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REFERENCE
GUIDE

The Absolute Leader In Valve Train Technology



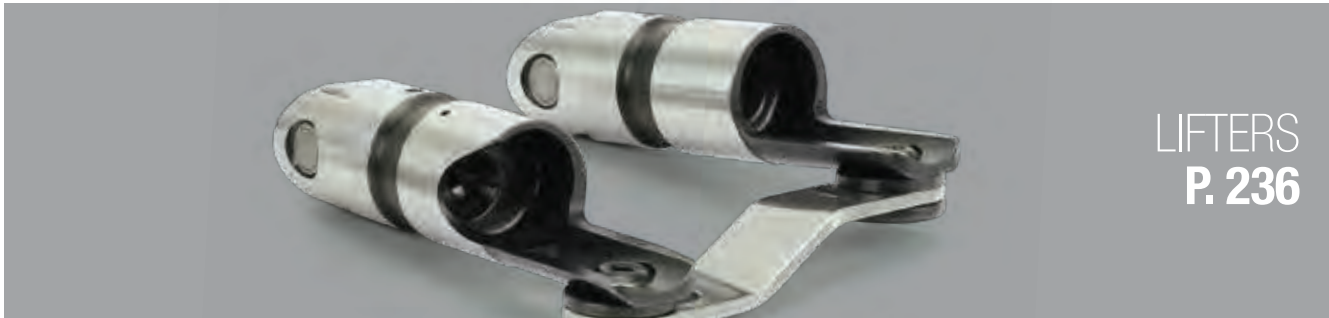
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PRODUCTS

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GM **P. 100**



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P. 236



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ARMS
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P. 287

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IMPORTANT NOTICE

This catalog has been completed using our best efforts. All product photos are for illustrative purposes only. Featured photos may contain optional items that are not included in the purchase of the product. We assume no liability for errors contained herein. The catalog on our website is updated on a regular basis and should be used to supplement the information contained herein.

It is the responsibility of the installer to ensure that all of the components are correct before installation. Proper assembly always requires that the installer measure all tolerances for proper clearance. We assume no liability for any errors made in component selection or installation.

Prices on all products are subject to change without notice. We reserve the right to make changes in products at any time. Except as noted, products in this catalog may not be legal for sale or use in pollution-controlled motor vehicles (pre-1966 domestic vehicles certified to California standards, pre-1968 domestic vehicles certified to federal standards.)

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CAM KITS

COMP Cams® offers four levels of complete component-matched valve train kits that deliver unbeatable performance, durability and ease of installation.

K-KIT – COMPLETE KIT

SK-KIT – SMALL KIT

GK-KIT – GEAR DRIVE KIT

CL-KIT – CAM & LIFTER KIT

All cam kits are fully tested and manufactured to the strictest standards. Each kit's components were specifically chosen as the best performance match for that particular camshaft so you can reap the benefits of a perfectly matched "Power Engineered System."

Ordering is easy. Upon selecting the proper camshaft for your application, simply add the kit prefix ("K", "SK", "GK" or "CL") in front of your cam part number. For example, if you choose cam Part #12-206-2 and you want the complete kit, you should order Part #K12-206-2.

* Please note not all kits are available for every part numbered camshaft. See the application charts on the following pages to determine which kits are available for your application.

**** CONTENTS OF KITS MAY VARY FROM APPLICATION TO APPLICATION; COMPONENTS SHOWN ARE TYPICAL EXAMPLES. ASK FOR SPECIFIC KIT CONTENTS BEFORE ORDERING.**

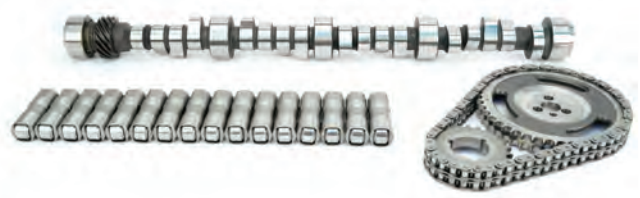
K-KIT – COMPLETE KIT INCLUDES:

- Camshaft
- Lifters
- Valve Springs
- Retainers
- Valve Locks
- Valve Stem Seals
- Timing Chain Set
- Assembly Lube
- Decals
- Instructions



SK-KIT – SMALL KIT INCLUDES:

- Camshaft
- Lifters
- Timing Chain Set
- Assembly Lube
- Decals
- Instructions



GK-KIT – CAM & GEAR KIT INCLUDES:

- Camshaft
- Lifters
- Gear Drive
- Assembly Lube
- Decals
- Instructions

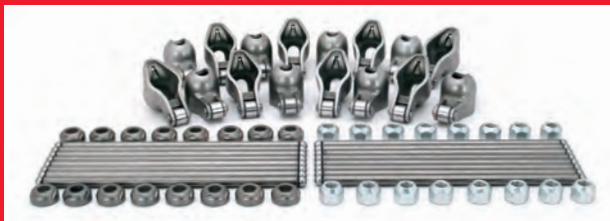


CL-KIT – CAM & LIFTER KIT INCLUDES:

- Camshaft
- Lifters
- Assembly Lube
- Decals
- Instructions



ROCKER ARM KITS



All rocker arm kits include quality COMP Cams® roller rocker arms and matching pushrods. Some applications also come with precision guide plates and rocker arm studs. Consult the related components section of your camshaft of choice to determine if a rocker kit is available.

VALVE SPRING KITS



These valve spring kit offerings include carefully matched Conical, Beehive™ or dual valve springs, steel or titanium retainers, locks, seals and spring seats. Please see page 290 for specific kit components and application listings.

4 | CAMSHAFT SERIES

COMP CAMS® CAMSHAFT SERIES:

COMP Classic:

High Energy™

- Work well with mainly stock components (rockers, manifolds, heads, compression, converters, gears, etc.)
- Good blend of efficiency and performance
- Perfect choice for performance street rebuilds

Computer Controlled

- Wide variety of sizes available for significant power gains
- Available for electronic fuel injected, throttle body injected and tuned port injected engines
- Available for both stock and modified computer systems

Magnum

- Great high RPM power but easy on valve train parts
- Can be used with mild ratio rocker arms and traditional performance valve springs
- Best with aftermarket converter and 9.5:1+ compression

Thumper™:

- Deliver excellent horsepower gains and broad torque curve; perfect choice for muscle cars and street rods
- Early intake valve opening and long exhaust duration create optimum overlap for powerful, hard-hitting exhaust note
- Best with aftermarket converters and more rear gear

Xtreme Energy™:

Xtreme Energy™

- Quicker opening lobe profiles deliver increased responsiveness & more area under the lift curve
- More vacuum allows an increase in duration for improved performance and assists power brakes
- Excellent performance in street carbureted applications
- Best performance with aftermarket intake manifolds, headers, lower gear ratios, etc.

Xtreme Marine

- Extremely wide powerband helps get boat on plane while making maximum horsepower
- Work against exhaust systems with restrictive back pressure
- Power enhancement helps maintain top end speed for longer distances
- Intended for applications where low idle speeds are required



Xtreme 4x4

- Improved throttle response and increased torque for low and mid-range RPM performance for towing and off-road
- Designed for use with common restrictive factory exhaust systems, including OEM exhaust manifolds

Nitrous HP

- Wider lobe separation and added exhaust duration from base XE series help shift the power to higher RPM to allow use in nitrous applications
- Early exhaust opening helps scavenge the extra spent gasses from nitrous or forced induction
- Better time slips for nitrous passes at the strip

Xtreme Turbo

- Help build pressure between engine and turbo for faster spool up in OEM or aftermarket
- Deliver wide powerband without compromising peak power
- Designed to focus on systems with similar boost to back pressure ratios as seen on most modern turbo systems

XtremeFI™:

XFI™

- Provide a terrific increase in performance
- Tuned for use in EFI applications where extra air flow signal through the carburetor is not required (feature wider lobe separation without loss of responsiveness)
- Work well with aftermarket cylinder heads and feature high lift

FSL™

- California Air Resources Board (CARB)-approved
- 30 to 90 HP improvement (depending on application) in GM Gen III/IV Three-bolt, LS2/LS3 Single-bolt and Gen IV Single-bolt engines
- Drop-in convenience with no valve springs or computer reprogramming required
- Designed to work with factory Variable Valve Timing, features unique profiles on switching and non-switching cylinders for compatibility with Active Fuel Management systems

4-Pattern

- Optimize valve events based on runner length
- Feature a large increase in both area under the curve and stability at high RPM
- Feature four lobe patterns; one intake and exhaust design for outboard runners and another intake and exhaust design for inboard runners
- Technology used for years in NASCAR

LS_R[™]

- Take advantage of today's newer and better flowing aftermarket cylinder heads
- Feature higher exhaust duration and overall lift to provide broadest powerband and most top end power of any COMP Cams® LS camshafts
- Unique grinds for both cathedral and rectangle port cylinder heads
- Require 26926-16 high load valve springs

CR

- Designed to work with stock 2015 valve springs and the Ford mid-lock phaser system without any limiters or phaser mods
- Three unique naturally aspirated and two blower designs that feature faster ramps, more lift and more area under the lift curve
- Most powerful lobe designs for any Mod series engine and provide excellent high-speed stability in the Ford Coyote application

Muscle Car Rebuilds:**Factory Muscle[™]**

- Reproduction of factory original muscle car camshaft
- Maintain efficiency and drivability of engines
- New computer controlled aided design avoids previous factory design compromises
- Tailored to work with the high compression engines of the 1960s and 70s to produce rough idle

Nostalgia Plus[™]

- Specifically designed to capture the essence of the original 1960s muscle car experience
- Combine famous factory cam performance with modern camshaft lobe designs for increased throttle response
- Excellent sound improvement through camshaft specifications (with similar vacuum characteristics to its muscle car era counterparts)

Camshaft Types

This catalog is divided into two major sections: camshafts and components. The camshaft section begins on page 8 and the component section begins on page 233.

The part numbered cams on pages 8-231 are listed by corporate sections according to engine make and model and then by cam/lifter type – hydraulic flat tappet, hydraulic roller, solid/mechanical flat tappet and solid/mechanical roller. The facing pages of these listings show the components that are designed to complement overall performance of each camshaft.

Camshaft Listing By Lifter Types

Hydraulic Flat Tappet

Hydraulic Roller

Solid/Mechanical Flat Tappet

Solid/Mechanical Roller



Chrysler, one of the most dominant names during the early “Muscle Car” era, has developed five basic series of engines which are popular choices in racing, street performance and towing applications. For our purposes we will refer to the 273-360 Small Block Chrysler engines as the “A” engines and the 383-440 big block standard head engines as the “B” engines. Several versions of the Hemi engine were manufactured in the 50s and 60s, and in recent years, the engineers at Chrysler have introduced three versions of the V10 engine platform, as well as a new 5.7L and 6.1L Hemi design. In the following information we have attempted to pass along some common tips learned during our many years of engine building, as well as the experiences of many of our customers. We will not attempt to cover all of the little things, only the more unique and aggravating trouble spots. If ever in doubt, there are many excellent reference manuals. Mopar Performance has one of the best. It goes into great detail about Chrysler engines.

ENGINE TYPES

Small Block, “A”, Uses “20” Prefix

The basic 273-360 engines produced in the mid-1960s have remained relatively unchanged as far as the valve train is concerned. The 1964-1991 engines used shaft-type rocker arms, which required some special changes in the camshaft design to allow oil to flow to the top of the engine and into the rocker arm shafts. Most of these early engines featured either grooved or offset holes in the second and fourth cam journals. In some instances a combination of both grooves and holes were employed. You must remember that if your engine has shaft-type rockers arms, there must be some groove or oiling hole combination on the cam journals. In 1992 the Magnum version of the “A” engine was changed to a pedestal-style individual rocker arm design with a non-adjustable valve train.

5.7L and 6.1L Hemi, Uses “112” and Prefixes “201”

In 2003 Chrysler called on the legendary Hemi cylinder head design to begin a new era in Mopar performance. This engine has the same familiar perpendicular valve arrangement but does not share any parts with the classic Hemi engine. Rocker arms are shaft-mounted with a 1.65 ratio on intake and exhaust. Two rocker shafts per head are used, which is similar to the earlier Hemi. Because of this design, different length intake and exhaust pushrods are used. The newer engine also uses smaller, .842” diameter hydraulic roller lifters and a single-bolt cam sprocket.

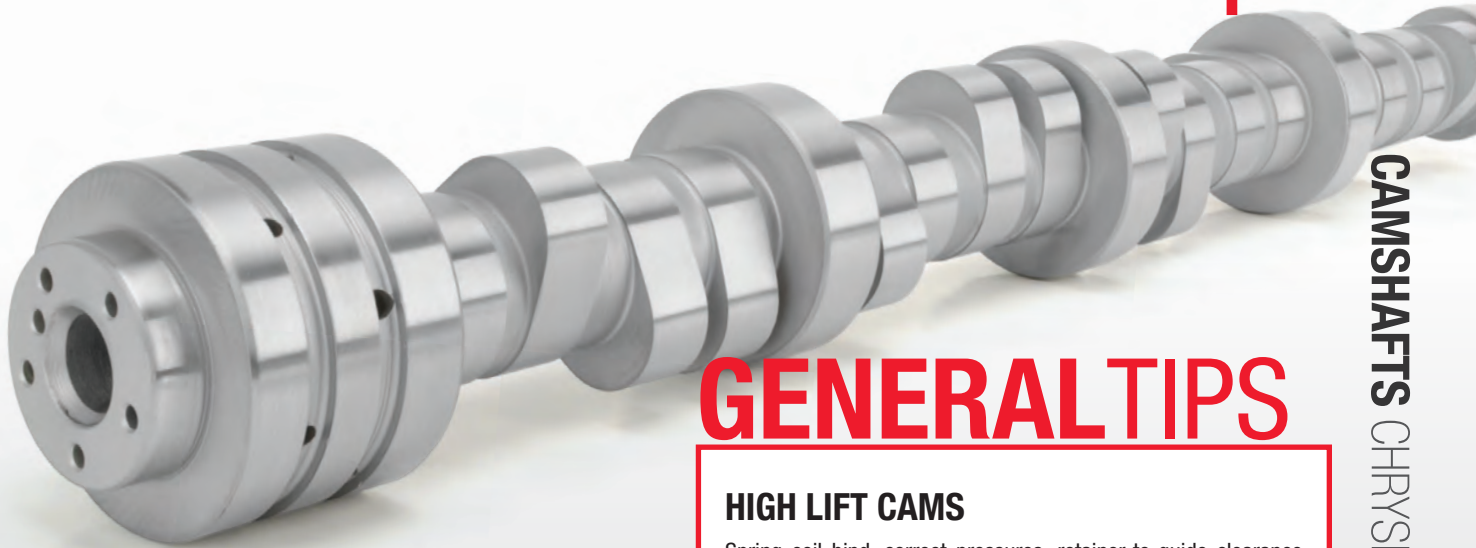
There are concerns when installing aftermarket camshafts in these engines. The factory piston has a dome and no valve reliefs. Extra caution should be taken to ensure adequate piston-to-valve clearance. It is also

necessary to deactivate the MDS (multiple displacement system) when installing and using a performance camshaft. Computer tuning must be performed to enhance drivability. In 2010, Chrysler released 5.7L, 6.1L and 6.4L Hemis that utilize Variable Valve Timing (VVT) technology to manage oil flow to a camshaft sprocket which contains a phasing device to either advance or retard camshaft timing. This no springs required design is perfect for Dodge Challengers and Chargers, Chrysler 300s, Jeeps, Dodge trucks and Mopar crate engines.

Big Block “B” or “RB”, Uses “21” and “23” Prefixes

The “B” and “RB” engines use two different deck height blocks. They require different length pushrods, so when considering pushrod length, remember that the 383-400 engines use a shorter pushrod than the 413-440 engines. The larger engines with the taller blocks use a pushrod that is approximately $\frac{3}{4}$ ” longer than the other.

When converting either of these engines to adjustable rocker arms, you must also replace the pushrods. The standard pushrod used with non-adjustable rocker arms uses a pushrod with a ball on each end. COMP Cams® aluminum roller rocker arms use a pushrod with a ball on the lifter end and a cup on the rocker arm end. The COMP Cams® Ultra Pro Magnum Rocker Arm™ Kit for these engines requires a ball-ball pushrod like the standard setup, but the length is different. In either case, the correct pushrods must be used for the rocker arm type selected.



GENERAL TIPS

Hemi, Uses "24" and "26" Prefixes

There are two basic versions of the original Hemi engine. The most common is the 426 Hemi, which was introduced in 1964 and uses the "24" prefix. Derivatives of this engine can be found in almost all Alcohol and Fuel cars racing today. One of the most popular drag racing engines, it is easily recognizable by the distributor location, which is in the front of the block. As far as production engines are concerned, most of the parts are interchangeable. Hybrid Hemis, however, have relatively few interchangeable parts because most are custom made.

The old style 301-392 Hemi engine, which uses the "26" prefix, is most readily recognized by the location of the distributor at the rear of the block. There were several versions of this engine; therefore it is highly recommended that before ordering any parts you make sure exactly which engine you are working on. These engines were very popular in the 60s and 70s and can still be found in many street machines and street rods, but they are becoming very hard to maintain due to the lack of replacement parts available.

V10, Uses "97" & "111" Prefixes (Viper)

We have two different cores for this engine, depending on the year model. The 2002 and older blocks use a single-bolt core, and the 2003 and later cores are a three-bolt design.

AMC 290-401 V8, Uses "10" Prefix

AMC produced many short deck and tall versions of these engines in the 60s, 70s and 80s. The 360 was the last American-made carbureted engine and was in production until 1991. The AMC V8 is still seen today in many racing applications in AMXs, Javelins, Matadors and ever Pacers. Many Jeeps made in the 70s and 80s were equipped with the AMC V8s, also.

HIGH LIFT CAMS

Spring coil bind, correct pressures, retainer-to-guide clearance and piston-to-valve clearance are just a few of the more common considerations. There is no exact formula to tell when you are getting into trouble, so to avoid serious problems, it is better to double check these things when installing a cam. If ever unsure, contact COMP Cams® by one of the means listed.

ROCKER ARM GEOMETRY

Proper rocker arm geometry is necessary to ensure the maximum benefit from any cam design. Camshaft base circle, block deck height, cylinder head design and lifter design all contribute to possible errors in geometry, which must be compensated for with pushrod length and rocker shaft height. Usually, a longer than stock pushrod will be necessary in a high performance engine, but care must be taken to choose the correct length.

FUEL PUMP PUSHROD

All Chrysler "B", "RB" and Hemi engines use a fuel pump pushrod to actuate the fuel pump. The fuel pump must be removed and the rod dropped away from the cam prior to camshaft removal. Failure to do so will result in damage to the cam, pushrod or both.

ROCKER ARM ADJUSTMENT/ LIFTER PRE-LOAD

All but a few Chrysler engines were equipped at the factory with non-adjustable rocker arms. Anytime a solid lifter camshaft (either roller or flat tappet) is used, you must also use adjustable rocker arms and appropriate pushrods.

When installing any high performance hydraulic camshaft, the lifter pre-load is something which must be considered. Too little pre-load will result in a noisy valve train while too much pre-load will result in tight valves and a poorly running engine. Either condition can hurt the performance or cause engine failure. After the cam, lifters and rocker arms are installed, and prior to installing the intake manifold, you must check the plunger depression in the lifters. With the cam on the base circle (valve closed), the plunger in the lifters should be depressed .040"-060". With non-adjustable rocker arms, you must change pushrod lengths to obtain proper lifter pre-load. There are also some premium hydraulic lifters that require different amounts of pre-load so be sure to contact COMP Cams® to make sure you know the proper pre-load for your lifters.

AMERICAN MOTORS 199-258 C.I. 4.0L 6 CYL. 1964-1998

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|----------------------------------|-------------|----------|-----|------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (NOT FOR FUEL INJECTION) | | | | | | | | | | | | |
| HYDRAULIC – Our best cam for gas mileage. Strong low end torque. Good stock replacement with very smooth idle. | Hyd. | Hyd. | 800 to 4000 | 68-115-4⁹⁷ | 240H | 240 | 248 | 192 | 200 | .416 | .416 | 108° |
| HYDRAULIC – Excellent torque and throttle response. Good for towing. Smooth idle. | Hyd. | Hyd. | 1000 to 4200 | 68-200-4⁹⁷ | 252H | 252 | 252 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC – Good power for Cherokees & Jeeps. Great for towing, 4WD and off-road. Smooth idle. | Hyd. | Hyd. | 1200 to 4400 | 68-201-4⁹⁷ | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts (NOT FOR FUEL INJECTION) | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque and throttle response, great stock replacement cam. | Hyd. | Hyd. | 800 to 5000 | 68-231-4⁹⁷ | X4250H | 250 | 258 | 206 | 214 | .462 | .485 | 111° |
| HYDRAULIC - Good torque and excellent mid-range power. Best with lower gear ratios. | Hyd. | Hyd. | 1000 to 5300 | 68-235-4⁹⁷ | X4254H | 254 | 262 | 210 | 218 | .477 | .493 | 111° |
| HYDRAULIC – Good mid to upper torque, needs increased compression, headers and gears. | Hyd. | Hyd. | 1400 to 5700 | 68-239-4⁹⁷ | X4262H | 262 | 270 | 218 | 226 | .493 | .512 | 111° |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts (FOR FUEL INJECTION) | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque and throttle response, great upgrade for stock cam in fuel injected applications. | Hyd. | Hyd. | 800 to 4800 | 68-232-4^{97,102} | X4250H-13 | 250 | 256 | 206 | 212 | .460 | .476 | 113° |

AMERICAN MOTORS 290-401 C.I. 8 CYL. 1966-1991

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------|-------------|----------|-----|------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong torque, excellent mileage for 290-304, has smooth idle, good for stock replacement. | Hyd. | Hyd. | 800 to 4800 | 10-200-4 | 252H | 252 | 252 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC – Good low end torque. Strong mid-range power. Excellent for towing or performance. Smooth idle in 304 and up. | Hyd. | Hyd. | 1200 to 5200 | 10-201-4 | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC – Great for mild daily driven street machines. Slightly rough idle, broad powerband. Use lower gears in 290-304. | Hyd. | Hyd. | 1500 to 5500 | 10-202-4 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best cam for 360-401 with stock converter. Works well with headers and aftermarket intake. Mild rough idle. | Hyd. | Hyd. | 1800 to 5800 | 10-203-4 | 270H | 270 | 270 | 224 | 224 | .480 | .480 | 110° |
| HYDRAULIC – Great street machine cam. Needs manifold, 2500 converter and lower gears. 9:1 compression. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 10-204-4 | 280H | 280 | 280 | 230 | 230 | .490 | .490 | 110° |
| HYDRAULIC – Street/strip cam for 360 and up. Use 10:1 compression with 3000+ converter and low gears. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 10-210-4 | 292H | 292 | 292 | 244 | 244 | .518 | .518 | 110° |
| HYDRAULIC – Excellent for Pro Street or mild bracket racing. 3500+ stall, 10.5:1 compression, 4.10 gear or lower. Radical idle. | Hyd. | Hyd. | 3000 to 7000 | 10-211-4 | 305H | 305 | 305 | 253 | 253 | .541 | .541 | 110° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁴ Requires .150" longer pushrod

⁷ Stock springs cannot be used

³⁷ Adjustable valve train required

⁶⁰ 1989 & later use .312" diameter valve with bead type locks

AMERICAN MOTORS 199-258 C.I. 4.0L 6 CYL. 1964-1998

CAMSHAFTS AMERICAN MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------|---------|------------|-------------|----------|----------------------|-----------|----------------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (NOT FOR FUEL INJECTION) | | | | | | | | | | | |
| K68-115-4 ⁸⁰ | SK68-115-4 | CL68-115-4 | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |
| K68-200-4 ⁸⁰ | SK68-200-4 | CL68-200-4 | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |
| K68-201-4 ⁸⁰ | SK68-201-4 | CL68-201-4 | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts (NOT FOR FUEL INJECTION) | | | | | | | | | | | |
| K68-231-4 ⁸⁰ | SK68-231-4 ⁷ | CL68-231-4 ⁷ | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |
| K68-235-4 ⁸⁰ | SK68-235-4 ⁷ | CL68-235-4 ⁷ | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |
| K68-239-4 ⁸⁰ | SK68-239-4 ⁷ | CL68-239-4 ⁷ | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts (FOR FUEL INJECTION) | | | | | | | | | | | |
| K68-232-4 ⁸⁰ | SK68-232-4 ⁷ | CL68-232-4 ⁷ | N/A | 822-12 | 3219 | N/A | N/A | 926-12 ⁹⁶ | 744-12 | 603-12 ⁶⁰ | 504-12 |

AMERICAN MOTORS 290-401 C.I. 8 CYL. 1966-1991

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-------------------------|--------------------------------|------------|------------------------|----------|---------------------|-----------|-------------|---------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K10-200-4 | SK10-200-4 | CL10-200-4 | RPM1410-16 ¹ | 822-16 | 3218 | 1442-16 ^{1,4} | 7812-16 | 940-16 | 744-16 | 603-16 | 504-16 |
| K10-201-4 | SK10-201-4 | CL10-201-4 | RPM1410-16 ¹ | 822-16 | 3218 | 1442-16 ^{1,4} | 7812-16 | 940-16 | 744-16 | 603-16 | 504-16 |
| K10-202-4 | SK10-202-4 ⁷ | CL10-202-4 ⁷ | RPM1410-16 ¹ | 822-16 | 3218 | 1442-16 ^{1,4} | 7812-16 | 940-16 | 744-16 | 603-16 | 504-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K10-203-4 | SK10-203-4 ⁷ | CL10-203-4 ⁷ | RPM1410-16 ¹ | 822-16 | 3118 | 1442-16 ^{1,4} | 7694-16 | 926-16 | 740-16 | 612-16 | 504-16 |
| K10-204-4 | SK10-204-4 ⁷ | CL10-204-4 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 926-16 | 740-16 | 612-16 | 504-16 |
| K10-210-4 | SK10-210-4 ⁷ | CL10-210-4 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² |
| K10-211-4 | SK10-211-4 ⁷ | CL10-211-4 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² |

⁸⁰ K-Kits will only work in 1964-88 models due to different valve stem diameters

⁹⁶ Works in 1964-88 models only

⁹⁷ Must use timing set #3219 in 1999 & newer applications

¹⁰² Cam for 1999-2005 applications also available

RED NUMBERS DENOTE PREMIUM OPTION



AMERICAN MOTORS 290-401 C.I. 8 CYL. 1966-1991 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1200 to 5200 | 10-214-5 | XE256H | 256 | 268 | 212 | 218 | .477 | .484 | 110° |
| HYDRAULIC – Excellent response, good mid-range, noticeable idle. | Hyd. | Hyd. | 1800 to 5800 | 10-215-5 | XE262H | 262 | 270 | 218 | 224 | .493 | .500 | 110° |
| HYDRAULIC – Very strong mid-range and throttle response, 2200+ stall. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 10-216-5 | XE274H | 274 | 286 | 230 | 236 | .520 | .523 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 10-600-5 | 279TH7 | 279 | 296 | 227 | 241 | .491 | .476 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 10-603-5 | 287TH7 | 287 | 304 | 235 | 249 | .500 | .486 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 10-604-5 | 295TH7 | 295 | 312 | 243 | 257 | .512 | .497 | 107° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best in heavy car with 3500+ stall and 10:1+ compression. | Hyd. | Hyd. | 3500 to 7000 | 10-212-5 | 312H-8 | 312 | 312 | 260 | 260 | .565 | .565 | 108° |
| HYDRAULIC – Our best racing hydraulic, 4500+ stall or 4 speed with 11:1 compression. | Hyd. | Hyd. | 4000 to 7500 | 10-213-5 | 320H-8 | 320 | 320 | 268 | 268 | .565 | .565 | 108° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER - Great 4x4 and offroad cam for off idle grunt and responsiveness. Mild but noticable idle. | Hyd. | Hyd. | 1200-5200 | 10-801-11⁵ | XE264HR-10 | 264 | 270 | 212 | 218 | .513 | .513 | 110° |
| HYDRAULIC ROLLER - Excellent combination of mid-range and top end power and noticable idle. | Hyd. | Hyd. | 1800-5800 | 10-802-11⁵ | XE276HR-10 | 276 | 282 | 224 | 230 | .513 | .513 | 110° |
| HYDRAULIC ROLLER - Street-strip grind for larger displacement engines w/ high compression, converter and gears. | Hyd. | Hyd. | 2100-6100 | 10-803-11⁵ | XE291HR-10 | 291 | 297 | 236 | 242 | .516 | .534 | 110° |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000-5800 | 10-600-11⁵ | 283THR7 | 283 | 303 | 227 | 241 | .531 | .515 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200-6100 | 10-601-11⁵ | 291THR7 | 291 | 311 | 235 | 249 | .540 | .526 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500-6400 | 10-602-11⁵ | 299THR7 | 299 | 319 | 243 | 257 | .552 | .537 | 107° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads

⁴ Requires .150" longer pushrod
⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used
³⁷ Adjustable valve train required

AMERICAN MOTORS 290-401 C.I. 8 CYL. 1966-1991 (CONTINUED)

CAMSHAFTS AMERICAN MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|-------------------------|-------------------------|-------------------------|--------------------------------|------------|------------------------|---------------------|---------------------|------------------|-------------|---------------------|--|
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K10-214-5 | SK10-214-5 | CL10-214-5 | RPM1410-16 ¹ | 822-16 | 3118 | 1442-16 ^{1,4} | 7694-16 | 926-16 | 740-16 | 612-16 | 504-16 | |
| K10-215-5 | SK10-215-5 ⁷ | CL10-215-5 ⁷ | RPM1410-16 ¹ | 822-16 | 3118 | 1442-16 ^{1,4} | 7694-16 | 926-16 | 740-16 | 612-16 | 504-16 | |
| K10-216-5 | SK10-216-5 ⁷ | CL10-216-5 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K10-600-5 | N/A | CL10-600-5 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² | |
| K10-603-5 | N/A | CL10-603-5 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² | |
| K10-604-5 | N/A | CL10-604-5 ⁷ | RPM1410-16 ¹ | 822-16 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RET. | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
| RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| 867-16 ³⁷ | 3118 | 1442-16 ^{1,4} | 7694-16 | 986-16 ² | 740-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| K10-801-11 | SK10-801-11 | CL10-801-11 | N/A | 8960-16 | 3118 | 1442-16 1631-16 | 7809-16 7609-16 | 985-16 26056-16 | 740-16 705-16 | 612-16 | 504-16 | |
| K10-802-11 | SK10-802-11 | CL10-802-11 | N/A | 8960-16 | 3118 | 1442-16 1631-16 | 7809-16 7609-16 | 985-16 26056-16 | 740-16 705-16 | 612-16 | 504-16 | |
| K10-803-11 | SK10-803-11 | CL10-803-11 | N/A | 8960-16 | 3118 | 1442-16 1631-16 | 7809-16 7609-16 | 985-16 26056-16 | 740-16 705-16 | 612-16 | 504-16 | |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| K10-600-11 | SK10-600-11 | CL10-600-11 | N/A | 8960-16 | 3118 | 1442-16 1631-16 | 7809-16 7609-16 | 985-16 26056-16 | 740-16 705-16 | 612-16 | 504-16 | |
| K10-601-11 | SK10-601-11 | CL10-601-11 | N/A | 8960-16 | 3118 | 1442-16 1631-16 | 7809-16 7609-16 | 985-16 26056-16 | 740-16 705-16 | 612-16 | 504-16 | |
| K10-602-11 | SK10-602-11 | CL10-602-11 | N/A | 8960-16 | 3118 | 1442-16 1631-16 | 7809-16 7609-16 | 985-16 26056-16 | 740-16 705-16 | 612-16 | 504-16 | |

RED NUMBERS DENOTE PREMIUM OPTION

AMERICAN MOTORS 290-401 C.I. 8 CYL. 1966-1991 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Great for mid-range torque in a heavy car with a 4000 converter and 10.5:1 compression. | .026 | .028 | 3800 to 6800 | 10-601-5 | 290B-6 | 290 | 304 | 255 | 266 | .576 | .570 | 106° |
| SOLID – Best in 360 or larger engine with a 5000 converter or a 4 speed and 11:1 compression. | .026 | .028 | 4500 to 7500 | 10-602-5 | 300B-8 | 300 | 314 | 265 | 276 | .600 | .594 | 108° |
| SOLID – Bracket race and mud racing. Works best with 5000+ converter in 390 or larger engine. | .018 | .020 | 5000 to 7500 | 10-610-5 | 304S-8 | 304 | 320 | 274 | 282 | .629 | .624 | 108° |
| RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Bracket & super classes. Smooth profile, easy on parts, use w/ 390+ & 5500 converter. | .024 | .026 | 5500 to 7500 | 10-800-11⁵ | 316AR-8 | 316 | 326 | 280 | 288 | .672 | .672 | 108° |

CHRYSLER 2.2L, 2.5L SOHC 4 CYL. 1981-1987

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Roller Swinging Follower Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good torque and power. Good OEM replacement. Smooth idle. | Hyd. | Hyd. | 1200 to 5000 | 22-123-6 | 260H | 260 | 260 | 212 | 212 | .460 | .460 | 108° |
| HYDRAULIC – Great cam for everyday street driving. Broad powerband. | Hyd. | Hyd. | 1500 to 5200 | 22-127-6 | 268H | 268 | 268 | 224 | 224 | .460 | .460 | 108° |
| MAGNUM Hydraulic Roller Swinging Follower Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best cam for performance usage. Slightly choppy idle. | Hyd. | Hyd. | 1800 to 5500 | 22-131-6 | 280H | 280 | 280 | 234 | 234 | .460 | .460 | 108° |
| TURBO Hydraulic Roller Swinging Follower Camshafts | | | | | | | | | | | | |
| HYDRAULIC – For use in turbo engines w/ modifications. | Hyd. | Hyd. | 3000 to 6000 | 22-124-6 | 260MT | 260 | 260 | 218 | 218 | .499 | .499 | 112° |

DODGE NEON SOHC 2.0L 4 CYL. 1995-2003

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – For use with stock Neon cylinder heads. More power throughout and substantial gains above 5000 RPM. | Hyd. | Hyd. | 2500 to 6200 | 107-200-8 | NE 256 HR8 | 256 | 266 | 200 | 206 | .356 | .336 | 108° |
| HYDRAULIC ROLLER – For use with Neon RT or ported cylinder heads. More power throughout and substantial gains above 5300 RPM. | Hyd. | Hyd. | 2600 to 6400 | 107-400-8 | NE 259 HR8 | 259 | 266 | 205 | 206 | .384 | .336 | 108° |

CHRYSLER 170-225 C.I. 6 CYL. 1960-1987

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good stock replacement for mileage and power increase. Low RPM torque. Smooth idle. | Hyd. | Hyd. | 800 to 4500 | 64-246-4 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Great power in mid-range RPM. Good choice for trucks and tow vehicles. Smooth idle. | Hyd. | Hyd. | 1200 to 5000 | 64-247-4 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁴ Requires .150" longer pushrod

⁵ Requires distributor gear upgrade

²² Fits 1981-87 models only

AMERICAN MOTORS 290-401 C.I. 8 CYL. 1966-1991 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RET. | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|------------|------------------------|----------|--|------------------|-------------|---------------------|-----------|---------|------------|--------------|--|
| RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 801-16 | 3118 | 1442-16 ^{1,4} | 7994-16 | 987-16 ² 950-16 ² | 740-16 730-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| 801-16 | 3118 | 1442-16 ^{1,4} | 7994-16 | 987-16 ² 950-16 ² | 740-16 730-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| 801-16 | 3118 | 1442-16 ^{1,4} | 7994-16 | 950-16 ² | 730-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| 861-16 ³⁷ | 3118 | 1832-16 ^{1,4} | 7994-16 | 999-16 ² 944-16 ² | 732-16 731-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |

CHRYSLER 2.2L, 2.5L SOHC 4 CYL. 1981-1987

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|------------|--------|---------|------------|----------------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Roller Swinging Follower Camshafts | | | | | | | | | | | |
| N/A | N/A | CL22-123-6 | N/A | 842-8 | N/A | 1222-8 ²² | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | CL22-127-6 | N/A | 842-8 | N/A | 1222-8 ²² | N/A | N/A | N/A | N/A | N/A |
| MAGNUM Hydraulic Roller Swinging Follower Camshafts | | | | | | | | | | | |
| N/A | N/A | CL22-131-6 | N/A | 842-8 | N/A | 1222-8 ²² | N/A | N/A | N/A | N/A | N/A |
| TURBO Hydraulic Roller Swinging Follower Camshafts | | | | | | | | | | | |
| N/A | N/A | CL22-124-6 | N/A | 842-8 | N/A | 1222-8 ²² | N/A | N/A | N/A | N/A | N/A |

DODGE NEON SOHC 2.0L 4 CYL. 1995-2003

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|--------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

CHRYSLER 170-225 C.I. 6 CYL. 1960-1987

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|------------|------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K64-246-4 | SK64-246-4 | CL64-246-4 | N/A | 820-12 | 3205 | N/A | N/A | 970-12 | N/A | 604-12 | 504-12 |
| K64-247-4 | SK64-247-4 | CL64-247-4 | N/A | 820-12 | 3205 | N/A | N/A | 970-12 | N/A | 604-12 | 504-12 |

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 170-225 C.I. 6 CYL. 1960-1987 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Great power and mileage increases. Smooth idle. | .010 | .012 | 800 to 4500 | 64-240-4 | 252S | 252 | 252 | 215 | 215 | .435 | .435 | 110° |
| SOLID – Excellent choice for trucks and towing. Good power in low-mid RPM. Smooth idle. | .010 | .012 | 1200 to 5000 | 64-241-4 | 264S | 264 | 264 | 220 | 220 | .440 | .440 | 110° |

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Smooth idle. Great replacement for 318 or 360 2 BBL or 4 BBL passenger car or truck. High vacuum and excellent low speed torque. | Hyd. | Hyd. | 800 to 4800 | 20-208-2 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Great for 360 4 BBL in medium to heavy-duty applications. Great performance cam for 318 with power brakes and air. | Hyd. | Hyd. | 1200 to 5200 | 20-210-2 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |
| HYDRAULIC – Replacement for HP 340 and 360 4 BBL motors. Noticeable idle in 318. Works with 3.23-3.55 gear, dual exhaust and 9:1 compression. | Hyd. | Hyd. | 1500 to 5500 | 20-212-2 | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Mild high performance in 340, 3.53-3.91 gears, dual exhaust and 9:1 compression. | Hyd. | Hyd. | 1800 to 5800 | 20-214-4 | 270H | 270 | 270 | 224 | 224 | .470 | .470 | 110° |
| HYDRAULIC – Use in 340-360 street machine. Dual exhaust, 3.53-3.91 gear, 9:1 compression. Headers and aftermarket intake, 2500 stall. | Hyd. | Hyd. | 2500 to 6000 | 20-232-4 | 280H | 280 | 280 | 230 | 230 | .480 | .480 | 110° |
| HYDRAULIC – Serious street/strip effort. 9.5:1 to 10.5:1 compression. Aftermarket manifold, headers and 3.91 gear. 3000-3500 stall in automatic cars. | Hyd. | Hyd. | 3000 to 6500 | 20-243-4 | 292H | 292 | 292 | 244 | 244 | .501 | .501 | 110° |
| HYDRAULIC – Pro Street/all out bracket racing. 3500 to 4000 stall, 10:1 to 11:1 compression. Aftermarket manifold with 750 CFM carb. | Hyd. | Hyd. | 3500 to 6800 | 20-244-4 | 305H | 305 | 305 | 253 | 253 | .525 | .525 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque excellent mileage, smooth idle. | Hyd. | Hyd. | 800 to 4800 | 20-220-3 | XE250H | 250 | 260 | 206 | 212 | .432 | .444 | 110° |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 20-221-3 | XE256H | 256 | 268 | 212 | 218 | .447 | .455 | 110° |
| HYDRAULIC – Excellent response, good mileage, stock converter, 3.23-4.10 gear. | Hyd. | Hyd. | 1300 to 5600 | 20-222-3 | XE262H | 262 | 270 | 218 | 224 | .462 | .470 | 110° |
| HYDRAULIC – Great for street machines, largest cam for stock converter, 273-318 works best with 2000 stall. | Hyd. | Hyd. | 1600 to 5800 | 20-223-3 | XE268H | 268 | 280 | 224 | 230 | .477 | .480 | 110° |
| HYDRAULIC – Very strong torque and throttle response, 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 20-224-4 | XE274H | 274 | 286 | 230 | 236 | .488 | .491 | 110° |
| HYDRAULIC – Street/strip, needs 3000+ stall, headers, gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 20-225-4 | XE284H | 284 | 296 | 240 | 246 | .507 | .510 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, gear, 3500+ stall. | Hyd. | Hyd. | 3000 to 7000 | 20-226-4 | XE294H | 294 | 306 | 250 | 256 | .519 | .524 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

²³ Includes special shafts & spacers

²⁴ Special 10° 4 groove lock. Single groove use Part #612-16.

³⁷ Adjustable valve train required

CHRYSLER 170-225 C.I. 6 CYL. 1960-1987 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|------------|------------|--------|------------------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K64-240-4 | SK64-240-4 | CL64-240-4 | N/A | 821-12 801-12 | 3205 | N/A | 7864-12 | 970-12 | N/A | 604-12 | 504-12 |
| K64-241-4 | SK64-241-4 | CL64-241-4 | N/A | 821-12 801-12 | 3205 | N/A | 7864-12 | 970-12 | N/A | 604-12 | 504-12 |

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-----------|--------------------------------|--------------|---|----------|--|------------------|----------------------|---------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K20-208-2 | SK20-208-2 | CL20-208-2 | RP1622-16 | 822-16 | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| K20-210-2 | SK20-210-2 | CL20-210-2 | RP1622-16 | 822-16 | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| K20-212-2 | SK20-212-2 ⁷ | CL20-212-2 ⁷ | RP1622-16 | 822-16 | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K20-214-4 | SK20-214-4 ⁷ | CL20-214-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 |
| K20-232-4 | SK20-232-4 ⁷ | CL20-232-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 |
| K20-243-4 | SK20-243-4 ⁷ | CL20-243-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-244-4 | SK20-244-4 ⁷ | CL20-244-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K20-220-3 | SK20-220-3 | CL20-220-3 | RP1622-16 | 822-16 | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| K20-221-3 | SK20-221-3 ⁷ | CL20-221-3 ⁷ | RP1622-16 | 822-16 | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| K20-222-3 | SK20-222-3 ⁷ | CL20-222-3 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| K20-223-3 | SK20-223-3 ⁷ | CL20-223-3 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ | 7958-16 | 901-16 | 744-16 | 604-16 | 504-16 |
| K20-224-4 | SK20-224-4 ⁷ | CL20-224-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-225-4 | SK20-225-4 ⁷ | CL20-225-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-226-4 | SK20-226-4 ⁷ | CL20-226-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 3203 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|--|-------------|----------|-----|------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 20-600-4 | 279TH7 | 279 | 296 | 227 | 241 | .486 | .473 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 20-601-4 | 287TH7 | 287 | 304 | 235 | 249 | .497 | .483 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 20-602-4 | 295TH7 | 295 | 312 | 243 | 257 | .507 | .494 | 107° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
| IN. | EX. | IN. | | | | EX. | IN. | EX. | | | | |
| XTREME ENERGY™ HI-LIFT Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best all around performance cam. Extra lift to help engine breathe at higher RPM, 2500+ stall with 9:1 compression. | Hyd. | Hyd. | 2000 to 6000 | 20-227-4 | XE275HL | 275 | 287 | 231 | 237 | .525 | .525 | 110° |
| HYDRAULIC – Serious street/strip cam. Strong mid-range and upper RPM power. Hi-lift design to take advantage of ported heads and single plane intake, 3000+ stall with 9.5:1 compression. | Hyd. | Hyd. | 2500 to 6500 | 20-228-4 | XE285HL | 285 | 297 | 241 | 247 | .545 | .545 | 110° |
| HYDRAULIC – Max effort street/bracket race cam. Likes ported heads and single plane intake, 3500+ stall with 10:1 compression. | Hyd. | Hyd. | 3000 to 6800 | 20-229-4 | XE295HL | 295 | 307 | 251 | 257 | .564 | .564 | 110° |
| NOSTALGIA PLUS™/PURPLE PLUS Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best all around street/strip cam with the performance sound of the sixties and early seventies. 2500+ stall with 9.5:1 compression. | Hyd. | Hyd. | 2200 to 6000 | 20-670-4 20-670-20⁹⁴ | PP280H | 280 | 287 | 233 | 240 | .474 | .474 | 110° |
| HYDRAULIC – Choppy idle for serious street and mild race applications. 3000+ stall with 10:1 compression. | Hyd. | Hyd. | 2500 to 6400 | 20-671-4 | PP284H | 284 | 291 | 239 | 246 | .484 | .484 | 108° |
| HYDRAULIC – Strong mid-range with a radical idle. Best replacement for the factory street/bracket race cam, 3500+ converter with 10:1 compression. | Hyd. | Hyd. | 3000 to 6600 | 20-672-4 | PP292H | 292 | 299 | 247 | 254 | .508 | .508 | 108° |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Factory I.D. #2899206 for: 340c.i., 1968-71, factory 275 HP 340c.i., 1970, factory 290 HP 340c.i., 1972-73, factory 240 HP | Hyd. | Hyd. | 1800 to 5800 | 20-309-4⁷ | 268AH-10 | 268 | 276 | 222 | 226 | .464 | .464 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

²³ Includes special shafts & spacers

²⁴ Special 10° 4 groove lock. Single groove use Part #612-16.

³⁷ Adjustable valve train required

⁹⁴ Nitrided version

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

CAMSHAFTS
CHRYSLER

| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|---|--------------------------------|--------------------------------|--------------|---|----------|--|------------------|----------------------|---------------------|
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K20-600-4 | N/A | CL20-600-4 ⁷ | 822-16 867-16 ³⁷ | 2103 3103 | N/A | 1622-16 ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-601-4 | N/A | CL20-601-4 ⁷ | 822-16 867-16 ³⁷ | 2103 3103 | N/A | 1622-16 ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-602-4 | N/A | CL20-602-4 ⁷ | 822-16 867-16 ³⁷ | 2103 3103 | N/A | 1622-16 ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| XTREME ENERGY™ HI-LIFT Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K20-227-4 | N/A | CL20-227-4 | RP1622-16 | 822-16 867-16 ³⁷ | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 995-16 ² | 740-16 | 626-16 ²⁴ | 505-16 ² |
| K20-228-4 | N/A | CL20-228-4 | RP1622-16 | 822-16 867-16 ³⁷ | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 978-16 ² | 740-16 | 626-16 ²⁴ | 505-16 ² |
| K20-229-4 | N/A | CL20-229-4 | RP1622-16 | 822-16 867-16 ³⁷ | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 978-16 ² | 740-16 | 626-16 ²⁴ | 505-16 ² |
| NOSTALGIA PLUS™/PURPLE PLUS Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K20-670-4 | N/A | CL20-670-4 | RP1622-16 | 822-16 867-16 ³⁷ | 2103 3103 | 1622-16 ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-671-4 | N/A | CL20-671-4 | RP1622-16 | 822-16 867-16 ³⁷ | 2103 3103 | 1622-16 ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-672-4 | N/A | CL20-672-4 ⁷ | RP1622-16 | 822-16 867-16 ³⁷ | 2103 3103 | 1622-16 ²³ | 7958-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 822-16 | 2103 | 1622-16 ²³ 1074-KIT ²³ | 7958-16 | 901-16 | 740-16 | 604-16 | 504-16 | 622-16 | N/A | N/A | N/A |

RED NUMBERS DENOTE PREMIUM OPTION



CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 3.23-3.91 gears, stock converter in 340 and 360, mild converter in 318, 9:1 compression, street machine. | Hyd. | Hyd. | 1400 to 5500 | 20-810-9 | XR268HR-10 | 268 | 276 | 218 | 224 | .535 | .531 | 110° |
| HYDRAULIC ROLLER – 3.55-4.10 gears, 2200+ stall, 9:1 compression, headers, high performance street. | Hyd. | Hyd. | 1800 to 5800 | 20-811-9 | XR274HR-10 | 274 | 282 | 224 | 230 | .538 | .534 | 110° |
| HYDRAULIC ROLLER – 3.91+ gears, 9.5:1 compression, 2500+ stall, aftermarket intake, headers. | Hyd. | Hyd. | 2200 to 6000 | 20-812-9 | XR280HR-10 | 280 | 288 | 230 | 236 | .541 | .537 | 110° |
| HYDRAULIC ROLLER – 3.91+ gears, 2800+ stall, 9.5:1 compression, needs headers, rough idle, street strip. | Hyd. | Hyd. | 2500 to 6200 | 20-813-9 | XR286HR-10 | 286 | 294 | 236 | 242 | .544 | .541 | 110° |
| HYDRAULIC ROLLER – 4.10 gear, 3000+ stall, 10:1 compression, Pro Street applications, very rough idle. | Hyd. | Hyd. | 2800 to 6400 | 20-814-9 | XR292HR-10 | 292 | 300 | 242 | 248 | .549 | .544 | 110° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| APPLICATIONS/CAMSHAFTS | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 20-600-9 | 283THR7 | 283 | 303 | 227 | 241 | .513 | .498 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 20-601-9 | 291THR7 | 291 | 311 | 235 | 249 | .522 | .509 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 20-603-9 | 299THR7 | 299 | 319 | 243 | 257 | .533 | .519 | 107° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| APPLICATIONS/CAMSHAFTS | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 1985-92 w/ Shaft Rockers & Mech. Fuel Pump, Long Snout | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best in a 318 engine. Good towing cam for Dakota P/U. This cam has oil holes and a long snout. | Hyd. | Hyd. | 700 to 4800 | 20-618-9⁷ | 254HR-12 | 254 | 262 | 199 | 206 | .450 | .450 | 112° |
| HYDRAULIC ROLLER – Best in a 360 engine. Good towing cam for full size P/U. Good performance cam for Dakota. This cam has oil holes and a long snout, may require computer modifications. | Hyd. | Hyd. | 800 to 5000 | 20-612-9⁷ | 262HR-12 | 262 | 264 | 206 | 210 | .450 | .480 | 112° |
| HYDRAULIC ROLLER – Best performance cam for 360 engine. This cam has oil holes and a long snout, will require computer modifications. | Hyd. | Hyd. | 900 to 5200 | 20-614-9⁷ | 264HR-12 | 264 | 274 | 210 | 220 | .480 | .480 | 112° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

²³ Includes special shafts & spacers

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

CAMSHAFTS CHRYSLER

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|--------------|---|----------|--|------------------|---|---------------------|--|------------------|----------------------|---------------------|--|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 8920-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | N/A | 987-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 8920-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | N/A | 987-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 8920-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | N/A | 987-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 8920-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | N/A | 987-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 8920-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | N/A | 987-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| K20-600-9 | N/A | CL20-600-9 ⁷ | 8920-16 | 2103 3103 | N/A | 1622-16 ²³ 1074-KIT ²³ | N/A | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 | 505-16 ² | |
| K20-601-9 | N/A | CL20-601-9 ⁷ | 8920-16 | 2103 3103 | N/A | 1622-16 ²³ 1074-KIT ²³ | N/A | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 | 505-16 ² | |
| K20-603-9 | N/A | CL20-603-9 ⁷ | 8920-16 | 2103 3103 | N/A | 1622-16 ²³ 1074-KIT ²³ | N/A | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 | 505-16 ² | |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts | | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | 3203 2103 | 1622-16 ²³ | 7937-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 | |
| N/A | N/A | N/A | N/A | N/A | 3203 2103 | 1622-16 ²³ | 7937-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 | |
| N/A | N/A | N/A | N/A | N/A | 3203 2103 | 1622-16 ²³ | 7937-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 | |

²⁴ Special 10° 4 groove lock. Single groove use Part #612-16.

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 1988-91 w/ Shaft Rockers & Electric Fuel Pump, Short Snout | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Factory replacement for fuel injected engines with shaft mounted rocker arms. Good torque cam in 318. | Hyd. | Hyd. | 700 to 4800 | 20-628-9⁷ | 254HR-12 | 254 | 262 | 199 | 206 | .450 | .450 | 112° |
| HYDRAULIC ROLLER – Performance cam for 318. Good towing cam for 360. May require computer modifications. | Hyd. | Hyd. | 800 to 5000 | 20-622-9⁷ | 262HR-12 | 262 | 264 | 206 | 210 | .450 | .480 | 112° |
| HYDRAULIC ROLLER – High performance cam for 360. Will require computer modifications. | Hyd. | Hyd. | 900 to 5200 | 20-624-9⁷ | 264HR-12 | 264 | 274 | 210 | 220 | .480 | .480 | 112° |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts For 1992-02 Magnum Engines (1.6 ROCKERS) | | | | | | | | | | | | |
| 1992-02 w/ Stud Mount Rockers & Electric Fuel Pump, Short Snout | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Super strong torque cam for 318, idle to 4500 RPM. | Hyd. | Hyd. | 700 to 4800 | 20-744-9⁷ | XR258HR-12 | 258 | 264 | 206 | 212 | .480 | .480 | 112° |
| HYDRAULIC ROLLER – Strong towing cam for 360, performance cam for 318 with better exhaust and computer modifications. | Hyd. | Hyd. | 1000 to 5000 | 20-745-9⁷ | XR264HR-14 | 264 | 270 | 212 | 218 | .480 | .480 | 114° |
| HYDRAULIC ROLLER – Performance cam for 360. Likes lower gears and exhaust. Will require computer modifications. | Hyd. | Hyd. | 1200 to 5400 | 20-746-9⁷ | XR265HR-14 | 265 | 273 | 216 | 224 | .506 | .506 | 114° |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts For 1992-02 Magnum Engines (1.6 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Factory replacement for 318 with strong torque. | Hyd. | Hyd. | 700 to 4800 | 20-608-9⁷ | 254HR-12 | 254 | 262 | 199 | 206 | .480 | .480 | 112° |
| HYDRAULIC ROLLER – Performance street cam for 318. Excellent torque in 360. May require computer modifications. | Hyd. | Hyd. | 800 to 5000 | 20-602-9⁷ | 262HR-12 | 262 | 264 | 206 | 210 | .480 | .512 | 112° |
| HYDRAULIC ROLLER – High performance cam for 360. Will require computer modifications. | Hyd. | Hyd. | 900 to 5200 | 20-604-9⁷ | 264HR-12 | 264 | 274 | 210 | 220 | .512 | .512 | 112° |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Great in 340 and 360 with 9:1-9.5:1 compression, 650-750 CFM carb and 3.55-3.91 gear. Largest cam to use with stock converter. | .022 | .022 | 1800 to 5800 | 20-246-4 | 270S | 270 | 270 | 224 | 224 | .468 | .468 | 110° |
| SOLID – 340-360 street machine/bracket race with 2500 stall, 9.5:1-10.5:1 compression and 3.91-4.10 gear. Aftermarket manifold & 650-750 CFM carb. | .022 | .022 | 2500 to 6000 | 20-247-4 | 282S | 282 | 282 | 236 | 236 | .495 | .495 | 110° |
| SOLID – Excellent for Pro Street, bracket race 9.5:1 compression, 3000-3500 stall, 4.10-4.30 gear, aftermarket intake. | .022 | .022 | 3000 to 6500 | 20-248-4 | 294S | 294 | 294 | 248 | 248 | .525 | .525 | 110° |
| SOLID – Max effort bracket racing or Pro Street. 10:1-11:1 compression with 4000-4500 stall and 4.30-4.88 gear. | .022 | .022 | 4000 to 7000 | 20-249-4 | 306S | 306 | 306 | 260 | 260 | .555 | .555 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

²³ Includes special shafts & spacers

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

CAMSHAFTS CHRYSLER

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-----------|---------|--------------|---|----------|--|------------------|----------------------|-------------------------------|
| COMPUTER CONTROLLED Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | 3203 2103 | 1622-16 ²³ | 7937-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 |
| N/A | N/A | N/A | N/A | N/A | 3203 2103 | 1622-16 ²³ | 7937-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 |
| N/A | N/A | N/A | N/A | N/A | 3203 2103 | 1622-16 ²³ | 7937-16 | 901-16 | 747-16 | 626-16 ²⁴ | 504-16 |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts For 1992-02 Magnum Engines (1.6 ROCKERS) | | | | | | | | | | | |
| N/A | N/A | N/A | 1425-KIT | N/A | 3203 2103 | N/A | 7632-16 | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 1425-KIT | N/A | 3203 2103 | N/A | 7632-16 | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 1425-KIT | N/A | 3203 2103 | N/A | 7632-16 | N/A | N/A | N/A | N/A |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts For 1992-02 Magnum Engines (1.6 ROCKERS) | | | | | | | | | | | |
| N/A | N/A | N/A | 1425-KIT | N/A | 3203 2103 | N/A | 7632-16 | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 1425-KIT | N/A | 3203 2103 | N/A | 7632-16 | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 1425-KIT | N/A | 3203 2103 | N/A | 7632-16 | N/A | N/A | N/A | N/A |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K20-246-4 | SK20-246-4 ⁷ | CL20-246-4 ⁷ | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ | 7970-16 | 901-16 995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 504-16 505-16 ² |
| K20-247-4 | SK20-247-4 ⁷ | CL20-247-4 ⁷ | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ | 7970-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-248-4 | SK20-248-4 ⁷ | CL20-248-4 ⁷ | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |
| K20-249-4 | SK20-249-4 ⁷ | CL20-249-4 ⁷ | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² |

²⁴ Special 10° 4 groove lock. Single groove use Part #612-16.

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" EX. | W/ 1.5 ROCKER IN. | EX. | | | |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – 340-360 street/strip use. 9:1 compression with 2500 stall, strong mid-range. | .016 | .018 | 2000 to 6000 | 20-233-4 | XS268S | 268 | 274 | 230 | 236 | .488 | .501 | 110° |
| SOLID – Great for street machines and mild bracket racing, 9.5:1 compression with 2800 stall, lopey idle. | .016 | .018 | 2200 to 6200 | 20-230-4 | XS274S | 274 | 280 | 236 | 242 | .502 | .511 | 110° |
| SOLID – Serious street/strip effort, needs 10:1 compression, single plane intake and 3000 stall. Radical idle. | .016 | .018 | 2500 to 6500 | 20-231-4 | XS282S | 282 | 290 | 244 | 252 | .520 | .540 | 110° |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – 3500+ converter in 360 or 3800+ in 340. Needs single plane intake and 10.5:1 compression. Excellent low end and mid-range torque. | .020 | .022 | 3500 to 6500 | 20-635-5 | XTQ281S-6 | 281 | 299 | 252 | 262 | .542 | .555 | 106° |
| SOLID – 318-340. 4000+ stall, 750 CFM, manifold. 4.88 gear. 10.5:1+ compression. | .026 | .028 | 4000 to 7000 | 20-618-5 | 290A-6 | 290 | 290 | 255 | 255 | .540 | .540 | 106° |
| SOLID – Best all around bracket cam. 4000+ converter in 360 or 4300+ stall in 340, min. compression ratio is 11:1. | .020 | .022 | 4000 to 7000 | 20-633-5 | XTQ290S-6 | 290 | 304 | 260 | 266 | .558 | .555 | 106° |
| SOLID – 4500 converter in 360 or 4800+ stall in 340, 11.5:1 compression. | .018 | .020 | 4300 to 7400 | 20-634-5 | TL295S-6 | 295 | 312 | 266 | 274 | .570 | .572 | 106° |
| SOLID – Good Super Street or fast bracket cam. Works best w/ 12:1 compression & 5000+ converter. | .018 | .020 | 4500 to 7500 | 20-632-5 | TL300S-8 | 300 | 316 | 270 | 278 | .579 | .578 | 108° |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good for short tracks. 1/4, 3/8 track w/ tight corners. Best with rules limiting intake & carb. | .018 | .020 | 3500 to 6500 | 20-616-5 | FL272B-6 | 272 | 280 | 242 | 250 | .540 | .556 | 106° |
| SOLID – Good short track cam for 340 or 360. Will turn more RPM in 340. Needs 10:1 compression & 4 BBL carb. | .020 | .022 | 3500 to 6500 | 20-635-5 | XTQ281S-6 | 281 | 299 | 252 | 262 | .542 | .555 | 106° |
| SOLID – Strong mid-range and upper RPM power needs 11:1 compression with open carb and intake. | .020 | .022 | 4000 to 7000 | 20-633-5 | XTQ290S-6 | 290 | 304 | 260 | 266 | .558 | .555 | 106° |
| SOLID – Good for medium sized tracks with sustained RPM. | .018 | .020 | 4300 to 7400 | 20-634-5 | TL295S-6 | 295 | 312 | 266 | 274 | .570 | .572 | 106° |
| SOLID – Very aggressive late model stock cam for long rod engine. | .018 | .020 | 3500 to 6500 | 20-629-5 | 269MM-8 | 269 | 273 | 243 | 247 | .549 | .560 | 108° |
| SOLID – Very aggressive late model stock cam for shorter rod or larger track. | .018 | .020 | 3700 to 6700 | 20-630-5 | 273MM-8 | 273 | 277 | 247 | 251 | .560 | .570 | 108° |
| SOLID – Very aggressive late model stock cam for shorter rod and larger track. | .018 | .020 | 4000 to 7000 | 20-631-5 | 277MM-8 | 277 | 281 | 251 | 255 | .570 | .582 | 108° |

² Requires machining on cylinder heads

²³ Includes special shafts & spacers

²⁴ Special 10° 4 groove lock. Single groove use Part #612-16.

⁷⁶ Oils through pushrods

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

CAMSHAFTS CHRYSLER

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|------------|---|-----------|-----------------------|-------------------|---|---------------------|--|------------------|----------------------|---------------------|--|
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| K20-233-4 | N/A | CL20-233-4 | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | |
| K20-230-4 | N/A | CL20-230-4 | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | |
| K20-231-4 | N/A | CL20-231-4 ⁷ | RP1623-16 | 821-16 | 2103 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 626-16 ²⁴ | 505-16 ² | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 928-16 ² | 1732-16 732-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ 1074-KIT ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 928-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 26094-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 26094-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |
| 821-16 801-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 26094-16 ² | 732-16 721-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A | |

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | @ .050" | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------|-----|---------|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Excellent for street/strip effort for 9.5:1 to 10:1 compression in 340 and 360. 3500 Stall, aftermarket intake with 750+ CFM carb. | .020 | .020 | 3000 to 6500 | 20-701-9⁵ | 288R | 288 | 288 | 243 | 243 | .550 | .550 | 110° |
| MECHANICAL ROLLER – Max effort street roller. 10:1+ compression with 750 CFM carb on aftermarket intake. 4.30-4.88 gear suggested with 4000-4500+ converter. Headers. | .020 | .020 | 4000 to 7200 | 20-702-9⁵ | 308R | 308 | 308 | 262 | 262 | .575 | .575 | 110° |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good for mild street/strip use w/ 9:1 compression & 2500 stall. Noticeable idle. | .016 | .018 | 2000 to 6000 | 20-743-9⁵ | XR268R | 268 | 274 | 230 | 236 | .552 | .564 | 110° |
| MECHANICAL ROLLER – Serious street/strip use. 9.5:1 compression with 2800+ stall. Lopey idle. | .016 | .018 | 2200 to 6300 | 20-742-9⁵ | XR274R | 274 | 280 | 236 | 242 | .564 | .570 | 110° |
| MECHANICAL ROLLER – 3000 stall with 10:1 compression, strong mid-range with a radical idle. | .016 | .018 | 2500 to 6500 | 20-741-9⁵ | XR280R | 280 | 286 | 242 | 248 | .570 | .576 | 110° |
| MECHANICAL ROLLER – 3300+ stall with 10:1 compression. Strong top end with a racey idle. | .016 | .018 | 2800 to 6800 | 20-740-9⁵ | XR286R | 286 | 292 | 248 | 254 | .576 | .582 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | @ .050" | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------|-------------|----------|-----|---------|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good all around bracket cam. 4200+ stall in 360 or 4500+ stall in 340, 11.5:1 compression. | .020 | .022 | 4200 to 7400 | 20-719-9⁵ | RX296S-R6 | 296 | 303 | 263 | 270 | .649 | .651 | 106° |
| MECHANICAL ROLLER – Good Super Street or bracket cam. 11.5:1 compression with 4500+ stall. | .020 | .022 | 4500 to 7500 | 20-718-9⁵ | RX302S-R6 | 302 | 309 | 269 | 276 | .654 | .655 | 106° |
| MECHANICAL ROLLER – Good Super Gas or Fast Bracket cam. 12:1 compression with 5500+ stall. | .026 | .028 | 4800 to 7800 | 20-717-9⁵ | RX308R-8 | 308 | 317 | 275 | 284 | .658 | .661 | 108° |
| MECHANICAL ROLLER – Good Super Gas, Super Comp or Fast Bracket cam, medium to large cubic inch engines with 6000+ converter. | .026 | .028 | 5500 to 8000 | 20-716-9⁵ | 314R-10 | 314 | 321 | 281 | 288 | .661 | .664 | 110° |
| MECHANICAL ROLLER – Fast bracket, high compression. | .026 | .028 | 5000 to 8000 | 20-721-9⁵ | 307-R6 | 307 | 310 | 274 | 279 | .693 | .645 | 106° |
| OVAL TRACK RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Standard cam for late model with 360, strong mid-range. | .020 | .022 | 4200 to 7400 | 20-719-9⁵ | RX296S-R6 | 296 | 303 | 263 | 270 | .649 | .651 | 106° |
| MECHANICAL ROLLER – Good for medium to large tracks with sustained RPM. | .020 | .022 | 4500 to 7500 | 20-718-9⁵ | RX302S-R6 | 302 | 309 | 269 | 276 | .654 | .655 | 106° |

² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used

¹³ Requires machining on block

²³ Includes special shafts & spacers

²⁴ Special 10° 4 groove lock. Single groove use Part #612-16.

CHRYSLER 273-360 C.I. 8 CYL. 1964-2002 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|---------------------------|---------------------------|-----------|----------------------|--------------|-----------------------|----------|---------------------|-------------------|----------------------|---------------------|
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K20-701-9 ⁵ | SK20-701-9 ^{5,7} | CL20-701-9 ^{5,7} | RP1623-16 | 828-16 ¹³ | 2103 3103 | 1622-16 ²³ | 7970-16 | 914-16 ² | 748-16 1732-16 | 626-16 ²⁴ | 505-16 ² |
| K20-702-9 ⁵ | SK20-702-9 ^{5,7} | CL20-702-9 ^{5,7} | RP1623-16 | 828-16 ¹³ | 2103 3103 | 1622-16 ²³ | 7970-16 | 914-16 ² | 748-16 1732-16 | 626-16 ²⁴ | 505-16 ² |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | |
| K20-743-9 ⁵ | N/A | CL20-743-9 ^{5,7} | RP1623-16 | 828-16 ¹³ | 2103 3103 | 1622-16 ²³ | 7970-16 | 914-16 ² | 748-16 1732-16 | 626-16 ²⁴ | 505-16 ² |
| K20-742-9 ⁵ | N/A | CL20-742-9 ^{5,7} | RP1623-16 | 828-16 ¹³ | 2103 3103 | 1622-16 ²³ | 7970-16 | 914-16 ² | 748-16 1732-16 | 626-16 ²⁴ | 505-16 ² |
| K20-741-9 ⁵ | N/A | CL20-741-9 ^{5,7} | RP1623-16 | 828-16 ¹³ | 2103 3103 | 1622-16 ²³ | 7970-16 | 914-16 ² | 748-16 1732-16 | 626-16 ²⁴ | 505-16 ² |
| K20-740-9 ⁵ | N/A | CL20-740-9 ^{5,7} | RP1623-16 | 828-16 ¹³ | 2103 3103 | 1622-16 ²³ | 7970-16 | 914-16 ² | 748-16 1732-16 | 626-16 ²⁴ | 505-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RET. | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------|-----------------------|----------|--|------------------|----------------------|---------------------|-----------|---------|------------|--------------|
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 26099-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 26099-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 951-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 951-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 951-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |
| OVAL TRACK RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 26099-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |
| 828-16 ¹³ 8043-16 ⁷⁶ | 3103 | 1622-16 ²³ | 7970-16 | 943-16 ² 26099-16 ² | 731-16 733-16 | 626-16 ²⁴ | 505-16 ² | 622-16 | N/A | 420 | N/A |

⁷⁶ Oils through pushrods

DODGE 5.7L & 6.1L HEMI 2003-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-------------------|--------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Slight noticeable idle, slight tuning modifications, excellent torque throughout range. Needs programmer. | Hyd. | Hyd. | 1000 to 5500 | 112-500-11 | 260H-13 | 260 | 264 | 208 | 212 | .522 | .525 | 113° |
| HYDRAULIC ROLLER – Noticeable idle, moderate tuning modifications, strong mid-range. Needs programmer. | Hyd. | Hyd. | 1500 to 5800 | 112-501-11 | 268H-13 | 268 | 272 | 216 | 220 | .528 | .531 | 113° |
| HYDRAULIC ROLLER – Needs extended rev limit and better exhaust, strongest power over 2500 RPM. Requires custom tuning. | Hyd. | Hyd. | 2000 to 6200 | 112-502-11 | 273H-14 | 273 | 277 | 224 | 228 | .547 | .550 | 114° |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Optimized fuel mileage with good torque and horsepower. Needs programmer. | Hyd. | Hyd. | 800 to 5000 | 112-525-11 | TPX 246HR-16 | 246 | 258 | 194 | 206 | .470 | .464 | 116° |
| HYDRAULIC ROLLER – Exceptional torque w/ good HP & moderate fuel economy. Needs programmer. | Hyd. | Hyd. | 1000 to 5400 | 112-530-11 | TPX 254HR-15 | 254 | 264 | 202 | 212 | .477 | .470 | 115° |
| HYDRAULIC ROLLER – Optimized horsepower w/ good torque & average fuel economy. Needs programmer. | Hyd. | Hyd. | 1200 to 5700 | 112-535-11 | TPX 262HR-14 | 262 | 270 | 210 | 218 | .483 | .477 | 114° |

DODGE 5.7L & 6.4L HEMI 2010-PRESENT (W/ VVT)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good improvements over the factory Apache camshaft. | Hyd. | Hyd. | 1800 to 6800 | 201-424-17 | 266W14 | 266 | 279 | 218 | 226 | .612 | .605 | 114° |
| HYDRAULIC ROLLER – Best all around performance grind for 6.4L applications. | Hyd. | Hyd. | 2100 to 7100 | 201-426-17 | 270W15 | 270 | 283 | 222 | 230 | .615 | .609 | 115° |
| HYDRAULIC ROLLER – Requires either added displacement or high RPM modifications in street/strip applications. | Hyd. | Hyd. | 2400 to 7400 | 201-428-17 | 274W16 | 274 | 287 | 226 | 234 | .619 | .612 | 116° |

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|--------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque & mileage for 383-400, 2 or 4 BBL. Smooth idle. Light towing, 9:1 compression. | Hyd. | Hyd. | 800 to 4800 | 21-212-4 Single-Bolt | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – OEM replacement for 383, 440. 9:1 compression. Smooth idle. Good for towing. Use 625 CFM carb and dual plane manifold. | Hyd. | Hyd. | 1000 to 5000 | 21-213-4 Single-Bolt | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |
| HYDRAULIC – Great replacement for 383 Magnum with 650-750 CFM carb, dual plane manifold, etc. Smooth idle 440, super torque. | Hyd. | Hyd. | 1200 to 5200 | 21-215-4 Single-Bolt | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |

7 Stock springs cannot be used

23 Includes special shafts & spacers

26 1/2 set 2 groove; 1/2 set 4 groove

DODGE 5.7L & 6.1L HEMI 2003-PRESENT

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------|-------------|----------|---------------|------------------|-------------|-------------|-----------|---------|------------|--------------|
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | 7114 | N/A | 7914-16 | 26918-16 | 761-16 762-16 | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | 7114 | N/A | 7914-16 | 26918-16 | 761-16 762-16 | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | 7114 | N/A | 7914-16 | 26918-16 | 761-16 762-16 | N/A | N/A | N/A | N/A | N/A | N/A |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | 7114 | N/A | 7914-16 | 26918-16 | 761-16 762-16 | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | 7114 | N/A | 7914-16 | 26918-16 | 761-16 762-16 | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | 7114 | N/A | 7914-16 | 26918-16 | 761-16 762-16 | N/A | N/A | N/A | N/A | N/A | N/A |

Note: Use of 26918-16 valve springs REQUIRES the use of a quantity of (8) 4678 locators for the intake & (8) 4679 locators for the exhaust.

DODGE 5.7L & 6.4L HEMI 2010-2012 (W/ VVT)

| LIFTERS | PHASER LOCK KIT | PHASER LIMITER KIT | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|-----------------|--------------------|----------|---------------|-----------|-------------|-------------|-----------|---------|------------|--------------|
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | 5760 | 5761 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | 5760 | 5761 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | 5760 | 5761 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|----------------------|--------------|-----------------------|----------|---------------|-----------|----------------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K21-212-4 | SK21-212-4 | CL21-212-4 | N/A | 822-16 ⁶¹ | 3204 2104 | 1621-16 ²³ | N/A | 926-16 | 744-16 | 606-16 ²⁶ | 504-16 |
| K21-213-4 | SK21-213-4 ⁷ | CL21-213-4 ⁷ | N/A | 822-16 ⁶¹ | 3204 2104 | 1621-16 ²³ | N/A | 926-16 | 744-16 | 606-16 ²⁶ | 504-16 |
| K21-215-4 | SK21-215-4 ⁷ | CL21-215-4 ⁷ | N/A | 822-16 ⁶¹ | 3204 2104 | 1621-16 ²³ | N/A | 926-16 | 744-16 | 606-16 ²⁶ | 504-16 |

⁶¹ Pre-1968 use Part #824-16 lifters

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | @ .050" | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---|-------------|----------|-----|---------|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Great replacement for 440 with 700-800 CFM or six pack. Noticeable idle in 383. Slight idle in 440. Largest cam w/ stock converter. | Hyd. | Hyd. | 1800 to 5500 | 21-306-4 Single-Bolt | 270H | 270 | 270 | 224 | 224 | .470 | .470 | 110° |
| HYDRAULIC – For 9:1-10:1 compression. 383 needs 2500 stall. 440 needs 2000+ stall. Use 700-800 CFM carburetor, headers, 3.91+ gears. | Hyd. | Hyd. | 2500 to 5800 | 21-237-4 Single-Bolt | 280H | 280 | 280 | 231 | 231 | .480 | .480 | 110° |
| HYDRAULIC – Serious street/strip effort. 383 needs 3000-3500+ stall. 440 needs 2500-3000. 750 to 800 CFM carb and headers, 3.91+ gear. | Hyd. | Hyd. | 3000 to 6200 | 21-242-4²⁸ Single-Bolt | 292H | 292 | 292 | 244 | 244 | .501 | .501 | 110° |
| HYDRAULIC – Pro Street. 383 needs 3500-3700+ stall. 440 needs 3000-3300+ stall. 850 CFM carb, 10:1+ compression. Headers and good int, 3.90-4.30 gear. | Hyd. | Hyd. | 3500 to 6500 | 21-243-4²⁸ Single-Bolt | 305H | 305 | 305 | 253 | 253 | .525 | .525 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4800 | 21-220-4 Single-Bolt | XE250H | 250 | 260 | 206 | 212 | .432 | .444 | 110° |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 21-221-4 Single-Bolt | XE256H | 256 | 268 | 212 | 218 | .447 | .455 | 110° |
| HYDRAULIC – Excellent response, good mileage, stock converter, 3.23 gear. | Hyd. | Hyd. | 1300 to 5600 | 21-222-4 Single-Bolt | XE262H | 262 | 270 | 218 | 224 | .462 | .470 | 110° |
| HYDRAULIC – Great for street machines, slightly rough idle works with stock converter but best with 1800+ stall. | Hyd. | Hyd. | 1600 to 5800 | 21-223-4²⁸ Single-Bolt | XE268H | 268 | 280 | 224 | 230 | .477 | .480 | 110° |
| HYDRAULIC – High performance street. Very strong mid-range with headers, 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 21-224-4²⁸ Single-Bolt | XE274H | 274 | 286 | 230 | 236 | .488 | .491 | 110° |
| HYDRAULIC – Street/strip, needs 2800+ stall, 9:1 compression, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 21-225-4²⁸ Single-Bolt | XE284H | 284 | 296 | 240 | 246 | .507 | .510 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, gear, 3200+ stall. | Hyd. | Hyd. | 2800 to 6800 | 21-226-4²⁸ Single-Bolt | XE294H | 294 | 306 | 250 | 256 | .519 | .524 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best w/ 2000+ stall & gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 21-600-5²⁸ Single-Bolt | 279TH7 | 279 | 296 | 227 | 241 | .486 | .473 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 21-601-5²⁸ Single-Bolt | 287TH7 | 287 | 304 | 235 | 249 | .497 | .483 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 21-602-5²⁸ Single-Bolt | 295TH7 | 295 | 312 | 243 | 257 | .507 | .494 | 107° |
| XTREME ENERGY™ HI-LIFT Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best all around street performance cam. 9:1 compression with 2500+ stall. Extra lift for upper RPM power. | Hyd. | Hyd. | 2000 to 5800 | 21-227-4²⁸ Single-Bolt | XE275HL | 275 | 287 | 231 | 237 | .525 | .525 | 110° |
| HYDRAULIC – Hot street cam. 10:1 compression, lower gears, headers & 3000+ stall. Strong mid-range w/ rough idle. | Hyd. | Hyd. | 2500 to 6200 | 21-228-4²⁸ Single-Bolt | XE285HL | 285 | 297 | 241 | 247 | .545 | .545 | 110° |
| HYDRAULIC – Serious street and bracket race cam. 10:1 compression, lower gears, headers and 3500+ stall. | Hyd. | Hyd. | 3000 to 6500 | 21-229-4²⁸ Single-Bolt | XE295HL | 295 | 307 | 251 | 257 | .564 | .564 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

²³ Includes special shafts & spacers

²⁶ 1/2 set 2 groove; 1/2 set 4 groove

²⁸ 3-bolt core available. Change first 2 digits of part # to 23.

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

CAMSHAFTS CHRYSLER

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|--|--------------|---|----------|--|------------------|----------------------|-------------------------------|
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K21-306-4 | SK21-306-4 ⁷ | CL21-306-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-237-4 | SK21-237-4 ⁷ | CL21-237-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-242-4 | SK21-242-4 ⁷ | CL21-242-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| K21-243-4 | SK21-243-4 ⁷ | CL21-243-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K21-220-4 | SK21-220-4 ⁷ | CL21-220-4 ⁷ | N/A | 822-16 ⁶¹ | 3204 2104 | 1621-16 ²³ | N/A | 926-16 | 744-16 | 606-16 ²⁶ | 504-16 |
| K21-221-4 | SK21-221-4 ⁷ | CL21-221-4 ⁷ | N/A | 822-16 ⁶¹ | 3204 2104 | 1621-16 ²³ | N/A | 926-16 | 744-16 | 606-16 ²⁶ | 504-16 |
| K21-222-4 | SK21-222-4 ⁷ | CL21-222-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 3204 2104 | 1621-16 ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-223-4 | SK21-223-4 ⁷ | CL21-223-4 | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 3204 2104 | 1621-16 ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-224-4 | SK21-224-4 ⁷ | CL21-224-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 3204 2104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-225-4 | SK21-225-4 ⁷ | CL21-225-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 3204 2104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-226-4 | SK21-226-4 ⁷ | CL21-226-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 3204 2104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 748-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K21-600-5 | N/A | CL21-600-5 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 505-16 ² |
| K21-601-5 | N/A | CL21-601-5 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 505-16 ² |
| K21-602-5 | N/A | CL21-602-5 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 911-16 925-16 ² | 748-16 741-16 | 627-16 ²⁶ | 505-16 ² |
| XTREME ENERGY™ HI-LIFT Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K21-227-4 | SK21-227-4 ⁷ | CL21-227-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| K21-228-4 | SK21-228-4 ⁷ | CL21-228-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| K21-229-4 | SK21-229-4 ⁷ | CL21-229-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |

³⁷ Adjustable valve train required

⁶¹ Pre-1968 use Part #824-16 lifters

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|--------------------------------|-------------|----------|-----|---------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | W/ 1.5 ROCKER | IN. | | EX. | |
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – 2500 stall with 9.5:1 compression, strong mid-range with early muscle car sound. | Hyd. | Hyd. | 2000 to 6000 | 21-670-4 Single-Bolt | PP280H | 280 | 287 | 233 | 240 | .474 | .474 | 110° |
| HYDRAULIC – Strong mid-range w/ a lopey idle, 2800+ stall w/ 9.5:1 compression, replaces the popular 484 cam. | Hyd. | Hyd. | 2300 to 6300 | 21-671-4 Single-Bolt | PP284H | 284 | 291 | 239 | 246 | .484 | .484 | 108° |
| HYDRAULIC – Strong bracket/street cam. 10:1 compression. 3500+ stall. Excellent replacement for the "509" cam. | Hyd. | Hyd. | 3000 to 6500 | 21-672-4 Single-Bolt | PP292H | 292 | 299 | 247 | 254 | .509 | .509 | 108° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|--|-------------|----------|-----|---------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | W/ 1.5 ROCKER | IN. | | EX. | |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Factory I.D. #2806980 for: 383c.i., 1968-70, factory 335 HP 383c.i., 1971, factory 300 HP 440c.i., 1967-70, factory 375/390 HP 440c.i., 1971, factory 370/385 HP | Hyd. | Hyd. | 1600 to 5600 | 21-305-4⁷ Single-Bolt | 268AH-10 | 268 | 276 | 222 | 226 | .464 | .464 | 110° |

| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
|--|------|------|--------------|---|------------|-----|-----|-----|-----|------|------|------|
| HYDRAULIC ROLLER – 3.55-4.10 gear, 2000 stall in 440, 2200+ in 383, 9:1 compression, high performance street. | Hyd. | Hyd. | 1800 to 5800 | 23-710-9⁷ Three-Bolt | XR274HR-10 | 274 | 282 | 224 | 230 | .538 | .534 | 110° |
| HYDRAULIC ROLLER – 3.91+ gear, 2500+ stall, 9.5:1 compression, aftermarket intake, headers. | Hyd. | Hyd. | 2200 to 6000 | 23-711-9⁷ Three-Bolt | XR280HR-10 | 280 | 288 | 230 | 236 | .541 | .537 | 110° |
| HYDRAULIC ROLLER – 3.91+ gear, 9.5:1+ compression, 2800+ stall, needs headers, rough idle. | Hyd. | Hyd. | 2500 to 6200 | 23-712-9⁷ Three-Bolt | XR286HR-10 | 286 | 294 | 236 | 242 | .544 | .541 | 110° |
| HYDRAULIC ROLLER – 4.10 gear, 3000+ stall, 10:1 compression, very rough idle, Pro Street/bracket race. | Hyd. | Hyd. | 2800 to 6400 | 23-713-9⁷ Three-Bolt | XR292HR-10 | 292 | 300 | 242 | 248 | .549 | .544 | 110° |

| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
|---|------|------|--------------|---|---------|-----|-----|-----|-----|------|------|------|
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 23-600-9⁷ Three-Bolt | 283THR7 | 283 | 303 | 227 | 241 | .513 | .498 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 23-601-9⁷ Three-Bolt | 291THR7 | 291 | 311 | 235 | 249 | .522 | .508 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 23-602-9⁷ Three-Bolt | 299THR7 | 299 | 319 | 243 | 257 | .532 | .519 | 107° |

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² Requires machining on cylinder heads

²³ Includes special shafts & spacers

³⁷ Adjustable valve train required

⁷ Stock springs cannot be used

²⁶ 1/2 set 2 groove; 1/2 set 4 groove

⁶¹ Pre-1968 use Part #824-16 lifters

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|-------------------------|--------|--|--------------|---|----------|--|------------------|----------------------|-------------------------------|
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K21-670-4 | N/A | CL21-670-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-671-4 | N/A | CL21-671-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-672-4 | N/A | CL21-672-4 ⁷ | N/A | 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|--------------|---|----------|-------------------------------|------------------|--------------------------------|-------------------------------|-----------|---------|------------|--------------|
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 822-16 ⁶¹ 867-16 ³⁷ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 926-16 924-16 ² | 744-16 741-16 | 606-16 627-16 ²⁶ | 504-16 505-16 ² | 622-16 | N/A | 424 | N/A |

| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
|--|----------------|---|-----|--|------------------|----------------------|---------------------|--------|-----|-----|-----|
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |

| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
|---|----------------|---|-----|--|------------------|----------------------|---------------------|--------|-----|-----|-----|
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 8921-16 | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |



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RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good with stock converter. Near smooth idle in 440. Works good with 650-750 CFM carb. Excellent torque. | .022 | .022 | 2000 to 5500 | 21-246-4 Single-Bolt | 270S | 270 | 270 | 224 | 224 | .468 | .468 | 110° |
| SOLID – Excellent for street/strip. 383 needs 2800 stall. 440 use 2400 stall, 700-800 CFM carb and headers. | .022 | .022 | 2500 to 5800 | 21-247-4 Single-Bolt | 282S | 282 | 282 | 236 | 236 | .495 | .495 | 110° |
| SOLID – Max street 383. 3500 converter. 10:1 compression. 750+ CFM and headers. 3000+ stall for 440, 800 CFM, 3.91-4.30 gear. | .022 | .022 | 3000 to 6200 | 21-248-4²⁸ Single-Bolt | 294S | 294 | 294 | 250 | 250 | .525 | .525 | 110° |
| SOLID – Serious street/strip effort for 440. 3500 converter. 10.5:1+ compression. 800-850 CFM. 383 requires 4000+ converter. | .022 | .022 | 3500 to 6500 | 21-249-4²⁸ Single-Bolt | 306S | 306 | 306 | 262 | 262 | .555 | .555 | 110° |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Excellent for street and mild strip, 2200+ stall or 4 speed. | .016 | .018 | 1800 to 5800 | 21-230-4²⁸ Single-Bolt | XS268S | 268 | 274 | 230 | 236 | .488 | .501 | 110° |
| SOLID – Serious street/strip, 9.5:1 compression with 2800+ stall. Strong mid-range. | .016 | .018 | 2200 to 6200 | 21-231-4²⁸ Single-Bolt | XS274S | 274 | 280 | 236 | 242 | .502 | .511 | 110° |
| SOLID – Very strong mid and upper RPM power. 10:1 compression with 3000+ stall. | .016 | .018 | 2500 to 6500 | 21-232-4²⁸ Single-Bolt | XS282S | 282 | 290 | 244 | 252 | .520 | .540 | 110° |
| SOLID – Max effort street/bracket race cam. 10.5:1 compression, 3500+ stall and low gears. | .016 | .018 | 3200 to 7000 | 21-233-4²⁸ Single-Bolt | XS290S | 290 | 298 | 252 | 260 | .540 | .558 | 110° |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good bracket cam. 10.5:1+ compression, 3500+ stall in 440, 3800+ in 383. | .018 | .020 | 3500 to 6500 | 23-631-5 Three-Bolt | XTQ286S-8 | 286 | 296 | 256 | 266 | .550 | .570 | 108° |
| SOLID – Best with 11:1 compression in 383 with 4500+ stall, 4200+ stall with 440. Strong mid-range. | .018 | .020 | 3800 to 6800 | 23-632-5 Three-Bolt | XTQ294S-8 | 294 | 299 | 264 | 270 | .567 | .579 | 108° |
| SOLID – Good Super Street, Super Gas or bracket cam. Best with 12:1 compression in 440 with 5000+ stall or 5500+ stall in 383. | .018 | .020 | 4500 to 7200 | 23-633-5 Three-Bolt | TL304S-8 | 302 | 311 | 274 | 282 | .590 | .609 | 108° |
| SOLID – Great Super Street, Super Gas or bracket cam. Best in 470+ engines w/ 12:1 compression & 5500+ stall. | .020 | .022 | 5000 to 7500 | 23-634-5 Three-Bolt | MM 305S-10 | 305 | 320 | 279 | 287 | .650 | .630 | 110° |
| SOLID – 440 with 5500+ stall, 5.13 gear, 11:1+ compression, 850+ CFM carb. | .028 | .030 | 5000 to 7200 | 23-630-5 Three-Bolt | 324A-8 | 324 | 324 | 290 | 290 | .650 | .650 | 108° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

²³ Includes special shafts & spacers

²⁶ 1/2 set 2 groove; 1/2 set 4 groove

²⁸ 3-bolt core available. Change first 2 digits of part # to 23.

⁷⁶ Oils through pushrods

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

CAMSHAFTS CHRYSLER

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|---|----------|--------------------------------|--------------|---|---------------------|--|------------------|----------------------|-------------------------------|
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K21-246-4 | SK21-246-4 ⁷ | CL21-246-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-247-4 | SK21-247-4 ⁷ | CL21-247-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-248-4 | SK21-248-4 ⁷ | CL21-248-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| K21-249-4 | SK21-249-4 ⁷ | CL21-249-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K21-230-4 | N/A | CL21-230-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 911-16 924-16 ² | 748-16 741-16 | 627-16 ²⁶ | 504-16 505-16 ² |
| K21-231-4 | N/A | CL21-231-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| K21-232-4 | N/A | CL21-232-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| K21-233-4 | N/A | CL21-233-4 ⁷ | N/A | 821-16 801-16 ⁷⁶ | 2104 3104 | 1621-16 ²³ 1071-KIT ²³ | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 627-16 ²⁶ | 505-16 ² |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RET. | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² | 732-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² | 732-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² | 732-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² | 732-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | 1621-16 ²³ 1071-KIT ²³ | N/A | 925-16 ² | 732-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | N/A | N/A |

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great all around power in 383 & 400. 750-830 CFM carb. 3500+ converter in 383. 3000+ in 440. Super torque & driveability, 4.10-4.56 gear. | .020 | .020 | 3000 to 6200 | 23-741-9⁵ Three-Bolt | 288R-10 | 288 | 288 | 243 | 243 | .550 | .550 | 110° |
| MECHANICAL ROLLER – Max street effort. 383 requires 4000+ converter. 750-830 CFM. 4.30-4.88 gear. 440 needs 3500+ converter. 800-850 CFM carb, headers. 4.10-4.56 gear. | .020 | .020 | 3500 to 6500 | 23-742-9⁵ Three-Bolt | 308R-10 | 308 | 308 | 262 | 262 | .575 | .575 | 110° |
| XTREME ENERGY™ Mechanical Street Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best all around street roller. 9.5:1 compression with 2500+ stall. | .016 | .018 | 2000 to 6000 | 23-700-9⁵ Three-Bolt | XR274R | 274 | 280 | 236 | 242 | .564 | .570 | 110° |
| MECHANICAL ROLLER – 9.5:1 with 3000+ stall. Strong mid-range with a lopey idle. | .016 | .018 | 2500 to 6200 | 23-701-9⁵ Three-Bolt | XR280R | 280 | 286 | 242 | 248 | .570 | .576 | 110° |
| MECHANICAL ROLLER – Serious street/strip effort, 10:1 compression with 3200+ stall. | .016 | .018 | 3000 to 6500 | 23-702-9⁵ Three-Bolt | XR286R | 286 | 292 | 248 | 254 | .576 | .582 | 110° |
| MECHANICAL ROLLER – Strong mid to upper RPM power, 10.5:1 compression with 3500+ stall. Radical idle. | .016 | .018 | 3500 to 6600 | 23-703-9⁵ Three-Bolt | XR292R | 292 | 297 | 254 | 260 | .582 | .588 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Super strong low end torque. Best with 10.5:1 compression and single plane intake. 3500+ stall in 440, 3800 in 383. | .026 | .028 | 3500 to 6300 | 23-705-9⁵ Three-Bolt | 283R-8 | 283 | 291 | 252 | 263 | .660 | .660 | 108° |
| MECHANICAL ROLLER – Best all around bracket or Super Street cam. Best in light to medium weight car with 11:1 compression, 4200+ stall in 440, 4500+ stall in 383. | .026 | .028 | 4000 to 6500 | 23-706-9⁵ Three-Bolt | RX296R-8 | 296 | 303 | 263 | 270 | .650 | .651 | 108° |
| MECHANICAL ROLLER – 383 Super Gas, Super Street, 12:1+ compression, 5000+ stall. | .028 | .030 | 4000 to 7000 | 23-758-9⁵ Three-Bolt | 306BR-8 | 306 | 306 | 273 | 273 | .625 | .625 | 108° |
| MECHANICAL ROLLER – Good Super Gas, Super Street with 12:1 compression and 850+ CFM carb. 5000+ stall with 440, 5400+ with 383. | .026 | .028 | 4500 to 7000 | 23-707-9⁵ Three-Bolt | RX308R-8 | 308 | 315 | 275 | 282 | .657 | .659 | 108° |
| MECHANICAL ROLLER – Quick 16, Super Comp for medium to large cubic inch. | .026 | .028 | 5500 to 7800 | 23-704-9⁵ Three-Bolt | REV315R-6 | 315 | 321 | 282 | 288 | .693 | .665 | 106° |
| MECHANICAL ROLLER – Fast Bracket, Super Gas or Super Comp. Best with 12.5:1 compression and ported iron or aftermarket heads. 5500+ stall in 440. | .026 | .028 | 4800 to 7200 | 23-708-9⁵ Three-Bolt | RX316R-8 | 316 | 321 | 283 | 288 | .660 | .663 | 108° |
| MECHANICAL ROLLER – Super Gas, Super Comp, Fast Brackets. 5000+ stall. | .028 | .030 | 5000 to 7200 | 23-732-9⁵ Three-Bolt | 320TR-8 | 320 | 320 | 288 | 288 | .692 | .692 | 108° |
| MECHANICAL ROLLER – Super Quick, Super Gas, Super Comp or Fast Brackets. For use in medium to large engines with aftermarket heads. 12.5:1 compression with 5500-6000 stall. | .026 | .028 | 5500 to 7500 | 23-709-9⁵ Three-Bolt | RX322R-10 | 318 | 330 | 285 | 292 | .705 | .705 | 110° |
| MECHANICAL ROLLER – Super Gas, Super Street, 12:1 compression, 5000+ stall, 5.13 gear. | .028 | .030 | 5000 to 7200 | 23-770-9⁵ Three-Bolt | 323BR-8 | 323 | 323 | 289 | 289 | .690 | .690 | 108° |

² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used

CHRYSLER 383-440 C.I. 8 CYL. 1959-1980 (CONTINUED)

CAMSHAFTS CHRYSLER

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------|-----------------------------------|--------------|---|----------|--|-------------------|----------------------|---------------------|
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K23-741-9 | SK23-741-9 ⁷ | CL23-741-9 ⁷ | N/A | 829-16 96829-16 ¹⁰⁴ | 2109 3125 | 1621-16 ²³ 1071-KIT ²³ | N/A | 929-16 ² 938-16 ² | 749-16 738-16 | 627-16 ²⁶ | 505-16 ² |
| K23-742-9 | SK23-742-9 ⁷ | CL23-742-9 ⁷ | N/A | 829-16 96829-16 ¹⁰⁴ | 2109 3125 | 1621-16 ²³ 1071-KIT ²³ | N/A | 929-16 ² 938-16 ² | 749-16 738-16 | 627-16 ²⁶ | 505-16 ² |
| XTREME ENERGY™ Mechanical Street Roller Camshafts | | | | | | | | | | | |
| K23-700-9 | SK23-700-9 ⁷ | CL23-700-9 | N/A | 829-16 96829-16 ¹⁰⁴ | 2109 3125 | 1621-16 ²³ 1071-KIT ²³ | N/A | 953-16 938-16 ² | 741-16 1741-16 | 627-16 ²⁶ | 505-16 ² |
| K23-701-9 | SK23-701-9 ⁷ | CL23-701-9 | N/A | 829-16 96829-16 ¹⁰⁴ | 2109 3125 | 1621-16 ²³ 1071-KIT ²³ | N/A | 953-16 938-16 ² | 741-16 1741-16 | 627-16 ²⁶ | 505-16 ² |
| K23-702-9 | SK23-702-9 ⁷ | CL23-702-9 | N/A | 829-16 96829-16 ¹⁰⁴ | 2109 3125 | 1621-16 ²³ 1071-KIT ²³ | N/A | 953-16 938-16 ² | 741-16 1741-16 | 627-16 ²⁶ | 505-16 ² |
| K23-703-9 | SK23-703-9 ⁷ | CL23-703-9 | N/A | 829-16 96829-16 ¹⁰⁴ | 2109 3125 | 1621-16 ²³ 1071-KIT ²³ | N/A | 953-16 938-16 ² | 741-16 1741-16 | 627-16 ²⁶ | 505-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|----------------|--|----------|--|------------------|--------------------------------|---------------------|-----------|---------|------------|--------------|
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ 1073-KIT ²³ | N/A | 947-16 ² 26082-16 ² | 739-16 722-16 | 627-16 ²⁶ 612-16 | 512-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ 1073-KIT ²³ | N/A | 947-16 ² 26082-16 ² | 739-16 722-16 | 627-16 ²⁶ 612-16 | 512-16 ² | 622-16 | N/A | 424 | N/A |
| 829-16 96829-16 ¹⁰⁴ | 3125 3125KT | 1071-KIT ²³ | N/A | 943-16 ² | 731-16 | 627-16 ²⁶ | 505-16 ² | 622-16 | N/A | 424 | N/A |

²³ Includes special shafts & spacers

¹⁰⁴ For bushing lifter, use part # 96829B-16

²⁶ 1/2 set 2 groove; 1/2 set 4 groove

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 392 HEMI 8 CYL. 1957-1958

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.57/1.52 ROCKER IN. | EX. | |
| CLASSIC THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Classic Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000-5500 | 26-600-7 | 279TH7 | 279 | 296 | 227 | 241 | .486 | .472 | 107° |
| HYDRAULIC – Classic Mutha' Thumpr™ – High performance street/strip, needs 9:1+ compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200-6000 | 26-601-7 | 287TH7 | 287 | 304 | 235 | 249 | .498 | .483 | 107° |
| HYDRAULIC – Classic Big Mutha' Thumpr™ – Street/strip, needs 9.5:1+ compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500-6200 | 26-602-7 | 295TH7 | 295 | 312 | 243 | 257 | .508 | .495 | 107° |

CHRYSLER 426 HEMI 8 CYL. 1966-1971

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.57/1.52 ROCKER IN. | EX. | |
| STREET AND STRIP Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good torque and power for daily driven street engines, stock converter. Slightly rough idle. | Hyd. | Hyd. | 2000 to 5000 | 24-278-4⁷ Three-Bolt | 278A-8 | 278 | 278 | 227 | 227 | .502 | .486 | 108° |
| HYDRAULIC – Street/strip use. 3000+ stall or 4 speed, has rough idle. | Hyd. | Hyd. | 3000 to 6200 | 24-292-4⁷ Three-Bolt | 292A-8 | 292 | 292 | 244 | 244 | .534 | .517 | 108° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 24-600-5⁷ | 279TH7 | 279 | 296 | 227 | 241 | .508 | .478 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 24-601-5⁷ | 287TH7 | 287 | 304 | 235 | 249 | .521 | .489 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 24-602-5⁷ | 295TH7 | 295 | 312 | 243 | 257 | .532 | .501 | 107° |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 3.91+ gear, 2500+ stall, 9.5:1 compression, aftermarket intake, headers. High performance street. | Hyd. | Hyd. | 2200 to 6000 | 24-710-11^{5,7} Three-Bolt | XR280HR-10 | 280 | 288 | 230 | 236 | .566 | .544 | 110° |
| HYDRAULIC ROLLER – 3.91+ gear, 2800+ stall, 9.5:1+ compression, needs headers, rough idle. | Hyd. | Hyd. | 2500 to 6200 | 24-711-11^{5,7} Three-Bolt | XR286HR-10 | 286 | 294 | 236 | 242 | .569 | .548 | 110° |
| HYDRAULIC ROLLER – 4.10 gear, 3000+ stall, 10:1 compression, very rough idle. Pro Street/bracket. | Hyd. | Hyd. | 2800 to 6400 | 24-712-11^{5,7} Three-Bolt | XR292HR-10 | 292 | 300 | 242 | 248 | .574 | .551 | 110° |

² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used

CHRYSLER 392 HEMI 8 CYL. 1957-1958

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|--------|---------|------------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| CLASSIC THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 826-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 826-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 826-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

CHRYSLER 426 HEMI 8 CYL. 1966-1971

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|----------------|-------------|----------|--|------------------|-------------|---------------------|-----------|---------|------------|--------------|
| STREET AND STRIP Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| 824-16 | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| 824-16 | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| 824-16 | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| 824-16 | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| 824-16 | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| 8921-16 | 3125 3125KT | N/A | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| 8921-16 | 3125 3125KT | N/A | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |
| 8921-16 | 3125 3125KT | N/A | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A |

RED NUMBERS DENOTE PREMIUM OPTION

CHRYSLER 426 HEMI 8 CYL. 1966-1971 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.57/1.52 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 24-600-11 ^{5,7} | 283THR7 | 283 | 303 | 227 | 241 | .536 | .504 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 24-601-11 ^{5,7} | 291THR7 | 291 | 311 | 235 | 249 | .546 | .515 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 24-602-11 ^{5,7} | 299THR7 | 299 | 319 | 243 | 257 | .557 | .525 | 107° |
| STREET AND STRIP Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good torque and power for daily driven street engines, stock converter. Has slightly rough idle. | .020 | .022 | 2500 to 5800 | 24-300-4 | 270S-8 | 270 | 270 | 235 | 235 | .518 | .502 | 108° |
| SOLID – Street/strip use. 3200+ stall or 4 speed, has rough idle. | .020 | .022 | 3000 to 6200 | 24-308-4 | 285S-8 | 285 | 285 | 250 | 250 | .557 | .540 | 108° |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Super Stock race Hemi with good intake & welded heads, automatic transmission. | .026 | .028 | 5500 to 8500 | 24-725-11 ⁵ | 317SSR-8 | 317 | 337 | 285 | 294 | .822 | .793 | 108° |
| MECHANICAL ROLLER – Super Stock race Hemi w/ lat-est design intake & welded heads, manual transmission. | .026 | .028 | 5800 to 8800 | 24-726-11 ⁵ | 322SSR-12 | 322 | 337 | 292 | 294 | .811 | .793 | 112° |
| MECHANICAL ROLLER – Blown Alcohol/Pro Mod 500-550 inch, high boost blower, 45° bank block. | .026 | .028 | 5000 to 8500 | 24-723-11 ⁵ | 331BAR-16 | 331 | 342 | 296 | 304 | .785 | .760 | 116° |
| MECHANICAL ROLLER – Blown Alcohol/Pro Mod 48° bank, journal 2.124". | .026 | .028 | 5000 to 8500 | 24-721-10 ⁵ | 331BAR-16 | 331 | 342 | 296 | 304 | .785 | .760 | 116° |

DODGE VIPER 10 CYL. 1992-2002

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong torque with good mileage, needs computer work. Head modifications necessary for related components. | Hyd. | Hyd. | 1000 to 5800 | 97-310-10 ⁷ Single-Bolt | XR264HR | 264 | 269 | 212 | 218 | .520 | .528 | 114° |
| HYDRAULIC ROLLER – High performance street cam, needs improved computer. Head modifications necessary for related components. | Hyd. | Hyd. | 1200 to 6200 | 97-320-10 ⁷ Single-Bolt | XR270HR | 269 | 276 | 218 | 224 | .528 | .536 | 114° |

DODGE VIPER 10 CYL. 2003-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong torque with good mileage, needs computer work. Head modifications necessary for related components. | Hyd. | Hyd. | 1000 to 5800 | 111-310-10 ⁷ Three-Bolt | XR264HR | 264 | 269 | 212 | 218 | .520 | .528 | 114° |
| HYDRAULIC ROLLER – High performance street cam, needs improved computer. Head modifications necessary for related components. | Hyd. | Hyd. | 1200 to 6200 | 111-320-10 ⁷ Three-Bolt | XR270HR | 269 | 276 | 218 | 224 | .528 | .536 | 114° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used

³⁰ Other lifters & pushrod heights available

⁷⁶ Oils through pushrods

CHRYSLER 426 HEMI 8 CYL. 1966-1971 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|----------------|-------------|----------|--|------------------|-------------|---------------------|-----------|---------|------------|--------------|--|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 8921-16 | 3125 3125KT | N/A | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A | |
| 8921-16 | 3125 3125KT | N/A | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A | |
| 8921-16 | 3125 3125KT | N/A | N/A | 925-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A | |
| STREET AND STRIP Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A | |
| 821-16 801-16 ⁷⁶ | 3125 3125KT | N/A | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 610-16 | 500-16 ² | 619-16 | N/A | 424 | N/A | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| 830-16 ³⁰ 96829-16 ¹⁰⁴ | 3125 3125KT | N/A | N/A | 948-16 ² 26082-16 ² | 739-16 722-16 | 610-16 | 509-16 ² | 619-16 | N/A | 424 | N/A | |
| 830-16 ³⁰ 96829-16 ¹⁰⁴ | 3125 3125KT | N/A | N/A | 948-16 ² 26082-16 ² | 739-16 722-16 | 610-16 | 509-16 ² | 619-16 | N/A | 424 | N/A | |
| 830-16 ³⁰ 96829-16 ¹⁰⁴ | 3125 3125KT | N/A | N/A | 948-16 ² 26082-16 ² | 739-16 722-16 | 610-16 | 509-16 ² | 619-16 | N/A | 424 | N/A | |
| 830-16 ³⁰ 96829-16 ¹⁰⁴ | 3125 3125KT | N/A | N/A | 948-16 ² 26082-16 ² | 739-16 722-16 | 610-16 | 509-16 ² | 619-16 | N/A | 424 | N/A | |

DODGE VIPER 10 CYL. 1992-2002

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|--------|--------|---------|------------|----------------------|----------|---------------------|-----------|-------------|-------------|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | 1805-20 ¹ | 7693-20 | 924-20 ² | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | 1805-20 ¹ | 7693-20 | 924-20 ² | N/A | N/A | N/A |

DODGE VIPER 10 CYL. 2003-PRESENT

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|--------|--------|---------|------------|----------------------|----------|---------------------|-----------|-------------|-------------|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | 1805-20 ¹ | 7693-20 | 924-20 ² | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | 1805-20 ¹ | 7693-20 | 924-20 ² | N/A | N/A | N/A |

¹⁰⁴ For bushing lifter, use part # 96829B-16

Ford has produced some of the most powerful engines to ever come out of Detroit. With the V8 engine sizes ranging from 221-460, there is an engine size and configuration to cover just about any need or application. Ford engines do have some unique characteristics not found in any other vehicle make, so in this section we will try to familiarize you with some of the more common differences. This valve train related information should help you when choosing parts or assembling your engine.

ENGINE TYPES

Small Block, Uses "31" and "35" Prefixes

This is the standard engine in most V8 applications. It has been around since the early 1960s and remains very popular today in many configurations. The Small Block Ford engine is commonly referred to as the 5.0L engine found in the Mustang for many years. This engine has become one of the most frequently modified engines Ford has ever produced. There are a few differences in the valve train of this design, but for the most part, they are the same. One thing to remember is that the 221-302 engines have a very short deck height, requiring a short pushrod. The 351W engine, on the other hand, has a tall deck and a longer pushrod. The 1985-1995 5.0L blocks differ from the earlier blocks in that the lifter bosses are taller to accommodate hydraulic roller lifters. The base circles of the cams for these blocks are larger because of the higher position of the lifters. These engines use either a prefix "31" (289-302) or a "35" (5.0L or 351W) camshaft, depending on the firing order.

SVO V8 Race Engine, Uses "35" Prefix

This engine is almost always found in all-out racing and is a cross between the Windsor and Cleveland designs. It utilizes a Windsor-type block and a Cleveland-type head. The newest of the head designs is referred to as the "Yates" head.

Cleveland/Modified, Uses "32" Prefix

This design was introduced in 1969 and was available as a 351 Cleveland, a 351C Boss or a 351/400 Modified. The easiest way to tell these engines from the standard small block is by looking at the front covers. The small block/SVO engines have a cast aluminum front cover and water pump housing. The Cleveland/Modified engines have a stamped steel flat front cover. Other than a few rocker arm differences, the valve train in all of these engines is very similar.

Big Block FE, Uses "33" Prefix

Ford's FE engine family was introduced in 1958 and was available as either a 332 or a 352 version. Later, the range was expanded to include 390-428 versions. They have been out of production since the mid-70s but remain popular today. These engines utilize a shaft rocker arm system and can be most easily recognized by the fact that the intake manifold is very wide and extends part way under the valve covers. Almost all of the parts in the FE series are used only in this engine and are not interchangeable with other engine families.

Big Block "FF", Uses "34" Prefix

The engine commonly referred to as the Big Block Ford is the 429-460 and was used in light trucks and motorhomes. It is an outstanding engine for boats, bracket racing or towing and typically has a similar but larger "Cleveland" style valve train.

Modular-Type Engines

The Ford "Modular Engine" was introduced in the early 1990s, with the idea of designing a new generation of engines from scratch, rather than basing them on then-current production engines. They were developed to replace all existing Ford V8 pushrod engines. The "Modular" term came about because of the many interchangeable components between the SOHC and DOHC engines, as well as the ability of Ford to machine and assemble the various engines on the same assembly lines.

The design focuses on low friction, excellent sealing and increased block stiffness. With a modern block and head design in 2 valve, 3 valve and 4 valve configurations, the engines are both versatile and powerful. They have a sophisticated overhead cam design in both single and dual overhead cam versions that utilize a roller finger follower to reduce friction, increase RPM potential and reduce maintenance.

All of the cylinder blocks have deep skirts, and nearly all of the main caps are cross-bolted. SOHC engines have cast iron blocks; DOHC engines have aluminum blocks (2003-04 Cobra and 2007-12 GT500 have iron blocks). All cylinder heads are aluminum, with very long head bolts to reduce distortion of the cylinder bores and improve sealing. The newer design also allows the accessories to be rigidly mounted directly to the block.

4.6L & 5.4L 2 Valve SOHC, Uses "102" Prefix

The 4.6L version of this engine first came out in the 1991 Lincoln Town Car and later was installed in the Crown Victoria, Grand Marquis, Thunderbird, and Cougar. In 1997 the 5.4L version of the 2 valve SOHC engine was introduced. This engine, known as the "Triton" truck engine, has numerous parts that are interchangeable with the modular car engines. However, not all are identical since the truck engines are built to handle more severe duty.

4.6L & 5.4L 3 Valve SOHC, Uses "127" Prefix

The 4.6L SOHC 3 Valve engine is available in today's Mustangs and trucks. The engine features variable cam timing, allowing the valves to open and close earlier or later as needed for optimum power. This technology was first introduced in 2004 in the 5.4L 3 Valve DOHC engines. This engine, also known as the "Triton", is primarily in the F-150 trucks.

4.6L, 5.4L & 5.8L 4 Valve DOHC, Uses "106" Prefix

This engine showed up first in the 1993 Lincoln Mark VIII and later in the front-wheel drive Continental. It has since been put in performance cars, such as the Mustang Cobra/GT500/Mach 1 and others.

5.0L Coyote DOHC, Uses "191" & "243" Prefixes

Designed for the Mustang GT, this 5.0L engine produces the power of its much larger competitors. It features an all aluminum block, high flowing heads, cross-flow cooling, and Twin independent Variable Cam Timing (TiVCT). Other variations of the Coyote were created for use in the F-150 truck, Boss 302 and the Australian Falcon.



CAMSHAFTS
FORD

GENERAL TIPS

FIRING ORDER, SMALL BLOCK & SVO

This is one of the most common questions asked by Ford customers. The firing order for the early 221-302 engines and the early 5.0 engines is 1-5-4-2-6-3-7-8. This is the firing order for all prefix "31" cams and is the standard replacement cam for all early engines. Most of the later 5.0L engine and 351 engines are designed to use the 1-3-7-2-6-5-4-8 firing order. This is the firing order for all prefix "35" cams, and cams ordered for these engines should use this prefix. However, non H.O. 302 5.0 engines use the early 1-5-4-2-6-3-7-8 firing order and require a custom grind from COMP Cams®. Other than the firing order, the cams are identical. By changing the spark plug wiring at the distributor these cams can be interchanged (only on carbureted applications or those using a FAST® EFI system). ***EXCEPT IN MASS AIR VEHICLES***

CAMSHAFT DOWEL PIN/ FUEL PUMP ECCENTRIC

Two different length dowel pins were used in the front of the cams in 221-351W engines. In 1972 and earlier engines, a longer (1.375") dowel pin was used so that it would extend through the one-piece fuel pump eccentric used on these engines. The 1973 and later engines utilized a two-piece fuel pump eccentric which required a shorter (1.125") dowel pin. If no eccentric is used, a thicker than standard retaining washer must be used to make up for the thickness of the eccentric. The cam gear MUST be pulled tightly against the snout of the cam. If the gear is not tight against the step at the front of the cam, the cam bolt will come loose, and engine failure is sure to occur.

Dowel pin failure is fairly common in Small Block Ford engines. This is almost never the result of a defective or soft dowel pin. It is most often caused by the bolt in the center of the cam loosening and allowing the dowel pin to be loaded and shear. The center bolt should always be torqued to the manufacturer's specifications and a suitable thread lock used to prevent the bolt from backing out.

CAM PHASERS

Cam phasers are specially designed, computer-controlled cam gears for all 3 Valve & Coyote-based Ford Modular engines that have the ability to adjust camshaft position up to 60° while the engine is running. This helps to increase the engine's fuel efficiency. Another benefit is that the cam phasers allow the camshafts to always be in the best position for maximum power, regardless of the engine's RPM. The engine makes more torque and horsepower and extends the high RPM power-band by an additional 800-1000 RPM. However, because there is such a wide range of movement, only fairly small cam profiles can be used without causing piston to valve clearance issues.

COMP Cams® has developed the COMP Cams® Phaser Limiter Kit to eliminate this problem. These limiter plates replace the factory backplate on the cam phaser. They have posts which extend into the cam gear's control chambers, limiting their movement to no more than 20°. This allows you to install bigger, more powerful camshafts with safe piston-to-valve clearances. While keeping up to 20° of movement available, all of the wide-open throttle benefits of cam phasing are retained, since the normal retard the cams see at wide-open throttle is only around 9°. You MUST reprogram your engine's computer for it to operate properly after installing the cam phaser limiters.

CAMSHAFT RETENTION BOLT

Most V8 Ford engines used a 3/8" bolt to secure the upper cam gear to the cam. Almost all racing engines use a 7/16" bolt for this application. Be sure to check the compatibility of the bolt to the cam, as a 3/8" bolt in a 7/16" cam will almost certainly result in catastrophic engine failure. Most COMP Cams® racing roller cams will come with the 7/16" hole in the cam.

FORD 2000-2300 OHC 4 CYL. (4 JOURNAL) 1971-1991

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque and good mileage. Perfect cam for OEM replacement. | Hyd. | Hyd. | 800 to 4800 | 70-115-6 | 240H | 247 | 247 | 201 | 201 | .400 | .400 | 110° |
| HYDRAULIC – Power and mileage increase in low to mid RPM range. Great for highway driving. | Hyd. | Hyd. | 1000 to 5000 | 70-119-6 | 252H | 256 | 256 | 210 | 210 | .410 | .410 | 110° |
| HYDRAULIC – Good for towing in trucks and sedans. Excellent torque. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 70-123-6 | 260H | 264 | 264 | 218 | 218 | .420 | .420 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good all around street performance. Can be used in daily driver. Mid-range power. | Hyd. | Hyd. | 1500 to 5500 | 70-127-6 | 268H | 272 | 272 | 226 | 226 | .440 | .440 | 110° |
| HYDRAULIC – Great power in mid-range and high RPM. Performance cam for street use. | Hyd. | Hyd. | 1800 to 5800 | 70-131-6 | 280H | 280 | 280 | 236 | 236 | .460 | .460 | 110° |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Aftermarket intake and headers needed. 500 CFM carb., 11:1+ compression. | .010 | .010 | 3500 to 7400 | 70-202-6⁵³ | 294S | 300 | 300 | 270 | 270 | .503 | .503 | 112° |
| SOLID – Ported cylinder head, longer valves. 12:1+ compression. | .010 | .010 | 3800 to 7800 | 70-204-6⁵⁴ | 300S | 315 | 315 | 285 | 285 | .638 | .638 | 110° |

FORD ZETEC 2.0L DOHC 4 CYL. 1995-1997 AND 2000-2003

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| XR SERIES Solid Direct Acting Camshafts (CUSTOM SETS AVAILABLE) | | | | | | | | | | | | |
| SERIOUS STREET/RACE – Pulls strong through RPM range. Responds well to bolt-ons. | .010 | .010 | 1400 to 6000 | 108100⁸⁴ | Z273 | 273 | 273 | 220 | 220 | .381 | .381 | 112° 112° |
| SEVERE STREET/COMPETITION – Strong improvement in torque and HP from mid-range and up. Responds well to cold air intakes and exhaust upgrades. | .010 | .010 | 1800 to 7000 | 108200⁸⁴ | Z281 | 281 | 281 | 228 | 228 | .381 | .381 | 112° 112° |
| COMPETITION/PRO RACE – High RPM power. Maximize HP gains w/ aftermarket intake & exhaust upgrades. | .010 | .010 | 2200 to 7400 | 108300⁸⁴ | Z289 | 289 | 289 | 236 | 236 | .381 | .381 | 112° 112° |

FORD 144-250 C.I. 6 CYL. 1960-1983 (7.808" DECK)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best cam for low RPM torque or for use in 200c.i. and smaller engines. Economy and smooth idle. | Hyd. | Hyd. | 500 to 4500 | 65-235-4 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Good for towing in 200-250c.i., mid-range torque and power. Smooth idle. | Hyd. | Hyd. | 1000 to 5000 | 65-236-4 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |

⁷ Stock springs cannot be used

⁸ Fits only certain years

⁵³ These specs are measured w/ a stock length valve & .010" lash between the cam & follower

⁵⁴ These specs are measured w/ a .060" longer than stock valve & .010" lash between cam & follower

FORD 2000-2300 OHC 4 CYL. (4 JOURNAL) 1971-1991

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|--------|-------------------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| N/A | N/A | CL70-115-6 | N/A | 846-8 | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | CL70-119-6 | N/A | 846-8 | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | CL70-123-6 | N/A | 846-8 | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| N/A | N/A | CL70-127-6 ⁷ | N/A | 846-8 | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | CL70-131-6 ⁷ | N/A | 846-8 | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | 1270-8 | N/A | N/A | N/A | N/A | N/A | |

FORD ZETEC 2.0L DOHC 4 CYL. 1995-1997 AND 2000-2003

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|--------|--------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| XR SERIES Solid Direct Acting Camshafts (CUSTOM SETS AVAILABLE) | | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |

FORD 144-250 C.I. 6 CYL. 1960-1983 (7.808" DECK)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|------------|------------|--------|---------|--------------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K65-235-4 | SK65-235-4 | CL65-235-4 | N/A | 834-12 | 3223 ⁸⁴ | N/A | 7865-12 | 902-12 | N/A | 601-12 | 502-12 | |
| K65-236-4 | SK65-236-4 | CL65-236-4 | N/A | 834-12 | 3223 ⁸⁴ | N/A | 7865-12 | 902-12 | N/A | 601-12 | 502-12 | |

⁸⁴ Will not work in 1998-99 models

FORD 240-300 C.I. 6 CYL. 1965-1996 (10" DECK)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-----------------|-------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.6 ROCKER IN. | EX. |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good torque and mileage for 240-300. Excellent throttle response. | Hyd. | Hyd. | 500 to 4500 | 66-236-4 | 252H | 252 | 252 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC – Excellent torque and power for towing in 300c.i. Smooth idle. | Hyd. | Hyd. | 1000 to 5000 | 66-237-4 | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC – Moderate performance camshaft for 300c.i. Strong in mid-range RPM. Noticeable idle. | Hyd. | Hyd. | 1200 to 5200 | 66-248-4 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |

FORD 2600-2800 OHV 6 CYL. 1972-1980 PASSENGER CARS

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-----------------|--------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.46 ROCKER IN. | EX. |
| HIGH ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good for OEM replacement or rebuild. Low RPM torque with good economy. Very smooth idle. | .010 | .012 | 500 to 4500 | 36-101-4 | 244S | 244 | 244 | 200 | 200 | .388 | .388 | 108° |
| SOLID – Power increase in low to mid RPM range. Economy with performance. Smooth idle. | .010 | .012 | 800 to 4800 | 36-240-4 | 252S | 252 | 252 | 210 | 210 | .423 | .423 | 110° |
| SOLID – Moderate performance camshaft. Strong in mid-range RPM. Noticeable idle. | .010 | .012 | 1200 to 5200 | 36-241-4 | 264S | 264 | 264 | 220 | 220 | .428 | .428 | 110° |

FORD 2800 OHV 6 CYL. 1983-1986 BRONCO II/RANGER

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-----------------|--------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.46 ROCKER IN. | EX. |
| HIGH ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good cam for OEM replacement or rebuild. Low RPM torque w/ good economy. Very smooth idle. | .010 | .012 | 500 to 4500 | 38-101-4 | 244S | 244 | 244 | 200 | 200 | .388 | .388 | 108° |
| SOLID – Performance with economy, power increase in low to mid RPM range. Smooth idle. | .010 | .012 | 800 to 4800 | 38-240-4 | 252S | 252 | 252 | 210 | 210 | .423 | .423 | 110° |
| SOLID – Moderate performance camshaft. Strong in mid-range RPM. Noticeable idle. | .010 | .012 | 1200 to 5200 | 38-241-4 | 264S | 264 | 264 | 220 | 220 | .428 | .428 | 110° |

FORD 3.8L & 4.2L 6 CYL. 1989-2004

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-----------------|--------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.73 ROCKER IN. | EX. |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent upgrade for factory cam. Strong torque, mid-range and power. | Hyd. | Hyd. | 1000 to 5000 | 44-700-9 | 255HR112 | 255 | 263 | 200 | 208 | .480 | .480 | 112° |
| HYDRAULIC ROLLER – Excellent upgrade for Super Coupe, strong torque. | Hyd. | Hyd. | 1200 to 5800 | 44-701-9 | 259HR115 | 259 | 271 | 204 | 216 | .480 | .480 | 115° |
| HYDRAULIC ROLLER – Mild performance, needs spring upgrade & may require computer modifications. | Hyd. | Hyd. | 1500 to 5800 | 44-702-9 | 268HR112 | 265 | 273 | 210 | 218 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Serious street cam for Super Coupe or nitrous applications, needs spring upgrade and requires custom tuning. | Hyd. | Hyd. | 1500 to 6000 | 44-703-9 | 265HR115 | 265 | 281 | 210 | 226 | .500 | .500 | 115° |
| HYDRAULIC ROLLER – Max strip/street cam, requires spring upgrade and custom tuning. | Hyd. | Hyd. | 1800 to 6200 | 44-704-9 | 273HR112 | 273 | 281 | 218 | 226 | .500 | .500 | 112° |

¹Requires screw-in studs & guide plates

⁸³ Requires extensive machining to heads for 1995 & older models. '95 & earlier models, use #942-12 w/ OEM retainers & locks.

FORD 240-300 C.I. 6 CYL. 1965-1996 (10" DECK)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|------------|-------------------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K66-236-4 | SK66-236-4 | CL66-236-4 | N/A | 832-12 | 3224 | 1266-12 | 7866-12 | 903-12 | N/A | 901-12 | 502-12 | |
| K66-237-4 | SK66-237-4 | CL66-237-4 | N/A | 832-12 | 3224 | 1266-12 | 7866-12 | 903-12 | N/A | 901-12 | 502-12 | |
| K66-248-4 | SK66-248-4 | CL66-248-4 ⁷ | N/A | 832-12 | 3224 | 1266-12 | 7866-12 | 903-12 | N/A | 901-12 | 502-12 | |

FORD 2600-2800 OHV 6 CYL. 1972-1980 PASSENGER CARS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|------------|------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| HIGH ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| N/A | SK36-101-4 | CL36-101-4 | N/A | 835-12 | 3236 | 1236-12 | 7836-12 | 906-12 | N/A | N/A | N/A | |
| N/A | SK36-240-4 | CL36-240-4 | N/A | 835-12 | 3236 | 1236-12 | 7836-12 | 906-12 | N/A | N/A | N/A | |
| N/A | SK36-241-4 | CL36-241-4 | N/A | 835-12 | 3236 | 1236-12 | 7836-12 | 906-12 | N/A | N/A | N/A | |

FORD 2800 OHV 6 CYL. 1983-1986 BRONCO II/RANGER

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|------------|------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| HIGH ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| N/A | SK38-101-4 | CL38-101-4 | N/A | 835-12 | 3236 | 1236-12 | 7836-12 | 906-12 | N/A | N/A | N/A | |
| N/A | SK38-240-4 | CL38-240-4 | N/A | 835-12 | 3236 | 1236-12 | 7836-12 | 906-12 | N/A | N/A | N/A | |
| N/A | SK38-241-4 | CL38-241-4 | N/A | 835-12 | 3236 | 1236-12 | 7836-12 | 906-12 | N/A | N/A | N/A | |

FORD 3.8L & 4.2L 6 CYL. 1989-2004

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|--------|--------|--------|---------|------------|----------------------|----------|------------------------|-----------|-------------|-------------|--|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 851-12 | N/A | 1619-12 ¹ | 7635-12 | 26918-12 ⁸³ | 786-12 | N/A | N/A | |
| N/A | N/A | N/A | N/A | 851-12 | N/A | 1619-12 ¹ | 7635-12 | 26918-12 ⁸³ | 786-12 | N/A | N/A | |
| N/A | N/A | N/A | N/A | 851-12 | N/A | 1619-12 ¹ | 7635-12 | 26918-12 ⁸³ | 786-12 | N/A | N/A | |
| N/A | N/A | N/A | N/A | 851-12 | N/A | 1619-12 ¹ | 7635-12 | 26918-12 ⁸³ | 786-12 | N/A | N/A | |
| N/A | N/A | N/A | N/A | 851-12 | N/A | 1619-12 ¹ | 7635-12 | 26918-12 ⁸³ | 786-12 | N/A | N/A | |

RED NUMBERS DENOTE PREMIUM OPTION

FORD 4.0L 6 CYL. 1990-2001

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good upgrade for factory cam in Explorers & Rangers. Good torque & mileage. Great for towing. | Hyd. | Hyd. | 800 to 4800 | 49-410-8⁹⁸ | 256HR | 256 | 266 | 200 | 210 | .465 | .500 | 112° |
| HYDRAULIC ROLLER – Good in Explorers & Rangers with aftermarket chip. Strong torque and mid-range. | Hyd. | Hyd. | 1200 to 5200 | 49-422-8⁹⁸ | 270HR | 270 | 284 | 215 | 224 | .500 | .500 | 112° |

FLATHEAD FORD (2 GEAR) 239, 255 C.I. 8 CYL. 1949-1953

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| CLASSIC THUMPR™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Classic Thumpr™ – Street performance, choppy/thumping idle. | .012 | .014 | 1800-3600 | 41-600-7 | 279TS7 | 267 | 299 | 227 | 241 | .354 | .350 | 107° |
| SOLID – Classic Mutha' Thumpr™ – Performance street/strip, needs higher compression and aftermarket heads, rough idle. | .012 | .014 | 2000-4000 | 41-601-7 | 287TS7 | 275 | 307 | 235 | 249 | .368 | .364 | 107° |
| SOLID – Classic Big Mutha' Thumpr™ – Street/strip, engine modification mandatory, aftermarket heads, very rough idle. | .012 | .014 | 2200-4200 | 41-602-7 | 295TS7 | 283 | 315 | 243 | 257 | .382 | .378 | 107° |

FORD Y-BLOCK 292, 312 C.I. 8 CYL. 1955-1962

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| CLASSIC THUMPR™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Classic Thumpr™ – Performance street with good bottom end. Choppy/thumping idle. | .012 | .014 | 2000-5800 | 37-600-5 | 268TS7 | 268 | 287 | 231 | 245 | .479 | .470 | 107° |
| SOLID – Classic Mutha' Thumpr™ – High performance street/strip, gears and headers, rough idle. | .012 | .014 | 2200-5500 | 37-601-5 | 276TS7 | 276 | 295 | 239 | 253 | .489 | .480 | 107° |
| SOLID – Classic Big Mutha' Thumpr™ – Street/strip, needs higher compression, gears & headers, very rough idle. | .012 | .014 | 2500-5700 | 37-602-5 | 284TS7 | 284 | 303 | 247 | 261 | .500 | .491 | 107° |

FORD 4.6L & 5.4L SOHC MODULAR 2 VALVE 8 CYL. 1991-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------|-------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Excellent upgrade from stock cam. Improved torque and power. Works with stock computer, best with custom tuning. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 102100* | XE262H | 262 | 270 | 224 | 232 | .500 | .500 | 114° |
| SOHC – Mild street performance, 3.23-3.55 gears. Good torque and power. Noticeable idle. Requires custom tuning. | Hyd. | Hyd. | 1600 to 5600 | 102200* | XE268H | 268 | 274 | 230 | 236 | .500 | .500 | 114° |
| SOHC – Hot street, 3.55-3.73 gears, 2000+ stall. Requires custom tuning. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 102300* | XE274H | 274 | 278 | 236 | 240 | .500 | .500 | 114° |

* Requires aftermarket valve springs/retainers
⁹⁸ Will not work with stock length pushrods

Note: Some aftermarket cylinder heads require a custom grind "269" prefix camshaft core in Ford 4.6L & 5.4L SOHC Modular 2V engines. Please call 1.800.999.0853.

FORD 4.0L 6 CYL. 1990-2001

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|--------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 988-12 | 775-12 | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 988-12 | 775-12 | N/A | N/A |

FLATHEAD FORD (2 GEAR) 239, 255 C.I. 8 CYL. 1949-1953

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|--------|----------|------------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| CLASSIC THUMPR™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 811FH-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 811FH-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 811FH-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

FORD Y-BLOCK 292, 312 C.I. 8 CYL. 1955-1962

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|--------|---------|------------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| CLASSIC THUMPR™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 2931-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 2931-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 2931-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

FORD 4.6L & 5.4L SOHC MODULAR 2 VALVE 8 CYL. 1991-PRESENT

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|--|------------------------|---------------------|-------------------|----------------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| XTREME ENERGY™ Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |

RED NUMBERS DENOTE PREMIUM OPTION

FORD 4.6L & 5.4L SOHC MODULAR 2 VALVE 8 CYL. 1991-PRESENT (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|----------------|-------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| 1999-Up Performance Improvement Heads | | | | | | | | | | | | |
| SOHC – Excellent torque. Better low and mid-range torque with more power. Will work with stock computer, best with custom tuning. | Hyd. | Hyd. | 1400 to 5400 | 102500* | XE262AH | 262 | 266 | 226 | 230 | .550 | .550 | 113° |
| SOHC – Hot street cam, needs higher gear ratio. 2000+ stall. Intake, exhaust, computer upgrade recommended. Noticeable idle. Requires custom tuning | Hyd. | Hyd. | 1800 to 5800 | 102600* | XE270AH | 270 | 274 | 234 | 238 | .550 | .550 | 113° |
| SOHC – Street/strip, needs higher gear ratio, 2400+ stall. Intake, exhaust, requires custom tuning. Rough idle. | Hyd. | Hyd. | 2200 to 6200 | 102700* | XE278AH | 278 | 282 | 242 | 246 | .550 | .550 | 113° |
| XTREME ENERGY™ Blower Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| 1999-Up Performance Improvement Heads | | | | | | | | | | | | |
| SOHC – Good torque with powerful mid-range when using a blower. Requires custom tuning. | Hyd. | Hyd. | 1600 to 5600 | 102560* | XE262BH-16 | 262 | 266 | 226 | 230 | .550 | .550 | 116° |
| TRI-POWER XTREME™ Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Optimized fuel mileage with good torque and horsepower. Requires tuning. | Hyd. | Hyd. | 800 to 4800 | 102525* | TPX248HR-16 | 247 | 257 | 212 | 222 | .484 | .475 | 116° |
| SOHC – Exceptional torque with good horsepower and good fuel economy. Requires tuning. | Hyd. | Hyd. | 1000 to 5000 | 102530* | TPX254HR-15 | 253 | 261 | 218 | 226 | .484 | .475 | 115° |
| SOHC – Optimized combination for power and torque with acceptable fuel economy for daily driver or highway cruiser. Requires tuning. | Hyd. | Hyd. | 1200 to 5200 | 102535* | TPX262HR-14 | 261 | 267 | 224 | 230 | .495 | .495 | 114° |

* Requires aftermarket valve springs/retainers.

Note: Some aftermarket cylinder heads require a custom grind "269" prefix camshaft core in Ford 4.6L & 5.4L SOHC Modular 2V engines. Please call 1.800.999.0853.

FORD 4.6L & 5.4L SOHC MODULAR 3 VALVE 8 CYL. 2004-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------|--------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XFI™ NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Great upgrade for stock engine. Solid power gains above 4700 RPM, compatible with stock springs. Works with stock tune. | Hyd. | Hyd. | 750 to 6200 | 127050 | XE253LH-14 | 253 | 270 | 214 | 227 | .450 | .450 | 114° |
| SOHC – Solid power gains above 4900 RPM, compatible with stock springs. Works with stock tune. Best with 3.73 gear & 2500 stall. Great idle. | Hyd. | Hyd. | 750 to 6400 | 127200 | XE261LH-15.5 | 261 | 278 | 222 | 235 | .450 | .450 | 115.5° |
| XFI™ NSR (NO SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Excellent mid-range cam for bolt-on blowers with stock boost levels. Great power gains above 4700 RPM, compatible with stock springs. Best with stock gears. Works with stock tune. | Hyd. | Hyd. | 750 to 6200 | 127055 | XE253LH-15 | 253 | 274 | 214 | 231 | .450 | .450 | 115° |
| SOHC – Mid to upper range for bolt-on blowers running higher boost psi. Major power gains above 4900 RPM, compatible with stock springs. Best with 3.73+ gears & 2500 stall. Great idle. Works with stock tune. | Hyd. | Hyd. | 750 to 6400 | 127205 | XE261LH-16.5 | 261 | 282 | 222 | 239 | .450 | .450 | 116.5° |

FORD 4.6L & 5.4L SOHC MODULAR 2 VALVE 8 CYL. 1991-PRESENT (CONTINUED)

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|---|------------------------|---------------------|-------------------|----------------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| XTREME ENERGY™ Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| XTREME ENERGY™ Blower Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| TRI-POWER XTREME™ Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26113-16 26125-16 | 792-16 | N/A | 791-16 | N/A | N/A | N/A |

FORD 4.6L & 5.4L SOHC MODULAR 3 VALVE 8 CYL. 2004-PRESENT

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|---|------------------------|---------------------|-------------------|---------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| XFI™ NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| XFI™ NSR (NO SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

RED NUMBERS DENOTE PREMIUM OPTION

FORD 4.6L & 5.4L SOHC MODULAR 3 VALVE 8 CYL. 2004-PRESENT (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------|-------------|----------|-----|-----|-----|-----------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | W/ 1.825 ROCKER | EX. | |
| THUMPR™ NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Thumpr™ – Great idle with excellent power. Good mid-range torque and power gains above 4500 RPM. Compatible with stock valve springs, converter and gears; requires cam phaser upgrade and custom tuning. | Hyd. | Hyd. | 750 to 6400 | 127010* | TH265LL-9 | 265 | 298 | 226 | 246 | .450 | .450 | 109° |
| SOHC – Mutha' Thumpr™ – Very rough idle, biggest cam for stock heads. Great power above 4900 RPM. Compatible with stock valve springs, benefits from converter and gears, requires cam phaser upgrade and custom tuning. | Hyd. | Hyd. | 750 to 6600 | 127020* | MT273LL-9 | 273 | 306 | 234 | 254 | .450 | .450 | 109° |
| SOHC – Big Mutha' Thumpr™ – Extremely rough idle, needs stroker motor and/or ported heads. Major hp gains to 6800 RPM. Best with 3.73+ gears and 2500 stall. Compatible with stock valve springs, requires cam phaser upgrade. | Hyd. | Hyd. | 750 to 6800 | 127030* | BT281LL-9 | 281 | 314 | 242 | 262 | .450 | .450 | 109° |
| XFI™ VSR (VALVE SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Great upgrade over stock. Solid power gains above 4400 RPM, requires spring upgrade. Stock gears & converter OK. Recommend custom tuning. | Hyd. | Hyd. | 850 to 6200 | 127100 | XE253H-14 | 253 | 270 | 214 | 227 | .480 | .470 | 114° |
| SOHC – Serious street cam, noticeable idle. Solid power gains above 4600 RPM, requires spring upgrade. Works with tuners, recommend custom tuning. Best with 3.90 gears and 3000 stall. | Hyd. | Hyd. | 950 to 6400 | 127300 | XE261H-15.5 | 261 | 278 | 222 | 235 | .490 | .480 | 115.5° |
| XFI™ VSR (VALVE SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Powerful mid-RPM range cam for bolt-on blowers at stock boost levels. Solid power gains above 4400 RPM, requires spring upgrade. Stock gears and converter OK. Requires custom tuning. | Hyd. | Hyd. | 850 to 6200 | 127150 | XE253H-15 | 253 | 274 | 214 | 231 | .480 | .475 | 115° |
| SOHC – Mid to upper range cam for bolt-on blowers with high boost. Noticeable idle, solid power gains above 4900 RPM, requires spring upgrade. Best with 3000+ stall. Requires custom tuning. | Hyd. | Hyd. | 950 to 6400 | 127350 | XE261H-16.5 | 261 | 282 | 222 | 239 | .490 | .485 | 116.5° |
| XFI™ SPR (SPRING & PHASER MODS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Powerful cam with great idle, excellent upgrade over stock. Good torque down low with powerful mid-range. Solid power gains above 4500 RPM, requires spring and phaser upgrade. Requires custom tuning. Stock gears and converter ok. | Hyd. | Hyd. | 900 to 6700 | 127400* | XE256PH-12 | 256 | 267 | 221 | 228 | .523 | .538 | 112° |
| SOHC – Powerful cam with very rough idle, biggest cam to use with stock heads. Good midrange torque with incredible top end hp gains. Solid power above 4700 RPM, spring and phaser upgrade required. 3.90+ gears and 3000+ stall. Requires custom tuning. | Hyd. | Hyd. | 950 to 6900 | 127500* | XE264PH-12 | 264 | 275 | 229 | 236 | .535 | .550 | 112° |
| SOHC – Max effort street/strip cam with very rough idle, needs ported heads. Good midrange with incredible power up to 7000+ RPM. Solid power gains above 4900 RPM, requires spring and phaser upgrade. Custom tuning required. 4.10+ gears and 3200+ stall. | Hyd. | Hyd. | 1000 to 7100 | 127600* | XE272PH-12 | 272 | 283 | 237 | 244 | .547 | .560 | 112° |

* Requires cam phaser limiter kit (Part #5449)

FORD 4.6L & 5.4L SOHC MODULAR 3 VALVE 8 CYL. 2004-PRESENT (CONTINUED)

CAMSHAFTS FORD

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS | |
|--|------------------------|---------------------|-------------------|----------------------|-----------|------------|----------|-------------|-------------|-----------------|--|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | | |
| THUMPR™ NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| N/A | 5449 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | 5449 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | 5449 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| XFI™ VSR (VALVE SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |
| XFI™ VSR (VALVE SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |
| XFI™ SPR (SPRING & PHASER MODS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| N/A | 5449 | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |
| N/A | 5449 | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |
| N/A | 5449 | N/A | N/A | 26113-24 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A | |

RED NUMBERS DENOTE PREMIUM OPTION

FORD 4.6L & 5.4L SOHC MODULAR 3 VALVE 8 CYL. 2004-PRESENT (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------|-------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XFI™ SPR (SPRING & PHASER MODS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| SOHC – Powerful cam with great idle, excellent upgrade over stock. Good torque down low with powerful mid-range. Solid power gains above 4500 RPM, requires spring and phaser upgrade. Requires custom tuning. OK with stock gears. | Hyd. | Hyd. | 900 to 6700 | 127450* | XE264PH-13 | 264 | 279 | 229 | 240 | .535 | .555 | 113° |
| SOHC – Big power gains in mid to upper RPM range for bolt-on blowers with high boost. Rough idle, solid power gains above 4900 RPM, requires spring and phaser upgrade. Requires custom tuning. Best with 3.90+ gears and 3000+ stall. | Hyd. | Hyd. | 950 to 6900 | 127550* | XE272PH-13 | 272 | 287 | 237 | 248 | .547 | .560 | 113° |
| SOHC – Max effort blower cam with very rough idle, needs ported heads. Great mid-range power with incredible gains up to 7000+ RPM. Solid power gains above 4900 RPM, requires spring and phaser upgrade. Requires custom tuning. 4.10+ gears and 3200+ stall. | Hyd. | Hyd. | 1000 to 7100 | 127650* | XE280PH-13 | 280 | 295 | 245 | 256 | .559 | .560 | 113° |

* Requires cam phaser limiter kit (Part #5449)

FORD 4.6L, 5.4L & 5.8L DOHC MODULAR 4 VALVE 8 CYL. 1993-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|----------------|-------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XTREME RPM SERIES Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Excellent replacement cam with strong torque. Requires custom tuning. | Hyd. | Hyd. | 1000 to 5000 | 106060* | XE254BH-116 | 253 | 253 | 218 | 218 | .425 | .425 | 116° |
| DOHC – Great street performance with excellent torque & HP gains with noticeable idle. Requires custom tuning. | Hyd. | Hyd. | 1200 to 5400 | 106100* | XE262AH-114 | 261 | 257 | 226 | 222 | .425 | .425 | 114° |
| DOHC – Serious street effort with maximum power gains in mid to upper RPM. Requires computer modifications and lower gears. Automatic cars need a 2000+ stall. Requires custom tuning. Mild rough idle. | Hyd. | Hyd. | 1500 to 6000 | 106160* | XE266BH-116 | 265 | 265 | 230 | 230 | .425 | .425 | 116° |
| DOHC – Street and strip performance. Needs lower gears, exhaust upgrades, larger throttle body and mass air, bigger fuel injectors and a 2200+ stall with automatics. Requires custom tuning. Rough idle. | Hyd. | Hyd. | 1800 to 6200 | 106200* | XE270AH-114 | 269 | 265 | 234 | 230 | .425 | .425 | 114° |
| XTREME XE-R SERIES Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Street performance with excellent torque in normally aspirated engines. Requires custom tuning. Noticeable idle. | Hyd. | Hyd. | 1500 to 5800 | 106300* | XE262AH-114 | 261 | 259 | 226 | 224 | .475 | .450 | 114° |
| DOHC – Hot performance with serious HP & torque gains. Recommended lower gears, requires custom tuning, larger throttle body, mass air, injectors & exhaust upgrades. Automatics use 2200+ stall. Rough idle. | Hyd. | Hyd. | 1800 to 6200 | 106400* | XE270BH-114 | 269 | 267 | 234 | 232 | .475 | .450 | 114° |
| DOHC – Race or limited street use. Cams require a larger throttle body, mass air, injectors, exhaust upgrades and requires custom tuning. Automatics need a 3000+ stall. Very rough idle. | Hyd. | Hyd. | 2200 to 6500 | 106500* | XE278AH-114 | 277 | 275 | 242 | 240 | .475 | .450 | 114° |

* Requires aftermarket valve springs/retainers.

FORD 4.6L & 5.4L SOHC MODULAR 3 VALVE 8 CYL. 2004-PRESENT (CONTINUED)

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|---|------------------------|---------------------|-------------------|---------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| XFI™ SPR (SPRING & PHASER MODS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | 5449 | N/A | N/A | 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A |
| N/A | 5449 | N/A | N/A | 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A |
| N/A | 5449 | N/A | N/A | 26125-24 | 710-24 | N/A | 702-24 | N/A | N/A | N/A |

FORD 4.6L, 5.4L & 5.8L DOHC MODULAR 4 VALVE 8 CYL. 1993-PRESENT

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|--|------------------------|---------------------|-------------------|---------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| XTREME RPM SERIES Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |
| XTREME XE-R SERIES Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A |

Note: For 5.4L GT500 applications, you MUST use these REQUIRED parts: 26125-16 valve springs & either 792-16 steel or 791-16 titanium retainers for the intake AND 26123-16 valve springs & either 799-16 steel or 798-16 titanium retainers for the exhaust. These are available in kit form that includes springs and retainers: Part #GT500ST-KIT (steel retainers) and #GT500TI-KIT (titanium retainers).

FORD 4.6L, 5.4L & 5.8L DOHC MODULAR 4 VALVE 8 CYL. 1993-PRESENT (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------|-------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XE-R SUPERCHARGED & NITROUS SERIES Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Street performance w/ excellent torque. Works well in supercharged or nitrous engines. Requires custom tuning. | Hyd. | Hyd. | 1200 to 5800 | 106260* | XE258BH-116 | 257 | 259 | 222 | 224 | .475 | .450 | 116° |
| DOHC – Serious street effort for supercharged or nitrous applications. Requires custom tuning & lower gears. Automatics require 2000+ stall. Mild rough idle. | Hyd. | Hyd. | 1500 to 6000 | 106360* | XE266BH-116 | 265 | 267 | 230 | 232 | .475 | .450 | 116° |
| DOHC – Max strip/street cams for centrifugal supercharged or nitrous engines. Large gains in power with larger throttle body, mass air, injectors and exhaust upgrades. Requires lower gears and custom tuning. Automatics use a 2500+ stall. Features a rough idle. | Hyd. | Hyd. | 2000 to 6400 | 106460* | XE274BH-116 | 273 | 275 | 238 | 240 | .475 | .450 | 116° |

* Requires aftermarket valve springs/retainers.

FORD COYOTE 5.0L DOHC MODULAR 4 VALVE 8 CYL. 2011-2014

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE** |
|--|---------------|------|---------------------|----------------|--------------------|----------------|-----|-------------|-----|---------------------|------|-------------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| XFI™ NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Great upgrade over stock. Good power gains above 4500 RPM. Requires custom ECU programming. | Hyd. | Hyd. | 1500-6800 | 191060* | F5.0D NSR-NA1H-126 | 260 | 267 | 220 | 223 | .492 | .453 | 126° |
| DOHC – Big power gains in mid to upper RPM range, especially above 4900 RPM. Requires custom ECU programming. | Hyd. | Hyd. | 1700-7000 | 191100* | F5.0D NSR-NA2H-126 | 268 | 275 | 228 | 231 | .492 | .453 | 126° |
| DOHC – Max effort street/strip cam set. Strong power gains above 5500-7200+. Full length headers and 3.73+ gear. Requires custom ECU programming. | Hyd. | Hyd. | 1900-7200 | 191160* | F5.0D NSR-NA3H-126 | 276 | 283 | 236 | 239 | .492 | .453 | 126° |
| XFI™ NSR (NO SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Great upgrade over stock cams with bolt-on blowers and standard boost levels. Requires custom ECU programming. | Hyd. | Hyd. | 1500-6900 | 191260* | F5.0D NSR-BL1H-128 | 260 | 271 | 220 | 227 | .492 | .453 | 128° |
| DOHC – Big power gains in mid to upper RPM range for blower kits with higher boost. Requires custom ECU programming. | Hyd. | Hyd. | 1700-7100 | 191360* | F5.0D NSR-BL2H-128 | 268 | 279 | 228 | 235 | .492 | .453 | 128° |
| DOHC – Max effort street/strip cam set. Best choice when running higher boost levels and high RPM in modified engines. Requires ECU programming. | Hyd. | Hyd. | 2000-7300 | 191460* | F5.0D NSR-BL3H-128 | 276 | 287 | 236 | 243 | .492 | .453 | 128° |

* Requires cam phaser limiter kit (Part #5493) or optional cam phaser lock kit (#5492) for race applications.

** This is the effective Lobe Separation Angle (LSA) with intake and exhaust cams in their resting or "parked" positions. When using these cams with the required COMP Cams® Phaser Limiter Kit, this is the MAXIMUM effective LSA but when running they can be tuned TIGHTER by as much as 40°.

FORD 4.6L, 5.4L & 5.8L DOHC MODULAR 4 VALVE 8 CYL. 1993-PRESENT (CONTINUED)

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS | |
|--|------------------------|---------------------|-------------------|---------------|-----------|------------|----------|-------------|-------------|-----------------|--|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | | |
| XE-R SUPERCHARGED & NITROUS SERIES Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A | |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A | |
| 10254 | N/A | N/A | N/A | 26123-32 | 799-32 | N/A | 798-32 | N/A | N/A | N/A | |

Note: For 5.4L GT500 applications, you MUST use these REQUIRED parts: 26125-16 valve springs & either 792-16 steel or 791-16 titanium retainers for the intake AND 26123-16 valve springs & either 799-16 steel or 798-16 titanium retainers for the exhaust. These are available in kit form that includes springs and retainers: Part #GT500ST-KIT (steel retainers) and #GT500TI-KIT (titanium retainers).

FORD COYOTE 5.0L DOHC MODULAR 4 VALVE 8 CYL. 2011-2014

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS | |
|---|------------------------|---------------------|---|----------------------|-----------|------------|----------|-------------|-------------|-----------------|--|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | | |
| XFI™ NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 | |
| XFI™ NSR (NO SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 | |

RED NUMBERS DENOTE PREMIUM OPTION



FORD COYOTE 5.0L DOHC MODULAR 4 VALVE 8 CYL. 2011-2014 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE** |
|--|---------------|------|---------------------|----------------|---------------------|----------------|-----|-------------|-----|---------------------|------|-------------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| CR (SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Great upgrade over stock, Ford Boss and older NSR camshafts. Requires Spring Kit (unless using Boss heads). | Hyd. | Hyd. | 1600 to 7000 | 191620* | F5.0D CYR263H-123 | 263 | 270 | 227 | 229 | .516 | .514 | 123° |
| DOHC – Best all around performance with ported heads with biggest improvements above 5000 RPM. Requires Spring Kit (unless using Boss heads). | Hyd. | Hyd. | 1800 to 7300 | 191630* | F5.0D CYR267H-124 | 267 | 274 | 231 | 233 | .516 | .514 | 124° |
| DOHC – Max effort street/strip grind for heavily modified applications that operate above the factory rev limiter. Requires Spring Kit. | Hyd. | Hyd. | 2000 to 7600 | 191640* | F5.0D CYR271H-125 | 271 | 278 | 235 | 237 | .516 | .514 | 125° |
| CR (SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Blower cam version of Part #191630. Excellent improvement over stock in blown applications. Requires Spring Kit. | Hyd. | Hyd. | 1900 to 7400 | 191660* | F5.0D CYR-267BH-125 | 267B | 278 | 231 | 237 | .516 | .514 | 125° |
| DOHC – Blower cam version of Part #191640. Best high RPM street/strip grind for heavily modified blown applications. Requires Spring Kit. | Hyd. | Hyd. | 2100 to 7700 | 191680* | F5.0D CYR-275BH-127 | 275B | 286 | 239 | 245 | .516 | .514 | 127° |

* Requires cam phaser limiter kit (Part #5493) or optional cam phaser lock kit (#5492) for race applications.

** This is the effective Lobe Separation Angle (LSA) with intake and exhaust cams in their resting or "parked" positions. When using these cams with the required COMP Cams® Phaser Limiter Kit, this is the MAXIMUM effective LSA but when running they can be tuned TIGHTER by as much as 40°.

FORD COYOTE 5.0L DOHC MODULAR 4 VALVE 8 CYL. 2015-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------|----------------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| CR NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Great upgrade over stock while taking advantage of the improved ports and higher lift capacity of the 2015+ head. | Hyd. | Hyd. | 1600 to 7000 | 243420* | F5.0F CYR-263NAH 127 | 263 | 270 | 227 | 229 | .516 | .514 | 127° |
| DOHC – Best all around performance in modified applications with biggest improvements above 5000 RPM. | Hyd. | Hyd. | 1800 to 7300 | 243430* | F5.0F CYR-267NAH 129 | 267 | 274 | 231 | 233 | .516 | .514 | 129° |
| DOHC – Max effort street/strip grind for 2015+ Coyote modified applications that operate above the factory rev limiter. | Hyd. | Hyd. | 2000 to 7600 | 243440* | F5.0F CYR-271NAH 131 | 271 | 278 | 235 | 237 | .516 | .514 | 131° |
| CR NSR (NO SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | | | |
| DOHC – Blower cam version of Part #243430. Excellent improvement over stock in blown applications. | Hyd. | Hyd. | 1900 to 7400 | 243460* | F5.0F CYR-263BLH 130 | 267 | 278 | 231 | 237 | .516 | .514 | 130° |
| DOHC – Blower cam version of Part #243440. Best high RPM street/strip grind for heavily modified blown applications. | Hyd. | Hyd. | 2100 to 7700 | 243480* | F5.0F CYR-275BLH 134 | 275 | 286 | 239 | 245 | .516 | .514 | 134° |

* Phaser limiters NOT required.

FORD COYOTE 5.0L DOHC MODULAR 4 VALVE 8 CYL. 2011-2014 (CONTINUED)

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|---|------------------------|---------------------|---|----------------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| CR (SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| CR (SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |

Note: All 2011-2014 CR cam sets require the use of high lift spring kits in all but Boss heads, and installer must check follower wheel to adjust tower clearance in 2011 heads.

FORD COYOTE 5.0L DOHC MODULAR 4 VALVE 8 CYL. 2015-PRESENT

| CAM GEAR SET | CAM PHASER LIMITER KIT | CAM PHASER LOCK KIT | VALVE SPRING KITS | VALVE SPRINGS | RETAINERS | | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|---|------------------------|---------------------|---|----------------------|-----------|------------|----------|-------------|-------------|-----------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | | | |
| CR NSR (NO SPRINGS REQUIRED) Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | N/A | N/A | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| N/A | N/A | N/A | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| N/A | N/A | N/A | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| CR NSR (NO SPRINGS REQUIRED) BLOWER Hydraulic Roller Finger Follower Camshafts | | | | | | | | | | |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |
| N/A | 5493 | 5492 | 26113CY-KIT 26125CTS-KIT 26125CTI-KIT | 26113-32 26125-32 | 710-32 | 1763-32 | 763-32 | N/A | 523-32 | 4673-32 |

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – 289c.i. with automatic, stock gears. Good torque and economy, very smooth idle. | Hyd. | Hyd. | 800 to 4500 | 31-115-4 | 240H | 240 | 248 | 192 | 200 | .416 | .416 | 108° |
| HYDRAULIC – Good for low RPM torque in 289-302. Good towing in 302 automatic. Smooth idle. | Hyd. | Hyd. | 800 to 4800 | 31-215-2 | 252H | 252 | 252 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC – Excellent combo of torque and power. Best for towing in 302 stick with low gears. | Hyd. | Hyd. | 1200 to 5200 | 31-216-2 | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC – Good for daily driven performance vehicles. Mid-range power. Slightly lower gears. Mild rough idle. | Hyd. | Hyd. | 1500 to 5500 | 31-218-2 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Performance use. Best w/ mild converter, headers, 9:1 compression & lower gears. Rough idle. | Hyd. | Hyd. | 1800 to 5800 | 31-414-3 | 270H | 270 | 270 | 224 | 224 | .500 | .500 | 110° |
| HYDRAULIC – Broad power. 2500+ stall, low gears, 9.5:1 compression and headers. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 31-226-3 | 280H | 280 | 280 | 230 | 230 | .512 | .512 | 110° |
| HYDRAULIC – Street/strip use. 3500+ stall or 4 speed, 4.10 gear and 10.5:1 compression. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 31-330-3 | 292H | 292 | 292 | 244 | 244 | .534 | .534 | 110° |
| HYDRAULIC – Limited street use or bracket race. 11:1 compression, intake and exhaust. Radical idle. | Hyd. | Hyd. | 3000 to 7000 | 31-331-4 | 305H | 305 | 305 | 253 | 253 | .540 | .540 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4800 | 31-230-3 | XE250H | 250 | 260 | 206 | 212 | .460 | .474 | 110° |
| HYDRAULIC – Strong torque thru low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 31-234-3 | XE256H | 256 | 268 | 212 | 218 | .477 | .484 | 110° |
| HYDRAULIC – Excellent response, good mid-range, stock converter, 3.23-4.10 gear. | Hyd. | Hyd. | 1300 to 5600 | 31-238-3 | XE262H | 262 | 270 | 218 | 224 | .493 | .500 | 110° |
| HYDRAULIC – Great for street machine, 2200+ stall. | Hyd. | Hyd. | 1600 to 5800 | 31-242-3 | XE268H | 268 | 280 | 224 | 230 | .509 | .512 | 110° |
| HYDRAULIC – Very strong torque and throttle response, 2500+ stall. | Hyd. | Hyd. | 1800 to 6000 | 31-246-3 | XE274H | 274 | 286 | 230 | 236 | .520 | .523 | 110° |
| HYDRAULIC – Street/strip, 2800+ stall, headers, gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 31-250-4 | XE284H | 284 | 296 | 240 | 246 | .541 | .544 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, gear, 3300+ stall. | Hyd. | Hyd. | 2800 to 7000 | 31-254-4 | XE294H | 294 | 306 | 250 | 256 | .554 | .558 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 31-601-5 | 279TH7 | 279 | 296 | 227 | 241 | .491 | .476 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 31-602-5 | 287TH7 | 287 | 304 | 235 | 249 | .500 | .486 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 31-603-5 | 295TH7 | 295 | 312 | 243 | 257 | .512 | .497 | 107° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

³³ Pre-1972 engines use Part #3220

³⁵ Part #4504 studs required for 1978-present

³⁶ 1962-69 use Part #7632-16

³⁷ Adjustable valve train required

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302)

CAMSHAFTS FORD

| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|------------|-----------------------------|--------------------------------|--------------|--|--|--|--|------------------|------------------|---------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K31-115-4 | CL31-115-4 | RP1431-16 ^{36,38} | 832-16 | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-215-2 | CL31-215-2 | RP1431-16 ^{36,38} | 832-16 | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-216-2 | CL31-216-2 | RP1431-16 ^{36,38} | 832-16 | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-218-2 | CL31-218-2 | RP1431-16 ^{36,38} | 832-16 | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K31-414-3 | CL31-414-3 | RPM1431-16 ^{35,39} | 832-16 | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 942-16 972-16 | 747-16 740-16 | 611-16 | 502-16 |
| K31-226-3 | CL31-226-3 | RPM1431-16 ^{35,39} | 832-16 | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 942-16 972-16 | 747-16 740-16 | 611-16 | 502-16 |
| K31-330-3 | CL31-330-3 | RPM1431-16 ^{35,39} | 832-16 | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-331-4 | CL31-331-4 | RPM1431-16 ^{35,39} | 832-16 | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K31-230-3 | CL31-230-3 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-234-3 | CL31-234-3 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-238-3 | CL31-238-3 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-242-3 | CL31-242-3 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-246-3 | CL31-246-3 | RPM1431-16 ^{35,39} | 832-16 862-16 ³⁷ | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-250-4 | CL31-250-4 | RPM1431-16 ^{35,39} | 832-16 862-16 ³⁷ | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-254-4 | CL31-254-4 | RPM1431-16 ^{35,39} | 832-16 862-16 ³⁷ | 431M 435M | 2120 ³³ 3120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7933-16 ³⁶ | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K31-601-5 | CL31-601-5 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-602-5 | CL31-602-5 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K31-603-5 | CL31-603-5 | RP1431-16 ^{36,38} | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2120 ³³ | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

³⁸ For 1.7:1 ratio use Part #RP1453-16
³⁹ For 1.7:1 ratio use Part #RPM1453-16

⁵⁶ If equipped w/ studs & guide plates, use Part #1442-16

RED NUMBERS DENOTE PREMIUM OPTION

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good vacuum. Better torque & power. | Hyd. | Hyd. | 800 to 4800 | 31-213-4 | 252BH | 252 | 252 | 201 | 206 | .432 | .432 | 112° |
| HYDRAULIC – Excellent economy, pleasure and skiing use, fairly smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 31-216-2 | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC – Single or dual engines. Best for inboard/outboard. Noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 31-218-2 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |
| HYDRAULIC – Off shore type boat. Strong performance, rough idle. | Hyd. | Hyd. | 2000 to 6000 | 31-226-3 | 280H | 280 | 280 | 230 | 230 | .512 | .512 | 110° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| HYDRAULIC – Sound of Ford 271 HP 289 cam with hydraulic lifters and increased performance. | Hyd. | Hyd. | 2200 to 6400 | 31-670-4 | N+271H | 266 | 273 | 219 | 226 | .480 | .475 | 112° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshaft (FOR EFI) | | | | | | | | | | | | |
| HYDRAULIC – EFI speed density, works w/ stock computer. Very strong torque, great mileage, good idle quality. | Hyd. | Hyd. | 1000 to 5200 | 31-255-5 | XE250H-14 | 250 | 260 | 206 | 212 | .462 | .474 | 114° |
| DRAG RACE Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| HYDRAULIC – Good for 4 speed or 3500+ stall, 10.5:1+ compression. | Hyd. | Hyd. | 3800 to 6800 | 31-331-4 | 305AH-10 | 305 | 305 | 253 | 253 | .540 | .540 | 110° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts (NOT FOR EFI) | | | | | | | | | | | | |
| For Engines That DID NOT Come From The Factory With Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best with stock engine or slightly modified engine for economy or towing. Stock converter. Smooth idle. | Hyd. | Hyd. | 1200 to 4500 | 31-412-8³¹ | 260HR | 260 | 260 | 206 | 206 | .480 | .480 | 110° |
| HYDRAULIC ROLLER – Good performance increase for highway cruiser. Slightly noticeable idle. | Hyd. | Hyd. | 1800 to 5000 | 31-422-8³¹ | 270HR | 270 | 270 | 215 | 215 | .533 | .533 | 110° |
| HYDRAULIC ROLLER – Great for street machines. Best power increase above 3500 RPM, good torque, mild idle. | Hyd. | Hyd. | 2000 to 5500 | 31-432-8³¹ | 281HR | 281 | 281 | 220 | 220 | .512 | .512 | 110° |
| HYDRAULIC ROLLER – Street machine and limited high performance street use. 3.40-4.10 gears. Aftermarket intake and headers. Mild/rough idle. | Hyd. | Hyd. | 2500 to 6000 | 31-442-8³¹ | 284HR | 284 | 284 | 224 | 224 | .533 | .533 | 110° |
| HYDRAULIC ROLLER – Street/strip only, 4 speed and 4.10 or lower gear. 9:1 compression, aftermarket intake, headers and 2500+ converter. | Hyd. | Hyd. | 3000 to 6500 | 31-452-8³¹ | 290HR | 290 | 290 | 230 | 230 | .544 | .544 | 110° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

³¹ These cams can only be used in 289-302 engines. NOT 302 H.O. blocks due to base circle size.

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302) (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|-------------------------|--|--|--|----------------------------|--|--|---------------------------------|------------------|------------------|---------------------|
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| 832-16 | 3120 | 1431-16 ^{35,56} | 7631-16 ³⁶ | 942-16 | 768-16 | 601-16 | 502-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 832-16 | 3120 | 1431-16 ^{35,56} | 7631-16 ³⁶ | 942-16 | 768-16 | 601-16 | 502-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 832-16 | 3120 | 1431-16 ^{35,56} | 7631-16 ³⁶ | 942-16 | 768-16 | 601-16 | 502-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 832-16 | 3120 | 1431-16 ^{35,56} | 7631-16 ³⁶ 7933-16 ³⁶ | 972-16 | 747-16 730-16 | 611-16 | 502-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshaft | | | | | | | | | | | |
| K31-670-4 | CL31-670-4 ⁷ | RP1431-16 ^{35,38} | 832-16 862-16 ³⁷ | 431M 435M | 2120 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7831-16 ³⁶ 7631-16 ³⁶ | 942-16 972-16 | 768-16 747-16 | 601-16 611-16 | 502-16 |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshaft (FOR EFI) | | | | | | | | | | | |
| 832-16 862-16 ³⁷ | 3120 | 1431-16 ^{35,56} | 7631-16 ³⁶ | 942-16 972-16 | 768-16 747-16 | 601-16 611-16 | 502-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| DRAG RACE Hydraulic Flat Tappet Camshaft | | | | | | | | | | | |
| 862-16 ³⁷ | 3120 | 1631-16 ¹ 1831-16 ¹ | 7933-16 | 987-16 ² 950-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts (NOT FOR EFI) | | | | | | | | | | | |
| K31-412-8 | CL31-412-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-422-8 | CL31-422-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-432-8 | CL31-432-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-442-8 | CL31-442-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-452-8 | CL31-452-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

³³ Pre-1972 engines use Part #3220

³⁵ Part #4504 studs required for 1978-present

³⁶ 1962-69 use Part #7632-16

³⁷ Adjustable valve train required

³⁸ For 1.7:1 ratio use Part #RP1453-16

⁵⁶ If equipped w/ studs & guide plates, use Part #1442-16

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-----------------|-------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.6 ROCKER IN. | EX. |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 31-600-8³¹ | 283THR7 | 283 | 303 | 227 | 241 | .531 | .515 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 31-601-8³¹ | 291THR7 | 291 | 311 | 235 | 249 | .540 | .526 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 31-602-8³¹ | 299THR7 | 299 | 319 | 243 | 257 | .552 | .537 | 107° |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Daily usage in performance vehicles. Broad power, good driveability, stock gear and compression. Mild rough idle. 2000 converter recommended. | .022 | .022 | 1800 to 5800 | 31-333-4 | 270S | 270 | 270 | 224 | 224 | .499 | .499 | 110° |
| SOLID – Performance cam for street machines. Lower axle ratio and 2500+ stall with headers. Rough idle. | .022 | .022 | 2000 to 6000 | 31-334-4 | 282S | 282 | 282 | 236 | 236 | .528 | .528 | 110° |
| SOLID – Great for street/strip. 4 speed or automatic with 3500+ stall. Intake, headers, low gears, very rough idle, 10:1 compression. | .022 | .022 | 2500 to 6500 | 31-335-4 | 294S | 294 | 294 | 248 | 248 | .560 | .560 | 110° |
| SOLID – Limited street use, with 4000+ stall or 4 speed, with 4.10 or lower gear. | .022 | .022 | 3000 to 7000 | 31-336-4 | 306S | 306 | 306 | 260 | 260 | .592 | .592 | 110° |
| NOSTALGIA PLUS™ Mechanical Flat Tappet Camshaft | | | | | | | | | | | | |
| SOLID – Outstanding power and modern tight lash with Ford 271 HP 289 cam sound. | .012 | .012 | 2200 to 6800 | 31-671-4 | N+271S | 262 | 269 | 225 | 232 | .495 | .495 | 112° |
| FACTORY MUSCLE™ Mechanical Flat Tappet Camshaft (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| SOLID – Factory I.D. #C30Z-6250-C for 289c.i. 1965-68, factory 271 HP. | .022 | .022 | 2200 to 6200 | 31-110-5 | C30ZS | 263 | 261 | 228 | 227 | .478 | .475 | 114° |
| MAGNUM MUSCLE Mechanical Flat Tappet Camshaft (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| SOLID – Magnum Muscle Camshaft for 289c.i. 1965-68, factory 271 HP. | .022 | .022 | 2500 to 6500 | 31-334-4 | 282S | 270 | 270 | 236 | 236 | .528 | .528 | 110° |
| DRAG RACE Mechanical Flat Tappet Camshaft | | | | | | | | | | | | |
| SOLID – Good torque for small engines, 3500+ stall, 10:1 compression. | .022 | .022 | 3000 to 7000 | 31-639-5 | 280B-6 | 280 | 284 | 242 | 246 | .541 | .522 | 106° |
| SOLID – Best baseline race cam, 10.5:1 compression, 3500+ stall, good power. | .022 | .022 | 3000 to 7000 | 31-609-5 | 285B-6 | 285 | 295 | 250 | 260 | .568 | .592 | 106° |
| SOLID – Good for 4000+ stall in medium to heavy cars, 10.5:1 compression. | .022 | .022 | 3000 to 7000 | 31-640-5 | 290B-6 | 290 | 304 | 255 | 266 | .576 | .570 | 106° |
| SOLID – Light car with 4 speed or 4500+ stall, 11:1 compression. | .022 | .022 | 3000 to 7000 | 31-641-5 | 300B-6 | 300 | 314 | 265 | 276 | .600 | .593 | 106° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

³¹ These cams can only be used in 289-302 engines. NOT 302 H.O. blocks due to base circle size.

³³ Pre-1972 engines use Part #3220

³⁵ Part #4504 studs required for 1978-present

³⁶ 1962-69 use Part #7632-16

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302) (CONTINUED)

| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|----------------------------|--|-------------------|--|----------------------------|--|----------------------------------|--|------------------|------------------|---------------------|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K31-600-8 | CL31-600-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-601-8 | CL31-601-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K31-602-8 | CL31-602-8 ⁷ | RPR1428-16 ³⁵ | 851-16 8931-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7819-16 7754-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K31-333-4 | CL31-333-4 ⁷ | RPM1431-16 ^{35,39} | 833-16 817-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7929-16 | 942-16 972-16 | 747-16 740-16 | 611-16 | 502-16 |
| K31-334-4 | CL31-334-4 ⁷ | RPM1431-16 ^{35,39} | 833-16 817-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7929-16 | 942-16 972-16 | 747-16 740-16 | 611-16 | 502-16 |
| K31-335-4 | CL31-335-4 ⁷ | RPM1431-16 ^{35,39} | 833-16 817-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7929-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 502-16 |
| K31-336-4 | CL31-336-4 ⁷ | RPM1431-16 ^{35,39} | 833-16 817-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7929-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 502-16 |
| NOSTALGIA PLUS™ Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
| K31-671-4 | CL31-671-4 ⁷ | RPM1431-16 ^{35,39} | 833-16 817-16 | 431M 435M | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7631-16 ³⁶ 7929-16 | 972-16 | 747-16 730-16 | 611-16 | 502-16 |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| FACTORY MUSCLE™ Mechanical Flat Tappet Camshaft (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 833-16 817-16 | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7929-16 | 26915-16 | 743-16 | 601-16 | 502-16 | N/A | N/A | 431M 435M | 4013 ¹ |
| MAGNUM MUSCLE Mechanical Flat Tappet Camshaft (Today's Version Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 833-16 817-16 | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7929-16 | 972-16 | 743-16 | 601-16 | 502-16 | N/A | N/A | 431M 435M | 4013 ¹ |
| DRAG RACE Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
| 833-16 817-16 | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7929-16 | 985-16 ² 950-16 ² | 740-16 730-16 | 611-16 | 503-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7929-16 | 985-16 ² 950-16 ² | 740-16 730-16 | 611-16 | 503-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7929-16 | 985-16 ² 950-16 ² | 740-16 730-16 | 611-16 | 503-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 2120 ³³ 3120 | 1431-16 ^{35,56} 1631-16 ¹ | 7929-16 | 985-16 ² 950-16 ² | 740-16 730-16 | 611-16 | 503-16 | 621-16 | N/A | 431M 435M | 4013 ¹ |

³⁹ For 1.7:1 ratio use Part #RPM1453-16
⁵⁶ If equipped w/ studs & guide plates, use Part #1442-16

RED NUMBERS DENOTE PREMIUM OPTION



FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Broad power, lower gear ratio, 2500+ stall with headers. Rough idle. | .020 | .020 | 2200 to 6500 | 31-760-8 | 288R | 288 | 288 | 243 | 243 | .586 | .586 | 110° |
| MECHANICAL ROLLER – Ultimate in Pro Street. 3500+ stall, 4.10 or lower gear. Radical idle. | .020 | .020 | 3000 to 7000 | 31-761-8 | 308R | 308 | 308 | 262 | 262 | .613 | .613 | 110° |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Excellent torque in 11:1 compression engines with 4000+ stall. | .026 | .028 | 4200 to 7200 | 31-767-9⁵ | 296BR-6 | 296 | 304 | 260 | 268 | .672 | .672 | 106° |
| MECHANICAL ROLLER – Easy on parts, great auto-matic cam, must have 4500+ stall. | .026 | .028 | 4500 to 7500 | 31-768-9⁵ | 306AR-4 | 306 | 306 | 271 | 271 | .640 | .640 | 104° |

FORD 5.0L 8 CYL. 1985-2002

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MAGNUM Hydraulic Roller Camshafts (CARBURETOR ONLY) | | | | | | | | | | | | |
| 1985-95 Engines Originally Equipped W/ Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best with stock or slightly modified engine for economy or towing. Stock gears and torque converter. Smooth idle. | Hyd. | Hyd. | 1200 to 4500 | 35-410-8 | 260HR | 260 | 260 | 206 | 206 | .533 | .533 | 110° |
| HYDRAULIC ROLLER – Mild street performance. Slight lobe at idle. Stock converter ok but best with 1800+ stall. Needs lower gears. | Hyd. | Hyd. | 1800 to 5000 | 35-420-8 | 270HR | 270 | 270 | 215 | 215 | .533 | .533 | 110° |
| HYDRAULIC ROLLER – Great in street machines. Best power above 3500 RPM but still good torque. Mild rough idle. Largest for stock heads and intake. 2000+ stall recommended. | Hyd. | Hyd. | 2000 to 5500 | 35-440-8 | 281HR | 281 | 281 | 220 | 220 | .512 | .512 | 110° |
| HYDRAULIC ROLLER – Street machine and limited high performance street use. Best with 5 speed or 2200-2500 stall. 3.40 to 4.10 gears, aftermarket intake and headers. | Hyd. | Hyd. | 2500 to 6000 | 35-430-8 | 280HR | 280 | 280 | 224 | 224 | .560 | .560 | 110° |
| HYDRAULIC ROLLER – Street/strip applications. 5 speed or 2500+ stall, 4.10 or lower gears with higher compression. Aftermarket intake and exhaust. | Hyd. | Hyd. | 3000 to 6500 | 35-450-8 | 286HR | 286 | 286 | 230 | 230 | .598 | .598 | 110° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads
⁵ Requires distributor gear upgrade

⁶ Offset lifters available
⁷ Stock springs cannot be used
³⁵ Part #4504 studs required for 1978-present

³⁶ 1962-69 use Part #7632-16
⁵⁶ If equipped with studs and guide plates, use Part #1442-16

FORD 221-302 C.I. 8 CYL. 1963-1995 (INCLUDES 221, 260, 289 & 302) (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | STEEL RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|------------|--|--|---------------------|------------------|--|----------------------------------|--|------------------|--------------|---------------------|--|
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| K31-760-8 | SK31-760-8 | CL31-760-8 | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2120 3120 | 1631-16 ¹ 1831-16 ¹ | 7631-16 ³⁶ 7929-16 | 914-16 ² 977-16 ² | 741-16 740-16 | 611-16 | 503-16 ² | |
| K31-761-8 | SK31-761-8 | CL31-761-8 | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2120 3120 | 1631-16 ¹ 1831-16 ¹ | 7631-16 ³⁶ 7929-16 | 914-16 ² 977-16 ² | 741-16 740-16 | 611-16 | 503-16 ² | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RET. | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3120 | 1632-16 ¹ 1832-16 ¹ | 7930-16 | 944-16 ² | 731-16 720-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ | |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3120 | 1632-16 ¹ 1832-16 ¹ | 7930-16 | 944-16 ² | 731-16 720-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ | |

FORD 5.0L 8 CYL. 1985-2002

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|-------------------------|-------------------------|-------------------|--------------|--|--|--------------------|---------------------------------|------------------|------------------|---------------------|--|
| MAGNUM Hydraulic Roller Camshafts (CARBURETOR ONLY) | | | | | | | | | | | | |
| K35-410-8 | SK35-410-8 ⁷ | CL35-410-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K35-420-8 | SK35-420-8 ⁷ | CL35-420-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K35-440-8 | SK35-440-8 ⁷ | CL35-440-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K35-430-8 | SK35-430-8 ⁷ | CL35-430-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K35-450-8 | SK35-450-8 ⁷ | CL35-450-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |

⁷⁰ Works with two-piece fuel pump eccentric
¹⁰⁵ For bushing lifter, use part # 96838B-16

FORD 5.0L 8 CYL. 1985-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-----------------|-------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.6 ROCKER IN. | EX. |
| MAGNUM Computer Controlled Hydraulic Roller Camshafts (FOR EFI) | | | | | | | | | | | | |
| 1985-95 Engines Originally Equipped W/ Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good stock upgrade. Best with mild tuning. | Hyd. | Hyd. | 1200 to 5200 | 35-308-8 | 266HR | 266 | 270 | 210 | 215 | .533 | .533 | 114° |
| HYDRAULIC ROLLER – Mild modifications, gears, mass air. Has slight idle. | Hyd. | Hyd. | 1500 to 5500 | 35-310-8 | 270HR | 270 | 276 | 215 | 220 | .533 | .544 | 114° |
| HYDRAULIC ROLLER – Mass air, 5 speed or 2500+ stall, heads, intake, headers, 3.55-3.73 gears. | Hyd. | Hyd. | 2000 to 5500 | 35-302-8 | 281HR | 281 | 284 | 220 | 224 | .512 | .533 | 112° |
| HYDRAULIC ROLLER – Works well with 5 speed or 2500+ stall, likes good intake, mass air and injectors. | Hyd. | Hyd. | 2000 to 6000 | 35-312-8 | 276HR | 276 | 280 | 220 | 224 | .544 | .560 | 114° |
| HYDRAULIC ROLLER – Needs injectors, larger mass air and throttle body, intake, heads, headers, gears and 2500+ stall or 5 speed. | Hyd. | Hyd. | 2200 to 6200 | 35-314-8 | 280HR | 280 | 286 | 224 | 230 | .560 | .598 | 112° |
| XTREME FUEL INJECTION (XFI™) Computer Controlled Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 1985-95 Engines O.E. Hydraulic Roller | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 347c.i. or larger. Super strong mid-range. Best w/ 9.5:1+ compression, aftermarket heads, intake, T-body and injectors. 3000+ stall or 5 speed. Computer mods a must. | Hyd. | Hyd. | 2600 to 6300 | 35-775-8⁷ | XFI236HR-14 | 286 | 300 | 236 | 248 | .579 | .579 | 114° |
| HYDRAULIC ROLLER – 347c.i. or larger. Serious hp and torque in mid and upper RPM. Best w/ aftermarket heads, intake, T-body and injectors. 3500+ stall or 5 speed. Computer mods a must. | Hyd. | Hyd. | 3200 to 6500 | 35-776-8⁷ | XFI248HR-14 | 304 | 314 | 248 | 258 | .608 | .608 | 114° |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts (FOR EFI) | | | | | | | | | | | | |
| 1985-95 Engines Originally Equipped w/ Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good power in stock application with few modifications. Best for towing or economy. | Hyd. | Hyd. | 1200 to 5200 | 35-512-8 | XE258HR | 258 | 264 | 206 | 212 | .480 | .480 | 114° |
| HYDRAULIC ROLLER – Mild street performance, good upgrade for stock cam. Works with O.B.D.1 | Hyd. | Hyd. | 1500 to 5500 | 35-349-8 | XE264HR | 264 | 270 | 212 | 218 | .512 | .512 | 114° |
| HYDRAULIC ROLLER – Best when used with better heads, intake, exhaust and 3.55-3.73 gears. | Hyd. | Hyd. | 1800 to 5800 | 35-351-8 | XE270HR | 270 | 276 | 218 | 224 | .512 | .512 | 114° |
| HYDRAULIC ROLLER – For stock H.O. or with mild modifications. | Hyd. | Hyd. | 1300 to 5300 | 35-510-8 | XE258HR | 258 | 266 | 208 | 216 | .533 | .544 | 112° |
| HYDRAULIC ROLLER – Mild modifications, 3.27-3.73 gears, mass air, larger throttle body. | Hyd. | Hyd. | 1600 to 5600 | 35-514-8 | XE266HR | 266 | 274 | 216 | 224 | .544 | .555 | 112° |
| HYDRAULIC ROLLER – 2500+ stall, 3.55-3.73 gears, better heads, intake and fuel system. | Hyd. | Hyd. | 2200 to 6200 | 35-518-8 | XE274HR | 274 | 282 | 224 | 232 | .555 | .565 | 112° |
| HYDRAULIC ROLLER – Street/strip, needs EEC IV upgrade, heads, intake and gears. 2800+ stall. | Hyd. | Hyd. | 2600 to 6500 | 35-522-8 | XE282HR | 282 | 290 | 232 | 240 | .565 | .574 | 112° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

³⁵ Part #4504 studs required for 1978-present

⁵⁶ If equipped with studs and guide plates, use Part #1442-16

FORD 5.0L 8 CYL. 1985-2002 (CONTINUED)

MAGNUM Computer Controlled Hydraulic Roller Camshafts (FOR EFI)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | STEEL RETAINERS | VALVE LOCKS | VALVE SEALS |
|-----------|-------------------------|-------------------------|-------------------|--------------|--|--|--------------------|---------------------------------|------------------|------------------|---------------------|
| K35-308-8 | SK35-308-8 ⁷ | CL35-308-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-310-8 | SK35-310-8 ⁷ | CL35-310-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-302-8 | SK35-302-8 ⁷ | CL35-302-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-312-8 | SK35-312-8 ⁷ | CL35-312-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-314-8 | SK35-314-8 ⁷ | CL35-314-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

XTREME FUEL INJECTION (XFI™) Computer Controlled Hydraulic Roller Camshafts

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|-------------------|--|--|--------------------|---------------------------------|------------------|------------------|---------------------|-----------|---------|--------------|--------------|
| 851-16 8931-16 | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 |
| 851-16 8931-16 | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 914-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 |

XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts (FOR EFI)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|-----------|-------------------------|-------------------------|-------------------|--------------|--|--|--------------------|---------------------------------|------------------|------------------|-------------------------------|
| K35-512-8 | SK35-512-8 | CL35-512-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 942-16 986-16 ² | 768-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| K35-349-8 | SK35-349-8 ⁷ | CL35-349-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 768-16 740-16 | 611-16 614-16 | 503-16 ² |
| K35-351-8 | SK35-351-8 ⁷ | CL35-351-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 768-16 740-16 | 611-16 614-16 | 503-16 ² |
| K35-510-8 | SK35-510-8 ⁷ | CL35-510-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 768-16 740-16 | 611-16 614-16 | 503-16 ² |
| K35-514-8 | SK35-514-8 ⁷ | CL35-514-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-518-8 | SK35-518-8 ⁷ | CL35-518-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-522-8 | SK35-522-8 ⁷ | CL35-522-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁷⁰ Works with two-piece fuel pump eccentric

FORD 5.0L 8 CYL. 1985-2002 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|------------------|-------------|----------------|-----|-------------|-----|-----------------|-------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.6 ROCKER IN. | EX. |
| NITROUS HP™ Hydraulic Roller Camshafts (CARBURETED OR EFI) | | | | | | | | | | | | |
| 1985-95 Engines Originally Equipped W/ Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – High performance street with 75-125 HP nitrous kit or small blower. Mild idle. | Hyd. | Hyd. | 1500 to 5600 | 35-552-8 | NX264HR | 264 | 276 | 212 | 224 | .512 | .512 | 114° |
| HYDRAULIC ROLLER – Street/strip applications, 100-175 HP kit or medium blower, rough idle. | Hyd. | Hyd. | 2200 to 6200 | 35-556-8 | NX274HR | 274 | 286 | 224 | 236 | .555 | .570 | 114° |
| HYDRAULIC ROLLER – Pro Street applications, excellent for 150-300 HP kits or large blower, computer modifications required. | Hyd. | Hyd. | 2600 to 6600 | 35-560-8 | NX282HR | 282 | 294 | 232 | 244 | .565 | .580 | 114° |
| BLOWER Hydraulic Roller Camshafts (CARBURETED OR EFI) | | | | | | | | | | | | |
| 1985-95 Engines Originally Equipped W/ Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Supercharged combinations with little or no additional modifications. | Hyd. | Hyd. | 1800 to 5300 | 35-304-8 | 270HR | 270 | 284 | 215 | 224 | .533 | .533 | 114° |
| HYDRAULIC ROLLER – Supercharged, works well with 5 speed, needs good intake with mass air and larger injectors, mild stall. | Hyd. | Hyd. | 2000 to 6000 | 35-312-8 | 276HR | 276 | 280 | 220 | 224 | .544 | .560 | 114° |
| HYDRAULIC ROLLER – Supercharged combinations with heads, intake, headers. 3.55-3.73 gear, mild stall. | Hyd. | Hyd. | 2000 to 6000 | 35-306-8 | 284HR | 284 | 290 | 224 | 230 | .533 | .544 | 114° |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts (FOR EFI) | | | | | | | | | | | | |
| 1985-95 Engines O.E. w/ Hydraulic Roller Cams (WITH 1.7 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – For use with 1.7:1 rockers. Mild street performance, good upgrade for factory cam. | Hyd. | Hyd. | 1500 to 5500 | 35-320-8 | XE264HR | 264 | 270 | 212 | 218 | .544 | .544 | 112° |
| HYDRAULIC ROLLER – For use with 1.7:1 rockers. Mild modifications, 3.20-3.73 gears, larger throttle body and mass air, good heads and manifold. | Hyd. | Hyd. | 1800 to 5800 | 35-324-8 | XE270HR | 270 | 276 | 218 | 224 | .544 | .544 | 112° |
| HYDRAULIC ROLLER – For use with 1.7:1 rockers. Major modifications, 3.55 gear or lower, 2500+ stall. | Hyd. | Hyd. | 2200 to 6200 | 35-328-8 | XE276HR | 276 | 282 | 224 | 230 | .544 | .544 | 112° |
| STREET/STRIP EFI Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 306-347c.i. with 160-180cc head, 9.25:1-10:1 compression. Needs intake upgrade, tuning required. | Hyd. | Hyd. | 2500 to 6000 | 35-871-13 | 277DHR-11 | 277 | 290 | 227 | 238 | .577 | .579 | 111° |
| HYDRAULIC ROLLER – 331-363c.i. with 190-215cc head, 10:1-11:1 compression. Needs aftermarket intake, requires tuning. | Hyd. | Hyd. | 2800 to 6200 | 35-872-13 | 289DHR-12 | 289 | 301 | 237 | 247 | .632 | .619 | 112° |
| HYDRAULIC ROLLER – 375-434c.i. with 200-225cc head, 10:1-11:1 compression. Needs single plane intake, requires tuning. | Hyd. | Hyd. | 3000 to 6500 | 35-870-13 | 295DHR-12 | 295 | 307 | 243 | 253 | .638 | .622 | 112° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

³⁵ Part #4504 studs required for 1978-present

⁵⁶ If equipped with studs and guide plates, use Part #1442-16

FORD 5.0L 8 CYL. 1985-2002 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|--|-------------------|---------------------|--|--|---------------------|---------------------------------|------------------|------------------|---------------------|
| NITROUS HP™ Hydraulic Roller Camshafts (CARBURETED OR EFI) | | | | | | | | | | | |
| K35-552-8 | SK35-552-8 ⁷ | CL35-552-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-556-8 | SK35-556-8 ⁷ | CL35-556-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-560-8 | SK35-560-8 ⁷ | CL35-560-8 ⁷ | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| BLOWER Hydraulic Roller Camshafts (CARBURETED OR EFI) | | | | | | | | | | | |
| K35-304-8 | SK35-304-8 | CL35-304-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-312-8 | SK35-312-8 | CL35-312-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-306-8 | SK35-306-8 | CL35-306-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts (FOR EFI) | | | | | | | | | | | |
| K35-320-8 | SK35-320-8 | CL35-320-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-324-8 | SK35-324-8 | CL35-324-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-328-8 | SK35-328-8 | CL35-328-8 | 851-16 8931-16 | 431M 435M | 2138 ⁷⁰ 3138 ⁷⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7826-16 7917-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| STREET/STRIP EFI Hydraulic Roller Camshafts | | | | | | | | | | | |
| 877-16 15931-16 | 3135 | 1632-16 ¹ 1832-16 ¹ | N/A | 914-16 ² | 1731-16 731-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 |
| 877-16 15931-16 | 3135 | 1632-16 ¹ 1832-16 ¹ | N/A | 914-16 ² | 1731-16 731-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 |
| 15931-16 | 3135 | 1632-16 ¹ 1832-16 ¹ | N/A | 914-16 ² | 1731-16 731-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 |

⁷⁰ Works with two-piece fuel pump eccentric

FORD 351W 8 CYL. 1969-1996

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong torque and good mileage in low RPM applications. Performance upgrade for stock cam. Smooth idle. | Hyd. | Hyd. | 800 to 4800 | 35-215-3 | 252H | 252 | 252 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC – Great torque for trucks and 4WD. Best for economy or towing vehicles with automatic. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 35-216-3 | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC – Moderate high performance street driving. Mild street machines, great for daily drivers. Noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 35-218-3 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good for daily driven performance cars. Largest cam for stock converter. Lower gears. Mild rough ride. | Hyd. | Hyd. | 1800 to 5800 | 35-414-3 | 270H | 270 | 270 | 224 | 224 | .500 | .500 | 110° |
| HYDRAULIC – Excellent street machine camshaft. Headers & 2200+ stall with low gears. Rough idle. 9:1 compression. | Hyd. | Hyd. | 2000 to 6000 | 35-226-3 | 280H | 280 | 280 | 230 | 230 | .512 | .512 | 110° |
| HYDRAULIC – Great street/strip cam. 10:1 compression, headers, intake, gears and 3000+ stall. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 35-330-3 | 292H | 292 | 292 | 244 | 244 | .518 | .518 | 110° |
| HYDRAULIC – Ultimate cam for Pro Street. 3500+ stall with 10.5:1 compression and low gears. Radical idle. | Hyd. | Hyd. | 3000 to 7000 | 35-331-4 | 305H | 305 | 305 | 253 | 253 | .540 | .540 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4800 | 35-230-3 | XE250H | 250 | 260 | 206 | 212 | .461 | .474 | 110° |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 35-234-3 | XE256H | 256 | 262 | 212 | 218 | .477 | .484 | 110° |
| HYDRAULIC – Excellent response, good mid-range, stock converter, 3.23-4.10 gear. | Hyd. | Hyd. | 1300 to 5600 | 35-238-3 | XE262H | 262 | 270 | 218 | 224 | .493 | .500 | 110° |
| HYDRAULIC – Great for street machine, 2200+ stall. | Hyd. | Hyd. | 1600 to 5800 | 35-242-3 | XE268H | 268 | 280 | 224 | 230 | .510 | .512 | 110° |
| HYDRAULIC – Very strong torque and throttle response, 2500+ stall. | Hyd. | Hyd. | 1800 to 6000 | 35-246-3 | XE274H | 274 | 286 | 230 | 236 | .519 | .523 | 110° |
| HYDRAULIC – Street/strip with 2800+ stall, headers, gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 35-250-4 | XE284H | 284 | 296 | 240 | 246 | .541 | .544 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, gear, 3300+ stall. | Hyd. | Hyd. | 2800 to 7000 | 35-254-4 | XE294H | 294 | 306 | 250 | 256 | .554 | .558 | 110° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads

⁷ Stock springs cannot be used
³³ Pre-1972 engines use Part #3220

³⁵ Part #4504 studs required for 1978-present
³⁷ Adjustable valve train required

FORD 351W 8 CYL. 1969-1996

CAMSHAFTS FORD

| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------------------------------|--------------|----------------------------|--|--------------------|---------------------------------|------------------|------------------|---------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K35-215-3 | CL35-215-3 | RP1436-16 ³⁵ | 832-16 | 431M 435M | 3230 ³³ | 1431-16 ^{35,56} | 7835-16 | 942-16 972-16 | 768-16 747-16 | 601-16 611-16 | 502-16 |
| K35-216-3 | CL35-216-3 | RP1436-16 ³⁵ | 832-16 | 431M 435M | 3230 ³³ | 1431-16 ^{35,56} | 7835-16 | 942-16 972-16 | 768-16 747-16 | 601-16 611-16 | 502-16 |
| K35-218-3 | CL35-218-3 ⁷ | RP1436-16 ³⁵ | 832-16 | 431M 435M | 3230 ³³ | 1431-16 ^{35,56} | 7835-16 | 942-16 972-16 | 768-16 747-16 | 601-16 611-16 | 502-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K35-414-3 | CL35-414-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 942-16 972-16 | 747-16 740-16 | 611-16 | 502-16 |
| K35-226-3 | CL35-226-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 942-16 972-16 | 747-16 740-16 | 611-16 | 502-16 |
| K35-330-3 | CL35-330-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-331-4 | CL35-331-4 | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K35-230-3 | CL35-230-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2135 | 1431-16 ^{35,56} 1631-16 ¹ | 7835-16 7472-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-234-3 | CL35-234-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2135 | 1431-16 ^{35,56} 1631-16 ¹ | 7835-16 7472-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-238-3 | CL35-238-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2135 | 1431-16 ^{35,56} 1631-16 ¹ | 7835-16 7472-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-242-3 | CL35-242-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 3230 ³³ 2135 | 1431-16 ^{35,56} 1631-16 ¹ | 7835-16 7472-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-246-3 | CL35-246-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-250-4 | CL35-250-4 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-254-4 | CL35-254-4 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁵⁶ If equipped with studs and guide plates, use Part #1442-16

RED NUMBERS DENOTE PREMIUM OPTION

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 35-600-4 | 279TH7 | 279 | 297 | 227 | 241 | .490 | .475 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 35-601-4 | 287TH7 | 287 | 304 | 235 | 249 | .501 | .486 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 35-602-4 | 295TH7 | 295 | 313 | 243 | 257 | .512 | .489 | 107° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque and throttle response, good economy and low end power. | Hyd. | Hyd. | 1000 to 5000 | 35-231-3 | X4250H | 250 | 258 | 206 | 214 | .462 | .493 | 111° |
| HYDRAULIC – Good torque for 4x4, excellent mid-range power, great for RV or towing. | Hyd. | Hyd. | 1200 to 5200 | 35-235-3 | X4254H | 254 | 262 | 210 | 218 | .477 | .493 | 111° |
| HYDRAULIC – Good torque for 4x4 with aftermarket intake & headers. Excellent mid-range, works with lower gears. | Hyd. | Hyd. | 1400 to 5500 | 35-239-3 | X4262H | 262 | 270 | 218 | 226 | .493 | .512 | 111° |
| HYDRAULIC – Good torque and throttle response, needs intake & headers, lower gears & 2500+ stall. | Hyd. | Hyd. | 1600 to 5800 | 35-243-4 | X4270H | 270 | 278 | 226 | 234 | .512 | .531 | 111° |

| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshaft (FOR EFI) | | | | | | | | | | | | |
|--|------|------|--------------|-----------------|--------|-----|-----|-----|-----|------|------|------|
| HYDRAULIC – EFI speed density, works with stock computer. Very strong torque, excellent mileage, good idle quality. | Hyd. | Hyd. | 1000 to 5200 | 35-255-5 | XE254H | 254 | 258 | 210 | 214 | .478 | .485 | 114° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| LOW LIFT OVAL TRACK Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| HYDRAULIC – .450" lift rule. Rough idle, under 10" of vacuum. Good power. | Hyd. | Hyd. | 3000 to 6500 | 35-635-5 | 41/15H-6 | 297 | 299 | 246 | 250 | .448 | .448 | 106° |

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¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

³³ Pre-1972 engines use Part #3220

³⁵ Part #4504 studs required for 1978-present

³⁷ Adjustable valve train required

⁵⁰ Camshaft retaining plate Part #3120TB recommended

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------------------------|-------------------------|--------------------------------|--------------|------------|--|--------------------|---------------------------------|------------------|------------------|---------------------|
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K35-600-4 | GK35-600-4 ⁹³ | CL35-600-4 ⁷ | 832-16 862-16 ³⁷ | 2135 3135 | 4120 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-601-4 | GK35-601-4 ⁹³ | CL35-601-4 ⁷ | 832-16 862-16 ³⁷ | 2135 3135 | 4120 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-602-4 | GK35-602-4 ⁹³ | CL35-602-4 ⁷ | 832-16 862-16 ³⁷ | 2135 3135 | 4120 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------------------------------|--------------|--------------|--|--------------------|---------------------------------|------------------|------------------|---------------------|
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K35-231-3 | CL35-231-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7835-16 7472-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-235-3 | CL35-235-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7835-16 | 942-16 972-16 | 768-16 743-16 | 601-16 | 502-16 |
| K35-239-3 | CL35-239-3 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-243-4 | CL35-243-4 ⁷ | RP1436-16 ³⁵ | 832-16 862-16 ³⁷ | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshaft (FOR EFI) | | | | | | | | | | | |
|--|-----|-------------------------|--------|--------------|--------------------|--------------------------|---------|------------------|------------------|------------------|--------|
| N/A | N/A | RP1436-16 ³⁵ | 832-16 | 431M 435M | 3230 ³³ | 1431-16 ^{35,56} | 7835-16 | 942-16 972-16 | 768-16 747-16 | 601-16 611-16 | 502-16 |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------------------------|--|--------------------|-------------------------------|------------------|-------------|-------------------------------|-----------|---------|--------------|-------------------|
| LOW LIFT OVAL TRACK Hydraulic Flat Tappet Camshaft | | | | | | | | | | | |
| 862-16 ³⁷ | 3135 3135KT ⁵⁰ | 1431-16 ^{35,56} 1631-16 ¹ | 7472-16 7965-16 | 972-16 986-16 ² | 740-16 730-16 | 611-16 | 502-16 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |



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⁵⁶ If equipped with studs and guide plates, use Part #1442-16

⁹³ GK-Kit contains cam, lifters & gear drive

RED NUMBERS DENOTE PREMIUM OPTION



FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts (NOT FOR EFI) | | | | | | | | | | | | |
| For Engines That DID NOT Come From The Factory With Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Mild performance applications, good low end and mid-range, good idle. | Hyd. | Hyd. | 1200 to 5200 | 35-413-8 | XR264RF-HR | 264 | 270 | 212 | 218 | .513 | .513 | 110° |
| HYDRAULIC ROLLER – Good mid-range performance, 3.23+ gears, stock converter or 1800+ stall. Noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 35-421-8 | XR270RF-HR | 270 | 276 | 218 | 224 | .513 | .513 | 110° |
| HYDRAULIC ROLLER – Strong mid-range performance, street machines with 3.55+ gears, 2200+ converter. | Hyd. | Hyd. | 1800 to 5800 | 35-424-8 | XR276RF-HR | 276 | 282 | 224 | 230 | .513 | .513 | 110° |
| HYDRAULIC ROLLER – Great for street machines, needs intake, headers, 2500+ converter and 3.73+ gears, rough idle. | Hyd. | Hyd. | 2000 to 6000 | 35-425-8 | XR282RF-HR | 282 | 289 | 230 | 236 | .513 | .529 | 110° |
| HYDRAULIC ROLLER – Street/strip, 9:1+ compression, intake, headers, 2800+ converter and 3.73+ gears, rough idle. | Hyd. | Hyd. | 2200 to 6200 | 35-426-8 | XR288RF-HR | 288 | 294 | 236 | 240 | .555 | .576 | 110° |
| HYDRAULIC ROLLER – Street/strip, 9.5:1 compression, intake, headers, 3000+ converter, 4.10+ gears, rough idle. | Hyd. | Hyd. | 2500 to 6500 | 35-427-8 | XR294RF-HR | 294 | 300 | 242 | 248 | .576 | .600 | 110° |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts (NOT FOR EFI) | | | | | | | | | | | | |
| For Engines That DID NOT Come From The Factory With Hydraulic Roller Cams | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best with stock engine for economy or towing. Use with stock gears and converter, smooth idle. | Hyd. | Hyd. | 1200 to 4500 | 35-412-8 | 260HR | 260 | 260 | 206 | 206 | .480 | .480 | 110° |
| HYDRAULIC ROLLER – Mild street performance increase. Slight lobe at idle. Works with stock converter, best with 1800+ stall and gears. | Hyd. | Hyd. | 1800 to 5000 | 35-422-8 | 270HR | 270 | 270 | 215 | 215 | .533 | .533 | 110° |
| HYDRAULIC ROLLER – Great for street machines. Best power above 3500 RPM with good torque. Mild rough idle. Largest for stock heads and intake. | Hyd. | Hyd. | 2000 to 5500 | 35-442-8 | 284HR | 284 | 284 | 224 | 224 | .533 | .533 | 110° |
| HYDRAULIC ROLLER – Street machine and limited high performance street use. Best with 4 speed or 2800+ stall and 3.40 to 4.10 gears, aftermarket intake and headers. | Hyd. | Hyd. | 2500 to 6000 | 35-452-8 | 290HR | 290 | 290 | 230 | 230 | .544 | .544 | 110° |
| HYDRAULIC ROLLER – Street/strip, 4 speed or 3200+ stall and 4.10 or lower gear. Higher compression, good intake and headers. | Hyd. | Hyd. | 3000 to 6500 | 35-462-8 | 304HR | 304 | 304 | 244 | 244 | .576 | .576 | 110° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads

⁷ Stock springs cannot be used
³² Requires lifter installation kit Part #31-1000 for retro-fit applications

³⁵ Part #4504 studs required for 1978-present

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

CAMSHAFTS FORD

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|---------------------------------|--------------|--------------|--|--------------------|---------------------------------|------------------|------------------|---------------------|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts (NOT FOR EFI) | | | | | | | | | | | |
| K35-413-8 | SK35-413-8 ⁷ | CL35-413-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-421-8 | SK35-421-8 ⁷ | CL35-421-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-424-8 | SK35-424-8 ⁷ | CL35-424-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-425-8 | SK35-425-8 ⁷ | CL35-425-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-426-8 | SK35-426-8 ⁷ | CL35-426-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-427-8 | SK35-427-8 ⁷ | CL35-427-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts (NOT FOR EFI) | | | | | | | | | | | |
| K35-412-8 | SK35-412-8 ⁷ | CL35-412-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-422-8 | SK35-422-8 ⁷ | CL35-422-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-442-8 | SK35-442-8 ⁷ | CL35-442-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-452-8 | SK35-452-8 ⁷ | CL35-452-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-462-8 | SK35-462-8 ⁷ | CL35-462-8 ⁷ | 851-16 ³² 8931-16 | 431M 435M | 2135 3135 | 1431-16 ^{35,56} 1631-16 ¹ | 7823-16 7963-16 | 987-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁵⁶ If equipped with studs and guide plates, use Part #1442-16

RED NUMBERS DENOTE PREMIUM OPTION

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts (Not For EFI) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 35-600-8⁹⁵ | 283THR7 | 283 | 303 | 227 | 241 | .531 | .515 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 35-601-8⁹⁵ | 291THR7 | 291 | 311 | 235 | 249 | .541 | .526 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/ strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 35-602-8⁹⁵ | 299THR7 | 299 | 319 | 243 | 257 | .552 | .538 | 107° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------------|--------|-------------|--------|-------------------|---------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| 4-PATTERN Retro-Fit Hydraulic Roller Camshafts (Larger Cam Lobes For Outboard Cylinders) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for smaller c.i. applications with very good heads. Extremely wide power range. 1800+ stall. | Hyd. | Hyd. | 1700 to 6300 | 35-561-44 | 269Q108 | 271 OB | 283 OB | 219 OB | 229 OB | .603 OB | .590 OB | 108.5 OB |
| | | | | | | 269 IB | 281 IB | 217 IB | 227 IB | .600 IB | .587 IB | 107.5 IB |
| HYDRAULIC ROLLER – Great all around choice for street applications in modified engines and 2500+ stall or manual transmissions. | Hyd. | Hyd. | 2300 to 6600 | 35-562-44 | 281Q108 | 283 OB | 295 OB | 231 OB | 241 OB | .622 OB | .610 OB | 108.5 OB |
| | | | | | | 281 IB | 293 IB | 229 IB | 239 IB | .619 IB | .606 IB | 107.5 IB |
| HYDRAULIC ROLLER – Excellent for street/strip applications w/ good heads & raised compression in high RPM engines. 3200+ stall. | Hyd. | Hyd. | 2900 to 7200 | 35-563-44 | 293Q108 | 295 OB | 307 OB | 243 OB | 253 OB | .638 OB | .622 OB | 108.5 OB |
| | | | | | | 293 IB | 305 IB | 241 IB | 251 IB | .637 IB | .622 IB | 107.5 IB |
| HYDRAULIC ROLLER – Recommended in larger c.i. & high compression applications. 3500+ stall. | Hyd. | Hyd. | 3300 to 7500 | 35-564-44 | 305Q108 | 307 OB | 319 OB | 255 OB | 265 OB | .638 OB | .622 OB | 108.5 OB |
| | | | | | | 305 IB | 317 IB | 253 IB | 263 IB | .638 IB | .622 IB | 107.5 IB |

LOW LIFT OVAL TRACK Mechanical Flat Tappet Camshaft

| | | | | | | | | | | | | |
|--|------|------|--------------|-----------------|---------|-----|-----|-----|-----|------|------|------|
| SOLID – 500" lift rule. Under 10" of vacuum with rough idle. Very good power. | .020 | .022 | 3000 to 6500 | 35-637-5 | 270LS-6 | 270 | 282 | 242 | 250 | .504 | .504 | 106° |
|--|------|------|--------------|-----------------|---------|-----|-----|-----|-----|------|------|------|

OVAL TRACK Mechanical Flat Tappet Camshafts

| | | | | | | | | | | | | |
|--|------|------|--------------|-----------------|----------|-----|-----|-----|-----|------|------|------|
| SOLID – Works well in restricted engines with stock manifolds, 2 BBL carb. | .020 | .022 | 2500 to 6500 | 35-620-5 | FL268S-6 | 268 | 276 | 238 | 246 | .568 | .584 | 106° |
| SOLID – Good in Late Model Stock on 1/4-1/2 mile, limited intake. | .020 | .022 | 2500 to 6500 | 35-622-5 | FL272S-6 | 272 | 280 | 242 | 250 | .576 | .592 | 106° |
| SOLID – 3/8-1/2 mile asphalt tracks. Late Model Stock, good power and torque. | .020 | .022 | 3000 to 7000 | 35-624-5 | FL276S-6 | 276 | 280 | 246 | 250 | .584 | .592 | 106° |
| SOLID – Good in Late Model Stock when high RPM can be maintained in turns. | .020 | .022 | 3500 to 7000 | 35-626-5 | FL280S-6 | 280 | 284 | 250 | 254 | .592 | .608 | 106° |
| SOLID – Good in heavy car on short tracks. Works with stock manifolds. | .020 | .022 | 3000 to 6500 | 35-639-5 | 280B-6 | 280 | 284 | 242 | 246 | .541 | .522 | 106° |
| SOLID – Best all around solid cam. Makes strong torque and good power. | .020 | .022 | 3000 to 6500 | 35-609-5 | 285B-6 | 285 | 295 | 250 | 260 | .568 | .592 | 106° |
| SOLID – Good for 1/4-3/8 mile tracks with high engine speed, great top end. | .020 | .022 | 3700 to 7000 | 35-640-5 | 290B-6 | 290 | 304 | 255 | 266 | .576 | .570 | 106° |
| SOLID – Good for 1/4-3/8 mile tracks with light car and large engine. | .020 | .022 | 3700 to 7500 | 35-641-5 | 300B-6 | 300 | 314 | 265 | 276 | .600 | .593 | 106° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

³⁵ Part #4504 studs required for 1978-present

⁵⁰ Camshaft retaining plate Part #3120TB recommended

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------------------------|-------------------------|---------|--------------|------------|--|--------------------|---------------------------------|------------------|------------------|---------------------|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts (Not For EFI) | | | | | | | | | | | |
| K35-600-8 | GK35-600-8 ⁹³ | CL35-600-8 ⁷ | 8931-16 | 2135 3135 | 4120 | 1431-16 ^{35,56} 1631-16 ¹ | 7643-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-601-8 | GK35-601-8 ⁹³ | CL35-601-8 ⁷ | 8931-16 | 2135 3135 | 4120 | 1431-16 ^{35,56} 1631-16 ¹ | 7643-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K35-602-8 | GK35-602-8 ⁹³ | CL35-602-8 ⁷ | 8931-16 | 2135 3135 | 4120 | 1431-16 ^{35,56} 1631-16 ¹ | 7643-16 7963-16 | 986-16 ² 26986-16 | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|--------------|--------------------|--------------------|---------------|-----------|-------------|-------------|-----------|---------|--------------|--------------|
| 4-PATTERN Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| 15931-16 | 7138 8138 | 1631-16 1831-16 | 7643-16 7963-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 431M 435M | 4013 |
| 15931-16 | 7138 8138 | 1631-16 1831-16 | 7643-16 7963-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 431M 435M | 4013 |
| 15931-16 | 7138 8138 | 1631-16 1831-16 | 7643-16 7963-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 431M 435M | 4013 |
| 15931-16 | 7138 8138 | 1631-16 1831-16 | 7643-16 7963-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 431M 435M | 4013 |

| LOW LIFT OVAL TRACK Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
|--|----------------|--------------------|--------------------|------------------|-------------------|--------|--|--------|-----|--------------|-------------------|
| 833-16 817-16 | 3135 3135KT | 1431-16 1631-16 | 7472-16 7965-16 | 972-16 986-16 | 740-16 1730-16 | 611-16 | 501-16 ² 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |

| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
|--|------------------------------|--|---------|--|------------------|--------|---------------------|--------|-----|--------------|-------------------|
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |
| 833-16 817-16 | 3135 ⁵⁰ 3135KT | 1631-16 ¹ 1831-16 ¹ | 7965-16 | 929-16 ² 26094-16 ² | 730-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4013 ¹ |

⁵⁶ If equipped with studs and guide plates, use Part #1442-16

⁹³ GK-Kit contains cam, lifters & gear drive
⁹⁵ Must use retro-fit roller style lifter #8931-16

RED NUMBERS DENOTE PREMIUM OPTION



FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | @ .050" | | VALVE LIFT W/ 1.6 ROCKER | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------|-----|---------|-----|--------------------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| XTREME ENERGY™ Mechanical Street Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good for weekend cruiser with 9:1 compression, 2000+ stall and lower gears. Noticeable idle. | .016 | .018 | 2000 to 6000 | 35-769-8 | XR268R | 268 | 274 | 230 | 236 | .589 | .602 | 110° |
| MECHANICAL ROLLER – Great for power touring. Needs 2500+ stall, easy on parts. Very reliable power. Rough idle. | .016 | .018 | 2200 to 6200 | 35-770-8 | XR274R | 274 | 280 | 236 | 242 | .602 | .608 | 110° |
| MECHANICAL ROLLER – Best in street machines w/ 2800+ stall, 10:1+ compression w/ 3.73-3.90 rear gears. | .016 | .018 | 2500 to 6500 | 35-771-8 | XR280R | 280 | 286 | 242 | 248 | .608 | .614 | 110° |
| MECHANICAL ROLLER – Good in weekend warrior with 3000+ stall. Needs aftermarket intake and exhaust with low gears. | .016 | .018 | 3000 to 7000 | 35-772-8 | XR286R | 286 | 292 | 248 | 254 | .614 | .621 | 110° |
| MECHANICAL ROLLER – Best for Pro Street. Needs aftermarket intake and exhaust, 11:1+ compression and 3500 stall. | .016 | .018 | 3200 to 7200 | 35-773-8 | XR292R | 292 | 298 | 254 | 260 | .621 | .627 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | @ .050" | | VALVE LIFT W/ 1.6 ROCKER | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------|-------------|----------|-----|---------|-----|--------------------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – 351-377c.i. motor, 12:1+ compression, 4500+ stall. | .020 | .022 | 4200 to 7200 | 35-780-9⁵ | 298DR-6 | 298 | 312 | 268 | 275 | .696 | .672 | 106° |
| MECHANICAL ROLLER – 351- 377c.i. Windsor with 125-250 HP nitrous. | .020 | .022 | 4800 to 7500 | 35-781-9⁵ | 308DR-10 | 308 | 326 | 278 | 286 | .696 | .683 | 110° |
| MECHANICAL ROLLER – 377c.i.+ stroker with aftermarket race heads, 300+ nitrous, needs best parts throughout. | .020 | .022 | 5500 to 8000 | 35-782-9⁵ | 318DR-12 | 318 | 336 | 282 | 300 | .744 | .731 | 112° |

| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | | |
|---|------|------|--------------|-----------------------------|---------|-----|-----|-----|-----|------|------|------|
| MECHANICAL ROLLER – Good on 3/8-1/2 mile asphalt track with tight corners. | .020 | .022 | 5800 to 7800 | 35-801-9⁵ | 292BR-6 | 292 | 296 | 256 | 260 | .672 | .672 | 106° |
| MECHANICAL ROLLER – For heavy cars with small c.i. Best for short tracks. | .020 | .022 | 3200 to 6200 | 35-830-9⁵ | 288AR-6 | 288 | 296 | 252 | 258 | .672 | .672 | 106° |
| MECHANICAL ROLLER – More aggressive intake lobe, more torque. Good for sprint car. | .020 | .022 | 3800 to 7000 | 35-831-9⁵ | 288BR-6 | 288 | 300 | 260 | 264 | .704 | .672 | 106° |
| MECHANICAL ROLLER – Best torque in 406+c.i. Late Model or 355c.i. with 9:5.1+ compression. | .020 | .022 | 4500 to 7500 | 35-832-9⁵ | 292BR-6 | 292 | 304 | 264 | 268 | .704 | .672 | 106° |

OVAL TRACK Mechanical Roller Camshafts

Xtreme RX Rollers use COMP's RX intake and RZ exhaust profiles to provide the ultimate in high RPM power and durability. Designed for use with light valve train above 8200 RPM. (Custom Grinds Available)

| | | | | | | | | | | | | |
|--|------|------|--------------|-----------------------------|----------|-----|-----|-----|-----|------|------|------|
| MECHANICAL ROLLER – Short track cam for 358 type engine. Very stable with good valve train parts. | .018 | .020 | 6000 to 8500 | 35-826-9⁵ | 296RXA-6 | 296 | 301 | 263 | 268 | .691 | .691 | 106° |
| MECHANICAL ROLLER – Great for large c.i. engines or high RPM 358 type engines. | .018 | .020 | 6300 to 8800 | 35-827-9⁵ | 300RXA-8 | 300 | 307 | 267 | 274 | .696 | .697 | 108° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade
⁶ Offset lifters available

⁷ Stock springs cannot be used

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

CAMSHAFTS FORD

| K-KIT | CL-KIT | BRONZE GEAR | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------|--|--------------|--------------|--|--------------------|--|------------------|-------------|---------------------|
| XTREME ENERGY™ Mechanical Street Roller Camshafts | | | | | | | | | | | |
| K35-769-8 | CL35-769-8 ⁷ | N/A | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2135 3135 | 1631-16 ¹ 1831-16 ¹ | 7472-16 7965-16 | 953-16 ² 954-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |
| K35-770-8 | CL35-770-8 ⁷ | N/A | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2135 3135 | 1631-16 ¹ 1831-16 ¹ | 7472-16 7965-16 | 953-16 ² 954-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |
| K35-771-8 | CL35-771-8 ⁷ | N/A | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2135 3135 | 1631-16 ¹ 1831-16 ¹ | 7472-16 7965-16 | 953-16 ² 954-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |
| K35-772-8 | CL35-772-8 ⁷ | N/A | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2135 3135 | 1631-16 ¹ 1831-16 ¹ | 7472-16 7965-16 | 953-16 ² 954-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |
| K35-773-8 | CL35-773-8 ⁷ | N/A | 838-16 ⁶ 96838-16 ¹⁰⁵ | 431M 435M | 2135 3135 | 1631-16 ¹ 1831-16 ¹ | 7472-16 7965-16 | 953-16 ² 954-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|----------------------|--|----------|---------------------|------------------|-------------|---------------------|-----------|---------|--------------|-------------------|
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 944-16 ² | 731-16 720-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 944-16 ² | 731-16 720-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 947-16 ² | 739-16 722-16 | 611-16 | 506-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |

| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | |
|--|----------------------|--|---------|--|-------------------|--------|---------------------|--------|-----|--------------|-------------------|
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 943-16 ² 26089-16 ² | 1731-16 720-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 26089-16 ² 26099-16 ² | 1731-16 733-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 26089-16 ² | 1731-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |

| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | |
|--|----------------------|--|---------|--|------------------|--------|---------------------|--------|-----|--------------|-------------------|
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 26089-16 ² 26099-16 ² | 731-16 733-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 26089-16 ² 26099-16 ² | 731-16 733-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ |

⁵⁰ Camshaft retaining plate Part #3120TB recommended
⁵⁹ Requires 7/16" rocker arm studs

¹⁰⁵ For bushing lifter, use part # 96838B-16

RED NUMBERS DENOTE PREMIUM OPTION

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| OVAL TRACK Mechanical Roller Camshafts (With 2.165"/1.968" Roller Bearings) | | | | | | | | | | | | |
| MECHANICAL ROLLER – Short track cam for 358 type engine. Very stable with good valve train parts. | .018 | .020 | 6000 to 8500 | 35-828-9⁵ | 296RXB-6 | 296 | 301 | 263 | 268 | .691 | .691 | 106° |
| MECHANICAL ROLLER – For high RPM 358 engines and for large cubic inches with less RPM. | .018 | .020 | 6300 to 8800 | 35-829-9⁵ | 300RXB-8 | 300 | 307 | 267 | 274 | .691 | .691 | 108° |

FORD 351C, 351M-400M 8 CYL. 1970-1983

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque & mileage. Smooth idle. | Hyd. | Hyd. | 800 to 4800 | 32-218-3 | 252H | 252 | 252 | 206 | 206 | .468 | .468 | 110° |
| HYDRAULIC – Great mid-range torque for towing. Good power at low speeds. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 32-219-3 | 260H | 260 | 260 | 212 | 212 | .484 | .484 | 110° |
| HYDRAULIC – Everyday performance driving with stock converter, noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 32-221-3 | 268H | 268 | 268 | 218 | 218 | .494 | .494 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Great for mild street machines. 2000+ stall, 3.30-4.0 gear, headers. Mild rough idle. | Hyd. | Hyd. | 1800 to 5800 | 32-224-4 | 270H | 270 | 270 | 224 | 224 | .519 | .519 | 110° |
| HYDRAULIC – Good in street machine with 2500+ stall, headers, gears, 9:1-10:1 compression. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 32-225-4 | 280H | 280 | 280 | 230 | 230 | .530 | .530 | 110° |
| HYDRAULIC – Street/strip use with 3000+ stall, 10:1 compression, low gears. Racy idle. | Hyd. | Hyd. | 2500 to 6500 | 32-234-4 | 292H | 292 | 292 | 244 | 244 | .560 | .560 | 110° |
| HYDRAULIC – Bracket race/limited street use, 3500+ stall, 11:1 compression, radical idle. | Hyd. | Hyd. | 3000 to 7000 | 32-235-4 | 305H | 305 | 305 | 253 | 253 | .585 | .585 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1200 to 5200 | 32-241-4 | XE256H | 256 | 268 | 212 | 218 | .487 | .493 | 110° |
| HYDRAULIC – Strong torque, excellent response. Good mid-range, stock converter, 3.23 gears. | Hyd. | Hyd. | 1400 to 5600 | 32-242-4 | XE262H | 262 | 270 | 218 | 224 | .513 | .520 | 110° |
| HYDRAULIC – Very strong mid-range and throttle response, 2400+ stall, 3.73+ gears. | Hyd. | Hyd. | 2000 to 6000 | 32-246-4 | XE274H | 274 | 286 | 230 | 236 | .562 | .565 | 110° |
| HYDRAULIC – Street/strip with 2800+ stall, 9.5:1 compression, headers and gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 32-250-4 | XE284H | 284 | 296 | 240 | 246 | .584 | .588 | 110° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade
⁶ Offset lifters available

⁷ Stock springs cannot be used
⁸ Fits only certain years

FORD 351W 8 CYL. 1969-1996 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|----------------------|--|----------|--|------------------|-------------|---------------------|-----------|---------|--------------|-------------------|--|
| OVAL TRACK Mechanical Roller Camshafts (With 2.165"/1.968" Roller Bearings) | | | | | | | | | | | | |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 26089-16 ² 26099-16 ² | 731-16 733-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ | |
| 838-16 ⁶ 96838-16 ¹⁰⁵ | 3135KT ⁵⁰ | 1632-16 ^{1,59} 1832-16 ^{1,59} | 7965-16 | 26089-16 ² 26099-16 ² | 731-16 733-16 | 611-16 | 503-16 ² | 621-16 | N/A | 431M 435M | 4014 ¹ | |

FORD 351C, 351M-400M 8 CYL. 1970-1983

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|--------------------------------|--------------|--|---------------------------------|--|------------------|--|-------------------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K32-218-3 | SK32-218-3 ⁷ | CL32-218-3 ⁷ | N/A | 832-16 | 3221 | 1411-16 ¹ | 7832-16 ⁸ | 940-16 | 743-16 | 601-16 | 502-16 |
| K32-219-3 | SK32-219-3 ⁷ | CL32-219-3 ⁷ | N/A | 832-16 | 3221 | 1411-16 ¹ | 7832-16 ⁸ | 940-16 | 743-16 | 601-16 | 502-16 |
| K32-221-3 | SK32-221-3 ⁷ | CL32-221-3 ⁷ | N/A | 832-16 | 3221 | 1411-16 ¹ | 7832-16 ⁸ | 940-16 | 743-16 | 601-16 | 502-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K32-224-4 | SK32-224-4 ⁷ | CL32-224-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-225-4 | SK32-225-4 ⁷ | CL32-225-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-234-4 | SK32-234-4 ⁷ | CL32-234-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-235-4 | SK32-235-4 ⁷ | CL32-235-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K32-241-4 | SK32-241-4 ⁷ | CL32-241-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-242-4 | SK32-242-4 ⁷ | CL32-242-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-246-4 | SK32-246-4 ⁷ | CL32-246-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-250-4 | SK32-250-4 ⁷ | CL32-250-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |

³⁷ Adjustable valve train required

⁵⁰ Camshaft retaining plate Part #3120TB recommended

⁵⁹ Requires 7/16" rocker arm studs

⁷¹ For engines with multi-groove valves, use Part #624-16 locks. CANNOT be used with lash caps.

¹⁰⁵ For bushing lifter, use part # 96838B-16

FORD 351C, 351M-400M 8 CYL. 1970-1983 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™-High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 32-600-5 | 279TH7 | 278 | 296 | 226 | 241 | .506 | .493 | 107° |
| HYDRAULIC – Mutha' Thumpr™-High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 32-601-5 | 287TH7 | 286 | 304 | 234 | 249 | .519 | .503 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™-Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 32-602-5 | 295TH7 | 294 | 312 | 242 | 257 | .531 | .515 | 107° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| DRAG RACE Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| HYDRAULIC – Good torque in heavy car. 3500+ stall or 4 speed, 10:1 compression. | Hyd. | Hyd. | 3000 to 7000 | 32-235-4 | 305H | 305 | 305 | 253 | 253 | .585 | .585 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| Designed To Put Hydraulic Roller Cams & Lifters In All 351C Engines | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best with stock engine for economy or towing. Can be used with stock gears and converter. Smooth idle. | Hyd. | Hyd. | 1200 to 4500 | 32-411-8 | 260HR | 260 | 260 | 205 | 205 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Mild street performance. Slightly noticeable lobe at idle. Will work w/ stock converter or even better w/ 1800+ stall & gear upgrade. | Hyd. | Hyd. | 1800 to 5000 | 32-421-8 | 270HR | 270 | 270 | 215 | 215 | .566 | .566 | 110° |
| HYDRAULIC ROLLER – Great in street machines. Best above 3500+ RPM. Good torque. Largest cam with stock heads and intake. Needs 2000+ stall. | Hyd. | Hyd. | 2000 to 5500 | 32-431-8 | 284HR | 284 | 284 | 224 | 224 | .566 | .566 | 110° |
| HYDRAULIC ROLLER – Perfect for street machine. Best with 4 speed and 3.40-4.10 gears. Aftermarket intake, headers and 2500+ stall. | Hyd. | Hyd. | 2500 to 6000 | 32-541-8 | 290HR | 290 | 290 | 230 | 230 | .578 | .578 | 110° |
| HYDRAULIC ROLLER – Street/strip only. 4 speed or 3000+ stall and 4.10 or lower gear. Higher compression, aftermarket intake and headers. | Hyd. | Hyd. | 3000 to 6500 | 32-651-8 | 304HR | 304 | 304 | 245 | 245 | .612 | .612 | 110° |

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¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

⁸ Fits only certain years

³² Requires lifter installation kit Part #31-1000 for retro-fit applications

³⁷ Adjustable valve train required

⁵⁵ For 351M and 400M engines, use Part #7824-16 pushrods on retro-fit cams

FORD 351C, 351M-400M 8 CYL. 1970-1983 (CONTINUED)

CAMSHAFTS FORD

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|-------------------------|--------|--------------------------------|--------------|--|---------------------------------|--|------------------|--|-------------------------------|
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K32-600-5 | N/A | CL32-600-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-601-5 | N/A | CL32-601-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-602-5 | N/A | CL32-602-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------|--|----------|--|------------------|----------------------|---------------------|-----------|---------|------------|--------------------|
| DRAG RACE Hydraulic Flat Tappet Camshaft | | | | | | | | | | | |
| 862-16 ³⁷ | 3121 | 1630-16 ¹ 1830-16 ¹ | 7945-16 | 928-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² | 621-16 | N/A | 432 | 4016 ⁷⁴ |

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------|---------------------------------|--------------|--|----------------------------------|--|------------------|--|---------------------|
| MAGNUM Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K32-411-8 | SK32-411-8 ⁷ | CL32-411-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-421-8 | SK32-421-8 ⁷ | CL32-421-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-431-8 | SK32-431-8 ⁷ | CL32-431-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-541-8 | SK32-541-8 ⁷ | CL32-541-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-651-8 | SK32-651-8 ⁷ | CL32-651-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² |



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⁷¹ For engines with multi-groove valves, use Part #624-16 locks. CANNOT be used with lash caps.

⁷⁴ Fits only 302/351C Boss & SVO heads

RED NUMBERS DENOTE PREMIUM OPTION

FORD 351C, 351M-400M 8 CYL. 1970-1983 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 32-600-8 | 283THR7 | 283 | 303 | 227 | 241 | .557 | .539 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 32-601-8 | 291THR7 | 291 | 311 | 235 | 249 | .567 | .551 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 32-602-8 | 299THR7 | 299 | 319 | 243 | 257 | .579 | .563 | 107° |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Excellent torque. Everyday performance. 2000+ converter and 9:1 compression. Noticeable idle. | .022 | .022 | 1800 to 5800 | 32-237-4 | 270S | 270 | 270 | 224 | 224 | .540 | .540 | 110° |
| SOLID – Street machine w/ headers, 2500+ converter, 9:1 compression. Great mid-range power. Mild rough idle. | .022 | .022 | 2000 to 6000 | 32-238-4 | 282S | 282 | 282 | 236 | 236 | .570 | .570 | 110° |
| SOLID – Street/strip, 3000+ stall, low gear, 10:1 compression. Rough idle. Great mid-range and top end. | .022 | .022 | 2500 to 6500 | 32-239-4 | 294S | 294 | 294 | 248 | 248 | .605 | .605 | 110° |
| SOLID – Pro Street/bracket race. Excellent top end, 3500+ stall and 11:1 compression. Radical idle. | .022 | .022 | 3000 to 7000 | 32-240-4 | 306S | 306 | 306 | 260 | 260 | .640 | .640 | 110° |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Best in large c.i. street machine. 10:1 compression, 3500+ stall, 4.10 gear. | .028 | .030 | 3200 to 6200 | 32-638-5 | 284B-8 | 284 | 294 | 246 | 256 | .564 | .589 | 108° |
| SOLID – Excellent torque for heavy cars, 3500+ stall or 4 speed with 10.5:1 compression. | .028 | .030 | 3800 to 6800 | 32-644-5 | 294B-6 | 294 | 304 | 256 | 266 | .589 | .615 | 106° |
| OVAL TRACK Mechanical Flat Tappet Camshaft | | | | | | | | | | | | |
| SOLID – Best for 1/4-3/8 mile track, broad torque range. | .022 | .024 | 3500 to 6500 | 32-642-5 | 285B-6 | 285 | 295 | 250 | 260 | .614 | .645 | 106° |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great power for serious street use. 3000+ stall w/ low gear & headers. Rough idle. | .020 | .020 | 2500 to 6500 | 32-771-9⁵ | 288R | 288 | 288 | 243 | 243 | .636 | .636 | 110° |
| MECHANICAL ROLLER – Ultimate Pro Street cam. 4000+ stall or 4 speed, 11:1 comp., radical race idle. | .020 | .020 | 3000 to 7000 | 32-772-9⁵ | 308R | 308 | 308 | 262 | 262 | .662 | .662 | 110° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade

⁶ Offset lifters available

⁷ Stock springs cannot be used

⁸ Fits only certain years

³² Requires lifter installation kit Part #31-1000 for retro-fit applications

FORD 351C, 351M-400M 8 CYL. 1970-1983 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|--|--|--|------------------|--|--|--|------------------|--|-------------------------------|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K32-600-8 | N/A | CL32-600-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-601-8 | N/A | CL32-601-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| K32-602-8 | N/A | CL32-602-8 ⁷ | N/A | 851-16 ³² 8931-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7825-16 ⁵⁵ 7974-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 611-16 ⁷¹ 614-16 ⁷¹ | 503-16 ² |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K32-237-4 | SK32-237-4 ⁷ | CL32-237-4 ⁷ | N/A | 833-16 817-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 ⁸ | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-238-4 | SK32-238-4 ⁷ | CL32-238-4 ⁷ | N/A | 833-16 817-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 ⁸ | 972-16 924-16 ² | 747-16 741-16 | 611-16 ⁷¹ | 502-16 503-16 ² |
| K32-239-4 | SK32-239-4 ⁷ | CL32-239-4 ⁷ | N/A | 833-16 817-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 ⁸ | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² |
| K32-240-4 | SK32-240-4 ⁷ | CL32-240-4 ⁷ | N/A | 833-16 817-16 | 2121 3121 | 1411-16 ¹ 1630-16 ¹ | 7502-16 ⁸ 7945-16 ⁸ | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 833-16 817-16 | 3121 | 1630-16 ¹ 1830-16 ¹ | 7945-16 ⁸ | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² | 621-16 | N/A | 432 | 4016 ⁷⁴ |
| 833-16 817-16 | 3121 | 1630-16 ¹ 1830-16 ¹ | 7945-16 ⁸ | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² | 621-16 | N/A | 432 | 4016 ⁷⁴ |
| OVAL TRACK Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
| 833-16 817-16 | 3121 | 1630-16 ¹ 1830-16 ¹ | 7945-16 ⁸ | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 ⁷¹ | 503-16 ² | 621-16 | N/A | 432 | 4016 ⁷⁴ |
| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K32-771-9 | SK32-771-9 ⁷ | CL32-771-9 ⁷ | 840-16 ⁶ 96840-16 ¹⁰⁶ | 432 | 2121 3121 | 1630-16 ¹ 1830-16 ¹ | 7502-16 ⁸ | 929-16 ² 939-16 ² | 749-16 741-16 | 611-16 ⁷¹ | 503-16 ² |
| K32-772-9 | SK32-772-9 ⁷ | CL32-772-9 ⁷ | 840-16 ⁶ 96840-16 ¹⁰⁶ | 432 | 2121 3121 | 1630-16 ¹ 1830-16 ¹ | 7502-16 ⁸ | 929-16 ² 939-16 ² | 749-16 741-16 | 611-16 ⁷¹ | 503-16 ² |

⁵⁵ For 351M and 400M engines, use Part #7824-16 pushrods on retro-fit cams

⁷¹ For engines with multi-groove valves, use Part #624-16 locks. CANNOT be used w/ lash caps.

⁷⁴ Fits only 302/351C Boss & SVO heads

¹⁰⁶ For bushing lifter upgrade, use part # 96840B-16

RED NUMBERS DENOTE PREMIUM OPTION

FORD 352-428 C.I. 8 CYL. 1963-1977

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Great low end torque and economy, smooth idle. | Hyd. | Hyd. | 800 to 4800 | 33-221-3 | 252H | 252 | 252 | 206 | 206 | .468 | .468 | 110° |
| HYDRAULIC – Great for vans, trucks and 4WD. Excellent for towing, mid-range torque. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 33-222-3 | 260H | 260 | 260 | 212 | 212 | .484 | .484 | 110° |
| HYDRAULIC – Good upgrade for factory performance cams in 390-428. Noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 33-224-3 | 268H | 268 | 268 | 218 | 218 | .494 | .494 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good cam for stock and even better for 2000 stall converter in street machine, 9:1 compression, mild rough idle. | Hyd. | Hyd. | 1800 to 5800 | 33-226-4 | 270H | 270 | 270 | 224 | 224 | .519 | .519 | 110° |
| HYDRAULIC – Works best in street machines with 2000+ stall, lower gears and headers. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 33-230-4 | 280H | 280 | 280 | 230 | 230 | .530 | .530 | 110° |
| HYDRAULIC – Street/strip, use 9.5:1+ compression w/ headers, intake, low gears and 3000+ stall. Racy idle. | Hyd. | Hyd. | 2500 to 6500 | 33-240-4 | 292H | 292 | 292 | 244 | 244 | .560 | .560 | 110° |
| HYDRAULIC – Best cam for Pro Street or bracket racing. 3500+ stall, 10.5:1+ compression. Radical race idle. | Hyd. | Hyd. | 3000 to 6800 | 33-241-4 | 305H | 305 | 305 | 253 | 253 | .585 | .585 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong torque through low and mid-range. Good economy. Mild idle. | Hyd. | Hyd. | 1000 to 5200 | 33-234-4 | XE256H | 256 | 268 | 212 | 218 | .487 | .493 | 110° |
| HYDRAULIC – Strong torque, excellent throttle response. Will work w/ stock converter but prefers 1800+ stall. | Hyd. | Hyd. | 1300 to 5600 | 33-238-4 | XE262H | 262 | 270 | 218 | 224 | .513 | .520 | 110° |
| HYDRAULIC – High performance street, very strong mid-range with headers, 2400+ stall & lower gears. | Hyd. | Hyd. | 1800 to 6000 | 33-248-4 | XE274H | 274 | 286 | 230 | 236 | .562 | .565 | 110° |
| HYDRAULIC – Street/strip 2800+ stall, headers, 9.5:1 compression, lower gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 33-250-4 | XE284H | 284 | 296 | 240 | 246 | .584 | .588 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 33-600-5 | 279TH7 | 278 | 296 | 226 | 241 | .506 | .493 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 33-601-5 | 287TH7 | 286 | 304 | 234 | 249 | .519 | .503 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 33-602-5 | 295TH7 | 294 | 312 | 242 | 257 | .531 | .515 | 107° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

⁴⁰ Includes special shafts

⁶² Part #7833 only works w/ non-adjustable factory rocker arms, use Part #7533 for adjustable rockers

FORD 352-428 C.I. 8 CYL. 1963-1977

CAMSHAFTS FORD

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|---------|--------------|-------------|----------------------------------|--|------------------|------------------|-------------------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K33-221-3 | SK33-221-3 ⁷ | CL33-221-3 ⁷ | N/A | 834-16 | 3208 | 19046 | 7833-16 ⁶² | 940-16 | 744-16 | 603-16 | 504-16 |
| K33-222-3 | SK33-222-3 ⁷ | CL33-222-3 ⁷ | N/A | 834-16 | 3208 | 19046 | 7833-16 ⁶² | 940-16 | 744-16 | 603-16 | 504-16 |
| K33-224-3 | SK33-224-3 ⁷ | CL33-224-3 ⁷ | N/A | 834-16 | 3208 | 19046 | 7833-16 ⁶² | 940-16 | 744-16 | 603-16 | 504-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K33-226-4 | SK33-226-4 ⁷ | CL33-226-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |
| K33-230-4 | SK33-230-4 ⁷ | CL33-230-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |
| K33-240-4 | SK33-240-4 ⁷ | CL33-240-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² |
| K33-241-4 | SK33-241-4 ⁷ | CL33-241-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K33-234-4 | SK33-234-4 ⁷ | CL33-234-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |
| K33-238-4 | SK33-238-4 ⁷ | CL33-238-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |
| K33-248-4 | SK33-248-4 ⁷ | CL33-248-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² |
| K33-250-4 | SK33-250-4 ⁷ | CL33-250-4 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K33-600-5 | N/A | CL33-600-5 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |
| K33-601-5 | N/A | CL33-601-5 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |
| K33-602-5 | N/A | CL33-602-5 ⁷ | N/A | 834-16 | 2108 3108 | 19046 | 7833-16 ⁶² 7530-16 | 926-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² |

⁶⁹ Includes special rockers & shafts Part #1047-2

FORD 352-428 C.I. 8 CYL. 1963-1977 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|------------------|-------------|----------------|-----|-------------|-----|-----------------|--------------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | | W/ 1.73 ROCKER IN. | EX. |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER - Great mid-range torque in performance street application, likes headers. | Hyd. | Hyd. | 1800-5400 | 33-422-11 | XR270HR | 270 | 276 | 218 | 224 | .521 | .521 | 110° |
| HYDRAULIC ROLLER - High performance for street cars with 2200+ stall, 9:1+ compression, headers. | Hyd. | Hyd. | 2200-5800 | 33-432-11 | XR280HR | 282 | 288 | 230 | 236 | .521 | .532 | 110° |
| HYDRAULIC ROLLER - Street/strip applications, 10:1+ compression, 3000+ stall, intake, headers, gear. | Hyd. | Hyd. | 2800-6100 | 33-443-11 | XR294HR | 294 | 300 | 242 | 248 | .553 | .572 | 110° |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER - Thumpr™ - High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 33-600-11 | 283THR7 | 283 | 303 | 227 | 241 | .557 | .539 | 107° |
| HYDRAULIC ROLLER - Mutha' Thumpr™ - High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 33-601-11 | 291THR7 | 291 | 311 | 235 | 249 | .567 | .551 | 107° |
| HYDRAULIC ROLLER - Big Mutha' Thumpr™ - Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 33-602-11 | 299THR7 | 299 | 319 | 243 | 257 | .579 | .563 | 107° |
| DRAG RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC - Good for automatic with 3500+ stall, 10:1 compression. | Hyd. | Hyd. | 3500 to 6800 | 33-242-5 | 312H-10 | 312 | 312 | 260 | 260 | .611 | .611 | 110° |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID - Good for street driving. Will work w/ stock manifolds & converter, best w/ 1800+ stall. Mild rough idle. | .022 | .022 | 1800 to 5800 | 33-244-4 | 270S | 270 | 270 | 224 | 224 | .540 | .540 | 110° |
| SOLID - Use in street machine with 2400+ stall and lower gear. 9:1 compression & headers. Rough idle. | .022 | .022 | 2000 to 6000 | 33-245-4 | 282S | 282 | 282 | 236 | 236 | .571 | .571 | 110° |
| SOLID - Good for street/strip cars. Use 10:1+ compression, low gears, 3000+ stall or 4 speed. Very rough idle. | .022 | .022 | 2500 to 6500 | 33-246-4 | 294S | 294 | 294 | 248 | 248 | .605 | .605 | 110° |
| SOLID - Excellent for Pro Street cars. 3500+ stall or 4 speed 11.5:1 compression, low gears. Radical idle. | .022 | .022 | 3000 to 7000 | 33-247-4 | 306S | 306 | 306 | 260 | 260 | .640 | .640 | 110° |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID - Street/strip, 9.5:1+ compression, 3000+ stall. | .028 | .030 | 3000 to 6000 | 33-638-5 | 284B-8 | 284 | 294 | 246 | 256 | .564 | .590 | 108° |
| SOLID - Great torque in heavy car with 3500+ stall, 10:1 compression. | .028 | .030 | 3500 to 6500 | 33-648-5 | 294B-8 | 294 | 304 | 256 | 266 | .600 | .626 | 108° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

⁴⁰ Includes special shafts
⁶² Part #7833 only works w/ non-adjustable factory rocker arms, use Part #7533 for adjustable rockers

⁶⁹ Includes special rockers & shafts Part #1047-2

FORD 352-428 C.I. 8 CYL. 1963-1977 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|-------------------------|--------------------------|----------|--|------------------|-------------|---------------------|--|------------------|------------------|-------------------------------|--|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| K33-422-11 | N/A | CL33-422-11 ⁷ | N/A | 8934-16 | 2108 3108 | 19046 | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² | |
| K33-432-11 | N/A | CL33-432-11 ⁷ | N/A | 8934-16 | 2108 3108 | 19046 | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² | |
| K33-443-11 | N/A | CL33-443-11 ⁷ | N/A | 8934-16 | 2108 3108 | 19046 | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| K33-600-11 | N/A | CL33-600-11 ⁷ | N/A | 8934-16 | 2108 3108 | 19046 | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² | |
| K33-601-11 | N/A | CL33-601-11 ⁷ | N/A | 8934-16 | 2108 3108 | 19046 | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² | |
| K33-602-11 | N/A | CL33-602-11 ⁷ | N/A | 8934-16 | 2108 3108 | 19046 | N/A | 924-16 ² 26120-16 ² | 741-16 795-16 | 612-16 616-16 | 505-16 ² | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
| DRAG RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 834-16 | 3108 3108KT | 19046 | 7530-16 | 930-16 ² 928-16 ² | 749-16 732-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| K33-244-4 | SK33-244-4 ⁷ | CL33-244-4 ⁷ | N/A | 835-16 | 2108 3108 | 19046 | 7530-16 | 972-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² | |
| K33-245-4 | SK33-245-4 ⁷ | CL33-245-4 ⁷ | N/A | 835-16 | 2108 3108 | 19046 | 7530-16 | 972-16 924-16 ² | 747-16 741-16 | 612-16 | 504-16 505-16 ² | |
| K33-246-4 | SK33-246-4 ⁷ | CL33-246-4 ⁷ | N/A | 835-16 | 2108 3108 | 19046 | 7530-16 | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 | 505-16 ² | |
| K33-247-4 | SK33-247-4 ⁷ | CL33-247-4 ⁷ | N/A | 835-16 | 2108 3108 | 19046 | 7530-16 | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 | 505-16 ² | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 835-16 | 3108 3108KT | 19046 | 7530-16 | 930-16 ² 928-16 ² | 749-16 732-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |
| 835-16 | 3108 3108KT | 19046 | 7530-16 | 930-16 ² 928-16 ² | 749-16 732-16 | 612-16 | 505-16 ² | 622-16 | N/A | N/A | N/A | |

RED NUMBERS DENOTE PREMIUM OPTION



FORD 352-428 C.I. 8 CYL. 1963-1977 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Broad powerband. Manual or automatic with 3000+ and 9.5:1 compression. Low gears. Must use headers. Rough idle. | .020 | .020 | 2200 to 6500 | 33-781-11⁵ | 288R | 292 | 292 | 243 | 243 | .645 | .645 | 110° |
| MECHANICAL ROLLER – The ultimate street cam. 3500+ stall or manual. 10.5:1 compression ratio. 4.10 gear or lower. Radical idle. | .020 | .020 | 3000 to 7000 | 33-782-11⁵ | 308R | 312 | 312 | 262 | 262 | .674 | .674 | 110° |

FORD 427 C.I. SOHC 8 CYL. 1963-1965

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---------------|-------------|----------------|-----|-------------|-----|---------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.825 ROCKER IN. | EX. | |
| SOHC Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER - Strong upgrade from stock cam for power increase and responsiveness. | .020 | .020 | 3000 to 7000 | 138100 | VM287R-10 | 287 | 287 | 264 | 264 | .543 | .543 | 110° |
| MECHANICAL ROLLER - Hot street cam with very strong torque. | .020 | .020 | 3500 to 7500 | 138200 | VM296R-10 | 296 | 296 | 272 | 272 | .598 | .598 | 110° |

* Stub shaft available (Part #138-101-9)

FORD 429, 460 C.I. 8 CYL. 1968-1995

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Performance upgrade for stock cam. Strong torque and mileage. Very smooth idle. Great for family sedans. | Hyd. | Hyd. | 800 to 4800 | 34-224-4 | 252H | 252 | 252 | 206 | 206 | .468 | .468 | 110° |
| HYDRAULIC – Great cam for trucks & towing. Strong mid-range torque & good mileage. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 34-225-4 | 260H | 260 | 260 | 212 | 212 | .484 | .484 | 110° |
| HYDRAULIC – Good for everyday performance driving or heavy towing w/ low gears. Broad power, noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 34-227-4 | 268H | 268 | 268 | 218 | 218 | .494 | .494 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Daily use in street machine. Largest cam with stock but will perform even better with 1800+ converter. Likes headers. Mild rough idle. | Hyd. | Hyd. | 1800 to 5800 | 34-229-4 | 270H | 270 | 270 | 224 | 224 | .519 | .519 | 110° |
| HYDRAULIC – Great cam for street machines. Needs 2500+ converter, headers and 9:1 compression. | Hyd. | Hyd. | 2000 to 6000 | 34-331-4 | 280H | 280 | 280 | 230 | 230 | .530 | .530 | 110° |
| HYDRAULIC – Street/strip use. Good power. 3000+ stall and raised compression. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 34-336-4 | 292H | 292 | 292 | 244 | 244 | .560 | .560 | 110° |
| HYDRAULIC – Bracket racing or limited street use. Strong top end power. 10.5:1 compression, 3500+ stall. Radical racy idle. | Hyd. | Hyd. | 3000 to 6800 | 34-337-4 | 305H | 305 | 305 | 253 | 253 | .585 | .585 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

⁴⁰ Includes special shafts

⁵ Requires distributor gear upgrade

³⁷ Adjustable valve train required

⁴¹ Use screw-in studs & guide plates. May require longer pushrods.

FORD 352-428 C.I. 8 CYL. 1963-1977 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------------------------|--------------------------|--------|-----------------------------------|--------------|-------------|----------|--|------------------|-------------|---------------------|
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K33-781-11 | SK33-781-11 ⁷ | CL33-781-11 ⁷ | N/A | 839-16 96836-16 ¹⁰⁷ | 2108 3108 | 19046 | N/A | 929-16 ² 930-16 ² | 741-16 732-16 | 612-16 | 505-16 ² |
| K33-782-11 | SK33-782-11 ⁷ | CL33-782-11 ⁷ | N/A | 839-16 96836-16 ¹⁰⁷ | 2108 3108 | 19046 | N/A | 929-16 ² 930-16 ² | 741-16 732-16 | 612-16 | 505-16 ² |

FORD 427 C.I. SOHC 8 CYL. 1963-1965

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|--------|--------|---------|------------|-------------|----------|--------------------|--------------------|-------------|-------------|
| SOHC Mechanical Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 928-16 26120-16 | 1732-16 1795-16 | 612-16 | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 928-16 943-16 | 1732-16 731-16 | 612-16 | N/A |

FORD 429, 460 C.I. 8 CYL. 1968-1995

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|--------------------------------|--------------|--|--------------------|---------------------------------|------------------|------------------|-------------------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-224-4 | SK34-224-4 | CL34-224-4 | N/A | 832-16 | 3222 | 1411-16 ⁴¹ | 7834-16 | 940-16 | 743-16 | 601-16 | 502-16 |
| K34-225-4 | SK34-225-4 ⁷ | CL34-225-4 ⁷ | N/A | 832-16 | 3222 | 1411-16 ⁴¹ | 7834-16 | 940-16 | 743-16 | 601-16 | 502-16 |
| K34-227-4 | SK34-227-4 ⁷ | CL34-227-4 ⁷ | N/A | 832-16 | 3222 | 1411-16 ⁴¹ | 7834-16 | 940-16 926-16 | 743-16 | 601-16 | 502-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-229-4 | SK34-229-4 | CL34-229-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-331-4 | SK34-331-4 | CL34-331-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-336-4 | SK34-336-4 ⁷ | CL34-336-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-337-4 | SK34-337-4 ⁷ | CL34-337-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |

⁶⁹ Includes special rockers & shafts Part #1047-2
¹⁰⁷ For bushing lifter upgrade, use part #96836B-16

RED NUMBERS DENOTE PREMIUM OPTION

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque through low end and mid-range. Good idle. | Hyd. | Hyd. | 1000 to 5200 | 34-234-4 | XE256H | 256 | 268 | 212 | 218 | .487 | .493 | 110° |
| HYDRAULIC – Strong torque, excellent response heavy towing in 460 with 4:10 gears. | Hyd. | Hyd. | 1300 to 5600 | 34-238-4 | XE262H | 262 | 270 | 218 | 224 | .513 | .520 | 110° |
| HYDRAULIC – High performance street, very strong mid-range, 2400+ stall with headers. | Hyd. | Hyd. | 1800 to 6000 | 34-247-4 | XE274H | 274 | 286 | 230 | 236 | .562 | .565 | 110° |
| HYDRAULIC – Street/strip, 2800+ stall, 9.5:1 compression, lower gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 34-250-4 | XE284H | 284 | 296 | 240 | 246 | .584 | .588 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 34-600-5 | 279TH7 | 278 | 296 | 226 | 241 | .506 | .493 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 34-601-5 | 287TH7 | 286 | 304 | 234 | 249 | .519 | .503 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 34-602-5 | 295TH7 | 294 | 312 | 242 | 257 | .531 | .515 | 107° |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong low end and mid-range torque, good idle. | Hyd. | Hyd. | 1000 to 5000 | 34-231-4 | X4256H | 256 | 262 | 210 | 218 | .514 | .514 | 111° |
| HYDRAULIC – Good mid-range, largest for stock converter, heavy towing, noticeable idle. Good for daily driver. | Hyd. | Hyd. | 1400 to 5600 | 34-235-4 | X4262H | 262 | 270 | 218 | 226 | .514 | .524 | 111° |
| HYDRAULIC – Likes improved intake, needs headers and 3.55-3.90 gear with 2000+ stall. | Hyd. | Hyd. | 1600 to 5800 | 34-239-4 | X4270H | 270 | 278 | 226 | 234 | .554 | .574 | 111° |
| HYDRAULIC – Good top end power, needs intake, headers and gears. 9.5:1 compression w/ 2500+ stall. | Hyd. | Hyd. | 2000 to 6200 | 34-243-5 | X4278H | 278 | 288 | 234 | 244 | .574 | .580 | 111° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong low end and mid-range power, smooth idle. | Hyd. | Hyd. | 1000 to 5200 | 34-232-4 | XM262H | 262 | 268 | 218 | 224 | .514 | .524 | 112° |
| HYDRAULIC – Strong mid-range with good throttle response, great for small blower, noticeable idle. | Hyd. | Hyd. | 1600 to 5800 | 34-236-4 | XM270H | 270 | 286 | 226 | 236 | .554 | .557 | 112° |
| HYDRAULIC – Good for jet boats with A impeller. Needs good manifold, likes headers. | Hyd. | Hyd. | 2000 to 6200 | 34-241-5 | XM278H | 278 | 292 | 234 | 244 | .574 | .576 | 112° |
| HYDRAULIC – Good for jet boat with A impeller. Great for skiing and performance use. | Hyd. | Hyd. | 2200 to 6500 | 34-245-5 | XM288H | 288 | 304 | 244 | 254 | .580 | .585 | 112° |
| HYDRAULIC – Good for jet boat with A or B impeller. Good in bracket racing and high performance use. | Hyd. | Hyd. | 2500 to 6800 | 34-254-5 | XM298H | 298 | 316 | 254 | 264 | .585 | .588 | 112° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

³⁷ Adjustable valve train required

⁴¹ Use screw-in studs & guide plates. May require longer pushrods.

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|--------------------------------|--------------|--|--------------------|---------------------------------|------------------|------------------|-------------------------------|
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-234-4 | SK34-234-4 ⁷ | CL34-234-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-238-4 | SK34-238-4 ⁷ | CL34-238-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-247-4 | SK34-247-4 ⁷ | CL34-247-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-250-4 | SK34-250-4 ⁷ | CL34-250-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-600-5 | N/A | CL34-600-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-601-5 | N/A | CL34-601-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-602-5 | N/A | CL34-602-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-231-4 | SK34-231-4 ⁷ | CL34-231-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-235-4 | SK34-235-4 ⁷ | CL34-235-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-239-4 | SK34-239-4 ⁷ | CL34-239-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-243-5 | SK34-243-5 ⁷ | CL34-243-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-232-4 | SK34-232-4 ⁷ | CL34-232-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-236-4 | SK34-236-4 ⁷ | CL34-236-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-241-5 | SK34-241-5 ⁷ | CL34-241-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-245-5 | SK34-245-5 ⁷ | CL34-245-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-254-5 | SK34-254-5 ⁷ | CL34-254-5 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |

RED NUMBERS DENOTE PREMIUM OPTION

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Jet boat w/ A impeller or Inboard-Outboard, good for skiing & economy. Mild idle. | Hyd. | Hyd. | 1500 to 5500 | 34-227-4 | 268H | 268 | 268 | 218 | 218 | .494 | .494 | 110° |
| HYDRAULIC – Jet boat with A or B impeller. Good for pleasure, skiing or performance. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 34-331-4 | 280H | 280 | 280 | 230 | 230 | .530 | .530 | 110° |
| HYDRAULIC – Jet boat with B impeller. Flat bottom or hydro for skiing or performance. | Hyd. | Hyd. | 2500 to 6500 | 34-336-4 | 292H | 292 | 292 | 244 | 244 | .560 | .560 | 110° |
| HYDRAULIC – Jet boat with B impeller. Flat bottom or hydro bracket racer. Likes tunnel ram. | Hyd. | Hyd. | 3000 to 6800 | 34-337-4 | 305H | 305 | 305 | 253 | 253 | .585 | .585 | 110° |
| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshaft (FOR EFI) | | | | | | | | | | | | |
| HYDRAULIC – EFI speed density, works with stock computer. Very strong torque, excellent mileage, good idle quality. | Hyd. | Hyd. | 1000 to 5200 | 34-255-5 | XE256H-14 | 256 | 268 | 212 | 219 | .490 | .495 | 114° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| DRAG RACE Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| HYDRAULIC – Great for heavy car with 3500+ stall and 10.5:1+ compression. | Hyd. | Hyd. | 3800 to 6800 | 34-338-5 | 312H-10 | 312 | 312 | 260 | 260 | .610 | .610 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great mid-range torque in performance street application, likes headers. | Hyd. | Hyd. | 1800-5400 | 34-422-9 | XR270HR | 270 | 276 | 218 | 224 | .521 | .521 | 110° |
| HYDRAULIC ROLLER – High performance for street cars with 2200+ stall, 9:1+ compression, headers. | Hyd. | Hyd. | 2200-5800 | 34-432-9 | XR280HR | 282 | 288 | 230 | 236 | .521 | .532 | 110° |
| HYDRAULIC ROLLER – Street/strip applications, 10:1+ compression, 3000+ stall, intake, headers, gear. | Hyd. | Hyd. | 2800-6100 | 34-443-9 | XR294HR | 294 | 300 | 242 | 248 | .553 | .572 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 34-600-9 | 283THR7 | 283 | 303 | 227 | 241 | .557 | .539 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 34-601-9 | 291THR7 | 291 | 311 | 235 | 249 | .567 | .551 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 34-602-9 | 299THR7 | 299 | 319 | 243 | 257 | .579 | .563 | 107° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

³⁷ Adjustable valve train required

⁴¹ Use screw-in studs & guide plates. May require longer pushrods.

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

CAMSHAFTS FORD

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|--------------------------------|--------------|--|--------------------|---------------------------------|------------------|------------------|-------------------------------|
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K34-227-4 | SK34-227-4 ⁷ | CL34-227-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 3222 2122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 940-16 926-16 | 747-16 | 611-16 | 502-16 503-16 ² |
| K34-331-4 | SK34-331-4 ⁷ | CL34-331-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-336-4 | SK34-336-4 ⁷ | CL34-336-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-337-4 | SK34-337-4 ⁷ | CL34-337-4 ⁷ | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |

| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshaft (FOR EFI) | | | | | | | | | | | |
|--|-----|-----|-----|--------------------------------|--------------|--|--------------------|-------------------------------|------------------|--------|-------------------------------|
| N/A | N/A | N/A | N/A | 832-16 862-16 ³⁷ | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------|-----------------------|----------|---------------------|-----------|-------------|---------------------|-----------|---------|------------|--------------------|
| DRAG RACE Hydraulic Flat Tappet Camshaft | | | | | | | | | | | |
| 862-16 ³⁷ | 3122 | 1630-16 ⁴¹ | 7934-16 | 928-16 ² | 741-16 | 611-16 | 503-16 ² | 621-16 | N/A | 432 | 4034 ⁷² |

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|-------------------------|--------|---------|--------------|--|----------|---------------------------------|------------------|------------------|---------------------|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K34-422-9 | N/A | CL34-422-9 ⁷ | N/A | 8934-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7740-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-432-9 | N/A | CL34-432-9 ⁷ | N/A | 8934-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7740-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-443-9 | N/A | CL34-443-9 ⁷ | N/A | 8934-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7740-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|-------------------------|--------|---------|--------------|--|----------|---------------------------------|------------------|------------------|---------------------|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K34-600-9 | N/A | CL34-600-9 ⁷ | N/A | 8934-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | N/A | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-601-9 | N/A | CL34-601-9 ⁷ | N/A | 8934-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | N/A | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-602-9 | N/A | CL34-602-9 ⁷ | N/A | 8934-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | N/A | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |

⁷² Fits only certain heads



FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Great for daily use. Good mid-range power. Stock converter and compression. Noticeable idle. | .022 | .022 | 1800 to 5800 | 34-340-4 | 270S | 270 | 270 | 224 | 224 | .540 | .540 | 110° |
| SOLID – Good for street machine w/ 2000+ converter and headers. 9:1+ compression. Mild rough idle. | .022 | .022 | 2000 to 6000 | 34-341-4 | 282S | 282 | 282 | 236 | 236 | .570 | .570 | 110° |
| SOLID – Good street/strip cam. Excellent power. 3000+ stall w/ manifolds & 9.5:1+ compression. Radical idle. | .022 | .022 | 2500 to 6500 | 34-342-4 | 294S | 294 | 294 | 248 | 248 | .605 | .605 | 110° |
| SOLID – Bracket race or limited street use. Must have low gear w/ 3500+ stall. 10.5:1 compression. Racy idle. | .022 | .022 | 3000 to 6800 | 34-343-4 | 306S | 306 | 306 | 260 | 260 | .640 | .640 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| MARINE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Jet boat A impeller, hydro or flat bottom river racer. Use tunnel ram. | .030 | .030 | 4000 to 7000 | 34-653-5 | 310B-8 | 310 | 314 | 270 | 276 | .649 | .642 | 108° |
| SOLID – Hydro or flat bottom with two 4 BBL on tunnel ram. Good for bracket racing. | .030 | .030 | 5000 to 7500 | 34-661-5 | 320B-8 | 320 | 324 | 280 | 286 | .645 | .666 | 108° |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Excellent torque. Works well with 4000 stall, heavy car. 10:1+ compression. | .030 | .030 | 3500 to 6500 | 34-652-5 | 294B-8 | 294 | 304 | 256 | 266 | .589 | .615 | 108° |
| SOLID – 4 speed or 4500 stall in 460c.i. and 5000 stall in 429. 11:1+ compression. | .030 | .030 | 4000 to 6800 | 34-653-5 | 310B-8 | 310 | 314 | 270 | 276 | .649 | .642 | 108° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Street/strip performance, 10:1+ compression, 2200+ stall, headers, choppy idle. | .020 | .020 | 2500 to 6500 | 34-700-9⁵ | 280A-R10 | 280 | 280 | 236 | 236 | .634 | .634 | 110° |
| MECHANICAL ROLLER – Ultimate Pro Street cam 4000+ stall/4 speed, 11:1+ compression, radical idle. | .020 | .020 | 3200 to 7200 | 34-710-9⁵ | 300A-R10 | 300 | 300 | 255 | 255 | .663 | .663 | 110° |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great for reliable power touring. 2500+ stall, easy on parts, rough idle. | .016 | .018 | 2200 to 6200 | 34-770-9⁵ | XR274R-10 | 274 | 280 | 236 | 242 | .650 | .657 | 110° |
| MECHANICAL ROLLER – Best in street machines, 2800 stall, 10:1+ compression, 3.73-3.90 gears. | .016 | .018 | 2500 to 6500 | 34-771-9⁵ | XR280R-10 | 280 | 286 | 242 | 248 | .657 | .664 | 110° |
| MECHANICAL ROLLER – Great for weekend warrior, 3000+ stall, needs intake, exhaust, gears. | .016 | .018 | 3000 to 7000 | 34-772-9⁵ | XR286R-10 | 286 | 292 | 248 | 254 | .664 | .671 | 110° |
| MECHANICAL ROLLER – Best for Pro Street, 3500+ stall. Needs good intake and exhaust, 11:1+ compression. | .016 | .018 | 3200 to 7200 | 34-773-9⁵ | XR292R-10 | 292 | 298 | 254 | 260 | .671 | .678 | 110° |

² Requires machining on cylinder heads
⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used

⁴¹ Use screw-in studs & guide plates. May require longer pushrods.

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------|------------------|--------------|--|--------------------|--|------------------|------------------|-------------------------------|
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K34-340-4 | SK34-340-4 ⁷ | CL34-340-4 ⁷ | N/A | 833-16 817-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 926-16 924-16 ² | 747-16 741-16 | 611-16 | 502-16 503-16 ² |
| K34-341-4 | SK34-341-4 ⁷ | CL34-341-4 ⁷ | N/A | 833-16 817-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 26120-16 | 741-16 795-16 | 611-16 614-16 | 503-16 ² |
| K34-342-4 | SK34-342-4 ⁷ | CL34-342-4 ⁷ | N/A | 833-16 817-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |
| K34-343-4 | SK34-343-4 ⁷ | CL34-343-4 | N/A | 833-16 817-16 | 2122 3122 | 1411-16 ⁴¹ 1630-16 ⁴¹ | 7651-16 7934-16 | 924-16 ² 930-16 ² | 741-16 732-16 | 611-16 | 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------|--|----------|---------------------|------------------|-------------|---------------------|-----------|---------|------------|--------------|
| MARINE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 833-16 817-16 | 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 930-16 ² | 741-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 432 | 4034 |
| 833-16 817-16 | 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 930-16 ² | 741-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 432 | 4034 |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 833-16 817-16 | 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 930-16 ² | 741-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 432 | 4034 |
| 833-16 817-16 | 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 930-16 ² | 741-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 432 | 4034 |

| K-KIT | SK-KIT | CL-KIT | DIST. GEAR | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|-------------------------|------------|-----------------------------------|--------------|--|----------|---------------|------------------|-------------|---------------------|
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K34-700-9 | N/A | CL34-700-9 ⁷ | 432 | 836-16 | 2122 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 954-16 | 741-16 732-16 | 611-16 | 503-16 ² |
| K34-710-9 | N/A | CL34-710-9 ⁷ | 432 | 836-16 | 2122 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 954-16 | 741-16 732-16 | 611-16 | 503-16 ² |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | |
| K34-770-9 | N/A | CL34-770-9 ⁷ | 432 | 836-16 96836-16 ¹⁰⁷ | 2122 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 954-16 | 741-16 732-16 | 611-16 | 503-16 ² |
| K34-771-9 | N/A | CL34-771-9 ⁷ | 432 | 836-16 96836-16 ¹⁰⁷ | 2122 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 954-16 | 741-16 732-16 | 611-16 | 503-16 ² |
| K34-772-9 | N/A | CL34-772-9 ⁷ | 432 | 836-16 96836-16 ¹⁰⁷ | 2122 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 954-16 | 741-16 732-16 | 611-16 | 503-16 ² |
| K34-773-9 | N/A | CL34-773-9 ⁷ | 432 | 836-16 96836-16 ¹⁰⁷ | 2122 3122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 954-16 | 741-16 732-16 | 611-16 | 503-16 ² |

¹⁰⁷ For bushing lifter upgrade, use part #96836B-16

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| MARINE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Blown alcohol or blown gas. Use in 500c.i. or larger engine. | .028 | .030 | 4400 to 7200 | 34-850-9⁵ | 308AR-12 | 308 | 316 | 272 | 279 | .727 | .727 | 112° |
| MECHANICAL ROLLER – Good for unblown gas or alcohol. Two 4 BBL or injection. | .030 | .030 | 5500 to 7500 | 34-746-9⁵ | 319CR-10 | 319 | 326 | 285 | 288 | .796 | .726 | 110° |
| MECHANICAL ROLLER – Pro Stock style engine, 500c.i. or larger, Boss, SV0 or TFS heads. | .028 | .030 | 6000 to 8500 | 34-803-9⁵ | 327DR-12 | 327 | 342 | 290 | 302 | .796 | .796 | 112° |
| PULLER & MUD RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great torque and power in 429-460, single carb., 10:1+ compression. | .028 | .030 | 3500 to 6500 | 34-711-9⁵ | 288BR-8 | 288 | 296 | 252 | 260 | .726 | .726 | 108° |
| MECHANICAL ROLLER – Works best in 460 or larger engine with 11:1 compression and tunnel ram. | .028 | .030 | 3800 to 7200 | 34-720-9⁵ | 306AR-8 | 306 | 306 | 271 | 271 | .692 | .692 | 108° |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Excellent torque for heavy car, 4000+ stall, 10:1+ compression. | .028 | .030 | 3800 to 6800 | 34-713-9⁵ | 296BR-8 | 296 | 304 | 260 | 268 | .726 | .726 | 108° |
| MECHANICAL ROLLER – Great power, 11:1+ compression with 4500+ stall. | .028 | .030 | 3800 to 6800 | 34-715-9⁵ | 304BR-8 | 304 | 312 | 268 | 276 | .726 | .726 | 108° |
| MECHANICAL ROLLER – 500c.i., use with good heads and large carb. | .030 | .030 | 4800 to 7500 | 34-740-9⁵ | 313CR-10 | 313 | 319 | 275 | 284 | .806 | .763 | 110° |
| MECHANICAL ROLLER – Use in large engine with 11.5+ compression and 5000+ stall. | .028 | .030 | 4800 to 7500 | 34-703-9⁵ | 312BR-10 | 312 | 319 | 276 | 280 | .726 | .692 | 110° |
| MECHANICAL ROLLER – 5500+ stall or 4 speed in light car. 460 and larger engine. | .030 | .030 | 5500-7500 | 34-746-9⁵ | 319CR-10 | 319 | 326 | 285 | 288 | .796 | .726 | 110° |
| MECHANICAL ROLLER – 650+ c.i., 2500+ lbs with Lenco, works with nitrous. | .028 | .030 | 5500 to 8500 | 34-814-9⁵ | 324FR-120 | 326 | 360 | 292 | 320 | .882 | .830 | 120° |
| MECHANICAL ROLLER – 550+ c.i., engines 2300+ lbs, manual transmission. | .028 | .030 | 6000 to 8500 | 34-812-9⁵ | 324FR-18 | 324 | 360 | 289 | 320 | .882 | .830 | 118° |
| MECHANICAL ROLLER – Top Sportsman 500c.i. with all best components. | .026 | .028 | 7000 to 9000 | 34-810-9⁵ | 324DR-14 | 324 | 352 | 289 | 312 | .882 | .825 | 114° |
| MECHANICAL ROLLER – Top Sportsman 500c.i. with manual transmission in light car. | .028 | .030 | 7000 to 9000 | 34-789-9⁵ | 328OR-16 | 328 | 356 | 288 | 316 | .836 | .830 | 116° |

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² Requires machining on cylinder heads
⁵ Requires distributor gear upgrade

⁴¹ Use screw-in studs & guide plates. May require longer pushrods.

⁷² Fits only certain heads

FORD 429, 460 C.I. 8 CYL. 1968-1995 (CONTINUED)

CAMSHAFTS FORD

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|--------------|--|----------|-------------------------------|------------------|-------------|--|-----------|---------|------------|----------------------------|--|
| MARINE Mechanical Roller Camshafts | | | | | | | | | | | | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 733-16 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 733-16 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 733-16 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| PULLER & MUD RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 733-16 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 733-16 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 959-16 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 4017 ⁷² | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 4017 ⁷² | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 4017 ⁷² | |
| 836-16 96836-16 ¹⁰⁷ | 3122 7122 | 1630-16 ⁴¹ 1830-16 ⁴¹ | 7934-16 | 947-16 ² | 739-16 | 611-16 | 503-16 ² 506-16 ² | 621-16 | N/A | 432 | 4034 4017 ⁷² | |



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¹⁰⁷ For bushing lifter upgrade, use part #96836B-16

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ENGINE TYPES

V6 90°

V6, Uses "18", "09" & "56" Prefixes

The 4.3L V6 90° engines produced since 1985 are equipped with two types of camshafts and three types of cam drive systems. Early 1985 and 1986 engines (Prefix "18") were produced with flat tappet cams. Hydraulic roller cams were first introduced in 1987 (Prefix "09"). These two cam types require different timing chain sets, because the hydraulic roller cams have a stepped nose like the LT1 engine described later in this section. In 1992, a balance shaft was incorporated into this engine, which necessitated a third timing chain setup to drive both the cam and the balance shaft. The cam (Prefix "56") in this balance shaft engine is also shorter than the earlier model and does not have a fuel pump lobe.

SMALL BLOCK V8

There are several varieties of small block engines currently in use in the aftermarket. Although most use the same block, the cylinder heads are very different and require totally different camshafts. The valve arrangements in the heads are different, and therefore the lobe placement on the camshafts must coincide with the head you are using.



The nose of the standard early model cam "12" is very different from the later model hydraulic roller "08". The nose of the hydraulic roller "08" is necked down to accommodate the cam retention plate. The "07" is an LT1/LT4 shaft, which has a longer dowel pin and a center hole for the distributor. Be sure to check the diameter and depth of the hole in the front, as well as the length of the dowel pin.

COMP Cams® Standard Small Block, Uses "12" Prefix

This design is the same basic small block that everyone is accustomed to. This engine configuration is found on all small blocks from 1955 until 1987, when Chevrolet introduced the roller cam. Based on the original 1955 version, with the exception of the 1955-1957 versions, which had an oiling groove in the rear journal, the camshafts are interchangeable.

Hydraulic Roller, Uses "08" Prefix

Beginning in 1987, most of the small block, (both V6 and V8) engines were equipped with hydraulic roller camshafts. There are differences in

the block to accommodate a cam retention thrust plate and the anti-rotation mechanism for the hydraulic roller lifters. These blocks are identifiable by bolt holes for a cam retention plate behind the upper timing sprocket, as well as bosses and tapped holes in the lifter valley for the lifter retention hardware. The camshafts on these engines have a step nose and smaller bolt pattern on the front of them cam. An earlier model camshaft may be used in these blocks by using the appropriate timing chain set and adding a thrust button when using a roller cam.

LT1 & LT4 Engines, Use "07" Prefix

These engines are, as far as the camshaft is concerned, essentially the same as the hydraulic roller engines, with one exception. The distributor is driven from the front of the cam, requiring some changes in the cam core. There is a deeper pilot hole in the front of the cam, as well as a longer dowel pin to locate this drive. These engines require a special timing chain set, and they utilize a self-aligning rocker arm. COMP Cams® LT1 and LT4 Magnum Rocker Arms can be found on pages 271-272.

Other Variations

Buick made a small block cylinder head with a different valve arrangement in the early 1980s, "19" prefix. It is still used in some drag racing and circle track applications today. GM also produced a true race engine called the SB2. It also has a different valve arrangement. When using this head with a standard GM block use prefix "03". There is also a special SB2 block design that would require the "04" prefix.

LS SERIES, USES "54," "146," "646," "156," "656," "189" AND "689" PREFIXES

This series of engines is the first real departure from GM's original small block design. Almost none of the parts carry over from previous engines. There are many new parts available in the aftermarket. The camshaft is a steel roller cam, approximately 4" shorter and .300" larger in diameter, so there should be no problem distinguishing these cams from the older style GM cams. There are several different core designs that vary based on bolt holes, Variable Valve Timing (VVT) and AFM (Active Fuel Management) and cam actuator part numbers. See our GM LS Application Chart on pages 162-165 if you need assistance in identifying your LS engine type.



GEN III/IV
THREE-BOLT CAM

GEN IV SINGLE-BOLT
W/O VVT CAM

GEN IV SINGLE-BOLT
W/ VVT CAM



Gen V LT1, LT4, L83, L86 Series, Uses "624" & "224" Prefixes

The GM Gen V (LT1, LT4, L83, L86) features Variable Valve Timing (VVT) and Active Fuel Management (AFM) lifters. Prefix "624" is also the first GM V8 and overhead valve engine to include Direct Injection (DI). It features a unique "tri-lobe" design to drive the fuel pump. A non-AFM cam core is also available (Prefix "224") to allow for larger lobe lift.

BIG BLOCK V8

Big Block, Uses "11" Prefix

Gen VI Big Block, Uses "01" Prefix

8.1L Big Block, Uses "46" Prefix

This engine was introduced in 1965 and with the exception of some of the very early 1965-1966 models that had an oiling groove in the rear journal, the camshafts are interchangeable. This includes all of the big blocks, including the Mark V, with nearly every style cylinder head until the Gen VI was introduced in 1996.

The Gen VI version 454-502 Big Block is very similar to the earlier standard big block engine. The heads are interchangeable, but there is a non-adjustable valve train. It is equipped with a hydraulic roller camshaft. There is also a positive camshaft retaining plate on the front, and the nose of the cam is stepped down to accept this plate. The lifter bosses are taller to accommodate the lifter anti-rotation plates, and the engine requires a special timing chain set.

The 8.1L Big Block has many differences from the previous designs. The parts are not interchangeable and it utilizes a different firing order as well.

OLDER ENGINES

The very first 1955-1957 265c.i. Small Blocks had a unique oiling system. The same holds true for the first 1965 and 1966 396/427 Big Blocks. When one of these blocks is used, it is necessary to machine a small groove in the rear journal of the cam to allow oil flow to the top of the engine.

COMP Cams® camshafts come without this groove, so it is important to check the vintage of your block prior to camshaft installation. COMP Cams® can perform this operation or supply the specs to you for local machining.

GENERAL TIPS

HYDRAULIC ROLLER CAMS

When installing a hydraulic roller cam in an early model block, it is necessary to use a special hydraulic roller lifter with a link bar attached to keep the lifters properly located within the block. In addition, special length pushrods must also be used. A thrust button must also be used to keep the cam from "walking" in the block.

When installing a flat tappet cam in a block originally equipped with a hydraulic roller, it is necessary to change the entire system. The cam, lifters, pushrods and timing chain set must all be changed in this case; none of the old parts will interchange.



HAVE QUESTIONS?
WE CAN HELP YOU

Just Call Our
Toll Free Tech Line

CAMHELP®
800.999.0853

BUICK 181-252 C.I. EVEN FIRE 6 CYL. 1978-1988

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent performance upgrade for stock camshaft. Good mileage & torque. Smooth idle. | Hyd. | Hyd. | 800 to 4200 | 69-115-4 | 240H | 240 | 248 | 192 | 200 | .403 | .403 | 110° |
| HYDRAULIC – Good power for light towing or use with high gear ratios. Smooth idle. | Hyd. | Hyd. | 1000 to 4800 | 69-234-4 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Ideal for towing. Strong mid-range power, especially at highway speeds. | Hyd. | Hyd. | 1400 to 5400 | 69-235-4 | 260H | 260 | 260 | 212 | 212 | .456 | .456 | 110° |
| HYDRAULIC – Performance cam for the street. Mild choppy idle. Likes lower gears. | Hyd. | Hyd. | 1800 to 5800 | 69-246-4 | 268H | 268 | 268 | 218 | 218 | .469 | .469 | 110° |

BUICK 198-225 C.I. ODD FIRE 6 CYL. 1962-1967

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque & economy. Good performance upgrade for stock cam. Smooth idle. | Hyd. | Hyd. | 1000 to 4800 | 63-234-4 | 252H | 252 | 252 | 206 | 206 | .438 | .438 | 110° |
| HYDRAULIC – Great for towing. Good power at highway speeds. Near smooth idle. | Hyd. | Hyd. | 1400 to 5400 | 63-235-4 | 260H | 260 | 260 | 212 | 212 | .454 | .454 | 110° |
| HYDRAULIC – Performance street cam with broad powerband. Slightly rough idle. | Hyd. | Hyd. | 1800 to 5800 | 63-246-4 | 268H | 268 | 268 | 218 | 218 | .468 | .468 | 110° |

BUICK GRAND NATIONAL 231 C.I. 6 CYL. 1977½-1987, 1988-1989 TRANS AM

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Turbo Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good replacement for turbo charged Grand National. | Hyd. | Hyd. | 1200 to 5500 | 69-248-4 | 260H | 260 | 260 | 212 | 212 | .459 | .459 | 112° |
| HIGH ENERGY™ Hydraulic Roller Turbo Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good performance upgrade for stock camshaft. Works with stock computer. | Hyd. | Hyd. | 800 to 5200 | 69-200-8 | 258HR | 258 | 258 | 206 | 206 | .496 | .496 | 110° |
| HYDRAULIC ROLLER – Stock or aftermarket turbo. Downpipe and computer modifications. | Hyd. | Hyd. | 1200 to 5800 | 69-300-8 | 264HR | 264 | 264 | 212 | 212 | .504 | .504 | 110° |
| HYDRAULIC ROLLER – Performance upgrade for use with aftermarket turbo. Downpipe, intercooler preferred. Needs computer modifications or aftermarket computer. | Hyd. | Hyd. | 1500 to 6200 | 69-400-8 | 269HR | 269 | 264 | 218 | 212 | .511 | .504 | 112° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

⁸¹ Some early applications use larger diameter lifters and non-oiling pushrods

BUICK 181-252 C.I. EVEN FIRE 6 CYL. 1978-1988

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K69-115-4* | SK69-115-4 | CL69-115-4 | N/A | 869-12 | 3226 | N/A | 7869-12 | 980-12 | 742-12 | 601-12 | 502-12 |
| K69-234-4* | SK69-234-4 | CL69-234-4 | N/A | 869-12 | 3226 | N/A | 7869-12 | 980-12 | 742-12 | 601-12 | 502-12 |
| K69-235-4* | SK69-235-4 ⁷ | CL69-235-4 ⁷ | N/A | 869-12 | 3226 | N/A | 7869-12 | 980-12 | 742-12 | 601-12 | 502-12 |
| K69-246-4* | SK69-246-4 ⁷ | CL69-246-4 ⁷ | N/A | 869-12 | 3226 | N/A | 7869-12 | 980-12 | 742-12 | 601-12 | 502-12 |

* K-Kit only includes cam, lifters, valve springs, timing set and seals.

BUICK 198-225 C.I. ODD FIRE 6 CYL. 1962-1967

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|----------------------|------------|-------------|-----------------------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K63-234-4* | SK63-234-4 | CL63-234-4 | N/A | 869-12 ⁸¹ | 3215 | N/A | 7869-12 ⁸¹ | 980-12 | 742-12 | 601-12 | 502-12 |
| K63-235-4* | SK63-235-4 ⁷ | CL63-235-4 ⁷ | N/A | 869-12 ⁸¹ | 3215 | N/A | 7869-12 ⁸¹ | 980-12 | 742-12 | 601-12 | 502-12 |
| K63-246-4* | SK63-246-4 ⁷ | CL63-246-4 ⁷ | N/A | 869-12 ⁸¹ | 3215 | N/A | 7869-12 ⁸¹ | 980-12 | 742-12 | 601-12 | 502-12 |

* K-Kit only includes cam, lifters, valve springs, timing set and seals.

BUICK GRAND NATIONAL 231 C.I. 6 CYL. 1977½-1987, 1988-1989 TRANS AM

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|----------------------|-------------------|------------------|-------------------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Turbo Camshafts | | | | | | | | | | | |
| K69-248-4* | SK69-248-4 ⁷ | CL69-248-4 ⁷ | N/A | 869-12 | 3226 | N/A | 7869-12 | 980-12 | 742-12 | 601-12 | 502-12 |
| HIGH ENERGY™ Hydraulic Roller Turbo Camshafts | | | | | | | | | | | |
| K69-200-8 | SK69-200-8 ⁷ | CL69-200-8 ⁷ | N/A | 6853-12 | 3129 | N/A | 7966-12 | 26915-12 26918-12 | 787-12 1787-12 | 601-12 648-12 | 502-12 503-12 ² |
| K69-300-8 | SK69-300-8 ⁷ | CL69-300-8 ⁷ | N/A | 6853-12 | 3129 | N/A | 7966-12 | 26915-12 26918-12 | 787-12 1787-12 | 601-12 648-12 | 502-12 503-12 ² |
| K69-400-8 | SK69-400-8 ⁷ | CL69-400-8 ⁷ | N/A | 6853-12 | 3129 | N/A | 7966-12 | 26918-12 | 787-12 1787-12 | 601-12 648-12 | 502-12 503-12 ² |

* K-Kit only includes cam, lifters, valve springs, timing set and seals.

RED NUMBERS DENOTE PREMIUM OPTION

BUICK 350 C.I. 8 CYL. 1968-1980

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque and mileage for family sedans. Good performance upgrade for stock camshaft. Smooth idle. | Hyd. | Hyd. | 800 to 4800 | 92-200-4 | 252H | 252 | 252 | 206 | 206 | .439 | .439 | 110° |
| HYDRAULIC – Excellent mid-range torque. Great for towing. Works well w/ stock manifolds. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 92-202-4 | 260H | 260 | 260 | 212 | 212 | .454 | .454 | 110° |
| HYDRAULIC – Good performance camshaft in daily driven vehicles. Slightly choppy idle. Likes headers and 3.40-3.70 gears. | Hyd. | Hyd. | 1500 to 5500 | 92-203-4 | 268H | 268 | 268 | 218 | 218 | .469 | .469 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 92-600-5 | 279TH7 | 279 | 297 | 227 | 241 | .494 | .480 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 92-601-5 | 287TH7 | 287 | 305 | 235 | 249 | .506 | .491 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 92-602-5 | 295TH7 | 295 | 313 | 243 | 257 | .517 | .502 | 107° |

BUICK NAILHEAD 364, 401, 425 C.I. 8 CYL. 1957-1966

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| CLASSIC THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Classic Thumpr™ – Performance street with strong torque, stock converter ok. Choppy/thumping idle. | Hyd. | Hyd. | 1500-5000 | 91-600-5 | 279TH7 | 279 | 297 | 227 | 241 | .478 | .465 | 107° |
| HYDRAULIC – Classic Mutha' Thumpr™ – High performance street/strip, head modification recommended to raise RPM limit, 2200+ stall, rough idle. | Hyd. | Hyd. | 1700-5500 | 91-601-5 | 287TH7 | 287 | 305 | 235 | 249 | .490 | .475 | 107° |
| HYDRAULIC – Classic Big Mutha' Thumpr™ – Street/strip, must have head modification, 2500+ stall, very rough idle. | Hyd. | Hyd. | 2000-6000 | 91-602-5 | 295TH7 | 295 | 313 | 243 | 257 | .501 | .486 | 107° |

BUICK 400, 430, 455 C.I. 8 CYL. 1967-1976

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good performance upgrade for stock camshaft. Great torque and mileage in 400 with stock gear ratio, smooth idle. | Hyd. | Hyd. | 800 to 4600 | 96-200-4 | 252H | 252 | 252 | 206 | 206 | .439 | .439 | 110° |
| HYDRAULIC – Best all-around cam. Great torque and power in mid-range. Smooth idle. Best cam for towing or highway use in 455c.i. | Hyd. | Hyd. | 1000 to 5000 | 96-202-4 | 260H | 260 | 260 | 212 | 212 | .454 | .454 | 110° |
| HYDRAULIC – High performance cam for everyday driving. Broad powerband. Slightly rough idle in 400, smooth to noticeable idle in 455. | Hyd. | Hyd. | 1200 to 5200 | 96-203-4 | 268H | 268 | 268 | 218 | 218 | .469 | .469 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

BUICK 350 C.I. 8 CYL. 1968-1980

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|------------------|-----------|-------------|---------------------|--|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K92-200-4 | SK92-200-4 | CL92-200-4 | N/A | 869-16 | 3215 | N/A | 7861-16 | 942-16 | N/A | N/A | 505-16 ² | |
| K92-202-4 | SK92-202-4 ⁷ | CL92-202-4 ⁷ | N/A | 869-16 | 3215 | N/A | 7861-16 | 942-16 | N/A | N/A | 505-16 ² | |
| K92-203-4 | SK92-203-4 ⁷ | CL92-203-4 ⁷ | N/A | 869-16 | 3215 | N/A | 7861-16 | 942-16 | N/A | N/A | 505-16 ² | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K92-600-5 | N/A | CL92-600-5 ⁷ | N/A | 869-16 | 3215 | N/A | 7861-16 | 942-16 926-16 | N/A | N/A | 505-16 ² | |
| K92-601-5 | N/A | CL92-601-5 ⁷ | N/A | 869-16 | 3215 | N/A | 7861-16 | 942-16 926-16 | N/A | N/A | 505-16 ² | |
| K92-602-5 | N/A | CL92-602-5 ⁷ | N/A | 869-16 | 3215 | N/A | 7861-16 | 942-16 926-16 | N/A | N/A | 505-16 ² | |

BUICK NAILHEAD 364, 401, 425 C.I. 8 CYL. 1957-1966

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|--------|--------|---------|------------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| CLASSIC THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| N/A | N/A | N/A | 852-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | 852-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | 852-16 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |

BUICK 400, 430, 455 C.I. 8 CYL. 1967-1976

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|---------------------|--|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K96-200-4 | SK96-200-4 | CL96-200-4 | N/A | 869-16 | 3217 | N/A | 7896-16 | 910-16 | N/A | N/A | 505-16 ² | |
| K96-202-4 | SK96-202-4 ⁷ | CL96-202-4 ⁷ | N/A | 869-16 | 3217 | N/A | 7896-16 | 910-16 | N/A | N/A | 505-16 ² | |
| K96-203-4 | SK96-203-4 ⁷ | CL96-203-4 ⁷ | N/A | 869-16 | 3217 | N/A | 7896-16 | 910-16 | N/A | N/A | 505-16 ² | |

RED NUMBERS DENOTE PREMIUM OPTION

BUICK 400, 430, 455 C.I. 8 CYL. 1967-1976 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.55 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good mid-range power. Needs headers and 2200 stall. | Hyd. | Hyd. | 2000 to 6000 | 96-210-4 | XE274H | 274 | 286 | 230 | 236 | .506 | .506 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000-5800 | 96-600-5 | 279TH7 | 279 | 297 | 227 | 241 | .494 | .480 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200-6100 | 96-601-5 | 287TH7 | 287 | 305 | 235 | 249 | .506 | .491 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500-6400 | 96-602-5 | 295TH7 | 295 | 313 | 243 | 257 | .517 | .502 | 107° |

CADILLAC 425, 472, 500 C.I. 8 CYL. 1963-1979

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.73 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, good mileage. Good performance upgrade for stock cam. Very smooth idle. | Hyd. | Hyd. | 800 to 4800 | 94-300-5 | 252H | 252 | 252 | 206 | 206 | .465 | .465 | 110° |
| HYDRAULIC – Strong torque through low and mid-range, smooth idle. | Hyd. | Hyd. | 1000 to 5000 | 94-302-5 | 260H | 260 | 260 | 212 | 212 | .481 | .481 | 110° |
| HYDRAULIC – Good everyday performance cam, broad power, slightly noticeable idle. | Hyd. | Hyd. | 1200 to 5200 | 94-304-5 | 268H | 268 | 268 | 218 | 218 | .490 | .490 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Performance street, strong mid-range, best w/ upgraded exhaust & 2000+ stall. Choppy idle. | Hyd. | Hyd. | 1500 to 5500 | 94-306-5 | 270H | 270 | 270 | 224 | 224 | .516 | .516 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 94-600-5 | 279TH7 | 278 | 296 | 226 | 241 | .503 | .490 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 94-601-5 | 287TH7 | 286 | 304 | 234 | 249 | .516 | .500 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 94-602-5 | 295TH7 | 294 | 312 | 242 | 257 | .528 | .512 | 107° |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER - Perfect all around performance grind for heavy vehicles w/o major mods. Almost stock idle, but noticeable in lower compression engines. | Hyd. | Hyd. | 1200-4800 | 94-800-10 | XE270HR-10 | 270 | 276 | 218 | 224 | .555 | .555 | 110° |
| HYDRAULIC ROLLER - Best all around high performance hyd roller camshaft for modified 500 c.i. engines with high compression, converter and gears. | Hyd. | Hyd. | 1800-5400 | 94-801-10 | XE285HR-10 | 285 | 291 | 230 | 236 | .558 | .558 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

BUICK 400, 430, 455 C.I. 8 CYL. 1967-1976 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|-------------------------|--------|---------|------------|-------------|----------|---------------------------------|-----------|-------------|---------------------|
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 869-16 | 3217 | N/A | 7896-16 | 26120-16 ² | N/A | N/A | 505-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K96-600-5 | N/A | CL96-600-5 ⁷ | N/A | 869-16 | 3217 | N/A | 7896-16 | 910-16 26120-16 ² | N/A | N/A | 505-16 ² |
| K96-601-5 | N/A | CL96-601-5 ⁷ | N/A | 869-16 | 3217 | N/A | 7896-16 | 26120-16 ² | N/A | N/A | 505-16 ² |
| K96-602-5 | N/A | CL96-602-5 ⁷ | N/A | 869-16 | 3217 | N/A | 7896-16 | 26120-16 ² | N/A | N/A | 505-16 ² |

CADILLAC 425, 472, 500 C.I. 8 CYL. 1963-1979

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|-------------------------|--------|---------|------------|-------------|----------|--|------------------|------------------|---------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | CL94-300-5 ⁷ | N/A | 869-16 | N/A | N/A | N/A | 981-16 ² 26981-16 ² | 742-16 787-16 | 601-16 | 503-16 ² |
| N/A | N/A | CL94-302-5 ⁷ | N/A | 869-16 | N/A | N/A | N/A | 981-16 ² 26981-16 ² | 742-16 787-16 | 601-16 | 503-16 ² |
| N/A | N/A | CL94-304-5 ⁷ | N/A | 869-16 | N/A | N/A | N/A | 981-16 ² 26981-16 ² | 742-16 787-16 | 601-16 | 503-16 ² |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | CL94-306-5 ⁷ | N/A | 869-16 | N/A | N/A | N/A | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | CL94-600-5 ⁷ | N/A | 869-16 | 2139 | N/A | N/A | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| N/A | N/A | CL94-601-5 ⁷ | N/A | 869-16 | 2139 | N/A | N/A | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| N/A | N/A | CL94-602-5 ⁷ | N/A | 869-16 | 2139 | N/A | N/A | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 8962-16 | 2139 | N/A | N/A | 26918-16 | 795-16 | 613-16 | 503-16 |
| N/A | N/A | N/A | N/A | 8962-16 | 2139 | N/A | N/A | 26918-16 | 795-16 | 613-16 | 503-16 |

RED NUMBERS DENOTE PREMIUM OPTION

CADILLAC 425, 472, 500 C.I. 8 CYL. 1963-1979 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000-5400 | 94-600-10 | 283THR7 | 283 | 303 | 227 | 241 | .555 | .538 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200-5600 | 94-601-10 | 291THR7 | 291 | 311 | 235 | 249 | .566 | .550 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500-5800 | 94-602-10 | 299THR7 | 299 | 319 | 243 | 257 | .578 | .562 | 107° |

CHEVROLET 153 C.I. CHEVY II 4 CYL. 1962-1970

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good torque and power with smooth idle. Strong increase over stock. | Hyd. | Hyd. | 800 to 4800 | 14-119-5 | 252H | 252 | 252 | 206 | 206 | .460 | .460 | 110° |
| HYDRAULIC – Good combination of torque and power. Performance street and marine. | Hyd. | Hyd. | 1200 to 5200 | 14-123-5 | 260H | 260 | 260 | 212 | 212 | .475 | .475 | 110° |

GM ECOTEC 2.2L 4 CYL.

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---------------------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Cast Core Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Turbo applications, wide power range, good power with few modifications. | Hyd. | Hyd. | 2200 to 7000 | 113150 | XE246THR-13 | 248 | 244 | 204 | 200 | .423 | .419 | 113° |
| HYDRAULIC ROLLER – Street applications, wide power range, strong torque, works best with programmer or computer modifications. | Hyd. | Hyd. | 2600 to 6800 | 113200 | XE252HR-11 | 252 | 256 | 210 | 212 | .423 | .419 | 111° |
| HYDRAULIC ROLLER – Blower applications, excellent for performance street applications w/ programmers. | Hyd. | Hyd. | 2800 to 7000 | 113250 113260* | XE252BHR-13 | 252 | 262 | 210 | 218 | .423 | .436 | 113° |
| HYDRAULIC ROLLER – Street/strip applications, requires programmer or computer modifications. | Hyd. | Hyd. | 3000 to 7500 | 113300 113350* | XE258HR-11 | 258 | 262 | 216 | 218 | .440 | .436 | 111° |
| HYDRAULIC ROLLER – Street/strip high RPM applications, requires computer modifications, very strong power over 5000 RPM. | Hyd. | Hyd. | 3500 to 8000 | 113400 113450* | XE264HR-13 | 264 | 268 | 222 | 224 | .456 | .453 | 113° |

NOTE: 2.0L available upon request

*Steel Core Version



**WINNING
RACERS DEMAND
ADVANCED
TECHNOLOGY.**



² Requires machining on cylinder heads

⁷ Stock springs cannot be used

CADILLAC 425, 472, 500 C.I. 8 CYL. 1963-1979 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|-------------|-------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| N/A | SK94-600-10 | CL94-600-10 | N/A | 8962-16 | 2139 | N/A | N/A | 26918-16 | 795-16 | 613-16 | 503-16 | |
| N/A | SK94-601-10 | CL94-601-10 | N/A | 8962-16 | 2139 | N/A | N/A | 26918-16 | 795-16 | 613-16 | 503-16 | |
| N/A | SK94-602-10 | CL94-602-10 | N/A | 8962-16 | 2139 | N/A | N/A | 26918-16 | 795-16 | 613-16 | 503-16 | |

CHEVROLET 153 C.I. CHEVY II 4 CYL. 1962-1970

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|--|----------------|-------------|-------------|--|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K14-119-5 | SK14-119-5 ⁷ | CL14-119-5 ⁷ | N/A | 812-8 | 3211 | 1261-8 | 7861-8 | 981-8 ² 26981-8 ² | 742-8 787-8 | 601-8 | 501-8 | |
| K14-123-5 | SK14-123-5 ⁷ | CL14-123-5 ⁷ | N/A | 812-8 | 3211 | 1261-8 | 7861-8 | 981-8 ² 26981-8 ² | 742-8 787-8 | 601-8 | 501-8 | |

GM ECOTEC 2.2L 4 CYL.

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|--------|--------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|--|
| XTREME ENERGY™ Hydraulic Roller Cast Core Camshafts | | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |

CAMSHAFTS GENERAL MOTORS



CHEVROLET 173-207 C.I. (2.8L-3.4L) 60° 6 CYL. 1979-1994

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Works with stock computer and fuel injection. Good performance upgrade for stock cam. | Hyd. | Hyd. | 500 to 4500 | 16-115-4 | 240H | 240 | 248 | 192 | 200 | .390 | .390 | 108° |
| HYDRAULIC – Good power for 2 or 4 wheel drive S-10, S-15 or Blazer. Works well in mild towing applications. Smooth idle. | Hyd. | Hyd. | 800 to 4800 | 16-232-4 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Good performance cam for 2.8L engine. Lope at idle w/ extremely good top end power. | Hyd. | Hyd. | 1000 to 5000 | 16-233-4 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |

CHEVROLET 194-250 C.I. 6 CYL. 1963-1984

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.75 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good performance upgrade for stock cam. Excellent torque & mileage. Very smooth idle. | Hyd. | Hyd. | 500 to 4500 | 61-113-4 | 240H | 240 | 248 | 192 | 200 | .455 | .455 | 108° |
| HYDRAULIC – Good city & highway driving, strong vacuum. Good torque & mileage. | Hyd. | Hyd. | 800 to 4800 | 61-232-4 | 252H | 252 | 252 | 206 | 206 | .474 | .474 | 110° |
| HYDRAULIC – Best for towing, off-road and 4WD trucks. Noticeable idle. Good for highway driving. | Hyd. | Hyd. | 1000 to 5000 | 61-233-4 | 260H | 260 | 260 | 212 | 212 | .489 | .489 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good street performance with stock converter or 2000+ stall, choppy idle. | Hyd. | Hyd. | 1200 to 5200 | 61-244-4 | 268H | 268 | 268 | 218 | 218 | .499 | .499 | 110° |
| HYDRAULIC – Great for street machines. Needs 2500+ stall, headers and gears. Rough idle. | Hyd. | Hyd. | 1500 to 5500 | 61-246-4 | 280H | 280 | 280 | 230 | 230 | .536 | .536 | 110° |
| HI-TECH™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good for mini-stock with stock engine, when solid lifters can be used. | .022 | .024 | 1500 to 5500 | 61-238-5 | 264S-8 | 264 | 264 | 220 | 220 | .513 | .513 | 108° |
| SOLID – Good for 1/8 mile drag or 1/4 to 3/8 mile oval track. Broad torque range. | .022 | .024 | 3500 to 6500 | 61-662-5 | 280B-6 | 280 | 284 | 242 | 246 | .591 | .570 | 106° |
| SOLID – For 1/4 mile drag or 3/8 to 5/8 mile oval track. Needs good cylinder heads, carb and intake. | .022 | .024 | 4000 to 7000 | 61-664-5 | 294A-8 | 294 | 294 | 256 | 256 | .596 | .596 | 108° |

CHEVROLET 200-229 C.I. (3.8L) 90° 6 CYL. 1978-1984

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Great torque, good mileage. Works well w/ high gear ratios & overdrive transmissions. Good city driving. | Hyd. | Hyd. | 500 to 4500 | 15-115-4 | 240H | 240 | 248 | 192 | 200 | .390 | .390 | 108° |
| HYDRAULIC – Strong torque, good for trucks, 4WD & mild towing. Works w/ stock computer. Smooth idle & good mileage. | Hyd. | Hyd. | 800 to 4800 | 15-200-4 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Good cam for highway use, off-road and towing. Good for trucks with low gear ratios. | Hyd. | Hyd. | 1000 to 5000 | 15-201-4 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |

¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

CHEVROLET 173-207 C.I. (2.8L-3.4L) 60° 6 CYL. 1979-1994

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-----------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K16-115-4 | SK16-115-4 | CL16-115-4 | RP1413-12 | 802-12 | 3201 | 1413-12 | 7816-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K16-232-4 | SK16-232-4 | CL16-232-4 | RP1413-12 | 802-12 | 3201 | 1413-12 | 7816-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K16-233-4 | SK16-233-4 ⁷ | CL16-233-4 ⁷ | RP1413-12 | 802-12 | 3201 | 1413-12 | 7816-12 | 980-12 | 742-12 | 601-12 | 501-12 |

CHEVROLET 194-250 C.I. 6 CYL. 1963-1984

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|------------------|------------|----------------------|----------|--|------------------|------------------|---------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K61-113-4 | SK61-113-4 | CL61-113-4 | N/A | 812-12 | 3211 | 1261-12 | 7861-12 | 981-12 26981-12 | 742-12 787-12 | 601-12 | 501-12 |
| K61-232-4 | SK61-232-4 ⁷ | CL61-232-4 ⁷ | N/A | 812-12 | 3211 | 1261-12 | 7861-12 | 981-12 26981-12 | 742-12 787-12 | 601-12 | 501-12 |
| K61-233-4 | SK61-233-4 ⁷ | CL61-233-4 ⁷ | N/A | 812-12 | 3211 | 1261-12 | 7861-12 | 981-12 26981-12 | 742-12 787-12 | 601-12 | 501-12 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K61-244-4 | SK61-244-4 ⁷ | CL61-244-4 ⁷ | N/A | 812-12 858-12 | 3211 | 1261-12 | 7861-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K61-246-4 | SK61-246-4 ⁷ | CL61-246-4 ⁷ | N/A | 812-12 858-12 | 3211 | 1261-12 | 7861-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| HI-TECH™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 813-12 | 3161 | 1261-12 ¹ | 7861-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| N/A | N/A | N/A | N/A | 813-12 | 3161 | 1261-12 ¹ | 7861-12 | 987-12 ² 26918-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| N/A | N/A | N/A | N/A | 813-12 | 3161 | 1261-12 ¹ | 7861-12 | 987-12 ² 26918-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |

CHEVROLET 200-229 C.I. (3.8L) 90° 6 CYL. 1978-1984

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|------------|------------|-----------|---------|------------|----------------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K15-115-4 | SK15-115-4 | CL15-115-4 | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K15-200-4 | SK15-200-4 | CL15-200-4 | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K15-201-4 | SK15-201-4 | CL15-201-4 | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 980-12 | 742-12 | 601-12 | 501-12 |

⁹ 50-State legal for 1993 & earlier Chevrolet V6 200-229c.i. C.A.R.B. E.O. #D-279-4

RED NUMBERS DENOTE PREMIUM OPTION



GM 3800/3.8 6 CYL. 1996-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Performance upgrade for stock cam. Naturally aspirated, daily usage. Significant improvement over stock. Must replace springs. | Hyd. | Hyd. | 800 to 4800 | 76-800-9⁷ | 246 HR10 | 246 | 256 | 191 | 201 | .480 | .496 | 110° |
| HYDRAULIC ROLLER – Naturally aspirated performance cam. Best w/ intake improvements. Must replace springs. | Hyd. | Hyd. | 1000 to 5500 | 76-801-9⁷ | 255 HR12 | 255 | 262 | 201 | 205 | .496 | .480 | 112° |
| HYDRAULIC ROLLER – Blower performance cam. Best with pulley change for increased boost. Must replace springs. | Hyd. | Hyd. | 1000 to 5500 | 76-802-9⁷ | 264 HR15 | 264 | 274 | 210 | 220 | .512 | .512 | 115° |

CHEVROLET 4.3L 262 C.I. 90° 6 CYL. 1980-1997

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Excellent torque/good mileage. Works well with high gear ratios and overdrive transmissions. Good city driving. | Hyd. | Hyd. | 500 to 4500 | 18-115-4³⁷ | 240H | 240 | 248 | 192 | 200 | .390 | .390 | 108° |
| HYDRAULIC – Good power for trucks, 4WD and mild towing. Works well with stock computer. Smooth idle and good economy. | Hyd. | Hyd. | 800 to 4800 | 18-119-4³⁷ | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Good cam for highway use, off-road and towing. Good for trucks with low gear ratios. | Hyd. | Hyd. | 1000 to 5000 | 18-123-4³⁷ | 260H | 260 | 260 | 212 | 212 | .444 | .444 | 110° |
| HYDRAULIC – High performance, non-computer, low gears, 2000+ stall suggested. | Hyd. | Hyd. | 1000 to 5000 | 18-124-4³⁷ | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |

MAGNUM Retro-Fit Hydraulic Roller Camshafts

(For Non-Computer Controlled)

| | | | | | | | | | | | | |
|--|------|------|--------------|---------------------------------|-------|-----|-----|-----|-----|------|------|------|
| HYDRAULIC ROLLER – Performance upgrade for stock camshaft. Good mileage, smooth idle. Vans, pickups & towing. Stock gear ratios & torque converter. | Hyd. | Hyd. | 1200 to 4500 | 18-410-8^{10,37} | 260HR | 260 | 260 | 206 | 206 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Mild street performance, slightly noticeable lobe at idle. Stock converter, aftermarket intake and headers. 3.40-4.10 gears. | Hyd. | Hyd. | 1800 to 5000 | 18-420-8^{10,37} | 270HR | 270 | 270 | 215 | 215 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Limited high performance street use. Aftermarket intake, headers and 2500+ stall, 3.40-4.10 gears. Mild rough idle. | Hyd. | Hyd. | 2000 to 5500 | 18-430-8^{10,37} | 280HR | 280 | 280 | 224 | 224 | .525 | .525 | 110° |

MAGNUM Computer Controlled Retro-Fit Hydraulic Roller Camshafts

| | | | | | | | | | | | | |
|--|------|------|--------------|---------------------------------|--------|-----|-----|-----|-----|------|------|------|
| HYDRAULIC ROLLER – Works with stock computer, fuel injection. Good low end torque and gas mileage. | Hyd. | Hyd. | 1200 to 4500 | 18-412-8^{10,37} | 260AHR | 260 | 266 | 206 | 210 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Works with throttle body and sequential port injection with aftermarket chip. Good low end, mid-range. | Hyd. | Hyd. | 1800 to 5000 | 18-415-8^{10,37} | 266HR | 266 | 270 | 210 | 215 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Performance cam for computer cars. Needs aftermarket chip and exhaust. Strong mid-range and top end. | Hyd. | Hyd. | 2000 to 5500 | 18-422-8^{10,37} | 270AHR | 270 | 276 | 215 | 220 | .500 | .510 | 114° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

⁹ 50-State legal for 1993 & earlier Chevrolet V6 200-229c.i. C.A.R.B. E.O. #D-279-4

¹⁰ Requires thrust button & wear plate

GM 3800/3.8 6 CYL. 1996-PRESENT

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|------------|-------------|----------|----------------------|------------------|-------------|---------------------|-----------|---------|------------|--------------|--|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 850-12 ¹¹ 875-12 ¹¹ | N/A | N/A | 7937-12 | 26915-12 26918-12 | 774-12 772-12 | 623-12 | 511-12 ² | N/A | N/A | N/A | N/A | |
| 850-12 ¹¹ 875-12 ¹¹ | N/A | N/A | 7937-12 | 26915-12 26918-12 | 774-12 772-12 | 623-12 | 511-12 ² | N/A | N/A | N/A | N/A | |
| 850-12 ¹¹ 875-12 ¹¹ | N/A | N/A | 7937-12 | 26915-12 26918-12 | 774-12 772-12 | 623-12 | 511-12 ² | N/A | N/A | N/A | N/A | |

CHEVROLET 4.3L 262 C.I. 90° 6 CYL. 1980-1997

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-----------|---------|------------|----------------------|----------|--------------------|------------------|-------------|-------------|
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K18-115-4 | SK18-115-4 | CL18-115-4 | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K18-119-4 | SK18-119-4 | CL18-119-4 | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K18-123-4 | SK18-123-4 | CL18-123-4 | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 980-12 | 742-12 | 601-12 | 501-12 |
| K18-124-4 | SK18-124-4 ⁷ | CL18-124-4 ⁷ | RP1412-12 | 812-12 | 3200 | 1412-12 ⁹ | 7812-12 | 981-12 26981-12 | 742-12 787-12 | 601-12 | 501-12 |

MAGNUM Retro-Fit Hydraulic Roller Camshafts

| | | | | | | | | | | | |
|-----------|----------------------------|----------------------------|-----------|--------------------|--------------|--|--------------------|--|------------------|------------------|---------------------|
| K18-410-8 | SK18-410-8 ^{7,10} | CL18-410-8 ^{7,10} | RPR200-12 | 853-12 15853-12 | 2100 3100 | 1412-12 ⁹ 1601-12 ⁹ | 7809-12 7949-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K18-420-8 | SK18-420-8 ^{7,10} | CL18-420-8 ^{7,10} | RPR200-12 | 853-12 15853-12 | 2100 3100 | 1412-12 ⁹ 1601-12 ⁹ | 7809-12 7949-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K18-430-8 | SK18-430-8 ^{7,10} | CL18-430-8 ^{7,10} | RPR200-12 | 853-12 15853-12 | 2100 3100 | 1412-12 ⁹ 1601-12 ⁹ | 7809-12 7949-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |

MAGNUM Computer Controlled Retro-Fit Hydraulic Roller Camshafts

| | | | | | | | | | | | |
|------------|----------------------------|-----------------------------|-----------|--------------------|--------------|--|--------------------|--|------------------|------------------|---------------------|
| K 18-412-8 | SK18-412-8 ^{7,10} | CL 18-412-8 ^{7,10} | RPR200-12 | 853-12 15853-12 | 2100 3100 | 1412-12 ⁹ 1601-12 ⁹ | 7809-12 7949-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K18-415-8 | SK18-415-8 ^{7,10} | CL18-415-8 ^{7,10} | RPR200-12 | 853-12 15853-12 | 2100 3100 | 1412-12 ⁹ 1601-12 ⁹ | 7809-12 7949-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K18-422-8 | SK18-422-8 ^{7,10} | CL18-422-8 ^{7,10} | RPR200-12 | 853-12 15853-12 | 2100 3100 | 1412-12 ⁹ 1601-12 ⁹ | 7809-12 7949-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |

¹¹ Lifters only, does not include lifter guides
³⁷ Adjustable valve train required



CHEVROLET 4.3L 262 C.I. 90° 6 CYL. 1980-1997 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Hydraulic Roller Camshafts (NON-BALANCE SHAFT) | | | | | | | | | | | | |
| 1987-Present Engines | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Performance upgrade for stock camshaft. Good mileage, smooth idle. Works with vans, pickups & towing. Stock gear ratios & converter. | Hyd. | Hyd. | 1200 to 4500 | 09-410-8³⁷ | 260HR | 260 | 260 | 206 | 206 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Mild street performance. Slight lobe at idle. Stock converter, aftermarket intake and headers. 3.40 to 4.10 gears. | Hyd. | Hyd. | 1800 to 5000 | 09-420-8³⁷ | 270HR | 270 | 270 | 215 | 215 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Limited high performance street use. Needs intake, headers and 2500+ stall, 3.73 to 4.10 gears. Mild rough idle. | Hyd. | Hyd. | 2000 to 5500 | 09-430-8³⁷ | 280HR | 280 | 280 | 224 | 224 | .525 | .525 | 110° |
| MAGNUM Computer Controlled Hydraulic Roller Camshafts (NON-BALANCE SHAFT) | | | | | | | | | | | | |
| 1987-Present Engines | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Works w/ stock computer & fuel injection. Low lift for non-modified cylinder heads. | Hyd. | Hyd. | 1000 to 4300 | 09-435-8 | 251HR | 251 | 257 | 200 | 206 | .428 | .459 | 114° |
| HYDRAULIC ROLLER – Works with stock computer and fuel injection. Good low end torque and mileage. | Hyd. | Hyd. | 1200 to 4500 | 09-412-8³⁷ | 260AHR | 260 | 266 | 206 | 210 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Works with throttle body and sequential port injection with aftermarket chip. Good low end and mid-range. | Hyd. | Hyd. | 1800 to 5000 | 09-415-8³⁷ | 266HR | 266 | 270 | 210 | 215 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Performance cam for computer cars. Needs aftermarket chip, exhaust and mild stall. Strong mid-range and top end. | Hyd. | Hyd. | 2000 to 5500 | 09-422-8³⁷ | 270AHR | 270 | 276 | 215 | 220 | .500 | .510 | 114° |

CHEVROLET 4.3L 262 C.I. 90° WITH BALANCE SHAFT 6 CYL. 1992-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Hydraulic Roller Camshafts (W/ BALANCE SHAFT) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great torque for trucks, 4WD and light towing. Has smooth idle. Works with stock components, small carburetor. | Hyd. | Hyd. | 1200 to 4500 | 56-410-8³⁷ | 260HR | 260 | 260 | 206 | 206 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Mild street performance with slight idle for stock converters with aftermarket intake and headers. | Hyd. | Hyd. | 1800 to 5000 | 56-420-8³⁷ | 270HR | 270 | 270 | 215 | 215 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Limited high performance with rough idle. Needs intake, headers and 2500+ stall with 3.73 to 4.10 gears. | Hyd. | Hyd. | 2000 to 5500 | 56-430-8³⁷ | 280HR | 280 | 280 | 224 | 224 | .525 | .525 | 110° |
| MAGNUM Computer Controlled Hydraulic Roller Camshafts (W/ BALANCE SHAFT) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Works with stock computer and fuel injection. Good low end torque and mileage. | Hyd. | Hyd. | 1200 to 4500 | 56-440-8³⁷ | 260AHR | 260 | 266 | 206 | 210 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Works with throttle body and sequential port injection with aftermarket chip. Good low end and mid-range. | Hyd. | Hyd. | 1800 to 5000 | 56-450-8³⁷ | 266HR | 266 | 270 | 210 | 215 | .500 | .500 | 112° |
| HYDRAULIC ROLLER – Performance cam for computer cars. Needs aftermarket chip and exhaust. Strong mid-range and top end. | Hyd. | Hyd. | 2000 to 5500 | 56-460-8³⁷ | 270AHR | 270 | 276 | 215 | 220 | .500 | .510 | 114° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

⁹ 50-State legal for 1993 & earlier Chevrolet V6 200-229c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 4.3L 262 C.I. 90° 6 CYL. 1980-1997 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|-----------|--|------------|--|--------------------|--|------------------|------------------|---------------------|
| MAGNUM Hydraulic Roller Camshafts (NON-BALANCE SHAFT) | | | | | | | | | | | |
| K09-410-8 | SK09-410-8 ⁷ | CL09-410-8 ⁷ | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K09-420-8 | SK09-420-8 ⁷ | CL09-420-8 ⁷ | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K09-430-8 | SK09-430-8 ⁷ | CL09-430-8 ⁷ | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| MAGNUM Computer Controlled Hydraulic Roller Camshafts (NON-BALANCE SHAFT) | | | | | | | | | | | |
| K09-435-8 | SK09-435-8 | CL09-435-8 | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 501-12 |
| K09-412-8 | SK09-412-8 ⁷ | CL09-412-8 ⁷ | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K09-415-8 | SK09-415-8 ⁷ | CL09-415-8 ⁷ | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |
| K09-422-8 | SK09-422-8 ⁷ | CL09-422-8 ⁷ | RPH300-12 | 850-12 ¹¹ 875-12 ¹¹ | 3136 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 ² 26986-12 ² | 740-12 795-12 | 611-12 614-12 | 503-12 ² |

CHEVROLET 4.3L 262 C.I. 90° WITH BALANCE SHAFT 6 CYL. 1992-PRESENT

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|--------|--------|--|------------|--|--------------------|-------------------------------|------------------|------------------|-------------------------------|
| MAGNUM Hydraulic Roller Camshafts (W/ BALANCE SHAFT) | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 850-12 ¹¹ 875-12 ¹¹ | 3202 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 983-12 986-12 ² | 751-12 740-12 | 611-12 | 502-12 503-12 ² |
| N/A | N/A | N/A | N/A | 850-12 ¹¹ 875-12 ¹¹ | 3202 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 983-12 986-12 ² | 751-12 740-12 | 611-12 | 502-12 503-12 ² |
| N/A | N/A | N/A | N/A | 850-12 ¹¹ 875-12 ¹¹ | 3202 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 983-12 986-12 ² | 751-12 740-12 | 611-12 614-12 | 503-12 ² |
| MAGNUM Computer Controlled Hydraulic Roller Camshafts (W/ BALANCE SHAFT) | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 850-12 ¹¹ 875-12 ¹¹ | 3202 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 983-12 986-12 ² | 751-12 740-12 | 611-12 | 502-12 503-12 ² |
| N/A | N/A | N/A | N/A | 850-12 ¹¹ 875-12 ¹¹ | 3202 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 983-12 986-12 ² | 751-12 740-12 | 611-12 | 502-12 503-12 ² |
| N/A | N/A | N/A | N/A | 850-12 ¹¹ 875-12 ¹¹ | 3202 | 1417-12 ⁹ 1617-12 ⁹ | 7808-12 7940-12 | 986-12 26986-12 | 750-12 795-12 | 611-12 614-12 | 503-12 ² |

¹¹ Lifters only, does not include lifter guides
³⁷ Adjustable valve train required

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| PURE ENERGY™ Hydraulic Flat Tappet Camshaft (C.A.R.B. Approved See Footnote #49 Below) | | | | | | | | | | | | |
| HYDRAULIC – 50-State legal performance upgrade for 1987 & earlier carbureted V8 Small Block Chevy. | Hyd. | Hyd. | 1200 to 5200 | 12-305-3⁴⁹ | 246PE | 246 | 263 | 203 | 212 | .429 | .438 | 110° |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (C.A.R.B. Approved See Footnote #49 Below) | | | | | | | | | | | | |
| HYDRAULIC – Strong torque, excellent mileage for 262-305c.i. with high axle ratios, smooth idle. | Hyd. | Hyd. | 600 to 4600 | 12-300-4⁴⁹ | 240H | 240 | 248 | 192 | 200 | .390 | .390 | 108° |
| HYDRAULIC – Strong torque, excellent mileage for 327-400c.i., has smooth idle, likes high axle ratios. | Hyd. | Hyd. | 800 to 4800 | 12-205-2⁴⁹ | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Vans, pickups, 4WD and towing in 350c.i., good idle, strong mid-range torque. | Hyd. | Hyd. | 1200 to 5200 | 12-206-2⁴⁹ | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |
| HYDRAULIC – Good street performance with stock converter, choppy idle. | Hyd. | Hyd. | 1500 to 5500 | 12-210-2⁴⁹ | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |
| HIGH ENERGY MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Single or dual engine with inboard/outboard drive for ski and economy. | Hyd. | Hyd. | 1800 to 4900 | 12-206-2⁴⁹ | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |
| HYDRAULIC – Biggest cam for inboard/outboard. Good for ski, economy and some performance. | Hyd. | Hyd. | 2200 to 5200 | 12-210-2⁴⁹ | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |
| HYDRAULIC – Good for jet boat with A impeller, strong mid-range power. | Hyd. | Hyd. | 2400 to 5400 | 12-318-4 | 268AH | 268 | 276 | 222 | 226 | .464 | .464 | 110° |
| HYDRAULIC – High performance in 350-400 engines, strong off-shore cam. | Hyd. | Hyd. | 2600 to 5700 | 12-324-4 | 280AH | 280 | 288 | 232 | 237 | .483 | .483 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – High performance. Biggest cam w/ stock converter but better w/ 2000+ stall. Use lower gears. Mild rough idle. | Hyd. | Hyd. | 1800 to 5800 | 12-211-2 | 270H | 270 | 270 | 224 | 224 | .470 | .470 | 110° |
| HYDRAULIC – Great for street machines. Needs 2500+stall, headers and gears. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 12-212-2 | 280H | 280 | 280 | 230 | 230 | .480 | .480 | 110° |
| HYDRAULIC – Needs 9:1 compression, 2800+ stall, headers, gears. Choppy idle. | Hyd. | Hyd. | 2200 to 6200 | 12-326-4 | 286H | 286 | 286 | 236 | 236 | .490 | .490 | 110° |
| HYDRAULIC – Street/strip special, 3000 stall, headers, gears, 9.5:1 compression. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 12-213-3 | 292H | 292 | 292 | 244 | 244 | .501 | .501 | 110° |
| HYDRAULIC – Pro Street/bracket, limited street driving. Intake, gears, 3500+ stall. Racy idle. 10.5:1 comp. | Hyd. | Hyd. | 3000 to 7000 | 12-214-4 | 305H | 305 | 305 | 253 | 253 | .525 | .525 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4600 | 12-230-2 | XE250H | 250 | 260 | 206 | 212 | .432 | .444 | 110° |
| HYDRAULIC – Strong torque thru low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 12-234-2 | XE256H | 256 | 268 | 212 | 218 | .447 | .454 | 110° |
| HYDRAULIC – Excellent response, good mid-range, noticeable idle. | Hyd. | Hyd. | 1300 to 5600 | 12-238-2 | XE262H | 262 | 270 | 218 | 224 | .462 | .469 | 110° |
| HYDRAULIC – Great for street machines, largest cam for stock converter, better with 2000+ stall. | Hyd. | Hyd. | 1600 to 5800 | 12-242-2 | XE268H | 268 | 280 | 224 | 230 | .477 | .480 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-410

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | STEEL RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|-------------------------|------------------|--------------|--|--------------------|--|------------------|------------------|---------------------|
| PURE ENERGY™ Hydraulic Flat Tappet Camshaft (C.A.R.B. Approved See Footnote #49 Below) | | | | | | | | | | | |
| K12-305-3 | SK12-305-3 | CL12-305-3 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 980-16 981-16 | 742-16 750-16 | 601-16 613-16 | 501-16 |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (C.A.R.B. Approved See Footnote #49 Below) | | | | | | | | | | | |
| K12-300-4 | SK12-300-4 | CL12-300-4 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 980-16 981-16 | 742-16 750-16 | 601-16 613-16 | 501-16 |
| K12-205-2 | SK12-205-2 | CL12-205-2 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 980-16 981-16 | 742-16 750-16 | 601-16 613-16 | 501-16 |
| K12-206-2 | SK12-206-2 | CL12-206-2 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 980-16 981-16 | 742-16 750-16 | 601-16 613-16 | 501-16 |
| K12-210-2 | SK12-210-2 ⁷ | CL12-210-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| HIGH ENERGY MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K12-206-2 | SK12-206-2 | CL12-206-2 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-210-2 | SK12-210-2 ⁷ | CL12-210-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| N/A | N/A | N/A | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| N/A | N/A | N/A | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K12-211-2 | SK12-211-2 ⁷ | CL12-211-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-212-2 | SK12-212-2 ⁷ | CL12-212-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-326-4 | SK12-326-4 ⁷ | CL12-326-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-213-3 | SK12-213-3 ⁷ | CL12-213-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-214-4 | SK12-214-4 ⁷ | CL12-214-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K12-230-2 | SK12-230-2 | CL12-230-2 | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-234-2 | SK12-234-2 ⁷ | CL12-234-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-238-2 | SK12-238-2 ⁷ | CL12-238-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-242-2 | SK12-242-2 ⁷ | CL12-242-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |

⁴⁹ 50-State legal for 1987 & earlier carbureted V8 SB Chevrolet 262-400 C.A.R.B. E.O. #D-279-3, #D-279-5, #D-279-6

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts (CONTINUED) | | | | | | | | | | | | |
| HYDRAULIC – Very strong mid-range torque and throttle response, 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 12-246-3 12-246-20⁹⁴ | XE274H | 274 | 286 | 230 | 236 | .490 | .490 | 110° |
| HYDRAULIC – Street/strip, 2800+ stall, likes headers and gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 12-250-3 12-250-20⁹⁴ | XE284H | 284 | 296 | 240 | 246 | .507 | .510 | 110° |
| HYDRAULIC – Pro Street/bracket, needs good intake, headers, gear and 3300+ stall. | Hyd. | Hyd. | 2800 to 7000 | 12-254-3 12-254-20⁹⁴ | XE294H | 294 | 306 | 250 | 256 | .519 | .523 | 110° |
| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshafts (1987-1998) | | | | | | | | | | | | |
| HYDRAULIC – Great in throttle body, crossfire or carbureted engine and 305 TPI. | Hyd. | Hyd. | 1000 to 5000 | 12-249-4 | XE249H | 249 | 260 | 206 | 212 | .434 | .444 | 112° |
| HYDRAULIC – Best in 305 or 350 tuned port injected engines. | Hyd. | Hyd. | 1200 to 5200 | 12-256-4 | XE256H | 256 | 268 | 212 | 218 | .449 | .456 | 112° |
| HYDRAULIC – Good for TPI 305 or 350 with after-market chip and upgraded exhaust. | Hyd. | Hyd. | 1500 to 5500 | 12-262-4 | XE262H | 262 | 270 | 218 | 224 | .464 | .470 | 114° |
| HYDRAULIC – Best cam for modified 350 TPI with improved chip, injectors, plenum, runners and exhaust. | Hyd. | Hyd. | 1800 to 5800 | 12-268-4 | XE268H | 268 | 280 | 224 | 230 | .477 | .480 | 114° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 12-600-4 12-600-20⁹⁴ | 279TH7 | 279 | 297 | 227 | 241 | .479 | .465 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 12-601-4 12-601-20⁹⁴ | 287TH7 | 287 | 305 | 235 | 249 | .489 | .476 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 12-602-4 12-602-20⁹⁴ | 295TH7 | 295 | 313 | 243 | 257 | .500 | .486 | 107° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, smooth idle, excellent mileage. | Hyd. | Hyd. | 600 to 4600 | 12-231-2 | X4250H | 250 | 258 | 206 | 214 | .432 | .453 | 111° |
| HYDRAULIC – Strong low end and mid-range torque, good idle. | Hyd. | Hyd. | 1000 to 5200 | 12-235-2 | X4254H | 254 | 262 | 210 | 218 | .447 | .462 | 111° |
| HYDRAULIC – Excellent response, good mid-range, noticeable idle. | Hyd. | Hyd. | 1300 to 5600 | 12-239-3 | X4262H | 262 | 270 | 218 | 226 | .462 | .480 | 111° |
| HYDRAULIC – Strong mid-range and throttle response, likes headers, gears, 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 12-243-3 | X4270H | 270 | 278 | 226 | 234 | .480 | .498 | 111° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-------------------------|------------------|--------------|--|--------------------|--|------------------|------------------|---------------------|
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts (CONTINUED) | | | | | | | | | | | |
| K12-246-3 | SK12-246-3 ⁷ | CL12-246-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-250-3 | SK12-250-3 ⁷ | CL12-250-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-254-3 | SK12-254-3 ⁷ | CL12-254-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Computer Controlled Hydraulic Flat Tappet Camshafts (1987-1998) | | | | | | | | | | | |
| K12-249-4 | SK12-249-4 | CL12-249-4 | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-256-4 | SK12-256-4 ⁷ | CL12-256-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-262-4 | SK12-262-4 ⁷ | CL12-262-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-268-4 | SK12-268-4 ⁷ | CL12-268-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |

| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|-------------------------|------------------|--------------|------------|--|--------------------|--|------------------|------------------|---------------------|
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K12-600-4 | GK12-600-4 ^{7,93} | CL12-600-4 ⁷ | 812-16 858-16 | 2100 3100 | 4100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 795-16 | 601-16 611-16 | 501-16 |
| K12-601-4 | GK12-601-4 ^{7,93} | CL12-601-4 ⁷ | 812-16 858-16 | 2100 3100 | 4100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 795-16 | 601-16 611-16 | 501-16 |
| K12-602-4 | GK12-602-4 ^{7,93} | CL12-602-4 ⁷ | 812-16 858-16 | 2100 3100 | 4100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 742-16 795-16 | 601-16 611-16 | 503-16 ² |

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|-------------------------|------------------|--------------|--|--------------------|--------------------|------------------|------------------|-------------|
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K12-231-2 | SK12-231-2 | CL12-231-2 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-235-2 | SK12-235-2 ⁷ | CL12-235-2 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-239-3 | SK12-239-3 ⁷ | CL12-239-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-243-3 | SK12-243-3 ⁷ | CL12-243-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |

⁹³ GK-Kit contains cam, lifters & gear drive

⁹⁴ Nitrided version



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| XTREME MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good for inboard/outboard pleasure boat, skiing and good economy. | Hyd. | Hyd. | 1000 to 5000 | 12-232-3 | XM256H | 256 | 262 | 212 | 218 | .447 | .462 | 112° |
| HYDRAULIC – Biggest cam for inboard/outboard, good mid-range with excellent response, noticeable idle. | Hyd. | Hyd. | 1300 to 5500 | 12-236-3 | XM262H | 262 | 268 | 218 | 224 | .462 | .477 | 112° |
| HYDRAULIC – Jet boat with A impeller, strong mid-range, good throttle response, noticeable idle. | Hyd. | Hyd. | 1600 to 5800 | 12-240-4 | XM270H | 270 | 286 | 226 | 236 | .480 | .489 | 112° |
| HYDRAULIC – Jet boat with A or B impeller, good off-shore high performance cam, rough idle. | Hyd. | Hyd. | 2000 to 6200 | 12-244-4 | XM278H | 278 | 292 | 234 | 244 | .498 | .500 | 112° |
| HYDRAULIC – Jet boat with A impeller, 9.5:1 compression, needs headers. Good for bracket racing and high performance. | Hyd. | Hyd. | 2500 to 6500 | 12-248-4 | XM290H | 290 | 306 | 246 | 256 | .516 | .522 | 112° |
| DUAL ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong torque and mileage. Excellent RV and towing cam. Smooth idle. | Hyd. | Hyd. | 1200 to 5500 | 12-207-3⁴⁹ | 255DEH | 255 | 261 | 203 | 212 | .421 | .451 | 110° |
| HYDRAULIC – Very strong mid-range. Lopey idle. Everyday performance for stock exhaust. | Hyd. | Hyd. | 1500 to 5750 | 12-208-3⁴⁹ | 265DEH | 265 | 269 | 211 | 221 | .442 | .465 | 110° |
| HYDRAULIC – High performance street. Works with stock converter. Choppy idle. | Hyd. | Hyd. | 2000 to 6000 | 12-209-3 | 275DEH | 275 | 277 | 219 | 229 | .462 | .482 | 110° |
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Sound of GM 300 HP camshaft with improved power and response. | Hyd. | Hyd. | 1000 to 5500 | 12-670-4 | N+300HP | 258 | 265 | 211 | 218 | .426 | .420 | 112° |
| HYDRAULIC – Sound and character of the ever popular GM L79 cam with modern power | Hyd. | Hyd. | 1800 to 6200 | 12-671-4 | N+L79H | 276 | 283 | 229 | 236 | .468 | .462 | 112° |
| HYDRAULIC – Exhaust note of GM 30-30 cam with increased performance. | Hyd. | Hyd. | 2300 to 6500 | 12-672-4 | N+30-30H | 286 | 293 | 239 | 246 | .483 | .477 | 112° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| FACTORY MUSCLE™ Hydraulic Flat Tappet Camshafts (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Factory I.D. #3896929 for: 327c.i., 1965-68, factory 275/300 HP 350c.i., 1967-69, factory 295 HP 350c.i., 1970, factory 300 HP 350c.i., 1971, factory 270 HP 350c.i., 1972, factory 200 HP | Hyd. | Hyd. | 600 to 4800 | 12-105-3 | 929H | 319 | 320 | 195 | 202 | .390 | .410 | 112° |
| HYDRAULIC – Factory I.D. #3863151 for: 327c.i., 1965-68, factory 350 HP 327c.i., 1967-68, factory 325 HP | Hyd. | Hyd. | 1800 to 5800 | 12-106-3 | 151H | 342 | 342 | 222 | 222 | .447 | .447 | 114° |

TECH TIP If you have a 1955-1957 Small Block Chevy engine, please notify your sales person before ordering.

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁹ 50-State legal for 1987 & earlier carbureted V8 SB Chevrolet 262-400 C.A.R.B. E.O. #D-279-3, #D-279-5, #D-279-6

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KITS | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|-------------------------|-------------------------|--|--------------------|--------------------|--|--------------------|--|------------------|------------------|---------------------|------|
| XTREME MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K12-232-3 | SK12-232-3 ⁷ | CL12-232-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-236-3 | SK12-236-3 ⁷ | CL12-236-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-240-4 | SK12-240-4 ⁷ | CL12-240-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-244-4 | SK12-244-4 ⁷ | CL12-244-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K12-248-4 | SK12-248-4 ⁷ | CL12-248-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| DUAL ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K12-207-3 | SK12-207-3 | CL12-207-3 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 980-16 981-16 | 742-16 750-16 | 601-16 613-16 | 501-16 | |
| K12-208-3 | SK12-208-3 ⁷ | CL12-208-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-209-3 | SK12-209-3 ⁷ | CL12-209-3 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K12-670-4 | SK12-670-4 | CL12-670-4 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-671-4 | SK12-671-4 | CL12-671-4 | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-672-4 | SK12-672-4 ⁷ | CL12-672-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 3200 2100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| FACTORY MUSCLE™ Hydraulic Flat Tappet Camshafts (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 980-16 981-16 | 742-16 750-16 | 601-16 611-16 | 501-16 503-16 ² | 621-16 | N/A | 12200 | 4001 |
| | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 750-16 795-16 | 613-16 611-16 | 501-16 | 621-16 | N/A | 12200 | 4001 |

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| NITROUS HP™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Works well in near stock engines with up to 125 hp nitrous kits. | Hyd. | Hyd. | 1200 to 5600 | 12-552-4 | NX256H | 256 | 268 | 212 | 222 | .434 | .464 | 113° |
| HYDRAULIC – High performance street. With 100-150 hp nitrous kit or small blower. | Hyd. | Hyd. | 1600 to 5900 | 12-556-4 | NX262H | 262 | 280 | 218 | 230 | .462 | .480 | 113° |
| HYDRAULIC – Street machines with 125+ hp kit, 2200+ stall, gears, choppy idle. | Hyd. | Hyd. | 2000 to 6200 | 12-560-4 | NX268H | 268 | 286 | 224 | 236 | .477 | .490 | 113° |
| HYDRAULIC – Street/strip applications, 125+ hp kit or medium blower, 2500+ stall. Rough idle. | Hyd. | Hyd. | 2400 to 6500 | 12-564-4 | NX274H | 274 | 292 | 230 | 244 | .487 | .501 | 113° |
| HYDRAULIC – Pro Street applications, excellent for multi-stage kits or 671 blower. 2800+ stall. | Hyd. | Hyd. | 2800 to 6800 | 12-568-4 | NX284H | 284 | 305 | 240 | 253 | .507 | .525 | 113° |
| XTREME FUEL INJECTION (XFI™) Hydraulic Flat Tappet Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC – Excellent throttle body cam. Superb for crossfire or carbureted engines. Lots of torque. | Hyd. | Hyd. | 1300 to 5300 | 12-364-4 | 252XFI H13 | 252 | 266 | 208 | 217 | .477 | .472 | 113° |
| HYDRAULIC – Good low end and mid-range for TPI 350 with aftermarket chip and upgraded exhaust. | Hyd. | Hyd. | 1500 to 5500 | 12-365-4 | 260XFI H13 | 260 | 272 | 216 | 223 | .499 | .493 | 113° |
| HYDRAULIC – Excellent mid-range for TPI 350 with chip upgrade, injectors, plenum and exhaust system. 2000+ stall. | Hyd. | Hyd. | 2000 to 6000 | 12-366-4 | 268XFI H13 | 268 | 280 | 224 | 231 | .520 | .515 | 113° |
| HYDRAULIC – Good mid-range with exceptional top end. Requires chip, gear, plenum and exhaust mods. 2500+ stall. | Hyd. | Hyd. | 2400 to 6400 | 12-367-4 | 280XFI H13 | 280 | 290 | 236 | 241 | .552 | .547 | 113° |
| HYDRAULIC – Best results at wide-open throttle. All mods a must. 2800+ stall needed. | Hyd. | Hyd. | 2800 to 6800 | 12-368-4 | 292XFI H13 | 292 | 302 | 248 | 253 | .584 | .579 | 113° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| COMPUTER CONTROLLED Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good vacuum and mileage for any size computer engine. | Hyd. | Hyd. | 700 to 4700 | 12-304-4 | 252BH-11 | 252 | 252 | 201 | 206 | .406 | .406 | 111° |
| HYDRAULIC – For use in throttle body injection, crossfire and TPI 305 and 350 engine. | Hyd. | Hyd. | 1000 to 5000 | 12-388-4 | 252AH-12 | 252 | 260 | 206 | 212 | .425 | .440 | 112° |
| HYDRAULIC – For 350 tuned port injected engines with performance chip or programmer. | Hyd. | Hyd. | 1200 to 5200 | 12-314-4 | 260AH-12 | 260 | 260 | 212 | 212 | .444 | .444 | 112° |
| HYDRAULIC – Good for stock TPI 350 or TPI 305 with modified computer or programmer. | Hyd. | Hyd. | 1500 to 5500 | 12-402-4 | 260AH-14 | 260 | 268 | 212 | 218 | .444 | .444 | 114° |
| HYDRAULIC – Best cam for 350 TPI with programmer or modified computer. | Hyd. | Hyd. | 1800 to 5800 | 12-404-4⁷ | 268AH-14 | 268 | 276 | 222 | 226 | .464 | .464 | 114° |
| XTREME TURBO Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| XTREME TURBO – Single turbo street applications with 5-10 lbs. of boost. | Hyd. | Hyd. | 1200 to 5500 | 12-251-4 | XT250H | 250 | 257 | 206 | 206 | .432 | .426 | 110° |
| XTREME TURBO – Higher RPM street applications with 8-16 lbs. of boost. | Hyd. | Hyd. | 1800 to 6000 | 12-252-4 | XT256H | 256 | 263 | 212 | 212 | .447 | .444 | 112° |
| XTREME TURBO – Street/strip applications. Single or dual turbos. | Hyd. | Hyd. | 2200 to 6400 | 12-253-4 | XT262H | 262 | 269 | 218 | 218 | .462 | .455 | 114° |

² Requires machining on cylinder heads⁷ Stock springs cannot be used¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|--|-------------------------|-------------------------|-------------------------|------------------|--------------|--|--------------------|--|-------------------|------------------|-------------------------------|--|
| NITROUS HP™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K12-552-4 | SK12-552-4 ⁷ | CL12-552-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-556-4 | SK12-556-4 ⁷ | CL12-556-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-560-4 | SK12-560-4 ⁷ | CL12-560-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | |
| K12-564-4 | SK12-564-4 ⁷ | CL12-564-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K12-568-4 | SK12-568-4 ⁷ | CL12-568-4 ⁷ | RP1412-16 RPM1601-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| XTREME FUEL INJECTION (XFI™) Hydraulic Flat Tappet Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | | |
| K12-364-4 | SK12-364-4 ⁷ | CL12-364-4 ⁷ | RP1416-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 26981-16 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | |
| K12-365-4 | SK12-365-4 ⁷ | CL12-365-4 ⁷ | RP1416-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 26981-16 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | |
| K12-366-4 | SK12-366-4 ⁷ | CL12-366-4 ⁷ | RP1416-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 26981-16 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | |
| K12-367-4 | SK12-367-4 ⁷ | CL12-367-4 ⁷ | RP1416-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | |
| K12-368-4 | SK12-368-4 ⁷ | CL12-368-4 ⁷ | RP1416-16 | 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|--------------|--|--------------------|--------------------|------------------|------------------|-------------|-----------|---------|--------------|--------------|
| COMPUTER CONTROLLED Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| XTREME TURBO Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7812-16 7372-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 |

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| BLOWER & TURBO Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very mild street. Small under hood blower. Good torque. | Hyd. | Hyd. | 1500 to 5500 | 12-402-4 | 260AH-14 | 260 | 268 | 212 | 218 | .444 | .444 | 114° |
| HYDRAULIC – Good upgrade for turbo charged OEM street engine. Good mid-range power. | Hyd. | Hyd. | 1500 to 5500 | 12-400-4 | 268TH-15 | 268 | 260 | 218 | 212 | .454 | .444 | 115° |
| HYDRAULIC – Street machine using under hood blower with 10-12 lbs. of boost. | Hyd. | Hyd. | 1800 to 5800 | 12-404-4 | 268AH-14 | 268 | 276 | 222 | 226 | .464 | .464 | 114° |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| HYDRAULIC – Very strong mid-range torque and throttle response, 2500+ stall. | Hyd. | Hyd. | 1800 to 6000 | 12-660-47 | XE274H-10 | 274 | 286 | 230 | 236 | .490 | .490 | 110° |
| HYDRAULIC – Street/strip, 2800+ stall, needs headers and gear, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 12-661-47 | XE284H-10 | 284 | 296 | 240 | 246 | .507 | .510 | 110° |
| HYDRAULIC – Pro Street/bracket, needs good intake, headers, gear and 3300+ stall. | Hyd. | Hyd. | 2800 to 7000 | 12-662-47 | XE294H-10 | 294 | 306 | 250 | 256 | .519 | .523 | 110° |
| DRAG RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – 3000+ stall in heavy car, with 10:1+ compression. | Hyd. | Hyd. | 2500 to 6500 | 12-213-3 | 292H-10 | 292 | 292 | 244 | 244 | .501 | .501 | 110° |
| HYDRAULIC – 10.5:1+ compression, 3500+ stall, good torque. | Hyd. | Hyd. | 3000 to 6800 | 12-342-4 | 296AH-8 | 296 | 305 | 246 | 253 | .510 | .507 | 108° |
| HYDRAULIC – 4000+ stall, 11:1+ compression, medium weight car. | Hyd. | Hyd. | 3500 to 6500 | 12-327-5 | 305H-6 | 305 | 305 | 253 | 253 | .525 | .525 | 106° |
| HYDRAULIC – 3500-4000 stall or 4 speed with 11:1+ compression. | Hyd. | Hyd. | 3500 to 7000 | 12-214-4 | 305H-10 | 305 | 305 | 253 | 253 | .525 | .525 | 110° |
| OVAL TRACK Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best for heavy car, short track. | Hyd. | Hyd. | 3000 to 6000 | 12-325-4 | 280AH-8 | 280 | 288 | 232 | 237 | .483 | .483 | 108° |
| HYDRAULIC – Best for 1/4 to 3/8 mile track, broad torque range. | Hyd. | Hyd. | 3500 to 6300 | 12-330-4 | 286AH-8 | 286 | 292 | 236 | 244 | .490 | .485 | 108° |
| HYDRAULIC – Good for 3/8 to 1/2 mile track, 350 or larger engine. | Hyd. | Hyd. | 3700 to 6500 | 12-344-5 | 296CH-6 | 296 | 305 | 246 | 253 | .510 | .525 | 106° |
| HYDRAULIC – Good for light cars on long tracks with fast corners. | Hyd. | Hyd. | 4000 to 6800 | 12-327-5 | 305H-6 | 305 | 305 | 253 | 253 | .525 | .525 | 106° |
| LOW LIFT OVAL TRACK Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – .400" lift rules. Rough idle. Low vacuum, under 10". | Hyd. | Hyd. | 3000 to 6000 | 12-520-5 | 22/12 H-6 | 300 | 306 | 247 | 255 | .399 | .399 | 106° |
| HYDRAULIC – .420" lift rules. Rough idle. Low vacuum, under 10". | Hyd. | Hyd. | 3000 to 6000 | 12-521-5 | 41/15 H-6 | 297 | 299 | 246 | 250 | .420 | .420 | 106° |
| HYDRAULIC – .450" lift rules. Rough idle. Low vacuum, under 10". | Hyd. | Hyd. | 2500 to 6000 | 12-522-5 | 45/28 H-6 | 293 | 300 | 242 | 255 | .450 | .453 | 106° |

² Requires machining on cylinder heads¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|---|------------------------------|--|--------------------|--|------------------|------------------|-------------------------------|-----------|---------|--------------|--------------|--|
| BLOWER & TURBO Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 983-16 26981-16 | 751-16 795-16 | 611-16 614-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 | |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 983-16 26981-16 | 751-16 795-16 | 611-16 614-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 | |
| 812-16 858-16 | 2100 3100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7372-16 7972-16 | 983-16 26981-16 | 751-16 795-16 | 611-16 614-16 | 501-16 | 621-16 | N/A | 412M 410M | 4001 | |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 812-16 858-16 | 2100 7100 | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 812-16 858-16 | 2100 7100 | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 812-16 858-16 | 2100 7100 | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| DRAG RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| OVAL TRACK Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| LOW LIFT OVAL TRACK Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 983-16 ² 26986-16 ² | 751-16 795-16 | 611-16 614-16 | 501-16 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 983-16 ² 26986-16 ² | 751-16 795-16 | 611-16 614-16 | 501-16 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |
| 858-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ¹⁵ | 7972-16 | 983-16 ² 26986-16 ² | 751-16 795-16 | 611-16 614-16 | 501-16 503-16 ² | 621-16 | N/A | 412M 410M | 4001 | |

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good mileage, smooth idle. Vans, pickups and towing. Stock rear gear ratios and torque converter. | Hyd. | Hyd. | 1200 to 4500 | 12-410-8^{10,46} | 260HR | 260 | 260 | 206 | 206 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Mild street performance, slightly noticeable lobe at idle. Stock converter, aftermarket intake and headers. 3.40 to 4.10 rear gears. | Hyd. | Hyd. | 1800 to 5000 | 12-420-8^{10,46} | 270HR | 270 | 270 | 215 | 215 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Limited high performance street. Aftermarket intake, headers, 2200+ stall, and 3.40 to 4.10 gears. Mild rough idle. | Hyd. | Hyd. | 2000 to 5500 | 12-430-8^{10,46} | 280HR | 280 | 280 | 224 | 224 | .525 | .525 | 110° |
| HYDRAULIC ROLLER – Great for street machines. Best with headers and aftermarket intake. Rough idle. Limited vacuum. 2500+ stall. | Hyd. | Hyd. | 2500 to 6000 | 12-450-8^{10,46} | 286HR | 286 | 286 | 230 | 230 | .560 | .560 | 110° |
| HYDRAULIC ROLLER – Street/strip applications. 3000+ stall. 3.90 lower gear ratio, intake and headers. Very rough idle. | Hyd. | Hyd. | 3000 to 6500 | 12-460-8^{10,46} | 304HR | 304 | 304 | 244 | 244 | .600 | .600 | 110° |
| HYDRAULIC ROLLER – Limited street use and bracket racing. 10.5:1 compression 3500+ stall 4.10 gear. Needs headers and race intake. Radical idle. | Hyd. | Hyd. | 3500 to 6500 | 12-470-8^{10,46} | 314HR | 314 | 314 | 252 | 252 | .600 | .600 | 110° |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for mileage and for towing, smooth idle. | Hyd. | Hyd. | 600 to 4600 | 12-407-8^{10,46} | XR252HR | 252 | 258 | 200 | 206 | .472 | .480 | 110° |
| HYDRAULIC ROLLER – Strong torque, good mileage, stock to mildly modified combinations. | Hyd. | Hyd. | 1000 to 5000 | 12-408-8^{10,46} | XR258HR | 258 | 264 | 206 | 212 | .480 | .487 | 110° |
| HYDRAULIC ROLLER – Mild performance applications, very good mid-range, 3.23-3.73 gears. | Hyd. | Hyd. | 1200 to 5200 | 12-412-8^{10,46} | XR264HR | 264 | 270 | 212 | 218 | .487 | .495 | 110° |
| HYDRAULIC ROLLER – High performance application, largest with stock converter, noticeable idle. | Hyd. | Hyd. | 1600 to 5400 | 12-422-8^{10,46} | XR270HR | 270 | 276 | 218 | 224 | .495 | .502 | 110° |
| HYDRAULIC ROLLER – High performance street machines, 2000+ stall, gears, choppy idle. | Hyd. | Hyd. | 1900 to 5600 | 12-423-8^{10,46} | XR276HR | 276 | 282 | 224 | 230 | .502 | .510 | 110° |
| HYDRAULIC ROLLER – Great for street machines, needs intake, headers, 2500+ stall, and gears. Mildly rough idle. | Hyd. | Hyd. | 2200 to 5800 | 12-432-8^{10,46} | XR282HR | 282 | 288 | 230 | 236 | .510 | .520 | 110° |
| HYDRAULIC ROLLER – Street/strip applications, 9:1 compression, rough idle intake, headers, 2800+ stall, gears. | Hyd. | Hyd. | 2500 to 6000 | 12-433-8^{10,46} | XR288HR | 288 | 294 | 236 | 242 | .520 | .540 | 110° |
| HYDRAULIC ROLLER – Street/strip applications, 9.5:1 compression, intake, headers, 3000+ stall, gears. Rough idle. | Hyd. | Hyd. | 2800 to 6100 | 12-443-8^{10,46} | XR294HR | 294 | 300 | 242 | 248 | .540 | .562 | 110° |
| HYDRAULIC ROLLER – Pro Street/bracket racing, 10:1 compression, 3500+ stall, good intake, headers. Very rough idle. | Hyd. | Hyd. | 3200 to 6200 | 12-444-8^{10,46} | XR300HR | 300 | 306 | 248 | 254 | .562 | .580 | 110° |

² Requires machining on cylinder heads⁷ Stock springs cannot be used¹⁰ Requires thrust button & wear plate¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|----------------------------|--------------------|--------------|--------------|--|--------------------|--|------------------|------------------|-------------------------------|
| MAGNUM Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K12-410-8 | SK12-410-8 ^{7,10} | CL12-410-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-420-8 | SK12-420-8 ^{7,10} | CL12-420-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-430-8 | SK12-430-8 ^{7,10} | CL12-430-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-450-8 | SK12-450-8 ^{7,10} | CL12-450-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 987-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-460-8 | SK12-460-8 ^{7,10} | CL12-460-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 950-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-470-8 | SK12-470-8 ^{7,10} | CL12-470-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 950-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K12-407-8 | SK12-407-8 ^{7,10} | CL12-407-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-408-8 | SK12-408-8 ^{7,10} | CL12-408-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-412-8 | SK12-412-8 ^{7,10} | CL12-412-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-422-8 | SK12-422-8 ^{7,10} | CL12-422-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-423-8 | SK12-423-8 ^{7,10} | CL12-423-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-432-8 | SK12-432-8 ^{7,10} | CL12-432-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-433-8 | SK12-433-8 ^{7,10} | CL12-433-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-443-8 | SK12-443-8 ^{7,10} | CL12-443-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 987-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-444-8 | SK12-444-8 ^{7,10} | CL12-444-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 987-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 12-600-8^{10,46} | 283THR7 | 283 | 303 | 227 | 241 | .513 | .498 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 12-601-8^{10,46} | 291THR7 | 291 | 311 | 235 | 249 | .522 | .509 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 12-602-8^{10,46} | 299THR7 | 299 | 319 | 243 | 257 | .533 | .519 | 107° |
| XTREME 4X4™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong torque, good mileage, for stock to mildly modified engines. | Hyd. | Hyd. | 1000 to 5000 | 12-409-8^{10,46} | X4258HR | 258 | 262 | 206 | 210 | .458 | .458 | 111° |
| HYDRAULIC ROLLER – Good mid-range power, good performance increase. Largest with stock converter. | Hyd. | Hyd. | 1200 to 5200 | 12-411-8^{10,46} | X4260HR | 260 | 264 | 210 | 214 | .474 | .474 | 111° |
| HYDRAULIC ROLLER – Good mid-range power, needs headers, 3.55-4.10 gears, 2000+ stall. Noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 12-413-8^{10,46} | X4270HR | 270 | 274 | 220 | 224 | .474 | .474 | 111° |
| HYDRAULIC ROLLER – Strong mid-range power, needs headers, 3.73-4.10 gears, 2500+ stall, rough idle. | Hyd. | Hyd. | 1800 to 5800 | 12-414-8^{10,46} | X4280HR | 280 | 284 | 230 | 234 | .474 | .474 | 111° |
| XTREME MARINE™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for inboard/outboard pleasure boat, skiing and good economy. | Hyd. | Hyd. | 1200 to 5200 | 12-416-8^{10,46} | XM264HR | 264 | 270 | 212 | 218 | .488 | .495 | 112° |
| HYDRAULIC ROLLER – Largest for inboard/outboard, good mid-range w/ excellent response, noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 12-417-8^{10,46} | XM270HR | 270 | 276 | 218 | 224 | .495 | .503 | 112° |
| HYDRAULIC ROLLER – Good for jet with A impeller, strong mid-range power, needs good exhaust. | Hyd. | Hyd. | 1800 to 5800 | 12-418-8^{10,46} | XM276HR | 276 | 282 | 224 | 230 | .503 | .510 | 112° |
| NITROUS HP™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Street machine with 125+ nitrous system or small supercharger. 2200+ Stall with lower gears. | Hyd. | Hyd. | 2000 to 6000 | 12-415-8^{10,46} | NX276HR | 276 | 288 | 224 | 236 | .502 | .520 | 113° |
| HYDRAULIC ROLLER – 175+ nitrous system. 2500+ Stall with lower gears and headers. | Hyd. | Hyd. | 2400 to 6500 | 12-419-8^{10,46} | NX288HR | 288 | 315 | 236 | 248 | .520 | .540 | 113° |

² Requires machining on cylinder heads⁷ Stock springs cannot be used¹⁰ Requires thrust button & wear plate¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|----------------------------|--------------------|--------------|--------------|--|--------------------|--|------------------|------------------|-------------------------------|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K12-600-8 | GK12-600-8 ⁹³ | CL12-600-8 ⁷ | 853-16 15853-16 | 2100 3100 | 4100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7609-16 7940-16 | 26981-16 26918-16 | 787-16 | 648-16 | 501-16 |
| K12-601-8 | GK12-601-8 ⁹³ | CL12-601-8 ⁷ | 853-16 15853-16 | 2100 3100 | 4100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7609-16 7940-16 | 26918-16 26986-16 ² | 787-16 795-16 | 648-16 611-16 | 501-16 |
| K12-602-8 | GK12-602-8 ⁹³ | CL12-602-8 ⁷ | 853-16 15853-16 | 2100 3100 | 4100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7609-16 7940-16 | 26918-16 26986-16 ² | 787-16 795-16 | 648-16 611-16 | 501-16 |
| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| XTREME 4X4™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K12-409-8 | SK12-409-8 ^{7,10} | CL12-409-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-411-8 | SK12-411-8 ^{7,10} | CL12-411-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-413-8 | SK12-413-8 ^{7,10} | CL12-413-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-414-8 | SK12-414-8 ^{7,10} | CL12-414-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| XTREME MARINE™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K12-416-8 | SK12-416-8 ^{7,10} | CL12-416-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-417-8 | SK12-417-8 ^{7,10} | CL12-417-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-418-8 | SK12-418-8 ^{7,10} | CL12-418-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| NITROUS HP™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K12-415-8 | SK12-415-8 ^{7,10} | CL12-415-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-419-8 | SK12-419-8 ^{7,10} | CL12-419-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1412-16 ^{15,52} 1601-16 ^{15,52} | 7809-16 7609-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

⁹³ GK-Kit contains cam, lifters & gear drive



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME FUEL INJECTION (XFI™) Retro-Fit Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for 305 or 350 TBI. Excellent off idle performance. Xtreme torque. | Hyd. | Hyd. | 1000 to 5000 | 12-464-8 ^{10,46} | 252XFI HR13 | 252 | 264 | 202 | 212 | .550 | .546 | 113° |
| HYDRAULIC ROLLER – Good low end and mid-range cam. Exhaust upgrade preferred. Smooth torque curve. | Hyd. | Hyd. | 1200 to 5200 | 12-465-8 ^{10,46} | 260XFI HR13 | 260 | 270 | 210 | 218 | .560 | .555 | 113° |
| HYDRAULIC ROLLER – Ample low end with very good mid-range. Gear and exhaust upgrade needed. Largest cam for stock converter. | Hyd. | Hyd. | 1800 to 5800 | 12-466-8 ^{10,46} | 268XFI HR13 | 268 | 276 | 218 | 224 | .570 | .565 | 113° |
| HYDRAULIC ROLLER – Great for "Hot Street". Must upgrade intake gear and exhaust for maximum performance. 2500+ Stall. | Hyd. | Hyd. | 2000 to 5000 | 12-467-8 ^{10,46} | 280XFI HR13 | 280 | 288 | 230 | 236 | .576 | .570 | 113° |
| HYDRAULIC ROLLER – Street/strip. Best at wide-open throttle. Need all upgrades with 2600+ converter. 9.5:1 compression. | Hyd. | Hyd. | 2200 to 6200 | 12-468-8 ^{10,46} | 292XFI HR13 | 292 | 300 | 242 | 248 | .584 | .579 | 113° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------------|--------|-------------|--------|-------------------|---------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| 4-PATTERN Retro-Fit Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | | |
| (Larger cam lobes for outboard cylinders) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for smaller c.i. applications with very good heads. Extremely wide power range. 1800+ Stall. | Hyd. | Hyd. | 1700-6300 | 12-471-44 | 269QI08 | 271 OB | 283 OB | 219 OB | 229 OB | .603 OB | .590 OB | 108.5 OB |
| | | | | | | 269 IB | 281 IB | 217 IB | 227 IB | .600 IB | .587 IB | 107.5 IB |
| HYDRAULIC ROLLER – Great all around choice for street applications in modified engines and 2500+ stall or manual transmissions | Hyd. | Hyd. | 2300-6600 | 12-472-44 | 281QI08 | 283 OB | 295 OB | 231 OB | 241 OB | .622 OB | .610 OB | 108.5 OB |
| | | | | | | 281 IB | 293 IB | 229 IB | 239 IB | .619 IB | .606 IB | 107.5 IB |
| HYDRAULIC ROLLER – Excellent for street/strip applications with good heads and raised compression in high RPM engines. 3200+ Stall. | Hyd. | Hyd. | 2900-7200 | 12-474-44 | 293QI08 | 295 OB | 307 OB | 243 OB | 253 OB | .638 OB | .622 OB | 108.5 OB |
| | | | | | | 293 IB | 305 IB | 241 IB | 251 IB | .637 IB | .622 IB | 107.5 IB |
| HYDRAULIC ROLLER – Recommended in larger c.i. and high compression applications. 3500+ Stall. | Hyd. | Hyd. | 3300-7500 | 12-476-44 | 305QI08 | 307 OB | 319 OB | 255 OB | 265 OB | .638 OB | .622 OB | 108.5 OB |
| | | | | | | 305 IB | 317 IB | 253 IB | 263 IB | .638 IB | .622 IB | 107.5 IB |

| 4-PATTERN Small Base Circle (.900") Retro-Fit Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | | |
|--|------|------|-----------|------------------|---------|--------|--------|--------|--------|---------|---------|----------|
| (Larger cam lobes for outboard cylinders) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for street 383 stroker engines with good cylinder heads. Very wide power range. 2600+ Stall. | Hyd. | Hyd. | 2400-6700 | 12-473-44 | 287QS9 | 289 OB | 301 OB | 236 OB | 246 OB | .630 OB | .618 OB | 109.5 OB |
| | | | | | | 287 IB | 299 IB | 234 IB | 244 IB | .627 IB | .614 IB | 108.5 IB |
| HYDRAULIC ROLLER – Great in larger c.i. street to street/strip stroker small blocks w/ good heads. | Hyd. | Hyd. | 2900-7200 | 12-475-44 | 299QS10 | 301 OB | 313 OB | 248 OB | 258 OB | .637 OB | .621 OB | 110.5 OB |
| | | | | | | 299 IB | 311 IB | 246 IB | 256 IB | .637 IB | .621 IB | 109.5 IB |
| HYDRAULIC ROLLER – Recommended in highly modified 420+ c.i. stroker applications with higher compression. 3500+ Stall. | Hyd. | Hyd. | 3200-7500 | 12-477-44 | 311QS10 | 313 OB | 325 OB | 260 OB | 270 OB | .637 OB | .621 OB | 110.5 OB |
| | | | | | | 311 IB | 323 IB | 258 IB | 268 IB | .637 IB | .621 IB | 109.5 IB |

| DRAG RACE Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
|---|------|------|-----------|------------------|-----------|-----|-----|-----|-----|------|------|------|
| HYDRAULIC ROLLER – Good 1/8 mile bracket race cam. Needs 10:1+ compression and 3500+ stall | Hyd. | Hyd. | 3500-6500 | 12-870-11 | 301QNHR-6 | 301 | 311 | 248 | 256 | .597 | .582 | 106° |
| HYDRAULIC ROLLER – Strong top end in 350+ c.i. engines. Best w/ 11:1+ compression and better heads | Hyd. | Hyd. | 3800-6800 | 12-871-11 | 313QNHR-8 | 313 | 325 | 260 | 270 | .597 | .582 | 108° |
| HYDRAULIC ROLLER – Best in larger c.i. engines. Needs 11.5:1+ compression and 4500 stall. | Hyd. | Hyd. | 4200-7200 | 12-872-11 | 321QNHR-8 | 321 | 329 | 267 | 275 | .600 | .600 | 108° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹⁰ Requires thrust button & wear plate

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|----------------------------|----------------------------|--------------------|--------------|--------------|--|--------------------|-----------------------|-------------------|------------------|-------------------------------|
| XTREME FUEL INJECTION (XFI™) Retro-Fit Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | |
| K12-464-8 | SK12-464-8 ^{7,10} | CL12-464-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1416-16 ⁷⁷ 1602-16 ⁷⁷ | 7809-16 7609-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-465-8 | SK12-465-8 ^{7,10} | CL12-465-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1416-16 ⁷⁷ 1602-16 ⁷⁷ | 7809-16 7609-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-466-8 | SK12-466-8 ^{7,10} | CL12-466-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1416-16 ⁷⁷ 1602-16 ⁷⁷ | 7809-16 7609-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-467-8 | SK12-467-8 ^{7,10} | CL12-467-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1416-16 ⁷⁷ 1602-16 ⁷⁷ | 7809-16 7609-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K12-468-8 | SK12-468-8 ^{7,10} | CL12-468-8 ^{7,10} | 853-16 15853-16 | 412M 410M | 2100 7100 | 1416-16 ⁷⁷ 1602-16 ⁷⁷ | 7809-16 7609-16 | 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|--------------|--------------------|--------------------|---------------|-----------|-------------|-------------|-----------|---------|--------------|--------------|
| 4-PATTERN Retro-Fit Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |

| | | | | | | | | | | | |
|--|--------------|--------------------|--------------------|----------|---------|--------|--------|--------|-----|--------------|------|
| 4-PATTERN Small Base Circle (.900") Retro-Fit Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1602-16 1802-16 | 7609-16 7949-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |

| | | | | | | | | | | | |
|---|--------------|--------------------|--------------------|---------------------------------|-------------------|--------|--------|--------|-----|--------------|------|
| DRAG RACE Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| 15853-16 | 7100 8100 | 1604-16 1804-16 | 7609-16 7949-16 | 977-16 ² 26055-16 | 1730-16 785-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1604-16 1804-16 | 7609-16 7949-16 | 977-16 ² 26055-16 | 1730-16 785-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |
| 15853-16 | 7100 8100 | 1604-16 1804-16 | 7609-16 7949-16 | 977-16 ² 26055-16 | 1730-16 785-16 | 648-16 | 518-16 | 622-16 | N/A | 412M 410M | 4001 |

⁷⁷ Engines with self-aligning rocker arms must use Part #1418-16 or #1618-16

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Streetable. Works with stock converter, best with 2000+. Lower gears. Noticeable idle. | .022 | .022 | 1500 to 5500 | 12-222-4 | 270S | 270 | 270 | 224 | 224 | .468 | .468 | 110° |
| SOLID – Good power for street, choppy idle. Needs 2500+ stall, likes headers and low gears. | .022 | .022 | 2000 to 6000 | 12-223-4 | 282S | 282 | 282 | 236 | 236 | .495 | .495 | 110° |
| SOLID – Maximum street performance, very rough idle, needs headers, 3000+ stall & 9.5:1+ compression. | .022 | .022 | 2500 to 6500 | 12-224-4 | 294S | 294 | 294 | 248 | 248 | .525 | .525 | 110° |
| SOLID – Street/strip. 3500+ stall, 10.5:1 compression. Low gears, headers and intake. Racy idle. | .022 | .022 | 3000 to 7000 | 12-225-4 | 306S | 306 | 306 | 260 | 260 | .555 | .555 | 110° |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Strong torque thru low end and mid-range, good idle. | .016 | .016 | 1000 to 5600 | 12-674-4 | XS256S | 256 | 262 | 218 | 224 | .465 | .477 | 110° |
| SOLID – Excellent response, good mid-range, noticeable idle. | .016 | .016 | 1300 to 5800 | 12-675-4 | XS262S | 262 | 268 | 224 | 230 | .477 | .488 | 110° |
| SOLID – Great for street machines. Will work with stock converter, best with 2000 stall. | .016 | .016 | 1600 to 6000 | 12-676-4 | XS268S | 268 | 274 | 230 | 236 | .488 | .501 | 110° |
| SOLID – Very strong mid-range torque and throttle response, 2200+ stall. | .016 | .016 | 2000 to 6400 | 12-677-4 | XS274S | 274 | 280 | 236 | 242 | .501 | .510 | 110° |
| SOLID – Street/strip, 2800+ stall, likes headers and gears, rough idle. | .016 | .016 | 2400 to 6800 | 12-678-4 | XS282S | 282 | 290 | 244 | 252 | .520 | .540 | 110° |
| SOLID – Pro street/bracket, needs good intake, headers, gear and 3300+ stall. | .016 | .016 | 2800 to 7200 | 12-679-5 | XS290S | 290 | 298 | 252 | 260 | .540 | .558 | 110° |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Very strong mid-range, torque and throttle response. 2200+stall. | .016 | .016 | 2000 to 6400 | 12-663-47 | XE274S | 274 | 280 | 236 | 242 | .501 | .510 | 110° |
| SOLID – Street/Strip, 2800+ stall, likes headers and gears, rough idle. Good for oval track vacuum rule applications. | .016 | .016 | 2400 to 6800 | 12-664-47 | XE282S | 282 | 290 | 244 | 252 | .520 | .540 | 110° |
| SOLID – Pro Street/bracket, needs good intake, headers, gear and 3300+stall. | .016 | .016 | 2800 to 7200 | 12-665-47 | XE290S | 290 | 298 | 252 | 260 | .540 | .558 | 110° |
| NOSTALGIA PLUS™ Mechanical Flat Tappet Camshaft | | | | | | | | | | | | |
| SOLID – Outstanding power and modern tight lash with the exhaust note of the GM 30-30 cam. | .012 | .012 | 2300 to 6900 | 12-673-4 | N+30-30S | 284 | 291 | 247 | 254 | .504 | .498 | 112° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|--|-------------------------|--|------------------|--|---------------------|--|------------------|------------------|---------------------|
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K12-222-4 | SK12-222-4 ⁷ | CL12-222-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-223-4 | SK12-223-4 ⁷ | CL12-223-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-224-4 | SK12-224-4 ⁷ | CL12-224-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-225-4 | SK12-225-4 ⁷ | CL12-225-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K12-674-4 | SK12-674-4 ⁷ | CL12-674-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-675-4 | SK12-675-4 ⁷ | CL12-675-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 |
| K12-676-4 | SK12-676-4 ⁷ | CL12-676-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-677-4 | SK12-677-4 ⁷ | CL12-677-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-678-4 | SK12-678-4 ⁷ | CL12-678-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K12-679-5 | SK12-679-5 ⁷ | CL12-679-5 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 2100 3100 | 1601-16 ^{15.52} 1801-16 ^{15.52} | 7372-16 7972-16 | 986-162 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 2100 3100 | 1601-16 ^{15.52} 1801-16 ^{15.52} | 7372-16 7972-16 | 986-162 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 2100 3100 | 1601-16 ^{15.52} 1801-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| NOSTALGIA PLUS™ Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
| K12-673-4 | SK12-673-4 ⁷ | CL12-673-4 ⁷ | RP1412-16 RPM1601-16 | 813-16 800-16 | 2100 3100 | 1412-16 ^{15.52} 1601-16 ^{15.52} | 7372-16 7972-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|--------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| FACTORY MUSCLE™ Mechanical Flat Tappet Camshaft (Today's Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| SOLID – Factory I.D. #3736097 for: 327c.i. Corvette, 340 HP | .010 | .012 | 1500 to 5500 | 12-108-5 | 287S | 287 | 291 | 228 | 232 | .394 | .400 | 110° |
| SOLID – Factory I.D. #3849346 for: 302c.i., 1967-69 Z28, factory 290 HP 327c.i., 1964-65, factory 365/275 HP 350c.i., 1970-71 LT1, factory 370 HP | .024 | .024 | 2800 to 6800 | 12-107-3 | 346S | 346 | 346 | 254 | 254 | .485 | .485 | 114° |
| BLOWER & TURBO Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Mild bracket and hot street with small blower or 471 blower. | .026 | .028 | 3000 to 6500 | 12-405-5 | 290AS-14 | 290 | 300 | 255 | 265 | .540 | .563 | 114° |
| SOLID – Serious bracket race and very hot street with 471 or larger blower. | .026 | .028 | 3500 to 7000 | 12-406-5 | 310BS-14 | 310 | 320 | 270 | 280 | .563 | .563 | 114° |
| PULLER & MUD RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Excellent torque and good idle for 327-350. Needs 10:1 compression and low gears. | .026 | .028 | 3000 to 6500 | 12-609-5 | 285B-6 | 285 | 295 | 250 | 260 | .532 | .555 | 106° |
| SOLID – Good for 377-406 engine to run high RPM. Requires upgraded cylinder heads and manifold. | .026 | .028 | 3500 to 7200 | 12-612-5 | 300B-6 | 300 | 314 | 265 | 276 | .562 | .557 | 106° |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good torque for heavy car, 10:1 compression. 3000+ stall. | .026 | .028 | 3000 to 6000 | 12-221-5 | 280B-8 | 280 | 285 | 242 | 250 | .507 | .532 | 108° |
| SOLID – 350-400, 12:1 compression, 4000+ stall. | .018 | .020 | 3500 to 6500 | 12-512-5 | 280TLS-6 | 280 | 288 | 250 | 259 | .530 | .550 | 106° |
| SOLID – Great torque, 3800+ stall or 4 speed, 10.5:1 compression. | .026 | .028 | 3500 to 6500 | 12-609-5 12-609-20⁹⁴ | 285B-6 | 285 | 295 | 250 | 260 | .532 | .555 | 106° |
| SOLID – 4000+ stall, 10.5:1 compression and up. | .026 | .028 | 4000 to 7000 | 12-611-5 12-611-20⁹⁴ | 290B-6 | 290 | 304 | 255 | 266 | .540 | .534 | 106° |
| SOLID – 350-400 11:1 compression, 4800+ stall. | .018 | .020 | 4200 to 7200 | 12-515-5 12-515-20⁹⁴ | 288TLS-6 | 288 | 296 | 259 | 266 | .550 | .570 | 106° |
| SOLID – 327-350, 4500+ stall, good power. 11:1 compression. | .026 | .028 | 4200 to 7200 | 12-612-5 12-612-20⁹⁴ | 300B-6 | 300 | 314 | 265 | 276 | .562 | .557 | 106° |
| SOLID – 350-400, 12:1 compression, 4800+ stall. | .018 | .020 | 4500 to 7500 | 12-517-5 12-517-20⁹⁴ | 296TLS-6 | 296 | 304 | 266 | 274 | .570 | .590 | 106° |
| SOLID – 350-400, 11.5:1 minimum compression, ported heads, 5000+ stall. | .026 | .028 | 4700 to 7500 | 12-518-5 | 300F-6 | 300 | 316 | 270 | 278 | .580 | .577 | 106° |
| SOLID – 350-400, 12:1 compression, 5000+ stall. | .018 | .020 | 5000 to 7700 | 12-519-5 | 304TLS-6 | 304 | 312 | 274 | 282 | .590 | .610 | 106° |
| SOLID – 350c.i. and up, 12:1+ compression, 5000+ stall, light car. | .026 | .028 | 5000 to 7700 | 12-614-5 | 310B-4 | 310 | 320 | 275 | 283 | .585 | .588 | 104° |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| SOLID – 4000+ stall, 10.5:1 compression and up. | .026 | .028 | 4000 to 7000 | 12-686-47 | 47S 290B-6 | 290 | 304 | 255 | 266 | .540 | .534 | 106° |
| SOLID – 350-400, 12:1 compression, 4800+ stall. | .018 | .020 | 4500 to 7500 | 12-687-47 | 47S 296TLS-6 | 296 | 304 | 266 | 274 | .570 | .590 | 106° |

² Requires machining on cylinder heads

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵² Engines with self-aligning rocker arms must use Part #1417-16 or #1617-16

⁹⁴ Nitrided version

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------------------------|--|--------------------|--|-------------------|------------------|-------------------------------|-----------|---------|--------------|--------------|
| FACTORY MUSCLE™ Mechanical Flat Tappet Camshaft (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 19001-16 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 750-16 795-16 | 613-16 614-16 | 501-16 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 19001-16 1601-16 ^{15,52} | 7372-16 7972-16 | 981-16 26981-16 | 750-16 795-16 | 613-16 614-16 | 501-16 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| BLOWER & TURBO Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ^{15,52} | 7372-16 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ^{15,52} | 7372-16 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| PULLER & MUD RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 19001-16 1801-16 ^{15,52} | 7372-16 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ^{15,52} 1801-16 ^{15,52} | 7372-16 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 19001-16 1601-16 ^{15,52} | 7972-16 | 987-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Short tracks with 2 BBL carburetor and stock exhaust manifolds for small cubic inch engines. | .020 | .022 | 2500 to 5800 | 12-607-5 | 270B-6 | 270 | 280 | 235 | 242 | .495 | .507 | 106° |
| SOLID – Short tracks w/ small engines in heavy car. Very good torque throughout range. | .020 | .022 | 2800 to 6200 | 12-608-5 | 280B-6 | 280 | 285 | 242 | 250 | .507 | .532 | 106° |
| SOLID – Very versatile cam. Great for 1/4 to 3/8 mile track. | .020 | .022 | 3000 to 6500 | 12-609-5 12-609-20⁹⁴ | 285B-6 | 285 | 295 | 250 | 260 | .532 | .555 | 106° |
| SOLID – For faster 1/4 to 3/8 mile track, strong torque and quick response. | .020 | .022 | 3500 to 6800 | 12-610-5 12-610-20⁹⁴ | 290B-4 | 290 | 304 | 255 | 266 | .540 | .534 | 104° |
| SOLID – Best for 1/4 to 3/8 track with fast corners. More top end than Part #12-610-5. | .020 | .022 | 3700 to 7000 | 12-611-5 12-611-20⁹⁴ | 290B-6 | 290 | 304 | 255 | 266 | .540 | .534 | 106° |
| SOLID – Best for slick 3/8 to 1/2 mile track with sustained high RPM. | .020 | .022 | 4000 to 7100 | 12-645-5 | 295B-6 | 295 | 295 | 260 | 260 | .555 | .555 | 106° |
| SOLID – Good for 1/2 to 5/8 mile track with light car, large engine. | .020 | .022 | 4300 to 7300 | 12-612-5 12-612-20⁹⁴ | 300B-6 | 300 | 314 | 265 | 276 | .562 | .557 | 106° |
| TIGHT LASH Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good short track camshaft for smaller engines, 327-350, with restrictions. 1/4 to 3/8 track with tight corners. | .018 | .020 | 2500 to 6000 | 12-501-5 | 272TL-6 | 272 | 276 | 242 | 246 | .510 | .520 | 106° |
| SOLID – Use with 305-350 on 1/4 to 3/8 high banked track in heavy car with limited intake and carburetor. | .018 | .020 | 2700 to 6200 | 12-511-5 | 272TLS-6 | 272 | 280 | 242 | 250 | .510 | .530 | 106° |
| SOLID – Good in 327-350 on short track with 2 BBL carburetor and cast intake. | .018 | .020 | 2800 to 6300 | 12-500-5 | 276TL-6 | 276 | 280 | 246 | 250 | .520 | .530 | 106° |
| SOLID – Best on 3/8 to short 1/2 mile with high corner speeds. 350-377 engine with open rules. Good torque. | .018 | .020 | 3000 to 6500 | 12-502-5 | 280TL-6 | 280 | 284 | 250 | 254 | .530 | .540 | 106° |
| SOLID – Good for 350-400 on big 3/8 to 1/2 mile tracks with high sustained RPM. Best with big carb. and good intake. | .018 | .020 | 3000 to 6700 | 12-512-5 | 280TLS-6 | 280 | 288 | 250 | 259 | .530 | .550 | 106° |
| SOLID – Good baseline cam for Late Model Stock. Short 1/4-3/8 mile asphalt track. Best with 358, limited intake and carb. | .018 | .020 | 3000 to 7000 | 12-504-5 | 284TL-6 | 284 | 284 | 254 | 254 | .540 | .540 | 106° |
| SOLID – Great in Late Model Stock on 3/8 to 1/2 mile asphalt track. Best in 358 with limited intake and carburetor. | .018 | .020 | 3200 to 7000 | 12-505-5 | 284BTL-6 | 284 | 288 | 254 | 259 | .540 | .550 | 106° |
| SOLID – Good for 350-377 on 3/8-1/2 mile tracks with fast corners. Best with open rules. | .018 | .020 | 3400 to 7000 | 12-506-5 12-506-20⁹⁴ | 288BTL-6 | 288 | 292 | 259 | 262 | .550 | .560 | 106° |
| SOLID – Best on big 3/8-1/2 mile tracks with high RPM. Great with open rules and large c.i. engines. | .018 | .020 | 3500 to 7200 | 12-515-5 12-515-20⁹⁴ | 288TLS-6 | 288 | 296 | 259 | 266 | .550 | .570 | 106° |
| SOLID – For big tracks with unrestricted 377-410 engines. Best with good heads and intake. | .018 | .020 | 3500 to 7500 | 12-517-5 12-517-20⁹⁴ | 296TLS-6 | 296 | 304 | 266 | 274 | .570 | .590 | 106° |
| SOLID – Use in unrestricted 400-410 engines with good heads and intake on big tracks. | .018 | .020 | 3600 to 7600 | 12-519-5 | 304TLS-6 | 304 | 312 | 274 | 282 | .590 | .610 | 106° |

² Requires machining on cylinder heads

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------------------------|--|----------|--|-------------------|-------------|---------------------|-----------|---------|--------------|--------------|
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 987-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| TIGHT LASH Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |

⁹⁴ Nitrided version



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAX AREA Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – 327-350c.i., iron intake and heads. Works good with 1.7+ rockers, 1/4-3/8 mile dirt. Also good for .500" lift rule w/1.5 rockers. | .020 | .022 | 2800 to 6000 | 12-620-5 | 263MAS-6 | 263 | 267 | 236 | 240 | .497 | .500 | 106° |
| SOLID – Good for Late Model Stock, 1.7 -1.8 rockers, 3/8-1/2 mile dirt or asphalt. | .020 | .022 | 3000 to 6500 | 12-622-5 | 267MAS-6 | 267 | 275 | 240 | 248 | .500 | .510 | 106° |
| SOLID – Great in Late Model Stock with high rocker ratios, 1/2+ mile dirt or asphalt. | .020 | .022 | 3200 to 6800 | 12-624-5 | 271MAS-6 | 271 | 279 | 244 | 252 | .510 | .510 | 106° |
| SOLID – Designed for larger tracks with fast corners, needs better intake, heads, headers and carburetor. | .020 | .022 | 3500 to 7000 | 12-626-5 12-626-20⁹⁴ | 275MAS-6 | 275 | 283 | 248 | 256 | .510 | .510 | 106° |
| SOLID – 377-410 for larger tracks, likes 1.65-1.7 rockers, needs better intake, heads, headers and carburetor. | .020 | .022 | 3500 to 7000 | 12-628-5 12-628-20⁹⁴ | 279MAS-6 | 279 | 287 | 252 | 260 | .510 | .510 | 106° |
| OVAL TRACK Mechanical Flat Tappet Camshafts – Xtreme Oval | | | | | | | | | | | | |
| Xtreme Oval Solids use new COMP® XTQ intake profiles with the XTX exhaust profiles for more area under the curve than most good .875" lifter designs, while still allowing standard .842" lifters. | | | | | | | | | | | | |
| SOLID – 1/4-3/8 tight track. 327-358c.i., 9:1 compression. 2 BBL with iron intake and exhaust. | .016 | .018 | 2200 to 6000 | 12-646-5 | 266XOS | 266 | 276 | 236 | 242 | .501 | .510 | 108° |
| SOLID – 1/4-3/8 tight. 327-358c.i., 9:1 compression. 2 BBL with stock intake and headers. | .016 | .018 | 2500 to 6200 | 12-647-5 | 266XOS | 266 | 272 | 236 | 238 | .501 | .501 | 108° |
| SOLID – 1/4-3/8 fast track. 327-358c.i., 9:1 compression. 2 BBL with iron intake and exhaust. | .016 | .018 | 2700 to 6200 | 12-648-5 | 270XOS | 270 | 280 | 240 | 246 | .510 | .519 | 108° |
| SOLID – 1/4-3/8 fast. 327-358c.i., 9:1 compression. 2 BBL with stock intake and headers. | .016 | .018 | 2700 to 6400 | 12-649-5 | 270XOS | 270 | 276 | 240 | 242 | .510 | .510 | 108° |
| SOLID – 1/4-3/8 tight track. 327-358c.i., 9:1 compression. 2 BBL, good intake and exhaust. | .016 | .018 | 2900 to 6400 | 12-650-5 | 274XOS | 274 | 280 | 244 | 246 | .519 | .519 | 108° |
| SOLID – 1/4-3/8 fast track. 327-358c.i., 9:1 compression. 2 BBL with good intake and exhaust. | .016 | .018 | 2800 to 6600 | 12-651-5 12-651-20⁹⁴ | 278XOS | 278 | 284 | 248 | 250 | .531 | .525 | 108° |
| SOLID – 1/4-3/8 tight. 327-358c.i., 11:1+ compression. 2 BBL with good intake and exhaust. | .016 | .018 | 3000 to 6800 | 12-652-5 12-652-20⁹⁴ | 278XOS | 278 | 284 | 248 | 250 | .531 | .525 | 106° |
| SOLID – 1/4-3/8 fast. 327-358c.i., 11:1+ compression. 2 BBL with good intake and exhaust. | .016 | .018 | 3200 to 7000 | 12-653-5 12-653-20⁹⁴ | 282XOS | 282 | 288 | 252 | 254 | .540 | .531 | 106° |
| SOLID – 1/4-3/8 tight. 327-358c.i., 12:1+ compression. 4 BBL with good intake and exhaust. | .016 | .018 | 3000 to 6700 | 12-656-5 12-656-20⁹⁴ | 282XOS | 282 | 292 | 252 | 258 | .540 | .537 | 106° |
| SOLID – 1/4-3/8 fast. 327-358c.i., 12:1+ compression. 4 BBL with good intake and exhaust. | .016 | .018 | 3200 to 6900 | 12-657-5 12-657-20⁹⁴ | 286XOS | 286 | 296 | 256 | 262 | .549 | .543 | 106° |
| SOLID – Late Model Stock. 1/4-3/8 track. 358 with limited intake and carb. | .016 | .018 | 3200 to 7200 | 12-654-5 12-654-20⁹⁴ | 286XOS | 286 | 292 | 256 | 258 | .549 | .537 | 108° |
| SOLID – Late Model Stock. 3/8-1/2 track. 358 with limited intake and carb. | .016 | .018 | 3400 to 7400 | 12-655-5 | 290XOS | 290 | 296 | 260 | 262 | .558 | .543 | 108° |
| SOLID – 3/8-1/2 tight. 360+c.i., 12:1+ compression. 4 BBL with good intake and exhaust. | .016 | .018 | 3400 to 7200 | 12-658-5 12-658-20⁹⁴ | 290XOS | 290 | 300 | 260 | 266 | .558 | .549 | 106° |
| SOLID – 3/8-1/2 fast. 360+c.i., 12:1+ compression. 4 BBL with good intake and exhaust. | .016 | .018 | 3500 to 7400 | 12-659-5 | 294XOS | 294 | 304 | 264 | 270 | .567 | .555 | 106° |

² Requires machining on cylinder heads

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------------------------|--|--------------------|--|-------------------|-------------|---------------------|-----------|---------|--------------|--------------|
| MAX AREA Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 1730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| OVAL TRACK Mechanical Flat Tappet Camshafts – Xtreme Oval | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 732-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |

⁹⁴ Nitrided version

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---|-------------|----------------|-----|-------------|-----|-----------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| OVAL TRACK 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| SOLID – 1/4-3/8 tight. 327-358c.i. 11:1+ compression. 2 BBL with good intake and exhaust. | .016 | .018 | 3000 to 6800 | 12-688-47 12-688-20⁹⁴ | 47S 278XOS | 278 | 284 | 248 | 250 | .531 | .525 | 106° |
| SOLID – 1/4-3/8 tight. 327-358c.i. 12:1+ compression. 4 BBL with good intake and exhaust. | .016 | .018 | 3000 to 6700 | 12-689-47 | 47S 282XOS | 282 | 292 | 252 | 258 | .540 | .537 | 106° |
| SOLID – 3/8-1/2 tight. 360+c.i. 12:1+ compression. 4 BBL with good intake and exhaust. | .016 | .018 | 3400 to 7200 | 12-690-47 12-690-20⁹⁴ | 47S 290XOS | 290 | 300 | 260 | 266 | .558 | .549 | 106° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.8/1.7 ROCKER IN. | EX. | |
| OPEN WHEEL MODIFIED TRACTION CONTROL (HIGH ROCKER RATIO) Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – 1/3-1/2 tracks w/ tight corners or heavy surface. 327-358c.i., 11:1 compression, 2/4 BBL gas or alcohol. | .016 | .018 | 3000 to 7000 | 12-524-5 | 281JFA | 281 | 285 | 252 | 256 | .596 | .563 | 107° |
| SOLID – 3/8-5/8 tracks w/ wide corners or slick surface. 355+c.i., 12:1 compression, 4 BBL gas or alcohol with good intake and heads. | .016 | .018 | 3200 to 7200 | 12-525-5 | 285JFA | 285 | 289 | 256 | 260 | .596 | .565 | 107° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| OPEN WHEEL MODIFIED TRACTION CONTROL (1.6 ROCKER RATIO) Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – 1/3-1/2 tracks w/ tight corners or heavy surface. 327-358c.i., 11:1 compression, 2/4 BBL gas or alcohol. | .016 | .018 | 3100 to 7100 | 12-526-5 12-526-20⁹⁴ | 280MHQ | 280 | 289 | 254 | 260 | .590 | .597 | 107° |
| SOLID – 3/8-5/8 tracks w/ wide corners or slick surface. 355+c.i., 12:1 compression, 4 BBL gas or alcohol with good intake and heads. | .016 | .018 | 3300 to 7300 | 12-527-5 12-527-20⁹⁴ | 284MHQ | 284 | 293 | 258 | 264 | .597 | .606 | 107° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| LAUNCHER SERIES Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – .283" lobe lift – Good for short track restricted with .425" or .450" lift rule. | .014 | .014 | 3000 to 6600 | 12-680-5 | LA2695 | 269 | 273 | 242 | 246 | .425 | .425 | 107° |
| SOLID – .283" lobe lift – Good for higher RPM tracks restricted with .425" or .450" lift rule. | .014 | .014 | 3200 to 6800 | 12-681-5 | LA2735 | 273 | 277 | 246 | 250 | .425 | .425 | 107° |
| SOLID – .312" lobe lift – Good for short track restricted with .480" or .500" lift rule. | .014 | .014 | 3000 to 6600 | 12-682-5 | LB2705 | 270 | 274 | 244 | 248 | .468 | .468 | 107° |
| SOLID – .312" lobe lift – Good for higher RPM tracks restricted with .480" or .500" lift rule. | .014 | .014 | 3200 to 6800 | 12-683-5 | LB2745 | 274 | 278 | 248 | 252 | .468 | .468 | 107° |
| SOLID – .322" lobe lift – Good for short track restricted with stock rocker and .480" or .500" lift rule. | .014 | .014 | 2800 to 6400 | 12-684-5 | LC2705 | 270 | 274 | 244 | 248 | .483 | .483 | 107° |
| SOLID – .322" lobe lift – Good for longer tracks, restricted carb. W/ stock rocker & .480" or .500" lift rule. | .014 | .014 | 3000 to 6600 | 12-685-5 | LC2745 | 274 | 278 | 248 | 252 | .483 | .483 | 107° |
| LOW LIFT OVAL TRACK Mechanical Flat Tappet Camshaft | | | | | | | | | | | | |
| SOLID – .470" lift rule. Rough idle. Low vacuum. | .018 | .018 | 2500 to 6000 | 12-523-5 | 270S-6 | 270 | 282 | 242 | 250 | .473 | .473 | 106° |

² Requires machining on cylinder heads

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------------------------|--|--------------------|--|-------------------|------------------|-------------------------------|-----------|---------|--------------|--------------------|
| OVAL TRACK 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 978-16 ² | 740-16 730-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 950-16 ² 26094-16 ² | 740-16 732/721 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |
| OPEN WHEEL MODIFIED TRACTION CONTROL (HIGH ROCKER RATIO) Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 800-16 | 3100KT ⁴⁸ 7100 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26094-16 ² 26075-16 ² | 732-16 738-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 |
| 800-16 | 3100KT ⁴⁸ 7100 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26094-16 ² 26075-16 ² | 732-16 738-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 |
| OPEN WHEEL MODIFIED TRACTION CONTROL (1.6 ROCKER RATIO) Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 800-16 | 3100KT ⁴⁸ 7100 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 26094-16 ² 26075-16 ² | 732-16 738-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 |
| 800-16 | 3100KT ⁴⁸ 7100 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 26094-16 ² 26075-16 ² | 732-16 738-16 | 611-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 |
| LAUNCHER SERIES Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7913-16 | 941-16 26918-16 | 750-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 ⁵⁹ |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7913-16 | 941-16 26918-16 | 750-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 ⁵⁹ |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7913-16 | 941-16 26918-16 | 750-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 ⁵⁹ |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7913-16 | 941-16 26918-16 | 750-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 ⁵⁹ |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7913-16 | 941-16 26918-16 | 750-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 ⁵⁹ |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7913-16 | 941-16 26918-16 | 750-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 412M 410M | 4004 ⁵⁹ |
| LOW LIFT OVAL TRACK Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
| 813-16 800-16 | 3100 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 983-16 26981-16 | 751-16 795-16 | 611-16 614-16 | 501-16 503-16 ² | 621-16 | N/A | 412M 410M | 4001 |

⁵⁹ Requires 7/16" rocker arm studs

⁹⁴ Nitrided version

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Most versatile, good vacuum, excellent throttle response, noticeable idle, works well with stock manifolds and 2000+ stall. | .020 | .020 | 2000 to 6000 | 12-700-8^{10,46} | 268AR | 268 | 268 | 224 | 224 | .525 | .525 | 110° |
| MECHANICAL ROLLER – Street/strip performance. Choppy idle, use 2500+ stall and headers. 9.5:1 compression. | .020 | .020 | 2500 to 6500 | 12-702-8^{10,46} | 280AR | 280 | 280 | 236 | 236 | .550 | .550 | 110° |
| MECHANICAL ROLLER – Excellent choice for maximum street effort, racy idle, 3500+ stall with low gears, 10:1 compression and headers. | .020 | .020 | 3000 to 7000 | 12-705-8^{10,46} | 300AR | 300 | 300 | 255 | 255 | .575 | .575 | 110° |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good for weekend cruiser with 9:1+ compression, 2000+ stall and lower gears. Noticeable idle. | .016 | .018 | 2000 to 6000 | 12-769-8^{10,46} | XR268R | 268 | 274 | 230 | 236 | .552 | .564 | 110° |
| MECHANICAL ROLLER – Great for power touring. Needs 2500+ stall, easy on parts. Rough idle. | .016 | .018 | 2200 to 6200 | 12-770-8^{10,46} | XR274R | 274 | 280 | 236 | 242 | .564 | .570 | 110° |
| MECHANICAL ROLLER – Best in street machines with 2800+ stall, 10:1+ compression with 3.73-3.90 rear gears. | .016 | .018 | 2500 to 6500 | 12-771-8^{10,46} | XR280R | 280 | 286 | 242 | 248 | .570 | .576 | 110° |
| MECHANICAL ROLLER – Good in weekend warrior with 3000+ stall. Needs good intake and exhaust with low gears. | .016 | .018 | 3000 to 7000 | 12-772-8^{10,46} | XR286R | 286 | 292 | 248 | 254 | .576 | .582 | 110° |
| MECHANICAL ROLLER – Best for Pro Street. Needs good intake & exhaust, 11:1+ compression & 3500 stall. | .016 | .018 | 3200 to 7200 | 12-773-8^{10,46} | XR292R | 292 | 297 | 254 | 260 | .582 | .588 | 110° |
| BLOWER Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good for serious street/strip applications with 671 blower. | .020 | .020 | 3000 to 6500 | 12-704-8¹⁰ | 300BR-14 | 300 | 308 | 255 | 262 | .575 | .575 | 114° |
| PULLER & MUD RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good for 350-370 engine when maximum torque is needed. 10:1+ compression. | .026 | .028 | 3500 to 6900 | 12-900-9¹⁴ | 288AR-6 | 288 | 296 | 252 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Good for 377-406 engine with carburetor or injectors. 11:1 compression. | .026 | .028 | 4500 to 7200 | 12-903-9¹⁴ | 300AR-6 | 300 | 304 | 264 | 266 | .630 | .630 | 106° |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great torque, 10:1+ compression, 3500+ stall. Good for 350-370c.i. | .026 | .028 | 3200 to 6200 | 12-900-9¹⁴ | 288AR-6 | 288 | 296 | 252 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – 4500+ stall, 11:1 compression, lower gears needed. | .026 | .028 | 4200 to 7200 | 12-908-9¹⁴ | 300BR-6 | 300 | 308 | 264 | 270 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Super Stock 350 auto w/ 1.8 and 1.6. | .026 | .028 | 5500 to 8000 | 12-813-9¹⁴ | 306LHR-7 | 306 | 312 | 274 | 284 | .748 | .704 | 107° |
| MECHANICAL ROLLER – Bracket with good heads and small Comp Eliminator 1.6 and 1.6. | .026 | .028 | 4500 to 8500 | 12-817-9¹⁴ | 307RXD-12 | 307 | 320 | 274 | 282 | .739 | .739 | 112° |

² Requires machining on cylinder heads
⁶ Offset lifters available

⁷ Stock springs cannot be used
¹⁰ Requires thrust button & wear plate

¹⁴ Requires upgraded gear, thrust button & wear plate

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|------------------------------|--|--|--|------------------|--|---------------------|--|------------------|--------------|---------------------|
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K12-700-8 | CL12-700-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| K12-702-8 | CL12-702-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| K12-705-8 | CL12-705-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | |
| K12-769-8 | CL12-769-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| K12-770-8 | CL12-770-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| K12-771-8 | CL12-771-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| K12-772-8 | CL12-772-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| K12-773-8 | CL12-773-8 ^{7,10} | RPM1601-16 RPM1801-16 | 818-16 ⁶ 96818-16 ¹⁰³ | 412M 410M | 2100 7100 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 | 503-16 ² |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| BLOWER Mechanical Roller Camshafts | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 977-16 ² 26055-16 ² | 740-16 785-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4001 |
| PULLER & MUD RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7372-16 7972-16 | 954-16 ² 944-16 ² | 740-16 785-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ | 1601-16 ¹⁵ 1801-16 ¹⁵ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1818-8 ⁵⁹ 1805-8 ⁵⁹ | 7913-16 | 947-16 ² 26082-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 947-16 ² 26082-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵⁹ Requires 7/16" rocker arm studs

¹⁰³ For bushing lifter upgrade, use part# 96818B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| DRAG RACE Mechanical Roller Camshafts (CONTINUED) | | | | | | | | | | | | |
| MECHANICAL ROLLER – Latest design for 350 with race heads, 5500+ stall. | .016 | .018 | 4500 to 7800 | 12-865-9^{14, 46} | 307-R6 | 307 | 317 | 278 | 284 | .684 | .660 | 106° |
| MECHANICAL ROLLER – Latest design for 350 with race heads, 5500+ stall, 1.8 & 1.7 rockers. | .016 | .018 | 5000 to 8000 | 12-866-9^{14, 46} | 305HXL-6 | 305 | 313 | 276 | 284 | .819 | .660 | 106° |
| MECHANICAL ROLLER – Comp Eliminator or Fast Bracket with 1.8 and 1.7. | .026 | .028 | 4800 to 8500 | 12-818-9^{14, 46} | 310RXD-14 | 310 | 334 | 277 | 296 | .846 | .800 | 114° |
| MECHANICAL ROLLER – 5000+ stall, 11:1+ compression. | .026 | .028 | 4500 to 7500 | 12-906-9^{14, 46} | 312AR-7 | 312 | 322 | 276 | 284 | .630 | .630 | 107° |
| MECHANICAL ROLLER – 350-400, 5000+ stall, 11.5:1+ compression, ported heads. | .026 | .028 | 4500 to 7500 | 12-801-9^{14, 46} | 313R-6 | 313 | 322 | 276 | 284 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Small cubic inch high RPM with 1.7 and 1.6. | .024 | .026 | 6000 to 10000 | 12-814-9^{14, 46} | 314CER-14 | 314 | 335 | 278 | 294 | .824 | .739 | 114° |
| MECHANICAL ROLLER – Large Comp Eliminator or Fast Bracket w/ 1.8 and 1.7. | .026 | .028 | 5000 to 9000 | 12-819-9^{14, 46} | 314RXD-14 | 314 | 334 | 281 | 296 | .873 | .800 | 114° |
| MECHANICAL ROLLER – 355+ c.i., 4 speed, light car. | .026 | .028 | 5200 to 7800 | 12-907-9^{14, 46} | 316AR-8 | 316 | 326 | 280 | 288 | .630 | .630 | 108° |
| MECHANICAL ROLLER – 355+ c.i., ported head, 5500+ stall, in light car. | .026 | .028 | 5500 to 7800 | 12-726-9^{14, 46} | 317DR-6 | 317 | 330 | 280 | 292 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Medium cubic inch Comp Eliminator w/ 1.8 and 1.7. | .024 | .026 | 6000 to 10000 | 12-815-9^{14, 46} | 318CER-14 | 318 | 339 | 282 | 298 | .873 | .785 | 114° |
| MECHANICAL ROLLER – Large cubic inch Quick 16 or Fast Bracket with 1.8 and 1.7. | .026 | .028 | 5200 to 9200 | 12-820-9^{14, 46} | 318RXD-14 | 318 | 338 | 285 | 300 | .873 | .800 | 114° |
| DRAG RACE Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| MECHANICAL ROLLER – 400+ c.i., good heads, high compression, .900" base circle. | .024 | .026 | 5000 to 7500 | 12-970-9^{14, 46} | 312R-8 | 312 | 325 | 279 | 286 | .679 | .645 | 108° |
| MECHANICAL ROLLER – 355+ c.i., ported head, 5500+ stall in light car, .900" base circle. | .026 | .028 | 5500 to 7800 | 12-727-9^{14, 46} | 317ER-6 | 317 | 330 | 280 | 292 | .660 | .630 | 106° |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Roller Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great torque, 10:1+ compression, 4000+ stall. | .020 | .022 | 4000 to 7000 | 12-823-14¹⁴ | 47S 288R-6 | 288 | 296 | 252 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – 4500+ stall, 11:1+ compression and good heads. | .024 | .026 | 4200 to 7200 | 12-822-14¹⁴ | 47S 300R-6 | 300 | 308 | 264 | 270 | .630 | .630 | 106° |
| MECHANICAL ROLLER – 5000+ stall, 11:1+ compression, good mid and top end. | .020 | .022 | 4500 to 7500 | 12-824-14¹⁴ | 47S 312R-7 | 312 | 322 | 276 | 284 | .630 | .630 | 107° |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| MECHANICAL ROLLER – 400+ c.i. engines, good heads, high compression, .900" base circle. | .024 | .026 | 5000 to 7500 | 12-821-14¹⁴ | 47S 312R-8 | 312 | 325 | 279 | 286 | .679 | .645 | 108° |

² Requires machining on cylinder heads
⁶ Offset lifters available

¹⁴ Requires upgraded gear, thrust button & wear plate

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|------------------------------|--|----------|--|------------------|------------------|---------------------|-----------|---------|--------------|--------------------|--|
| DRAG RACE Mechanical Roller Camshafts (CONTINUED) | | | | | | | | | | | | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 944-16 ² 26115-16 ² | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26082-16 ² 26028-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26082-16 ² 26028-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1817-8 ⁵⁹ 1805-8 ⁵⁹ | 7913-16 | 26082-16 ² 26028-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26082-16 ² 26028-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 944-16 ² 26115-16 ² | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 944-16 ² 26115-16 ² | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26082-16 ² 26028-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1818-8 ⁵⁹ 1817-8 ⁵⁹ | 7913-16 | 26082-16 ² 26028-16 ² | 735-16 722-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| DRAG RACE Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 944-16 ² 26115-16 ² | 732-16 721-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 944-16 ² 26115-16 ² | 732-16 721-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Roller Camshafts | | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 954-16 ² 944-16 ² | 732-16 731-16 | 611-16 614-16 | 506-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 944-16 ² 26115-16 ² | 732-16 721-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵⁹ Requires 7/16" rocker arm studs
¹⁰³ For bushing lifter upgrade, use part# 96818B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------|-----|---------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | W/ 1.5 ROCKER | IN. | | EX. | |
| OVAL TRACK Mechanical Roller Camshafts (Standard Base Circle) | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best for heavy cars and small engines on short tracks. | .020 | .022 | 3200 to 6200 | 12-900-9 ^{14, 46} | 288AR-6 | 288 | 296 | 252 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Good for 1/4 to 3/8 mile tacky tracks with tight corners. | .020 | .022 | 3500 to 6500 | 12-901-9 ^{14, 46} | 292AR-6 | 292 | 296 | 256 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Good torque and throttle response w/ 355 engine on short track. | .020 | .022 | 3600 to 6600 | 12-902-9 ^{14, 46} | 296AR-6 | 296 | 300 | 260 | 262 | .630 | .630 | 106° |
| MECHANICAL ROLLER – 355 in Late Model with good heads and intake on 1/4 to 3/8 mile tracks. | .020 | .022 | 3000 to 7000 | 12-940-9 ^{14, 46} | 290AR-6 | 290 | 300 | 260 | 264 | .645 | .630 | 106° |
| MECHANICAL ROLLER – More aggressive intake lobe, more torque. Good for sprint car. | .020 | .022 | 3800 to 7000 | 12-910-9 ^{14, 46} | 288BR-6 | 288 | 300 | 260 | 264 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Good Late Model cam w/ 388-406 on short track. | .020 | .022 | 4200 to 7000 | 12-909-9 ^{14, 46} | 296BR-4 | 296 | 304 | 260 | 266 | .630 | .630 | 104° |
| MECHANICAL ROLLER – Good cam for sprint car on longer tracks. | .020 | .022 | 4000 to 7000 | 12-911-9 ^{14, 46} | 288CR-6 | 288 | 304 | 260 | 268 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Best cam for Late Model with 406+ engine. | .020 | .022 | 4200 to 7200 | 12-903-9 ^{14, 46} | 300AR-6 | 300 | 304 | 264 | 266 | .630 | .630 | 106° |
| MECHANICAL ROLLER – High torque cam for use with 1.6 or 1.65 intake rocker. | .020 | .022 | 4200 to 7000 | 12-835-9 ^{14, 46} | 296CR-6 | 296 | 304 | 264 | 268 | .609 | .630 | 106° |
| MECHANICAL ROLLER – 355 Late Model with good cylinder heads on longer tracks. | .020 | .022 | 3500 to 7500 | 12-945-9 ^{14, 46} | 294AR-6 | 294 | 304 | 264 | 268 | .645 | .630 | 106° |
| MECHANICAL ROLLER – Best torque in 406+ Late Model or 355, 9:1 compression. | .020 | .022 | 4500 to 7500 | 12-912-9 ^{14, 46} | 292BR-6 | 292 | 304 | 264 | 268 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Good Late Model with large engine and slick track. | .020 | .022 | 4500 to 7500 | 12-830-9 ^{14, 46} | 292CR-6 | 292 | 308 | 264 | 272 | .660 | .630 | 106° |
| MECHANICAL ROLLER – 400-410 Late Model on 3/8 to 5/8 mile tracks. | .020 | .022 | 3500 to 7500 | 12-950-9 ^{14, 46} | 296DR-6 | 296 | 308 | 266 | 272 | .645 | .630 | 106° |
| MECHANICAL ROLLER – Good for 311-355 with open carb. Good on road course. | .020 | .022 | 5000 to 8200 | 12-905-9 ^{14, 46} | 308AR-7 | 308 | 312 | 272 | 274 | .630 | .630 | 107° |
| MECHANICAL ROLLER – Excellent for 12:1 compression, 358 with open carb. Sustained high RPM on long track. | .020 | .022 | 6200 to 8500 | 12-906-9 ^{14, 46} | 312AR-7 | 312 | 322 | 276 | 284 | .630 | .630 | 107° |
| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | | |
| Xtreme TK Rollers give more area under the curve and shorter seat timing than any other series. Great for Hi-Torque or restricted applications. | | | | | | | | | | | | |
| MECHANICAL ROLLER – 1/4-3/8. 331-355 limited Late Model, restricted with 2 BBL carb. | .016 | .016 | 2800 to 7000 | 12-854-9 ^{14, 46} | 279TKR-6 | 279 | 283 | 251 | 255 | .645 | .645 | 106° |
| MECHANICAL ROLLER – 1/4-3/8. 331-355 limited Late Model, 2 BBL and 390 4 BBL carbs. | .016 | .016 | 3000 to 7200 | 12-855-9 ^{14, 46} | 281TKR-6 | 281 | 285 | 253 | 257 | .645 | .645 | 106° |
| MECHANICAL ROLLER – 355-377 Sportsman, Late Model. Great torque with gear rule. | .016 | .020 | 3200 to 7400 | 12-856-9 ^{14, 46} | 281TKBR-6 | 281 | 295 | 253 | 262 | .645 | .630 | 106° |
| MECHANICAL ROLLER – 1/4-1/2 mile tacky. 355-377 Late Model with 4 BBL, big heads. | .016 | .016 | 3500 to 7500 | 12-857-9 ^{14, 46} | 283TKR-6 | 283 | 287 | 255 | 259 | .645 | .645 | 106° |

² Requires machining on cylinder heads

⁶ Offset lifters available

¹⁴ Requires upgraded gear, thrust button & wear plate

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|------------------------------|--|--------------------|--|------------------|------------------|---------------------|-----------|---------|--------------|--------------------|--|
| OVAL TRACK Mechanical Roller Camshafts (Standard Base Circle) | | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | | |
| 96818-16 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 96818-16 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵⁹ Requires 7/16" rocker arm studs

¹⁰³ For bushing lifter upgrade, use part# 96818B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| OVAL TRACK Mechanical Roller Camshafts – Xtreme TK Rollers (CONTINUED) | | | | | | | | | | | | |
| Xtreme TK Rollers give more area under the curve and shorter seat timing than any other series. Great for Hi-Torque or restricted applications. | | | | | | | | | | | | |
| MECHANICAL ROLLER – 3/8-1/2 mile tacky. 355-406 Late Model 4 BBL. Good top end. | .016 | .020 | 3500 to 7500 | 12-858-9 ^{14, 46} | 283TKBR-6 | 283 | 296 | 255 | 264 | .645 | .630 | 106° |
| MECHANICAL ROLLER – 3/8-5/8 mile dry slick. 355-406 Late Model. Great small cubic inch IMCA. | .016 | .020 | 3500 to 7600 | 12-859-9 ^{14, 46} | 285TKR-6 | 285 | 298 | 257 | 266 | .645 | .637 | 106° |
| MECHANICAL ROLLER – 377-406 Late Model w/ good heads, carb, intake and 1.6:1 rocker ratio. | .016 | .020 | 3500 to 7800 | 12-860-9 ^{14, 46} | 287TKR-6 | 287 | 296 | 259 | 264 | .645 | .630 | 106° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| OPEN WHEEL MODIFIED TRACTION CONTROL Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – 1/3-1/2 tracks w/ tight corners or heavy surface. 327-358, 11:1 compression, 2/4 BBL gas or alcohol. Designed for flat tappet-appearing Beehive™ Valve Springs. | .016 | .018 | 3200 to 7500 | 12-780-9 ^{14, 46} | 287CRL | 287 | 291 | 256 | 260 | .589 | .589 | 107° |
| MECHANICAL ROLLER – 3/8-5/8 tracks w/ wide corners or slick surface. 355+, 12:1 compression, 4 BBL gas or alcohol with good intake & heads. Designed for flat tappet-appearing Beehive™ Valve Springs. | .016 | .018 | 3400 to 7700 | 12-781-9 ^{14, 46} | 291CRL | 291 | 295 | 260 | 264 | .589 | .589 | 107° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| OVAL TRACK Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| MECHANICAL ROLLER – For heavy cars with small c.i. Best for short tracks. | .020 | .022 | 3200 to 6200 | 12-990-9 ^{14, 46} | 288AR-6 | 288 | 296 | 252 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Good for 1/4 to 3/8 mile tacky tracks with tight corners. | .020 | .022 | 3500 to 6500 | 12-991-9 ^{14, 46} | 292AR-6 | 292 | 296 | 256 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Good torque and throttle response w/ 355c.i. engine on short track. | .020 | .022 | 3600 to 6600 | 12-992-9 ^{14, 46} | 296AR-6 | 296 | 300 | 260 | 262 | .630 | .630 | 106° |
| MECHANICAL ROLLER – More aggressive intake lobe, more torque. Good for sprint car. | .020 | .022 | 3800 to 7000 | 12-920-9 ^{14, 46} | 288BR-6 | 288 | 300 | 260 | 264 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Good Late Model cam w/ 388-406c.i. on short track. | .020 | .022 | 4200 to 7000 | 12-924-9 ^{14, 46} | 296BR-4 | 296 | 304 | 260 | 267 | .630 | .630 | 104° |
| MECHANICAL ROLLER – Good cam for Sprint car on longer tracks. | .020 | .022 | 4000 to 7000 | 12-921-9 ^{14, 46} | 288CR-6 | 288 | 304 | 260 | 268 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Best for Late Model with 406+ c.i. engine. | .020 | .022 | 4200 to 7200 | 12-993-9 ^{14, 46} | 300AR-6 | 300 | 304 | 264 | 267 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Best torque in 406+c.i. Late Model or 355c.i. with 9:5.1+ compression. | .020 | .022 | 4500 to 7500 | 12-922-9 ^{14, 46} | 292BR-6 | 292 | 304 | 264 | 268 | .660 | .630 | 106° |

² Requires machining on cylinder heads
⁶ Offset lifters available

¹⁴ Requires upgraded gear, thrust button & wear plate

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------------------------|--|--------------------|-----------------------------------|------------------|------------------|---------------------|-----------|---------|--------------|--|
| OVAL TRACK Mechanical Roller Camshafts – Xtreme TK Rollers (CONTINUED) | | | | | | | | | | | |
| 98818-16 ⁶ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 98818-16 ⁶ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 98818-16 ⁶ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------------------------|--|----------|--|-----------|------------------|---------------------|-----------|---------|--------------|--|
| OPEN WHEEL MODIFIED TRACTION CONTROL Mechanical Roller Camshafts | | | | | | | | | | | |
| 98818-16 ⁶ | 3100KT ⁴⁸ 7100 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 26095-16 ² 26055-16 ² | 785-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 98818-16 ⁶ | 3100KT ⁴⁸ 7100 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 26095-16 ² 26055-16 ² | 785-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------------------------|--|----------|--|------------------|------------------|---------------------|-----------|---------|--------------|--------------------|
| OVAL TRACK Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ |

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵⁹ Requires 7/16" rocker arm studs

¹⁰³ For bushing lifter upgrade, use part# 96818B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| OVAL TRACK Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| MECHANICAL ROLLER – High torque cam for use with a 1.6 or 1.65 intake rocker. | .020 | .022 | 4200 to 7000 | 12-895-9^{14,46} | 296CR-6 | 296 | 304 | 264 | 268 | .609 | .630 | 106° |
| MECHANICAL ROLLER – Good Late Model with large engine and slick track. | .020 | .022 | 4500 to 7500 | 12-890-9^{14,46} | 292CR-6 | 292 | 308 | 264 | 272 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Good for Late Models with very large engine on long track. | .020 | .022 | 4500 to 7500 | 12-994-9^{14,46} | 304AR-6 | 304 | 308 | 268 | 270 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Good for 430+c.i. engines in Late Models on slick tracks. | .020 | .022 | 4200 to 7200 | 12-923-9^{14,46} | 296BR-6 | 296 | 308 | 268 | 272 | .660 | .630 | 106° |
| MECHANICAL ROLLER – Good for constant high RPM, 358c.i. with open carb. | .020 | .022 | 6200 to 8500 | 12-996-9^{14,46} | 312AR-7 | 312 | 322 | 276 | 284 | .630 | .630 | 107° |
| OVAL TRACK Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | | |
| Xtreme TK Rollers give more area under the curve and shorter seat timing than any other series. Great for Hi-Torque or restricted applications. | | | | | | | | | | | | |
| MECHANICAL ROLLER – 383-415c.i. IMCA, Late Model, Modifieds. Great torque. | .016 | .020 | 3400 to 7600 | 12-861-9^{14,46} | 287TKNR-7 | 287 | 300 | 259 | 268 | .648 | .645 | 107° |
| MECHANICAL ROLLER – 383-415c.i. Great for Late Model with 1.6:1 and good heads. | .016 | .020 | 3600 to 7800 | 12-862-9^{14,46} | 289TKNR-7 | 289 | 302 | 261 | 270 | .648 | .645 | 107° |
| MECHANICAL ROLLER – 415-430c.i. Great bottom end for short tacky track. | .016 | .020 | 3400 to 7600 | 12-863-9^{14,46} | 291TKNR-8 | 291 | 304 | 263 | 272 | .648 | .645 | 108° |
| MECHANICAL ROLLER – 415-430c.i. Late Model with good heads and open carb. | .016 | .020 | 3600 to 7800 | 12-864-9^{14,46} | 293TKNR-8 | 293 | 310 | 265 | 274 | .648 | .630 | 108° |
| OVAL TRACK Mechanical Roller Camshafts (50mm, 1.968" Roller Cam Bearings) | | | | | | | | | | | | |
| Xtreme RX Rollers use COMP® RX intake and RZ exhaust profiles to provide the ultimate in high RPM power and durability. Designed for use with light valve train above 8200 RPM. | | | | | | | | | | | | |
| MECHANICAL ROLLER – (50mm) 358c.i. Late Model with good heads and light valves. | .020 | .022 | 5500 to 8500 | 12-850-9^{14,46} | 294RX-6 | 294 | 301 | 261 | 268 | .648 | .648 | 106° |
| MECHANICAL ROLLER – (50mm) 400+c.i. Late Model with good heads and light valves. | .020 | .022 | 5600 to 8600 | 12-851-9^{14,46} | 298RX-6 | 298 | 305 | 265 | 272 | .649 | .651 | 106° |
| MECHANICAL ROLLER – (50mm) 430c.i. Late Model with good heads and light valves. | .020 | .022 | 5400 to 8400 | 12-852-9^{14,46} | 300RX-7 | 300 | 309 | 267 | 276 | .651 | .652 | 107° |
| MECHANICAL ROLLER – (50mm) 358c.i. High RPM asphalt track with very light valves. | .020 | .022 | 7200 to 9200 | 12-853-9^{14,46} | 304RX-8 | 304 | 313 | 271 | 280 | .654 | .657 | 108° |
| OVAL TRACK 4 & 7 FIRING ORDER SWAP Mechanical Roller Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best for heavy car and small engines on short tracks. | .020 | .022 | 4000 to 7000 | 12-823-14^{14,46} | 47S 288R-6 | 288 | 296 | 252 | 258 | .630 | .630 | 106° |
| MECHANICAL ROLLER – Dirt Late Model with good heads and 4 BBL carb. | .020 | .022 | 4400 to 7600 | 12-826-14^{14,46} | 47S 288BR-6 | 288 | 296 | 258 | 264 | .639 | .632 | 106° |
| MECHANICAL ROLLER – 355-400c.i. with 4 BBL carb. High RPM on long tracks. | .020 | .022 | 6000 to 8200 | 12-824-14^{14,46} | 47S 312R-7 | 312 | 322 | 276 | 284 | .630 | .630 | 107° |

TECH TIP

If you have a 1955-1957 Small Block Chevy engine, please notify your sales person before ordering.

² Requires machining on cylinder heads
⁶ Offset lifters available

¹⁴ Requires upgraded gear, thrust button & wear plate

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------------------------|--|--------------------|--|------------------|------------------|---------------------|-----------|---------|--------------|--|
| OVAL TRACK Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 943-16 ² 26089-16 ² | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| OVAL TRACK Mechanical Roller Camshafts (.900" Base Circle) | | | | | | | | | | | |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 891-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| OVAL TRACK Mechanical Roller Camshafts (50mm, 1.968" Roller Cam Bearings) | | | | | | | | | | | |
| 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 96818B-16 | 3100KT ⁴⁸ 7100 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 26089-16 ² 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| OVAL TRACK 4 & 7 FIRING ORDER SWAP Mechanical Roller Camshafts | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 26089-16 | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 26089-16 | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1604-16 ⁵⁹ 1804-16 ⁵⁹ | 7972-16 7913-16 | 943-16 26089-16 | 731-16 720-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ |

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵⁹ Requires 7/16" rocker arm studs
¹⁰³ For bushing lifter upgrade, use part# 96818B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| OPEN WHEEL MODIFIED TRACTION CONTROL 4 & 7 FIRING ORDER SWAP Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – 1/3-1/2 tracks w/ tight corners or heavy surface. 327-358ci., 11:1 compression, 4 BBL gas or alcohol. Requires good intake and heads. | .016 | .018 | 3600 to 7400 | 12-840-14¹⁴ | 285HXL | 285 | 294 | 256 | 261 | .702 | .691 | 107° |
| MECHANICAL ROLLER – 1/3-1/2 tracks w/ wide corners or slick surface. 355-383c.i., 12:1 compression, 4 BBL gas or alcohol. Requires good intake and heads. | .016 | .018 | 3800 to 7600 | 12-841-14¹⁴ | 289HXL | 289 | 298 | 260 | 265 | .709 | .694 | 107° |
| MECHANICAL ROLLER – 3/8-5/8 tracks w/ tight corners or heavy surface. 355-383c.i., 12:1+ compression, 4 BBL gas or alcohol. Requires good intake & heads. | .016 | .018 | 4000 to 7800 | 12-842-14¹⁴ | 293HXL | 293 | 302 | 264 | 269 | .715 | .698 | 107° |
| MECHANICAL ROLLER – 3/8-5/8 tracks w/ wide corners or slick surface. 383+c.i., 12:1+ compression, 4 BBL gas or alcohol. Requires good intake and heads. | .016 | .018 | 4200 to 8000 | 12-843-14¹⁴ | 297HXL | 297 | 306 | 268 | 273 | .722 | .701 | 107° |

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/ O.E. Hyd. Roller Cams)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | | |
| 1987-98 305-350 Engines With O.E. Hyd. Roller Cams (EXCEPT LT1 & LT4) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent mileage, smooth idle. Works with pickups, vans and towing. Stock gear ratios and converter. | Hyd. | Hyd. | 1200 to 4500 | 08-410-8^{46,111} | 260HR | 260 | 260 | 206 | 206 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – Mild street performance, slightly noticeable idle. Needs aftermarket intake, headers, 3.40-4.10 gears. | Hyd. | Hyd. | 1800 to 5000 | 08-420-8^{46,111} | 270HR | 270 | 270 | 215 | 215 | .500 | .500 | 110° |
| HYDRAULIC ROLLER – High performance street use. Aftermarket intake, headers and 2000+ stall, 3.40 to 4.10 gears. Mild rough idle. | Hyd. | Hyd. | 2000 to 5500 | 08-430-8^{46,111} | 280HR | 280 | 280 | 224 | 224 | .525 | .525 | 110° |
| HYDRAULIC ROLLER – Great for street machines. Best with headers and aluminum intake. 2500+ stall. Rough idle. | Hyd. | Hyd. | 2500 to 6000 | 08-450-8^{46,111} | 286HR | 286 | 286 | 230 | 230 | .560 | .560 | 110° |
| HYDRAULIC ROLLER – Street/strip applications. 3000+ stall. Use 4.10 gears, aftermarket intake and headers. Very rough idle. | Hyd. | Hyd. | 3000 to 6500 | 08-460-8^{46,111} | 304HR | 304 | 304 | 244 | 244 | .600 | .600 | 110° |
| HYDRAULIC ROLLER – Limited street/ bracket racing. 10.5:1. 3500+ stall. Headers and race intake. | Hyd. | Hyd. | 3500 to 6500 | 08-470-8^{46,111} | 314HR | 314 | 314 | 252 | 252 | .600 | .600 | 110° |

² Requires machining on cylinder heads
⁶ Offset lifters available
⁷ Stock springs cannot be used

¹¹ Lifters only, does not include lifter guides
¹⁴ Requires upgraded gear, thrust button & wear plate

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4
⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 262-400 C.I. 8 CYL. 1958-1998 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|---|------------------------------|--|----------|--------------------|------------------|------------------|---------------------|-----------|---------|--------------|--|--|
| OPEN WHEEL MODIFIED TRACTION CONTROL 4 & 7 FIRING ORDER SWAP Mechanical Roller Camshafts | | | | | | | | | | | | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 943-16 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 943-16 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 943-16 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ | |
| 818-16 ⁶ 96818-16 ¹⁰³ | 3100KT ⁴⁸ 6500 | 1605-16 ⁵⁹ 1805-16 ⁵⁹ | 7913-16 | 943-16 26115-16 | 731-16 732-16 | 611-16 614-16 | 503-16 ² | 621-16 | 4000 | 412M 410M | 4004 ⁵⁹ 4009 ⁵⁹ | |

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/ O.E. Hyd. Roller Cams)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--|--------------|--------------|--|--------------------|--|------------------|------------------|---------------------|
| MAGNUM Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | |
| K08-410-8 | SK08-410-8 ⁷ | CL08-410-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-420-8 | SK08-420-8 ⁷ | CL08-420-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-430-8 | SK08-430-8 ⁷ | CL08-430-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-450-8 | SK08-450-8 ⁷ | CL08-450-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-460-8 | SK08-460-8 ⁷ | CL08-460-8 ⁷ | 850-16 ¹¹ 15850-16 | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-470-8 | SK08-470-8 ⁷ | CL08-470-8 ⁷ | 850-16 ¹¹ 15850-16 | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁴⁸ Includes 3 cam bolts, thrust bearing, adjustable cam timing system, 2 machined steel gears & true roller chain

⁵⁹ Requires 7/16" rocker arm studs
¹⁰³ For bushing lifter upgrade, use part# 96818B-16. Offsets available.

¹¹¹ 1996-99 Vortec engines may experience retainer to valve guide clearance issues with anything over .470" valve lift.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for towing, excellent mileage, smooth idle. Will work with stock converters and gears. | Hyd. | Hyd. | 600 to 4600 | 08-407-8 ^{46,111} | XR252HR | 252 | 258 | 200 | 206 | .472 | .480 | 110° |
| HYDRAULIC ROLLER – Strong torque, good mileage, stock to mildly modified combinations. | Hyd. | Hyd. | 1000 to 5000 | 08-408-8 ^{46,111} | XR258HR | 258 | 264 | 206 | 212 | .480 | .487 | 110° |
| HYDRAULIC ROLLER – Mild performance applications, good mid-range, 3.23-3.73 gears. Slightly noticeable idle. | Hyd. | Hyd. | 1200 to 5200 | 08-412-8 ^{46,111} | XR264HR | 264 | 270 | 212 | 218 | .487 | .495 | 110° |
| HYDRAULIC ROLLER – High performance application, largest with stock converter, noticeable idle. | Hyd. | Hyd. | 1600 to 5400 | 08-422-8 ^{46,111} | XR270HR | 270 | 276 | 218 | 224 | .495 | .502 | 110° |
| HYDRAULIC ROLLER – High performance street machines, 2000+ stall, gears, choppy idle. | Hyd. | Hyd. | 1900 to 5600 | 08-423-8 ^{46,111} | XR276HR | 276 | 282 | 224 | 230 | .502 | .510 | 110° |
| HYDRAULIC ROLLER – Great for street machines, needs intake, headers and gears. 2500+ stall. | Hyd. | Hyd. | 2200 to 5800 | 08-432-8 ^{46,111} | XR282HR | 282 | 288 | 230 | 236 | .510 | .520 | 110° |
| HYDRAULIC ROLLER – Street/strip applications, 9:1+ compression, intake, headers, gears. 3000+ stall. Rough idle. | Hyd. | Hyd. | 2500 to 6000 | 08-433-8 ^{46,111} | XR288HR | 288 | 294 | 236 | 242 | .520 | .540 | 110° |
| HYDRAULIC ROLLER – Street/strip applications, 9.5:1+ compression, intake, headers, stall, gears. 3200+ stall. | Hyd. | Hyd. | 2800 to 6100 | 08-443-8 ^{46,111} | XR294HR | 294 | 300 | 242 | 248 | .540 | .562 | 110° |
| HYDRAULIC ROLLER – Pro Street, bracket racing, 10:1+ compression, 3500+ stall, good intake, headers. | Hyd. | Hyd. | 3200 to 6200 | 08-444-8 ^{46,111} | XR300HR | 300 | 306 | 248 | 254 | .562 | .580 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| THUMPR™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 08-600-8 ^{46,111} | 283THR7 | 283 | 303 | 227 | 241 | .513 | .498 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 08-601-8 ^{46,111} | 291THR7 | 291 | 311 | 235 | 249 | .522 | .509 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 08-602-8 ^{46,111} | 299THR7 | 299 | 319 | 243 | 257 | .533 | .519 | 107° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

¹¹ Lifters only, does not include lifter guides

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--|--------------|--------------|--|--------------------|--|------------------|------------------|-------------------------------|
| XTREME ENERGY™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | |
| K08-407-8 | SK08-407-8 ⁷ | CL08-407-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-408-8 | SK08-408-8 ⁷ | CL08-408-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-412-8 | SK08-412-8 ⁷ | CL08-412-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-422-8 | SK08-422-8 ⁷ | CL08-422-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-423-8 | SK08-423-8 ⁷ | CL08-423-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-432-8 | SK08-432-8 ⁷ | CL08-432-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-433-8 | SK08-433-8 ⁷ | CL08-433-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-443-8 | SK08-443-8 ⁷ | CL08-443-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 987-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-444-8 | SK08-444-8 ⁷ | CL08-444-8 ⁷ | 850-16 ¹¹ 15850-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 987-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|-------------------------|--|--------------|------------|--|--------------------|-----------------------------------|------------------|------------------|-------------------------------|
| THUMPR™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | |
| K08-600-8 | GK08-600-8 ^{7,93} | CL08-600-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 2136 3136 | 4136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7608-16 7940-16 | 26981-16 26918-16 | 787-16 | 648-16 | 501-16 |
| K08-601-8 | GK08-601-8 ^{7,93} | CL08-601-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 2137 3136 | 4136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7608-16 7940-16 | 26918-16 26986-16 ² | 787-16 795-16 | 648-16 611-16 | 501-16 503-16 ² |
| K08-602-8 | GK08-602-8 ^{7,93} | CL08-602-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 2138 3136 | 4136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7608-16 7940-16 | 26918-16 26986-16 ² | 787-16 795-16 | 648-16 611-16 | 501-16 503-16 ² |

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁹³ GK-Kit contains cam, lifters & gear drive

¹¹¹ 1996-99 Vortec engines may experience retainer to valve guide clearance issues with anything over .470" valve lift.

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| XTREME 4X4™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong torque, good mileage, for stock to mildly modified engines. | Hyd. | Hyd. | 1000 to 5000 | 08-409-8 ^{46,111} | X4258HR | 258 | 262 | 206 | 210 | .458 | .458 | 111° |
| HYDRAULIC ROLLER – Good mid-range power, good with 3.23-3.73 gear. | Hyd. | Hyd. | 1200 to 5200 | 08-411-8 ^{46,111} | X4260HR | 260 | 264 | 210 | 214 | .474 | .474 | 111° |
| HYDRAULIC ROLLER – Good mid-range power, needs headers, 3.55-4.10 gears, 2000 stall. Noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 08-413-8 ^{46,111} | X4270HR | 270 | 274 | 220 | 224 | .474 | .474 | 111° |
| HYDRAULIC ROLLER – Good top end. Needs headers, lower gears and 2500+ stall. | Hyd. | Hyd. | 1800 to 5800 | 08-414-8 ^{46,111} | X4280HR | 280 | 284 | 230 | 234 | .474 | .474 | 111° |
| XTREME MARINE™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for pleasure use and economy, smooth idle. | Hyd. | Hyd. | 1000 to 5000 | 08-416-8 ^{46,111} | XM264HR | 264 | 270 | 212 | 218 | .488 | .495 | 112° |
| HYDRAULIC ROLLER – Largest for inboard/outboard, very good mid-range. | Hyd. | Hyd. | 1200 to 5200 | 08-417-8 ^{46,111} | XM270HR | 270 | 276 | 218 | 224 | .495 | .503 | 112° |
| HYDRAULIC ROLLER – Good for jet boat w/ A or B impeller, strong mid-range power, needs good exhaust. | Hyd. | Hyd. | 1500 to 5500 | 08-418-8 ^{46,111} | XM276HR | 276 | 282 | 224 | 230 | .503 | .510 | 112° |
| NITROUS HP™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 125+ HP nitrous or small supercharger, low gears, headers, 2200+ stall. | Hyd. | Hyd. | 2000 to 6000 | 08-301-8 ^{46,111} | NX276HR | 276 | 288 | 224 | 236 | .502 | .520 | 113° |
| HYDRAULIC ROLLER – 175+ HP nitrous system. 2500+ stall with lower gears and headers. | Hyd. | Hyd. | 2400 to 6500 | 08-303-8 ^{46,111} | NX288HR | 288 | 315 | 236 | 248 | .520 | .540 | 113° |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – For throttle body 305 or 350, very good economy and power. | Hyd. | Hyd. | 1000 to 5000 | 08-500-8 ^{46,111} | XR258HR | 258 | 264 | 206 | 212 | .480 | .488 | 112° |
| HYDRAULIC ROLLER – Best in 305 or 350 tuned port injected engines. | Hyd. | Hyd. | 1200 to 5200 | 08-501-8 ^{46,111} | XR264HR | 264 | 269 | 212 | 218 | .488 | .495 | 112° |
| HYDRAULIC ROLLER – Good for TPI 305 or 350 with upgraded exhaust. Requires custom tuning. | Hyd. | Hyd. | 1500 to 5500 | 08-502-8 ^{46,111} | XR269HR | 269 | 276 | 218 | 224 | .495 | .503 | 112° |
| HYDRAULIC ROLLER – Needs modified TPI w/injectors, plenum, runners, exhaust, 2000+ stall. Requires custom tuning. | Hyd. | Hyd. | 1800 to 5800 | 08-503-8 ^{46,111} | XR276HR | 276 | 281 | 224 | 230 | .503 | .510 | 112° |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good torque & mileage with tuned port injection. | Hyd. | Hyd. | 1000 to 5000 | 08-300-8 ^{46,111} | 262HR-12 | 262 | 264 | 206 | 210 | .450 | .480 | 112° |
| HYDRAULIC ROLLER – Mild performance for TPI. Strong low to mid-range power. Requires custom tuning. | Hyd. | Hyd. | 1200 to 5200 | 08-302-8 ^{46,111} | 264HR-12 | 264 | 274 | 210 | 220 | .480 | .480 | 112° |
| HYDRAULIC ROLLER – Great mid-range power with modified TPI application. Requires custom tuning. | Hyd. | Hyd. | 1400 to 5400 | 08-304-8 ^{46,111} | 266HR-14 | 266 | 276 | 210 | 220 | .500 | .510 | 114° |
| HYDRAULIC ROLLER – High performance street for modified TPI, 2000+ stall. Requires custom tuning. | Hyd. | Hyd. | 1800 to 5800 | 08-305-8 ^{46,111} | 276HR-14 | 276 | 290 | 220 | 230 | .510 | .510 | 114° |
| HYDRAULIC ROLLER – Street/strip applications. Needs 2500+ stall, lower gears. Requires custom tuning. | Hyd. | Hyd. | 2000 to 6000 | 08-306-8 ^{46,111} | 290HR-12 | 290 | 307 | 230 | 244 | .510 | .540 | 112° |

² Requires machining on cylinder heads⁷ Stock springs cannot be used¹¹ Lifters only, does not include lifter guides¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--|--------------|--------------|--|--------------------|--|------------------|------------------|-------------------------------|
| XTREME 4X4™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | |
| K08-409-8 | SK08-409-8 ⁷ | CL08-409-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-411-8 | SK08-411-8 ⁷ | CL08-411-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-413-8 | SK08-413-8 ⁷ | CL08-413-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-414-8 | SK08-414-8 ⁷ | CL08-414-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| XTREME MARINE™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| K08-416-8 | SK08-416-8 ⁷ | CL08-416-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-417-8 | SK08-417-8 ⁷ | CL08-417-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-418-8 | SK08-418-8 ⁷ | CL08-418-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| NITROUS HP™ Hydraulic Roller Camshafts (CARBURETED) | | | | | | | | | | | |
| K08-301-8 | SK08-301-8 ⁷ | CL08-301-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7940-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-303-8 | SK08-303-8 ⁷ | CL08-303-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7940-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts | | | | | | | | | | | |
| K08-500-8 | SK08-500-8 ⁷ | CL08-500-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 981-16 26981-16 | 742-16 787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-501-8 | SK08-501-8 ⁷ | CL08-501-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-502-8 | SK08-502-8 ⁷ | CL08-502-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-503-8 | SK08-503-8 ⁷ | CL08-503-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| COMPUTER CONTROLLED Hydraulic Roller Camshafts | | | | | | | | | | | |
| K08-300-8 | SK08-300-8 ⁷ | CL08-300-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 983-16 26981-16 | 751-16 795-16 | 611-16 613-16 | 501-16 503-16 ² |
| K08-302-8 | SK08-302-8 ⁷ | CL08-302-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 983-16 26981-16 | 751-16 795-16 | 611-16 613-16 | 501-16 503-16 ² |
| K08-304-8 | SK08-304-8 ⁷ | CL08-304-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-305-8 | SK08-305-8 ⁷ | CL08-305-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K08-306-8 | SK08-306-8 ⁷ | CL08-306-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 986-16 ² 26986-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

¹¹¹ 1996-99 Vortec engines may experience retainer to valve guide clearance issues with anything over .470" valve lift.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent torque for throttle body 305 or 350. Good economy with added power. | Hyd. | Hyd. | 1000 to 5000 | 08-464-8^{46,111} | 252XFI HR13 | 252 | 264 | 202 | 212 | .550 | .546 | 113° |
| HYDRAULIC ROLLER – Superb low end & mid-range for 350 tuned port injections. Requires custom tuning. | Hyd. | Hyd. | 1200 to 5200 | 08-465-8^{46,111} | 260XFI HR13 | 260 | 270 | 210 | 218 | .560 | .555 | 113° |
| HYDRAULIC ROLLER – Good torque with exceptional mid-range power for 305 and 350 TPI applications. Needs upgraded exhaust and custom tuning. | Hyd. | Hyd. | 1800 to 5800 | 08-466-8^{46,111} | 268XFI HR13 | 268 | 276 | 218 | 224 | .570 | .565 | 113° |
| HYDRAULIC ROLLER – Strong mid-range and top end. Will require headers, gears and stall. Strong Idle. Requires custom tuning. | Hyd. | Hyd. | 2000 to 6000 | 08-467-8^{46,111} | 280XFI HR13 | 280 | 288 | 230 | 236 | .576 | .570 | 113° |
| HYDRAULIC ROLLER – Excellent top end power. Needs headers, gears & 2500+ stall. Requires custom tuning. | Hyd. | Hyd. | 2200 to 6200 | 08-468-8^{46,111} | 292XFI HR13 | 292 | 300 | 242 | 248 | .584 | .579 | 113° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Optimized fuel mileage with good torque and horsepower. | Hyd. | Hyd. | 800 to 5000 | 08-525-8^{46,111} | TPX246HR-16 | 246 | 258 | 194 | 206 | .470 | .464 | 116° |
| HYDRAULIC ROLLER – Exceptional torque with good horsepower and moderate fuel economy. | Hyd. | Hyd. | 1200 to 5200 | 08-530-8^{46,111} | TPX254HR-15 | 254 | 264 | 202 | 212 | .477 | .471 | 115° |
| HYDRAULIC ROLLER – Optimized horsepower with good torque and average fuel economy. | Hyd. | Hyd. | 1400 to 5400 | 08-535-8^{46,111} | TPX262HR-14 | 262 | 270 | 210 | 218 | .486 | .480 | 114° |

¹¹¹ 1996-99 Vortec engines may experience retainer to valve guide clearance issues with anything over .470" valve lift.

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------------|--------|-------------|--------|-------------------|---------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| 4-PATTERN O.E. Hydraulic Roller Camshafts (W/ 1.6 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for smaller c.i. applications with very good heads. Extremely wide power range. 1800+ Stall. | Hyd. | Hyd. | 1700-6300 | 08-604-44 | 269QI08 | 271 OB | 283 OB | 219 OB | 229 OB | .603 OB | .590 OB | 108.5 OB |
| | | | | | | 269 IB | 281 IB | 217 IB | 227 IB | .600 IB | .587 IB | 107.5 IB |
| HYDRAULIC ROLLER – Great all around choice for street applications in modified engines and 2500+ stall or manual transmissions | Hyd. | Hyd. | 2300-6600 | 08-605-44 | 281QI08 | 283 OB | 295 OB | 231 OB | 241 OB | .622 OB | .610 OB | 108.5 OB |
| | | | | | | 281 IB | 293 IB | 229 IB | 239 IB | .619 IB | .606 IB | 107.5 IB |
| HYDRAULIC ROLLER – Excellent for street/strip applications with good heads and raised compression in high RPM engines. 3200+ Stall. | Hyd. | Hyd. | 2900-7200 | 08-607-44 | 293QI08 | 295 OB | 307 OB | 243 OB | 253 OB | .638 OB | .622 OB | 108.5 OB |
| | | | | | | 293 IB | 305 IB | 241 IB | 251 IB | .637 IB | .622 IB | 107.5 IB |
| HYDRAULIC ROLLER – Recommended in larger c.i. and high compression applications. 3500+ Stall. | Hyd. | Hyd. | 3300-7500 | 08-609-44 | 305QI08 | 307 OB | 319 OB | 255 OB | 265 OB | .638 OB | .622 OB | 108.5 OB |
| | | | | | | 305 IB | 317 IB | 253 IB | 263 IB | .638 IB | .622 IB | 107.5 IB |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹¹ Lifters only, does not include lifter guides

¹⁵ 50-State legal on 1993 & earlier SB Chevrolet V8, 262-400c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--|--------------|--------------|--------------------|--------------------|---------------|-------------------|------------------|-------------------------------|
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts | | | | | | | | | | | |
| K08-464-8 | SK08-464-8 ⁷ | CL08-464-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1418-16 1618-16 | 7808-16 7608-16 | 26986-16 | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-465-8 | SK08-465-8 ⁷ | CL08-465-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1418-16 1618-16 | 7808-16 7608-16 | 26986-16 | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-466-8 | SK08-466-8 ⁷ | CL08-466-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1418-16 1618-16 | 7808-16 7608-16 | 26986-16 | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-467-8 | SK08-467-8 ⁷ | CL08-467-8 ⁷ | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 2136 3136 | 1418-16 1618-16 | 7808-16 7608-16 | 26986-16 | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |
| K08-468-8 | SK08-468-8 ⁷ | CL08-468-8 ⁷ | 850-16 ¹¹ 15850-16 ¹¹ | 412M 410M | 2136 3136 | 1418-16 1618-16 | 7808-16 7608-16 | 26986-16 | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|--------------|--|--------------------|-----------------------------------|-------------------|------------------|-------------------------------|-----------|---------|--------------|--------------|
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 26981-16 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A |
| 850-16 ¹¹ 875-16 ¹¹ | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 26981-16 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A |
| 850-16 ¹¹ 875-16 ¹¹ | 2136 3136 | 1417-16 ¹⁵ 1617-16 ¹⁵ | 7808-16 7608-16 | 26981-16 26986-16 ² | 787-16 1787-16 | 601-16 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|------------|-------------|--------------------|---------------|-----------|-------------|-------------|-----------|---------|--------------|--------------|
| 4-PATTERN O.E Hydraulic Roller Camshafts (W/ 1.6 ROCKERS) | | | | | | | | | | | |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

¹¹¹ 1996-99 Vortec engines may experience retainer to valve guide clearance issues with anything over .470" valve lift.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------|--------|---------|--------|------------|---------------|-----------------|
| | IN. | EX. | | | | IN. | EX. | @ .050" | IN. | EX. | W/ 1.6 ROCKER | |
| 4-PATTERN Small Base Circle (.900") O.E Hydraulic Roller Camshafts (W/ 1.6 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for street 383 stroker engines with good cylinder heads. Very wide power range. 2600+ Stall. | Hyd. | Hyd. | 2400-6700 | 08-606-44 | 287QS9 | 289 OB | 301 OB | 236 OB | 246 OB | .630 OB | .618 OB | 109.5 OB |
| | | | | | | 287 IB | 299 IB | 234 IB | 244 IB | .627 IB | .614 IB | 108.5 IB |
| HYDRAULIC ROLLER – Great in larger c.i. street to street/strip stroker small blocks w/ good heads. | Hyd. | Hyd. | 2900-7200 | 08-608-44 | 299QS10 | 301 OB | 313 OB | 248 OB | 258 OB | .637 OB | .621 OB | 110.5 OB |
| | | | | | | 299 IB | 311 IB | 246 IB | 256 IB | .637 IB | .621 IB | 109.5 IB |
| HYDRAULIC ROLLER – Recommended in highly modified 420+ c.i. stroker applications with higher compression. 3500+ Stall. | Hyd. | Hyd. | 3200-7500 | 08-610-44 | 311QS10 | 313 OB | 325 OB | 260 OB | 270 OB | .637 OB | .621 OB | 110.5 OB |
| | | | | | | 311 IB | 323 IB | 258 IB | 268 IB | .637 IB | .621 IB | 109.5 IB |

GM LT1 & LT4 350 C.I. 8 CYL. 1995-1997

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------|-----|---------|-----|------------|---------------|-----------------|
| | IN. | EX. | | | | IN. | EX. | @ .050" | IN. | EX. | W/ 1.5 ROCKER | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good in factory LT1, noticeable increase over stock cam. | Hyd. | Hyd. | 1000 to 5000 | 07-304-8⁴⁶ | 266HR-14 | 266 | 276 | 210 | 220 | .500 | .510 | 114° |
| HYDRAULIC ROLLER – For use in LT1, with custom tuning. | Hyd. | Hyd. | 1500 to 5500 | 07-305-8⁴⁶ | 276HR-14 | 276 | 290 | 220 | 230 | .510 | .510 | 114° |
| HYDRAULIC ROLLER – For use in LT1, with custom tuning, headers, gears, and 2200+ stall. Rough Idle. | Hyd. | Hyd. | 1800 to 5800 | 07-306-8⁴⁶ | 290HR-12 | 290 | 307 | 230 | 244 | .510 | .540 | 112° |
| HYDRAULIC ROLLER – Good in factory LT1, increased power and economy over stock. | Hyd. | Hyd. | 1000 to 5000 | 07-500-8⁴⁶ | 258HR-12 | 258 | 264 | 206 | 212 | .480 | .488 | 112° |
| HYDRAULIC ROLLER – Best for increased power in LT1 engines w/ minimal mods. Requires custom tuning. | Hyd. | Hyd. | 1200 to 5200 | 07-501-8⁴⁶ | 264HR-12 | 264 | 269 | 212 | 218 | .488 | .495 | 112° |
| HYDRAULIC ROLLER – Good for performance LT1. Requires custom tuning and upgraded exhaust. | Hyd. | Hyd. | 1500 to 5500 | 07-502-8⁴⁶ | 269HR-12 | 269 | 276 | 218 | 224 | .495 | .503 | 112° |
| HYDRAULIC ROLLER – Best cam for modified LT1, better exhaust & 2000+ converter. Requires custom tuning. | Hyd. | Hyd. | 1800 to 5800 | 07-503-8⁴⁶ | 276HR-12 | 276 | 281 | 224 | 230 | .503 | .510 | 112° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------|-----|---------|-----|------------|---------------|-----------------|
| | IN. | EX. | | | | IN. | EX. | @ .050" | IN. | EX. | W/ 1.6 ROCKER | |
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent torque and economy with noticeable horsepower gains. | Hyd. | Hyd. | 1000 to 5000 | 07-464-8⁴⁶ | 252XFI HR13 | 252 | 264 | 202 | 212 | .550 | .546 | 113° |
| HYDRAULIC ROLLER – Superb low end and mid-range with minimal modifications. | Hyd. | Hyd. | 1200 to 5200 | 07-465-8⁴⁶ | 260XFI HR13 | 260 | 270 | 210 | 218 | .560 | .555 | 113° |
| HYDRAULIC ROLLER – Good low end torque with exceptional mid-range. Needs upgraded exhaust and programmer or chip. | Hyd. | Hyd. | 1800 to 5800 | 07-466-8⁴⁶ | 268XFI HR13 | 268 | 276 | 218 | 224 | .570 | .565 | 113° |
| HYDRAULIC ROLLER – Strong mid-range and top end. Requires headers, gears, 2200+ stall, and modified computer. Strong Idle. | Hyd. | Hyd. | 2000 to 6000 | 07-467-8⁴⁶ | 280XFI HR13 | 280 | 288 | 230 | 236 | .576 | .570 | 113° |
| HYDRAULIC ROLLER – Good mid-range with excellent top end. Will require headers, gears, 2500+ stall and custom programmer. Rough Idle. | Hyd. | Hyd. | 2200 to 6200 | 07-468-8⁴⁶ | 292XFI HR13 | 292 | 300 | 242 | 248 | .584 | .579 | 113° |

² Requires machining on cylinder heads

¹¹ Lifters only, does not include lifter guides

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 305-350 C.I. 8 CYL. 1987-1998 (W/O.E. Hyd. Roller Cams) (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|------------|-------------|--------------------|---------------|-----------|-------------|-------------|-----------|---------|--------------|--------------|--|
| 4-PATTERN Small Base Circle (.900") O.E Hydraulic Roller Camshafts (W/ 1.6 ROCKERS) | | | | | | | | | | | | |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A | |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A | |
| 15850-16 | 7136 | 1618-16 | 7608-16 7940-16 | 26926-16 | 1777-16 | 648-16 | 518-16 | N/A | N/A | 412M 410M | N/A | |

GM LT1 & LT4 350 C.I. 8 CYL. 1995-1997

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES | |
|--|--------------------|--------------------|--------------------|----------------------|-------------------|-------------|-------------------------------|-----------|---------|--------------|--------------|--|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3207 ⁷⁹ | 1417-16 1617-16 | 7608-16 7940-16 | 26915-16 26918-16 | 787-16 1787-16 | 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A | |
| 850-16 ¹¹ 875-16 ¹¹ | 3207 ⁷⁹ | 1417-16 1617-16 | 7608-16 7940-16 | 26915-16 26918-16 | 787-16 1787-16 | 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A | |
| 850-16 ¹¹ 875-16 ¹¹ | 3207 ⁷⁹ | 1417-16 1617-16 | 7608-16 7940-16 | 26918-16 | 787-16 1787-16 | 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A | |
| 850-16 ¹¹ 875-16 ¹¹ | 3207 ⁷⁹ | 1417-16 1617-16 | 7608-16 7940-16 | 26915-16 26918-16 | 787-16 1787-16 | 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A | |
| 850-16 ¹¹ 875-16 ¹¹ | 3207 ⁷⁹ | 1417-16 1617-16 | 7608-16 7940-16 | 26915-16 26918-16 | 787-16 1787-16 | 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A | |
| 850-16 ¹¹ 875-16 ¹¹ | 3207 ⁷⁹ | 1417-16 1617-16 | 7608-16 7940-16 | 26918-16 | 787-16 1787-16 | 648-16 | 501-16 503-16 ² | N/A | N/A | 412M 410M | N/A | |

| K-KIT | CL-KIT | RP-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|--------------------------|--|--------------|--------------------|--------------------|--------------------|----------------------|-------------------|------------------|-------------------------------|
| XTREME FUEL INJECTION (XFI™) Hydraulic Roller Camshafts (WITH 1.6 ROCKERS) | | | | | | | | | | | |
| K07-464-8 ⁷⁸ | CL07-464-8 ⁷ | RPM1418-16 RPM1618-16 | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 3207 ⁷⁹ | 1418-16 1618-16 | 7608-16 7940-16 | 26918-16 | 787-16 1787-16 | 601-16 648-16 | 502-16 503-16 ² |
| K07-465-8 ⁷⁸ | CL07-465-8 ⁷ | RPM1418-16 RPM1618-16 | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 3207 ⁷⁹ | 1418-16 1618-16 | 7608-16 7940-16 | 26918-16 | 787-16 1787-16 | 601-16 648-16 | 502-16 503-16 ² |
| K07-466-8 ⁷⁸ | CL07-466-8 ⁷ | RPM1418-16 RPM1618-16 | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 3207 ⁷⁹ | 1418-16 1618-16 | 7608-16 7940-16 | 26918-16 | 787-16 1787-16 | 601-16 648-16 | 502-16 503-16 ² |
| K07-467-8 ⁷⁸ | CL07-467-8 ⁷ | RPM1418-16 RPM1618-16 | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 3207 ⁷⁹ | 1418-16 1618-16 | 7608-16 7940-16 | 26918-16 | 787-16 1787-16 | 601-16 648-16 | 502-16 503-16 ² |
| K07-468-8 ⁷⁸ | CL07-468-8 ⁷ | RPM1418-16 RPM1618-16 | 850-16 ¹¹ 875-16 ¹¹ | 412M 410M | 3207 ⁷⁹ | 1418-16 1618-16 | 7608-16 7940-16 | 26918-16 26925-16 | 787-16 1779-16 | 601-16 648-16 | 502-16 503-16 ² |

⁷⁸ K-Kits do not include timing sets
⁷⁹ For 1995 and later engines only

RED NUMBERS DENOTE PREMIUM OPTION

LS ENGINE CAR APPLICATIONS

| RPO | YEAR | APPLICATIONS | CORE | VARIABLE VALVE TIMING | ACTIVE FUEL MANAGEMENT/DISPLACEMENT ON DEMAND | LITER |
|-----|--------------|----------------------------------|------------------------|-----------------------|---|-------|
| LS1 | 1997-2004 | 1997-2004 Corvette | Three-Bolt 54 Prefix | NO | NO | 5.7 |
| | | 1998-2002 Camaro/Trans Am | | | | |
| | | 2004 Pontiac GTO | | | | |
| LS6 | 2001-2005 | 2001-2004 Corvette Z06 | Three-Bolt 54 Prefix | NO | NO | 5.7 |
| | | 2004-2005 Cadillac CTS V | | | | |
| LS2 | 2005-2009 | 2005-2007 Buick Rainier | Three-Bolt 54 Prefix | NO | NO | 6.0 |
| | | 2005-2006 Pontiac GTO | | | | |
| | | 2006-2007 Cadillac CTS V | | | | |
| | | 2005-2007 Corvette | | | | |
| | | 2005-2006 SSR | | | | |
| | | 2006-2009 Trailblazer SS | | | | |
| LS4 | 2006-2009 | 2006-2009 Impala SS | Single-Bolt 646 Prefix | NO | YES | 5.3 |
| | | 2006-2007 Monte Carlo SS | | | | |
| | | 2005-2008 Pontiac Grand Prix GXP | | | | |
| | | 2008-2009 Buick LaCrosse | | | | |
| LS7 | 2006-2015 | 2006-2013 Corvette Z06 | Three-Bolt 54 Prefix | NO | NO | 7.0 |
| | | 2014-2015 Camaro Z28 | | | | |
| L98 | 2007-2008 | 2007-2008 Lumina SS | Single-Bolt 146 Prefix | NO | NO | 6.0 |
| | | 2007-2008 Caprice SS | | | | |
| L76 | 2007-2009 | 2008-2009 Pontiac G8 GT | Single-Bolt 646 Prefix | NO | YES | 6.0 |
| LSA | 2008-2014 | 2009-2013 Cadillac CTS V | Single-Bolt 146 Prefix | NO | NO | 6.2 |
| | | 2012-2014 Camaro ZL1 | | | | |
| LS3 | 2008-2015 | 2008-2013 Corvette | Single-Bolt 146 Prefix | NO | NO | 6.2 |
| | | 2009 Pontiac G8 GXP | | | | |
| | | 2010-2015 Camaro SS (Manual) | | | | |
| LS9 | 2009-2013 | 2009-2013 Corvette ZR1 | Three-Bolt 54 Prefix | NO | NO | 6.2 |
| L99 | 2010-2015 | 2010-2015 Camaro SS (Auto) | Single-Bolt 689 Prefix | YES | YES | 6.2 |
| L77 | 2011-2013 | 2011-2013 Caprice Police Vehicle | Single Bolt 646 Prefix | NO | YES | 6.0 |
| LT1 | 2014-Present | 2014-Present Corvette C7 | Single-Bolt 624 Prefix | YES | YES | 6.2 |
| | | 2016 Camaro | | | | |
| LT4 | 2015-Present | 2015-Present Corvette Z06 | Single-Bolt 624 Prefix | YES | YES | 6.2 |
| | | 2016-Present Cadillac CTS V | | | | |
| | | 2017 Camaro ZL1 | | | | |

GM LS ACCESSORIES

TIMING SETS

See page 322 for details

FRONT COVERS

See page 325 for details


LS VALVE SPRING KITS

See page 290 for details

LS ENGINE TRUCK APPLICATIONS

| RPO | YEAR | APPLICATIONS | CORE | VARIABLE VALVE TIMING | ACTIVE FUEL MANAGEMENT/ DISPLACEMENT/ ON DEMAND | LITER |
|---------------------------------------|--------------|---------------------------------------|------------------------|-----------------------|---|-------|
| LR4 | 1999-2007 | 2000-2006 Tahoe/Yukon | Three-Bolt 54 Prefix | NO | NO | 4.8 |
| | | 1999-2006 Silverado/Sierra | | | | |
| | | 2003-2006 Express 2500-3500 | | | | |
| | | 2003-2006 Savana 2500-3500 | | | | |
| LM7 | 1999-2007 | 1999-2006 Tahoe/Yukon | Three-Bolt 54 Prefix | NO | NO | 5.3 |
| | | 1999-2006 Suburban/Yukon XL | | | | |
| | | 1999-2007 Silverado/Sierra | | | | |
| | | 2002-2005 Escalade 2WD | | | | |
| | | 2002-2006 Avalanche | | | | |
| 2003-2007 Express/Savana | | | | | | |
| LQ4 | 1999-2007 | 1999-2007 Express/Savana | Three-Bolt 54 Prefix | NO | NO | 6.0 |
| | | 1999-2001 Silverado/Sierra 2500/3500 | | | | |
| | | 1999-2001 Suburban/Yukon XL 2500 | | | | |
| L59 | 2002-2007 | 2003-2007 Hummer H2 | Three-Bolt 54 Prefix | NO | NO | 5.3 |
| | | 2002-2007 Silverado/Sierra | | | | |
| | | 2002-2006 Tahoe/Yukon | | | | |
| LQ9 | 2002-2007 | 2002-2006 Suburban/Yukon XL | Three-Bolt 54 Prefix | NO | NO | 6.0 |
| | | 2002-2006 Cadillac Escalade | | | | |
| | | 2002-2006 Cadillac Escalade EXT | | | | |
| | | 2003-2006 Cadillac Escalade ESV | | | | |
| | | 2003-2007 Silverado SS | | | | |
| | | 2004-2005 Silverado/Sierra HD Edition | | | | |
| 2006-2007 Silverado/Sierra MAX Option | | | | | | |
| LM4 | 2003-2004 | 2003-2004 Trailblazer EXT | Three-Bolt 54 Prefix | NO | NO | 5.3 |
| | | 2004 Envoy XL | | | | |
| | | 2003-2004 SSR | | | | |
| | | 2004 Buick Rainier | | | | |
| L33 | 2005-2007 | 2005-2007 Silverado/Sierra 4WD | Three-Bolt 54 Prefix | NO | NO | 5.3 |
| LH6 | 2005-2009 | 2005-2009 Envoy XUV | Single-Bolt 646 Prefix | NO | YES | 5.3 |
| | | 2005-2006 Envoy XL | | | | |
| | | 2005-2009 Envoy Denali | | | | |
| | | 2005-2009 Trailblazer | | | | |
| | | 2007 Silverado 1500 | | | | |
| | | 2005-2007 Buick Rainier | | | | |
| 2007-2009 Sierra 1500 | | | | | | |
| LY6 | 2007-Present | 2007-Present Silverado/Sierra HD | Single-Bolt 146 Prefix | NO | NO | 6.0 |
| | | 2007-2013 Suburban, Yukon XL 2500 | | | | |
| | | 2007 Express/Savana | | | | |
| LY2 | 2007-2009 | 2007-2009 Silverado/Sierra | Single-Bolt 146 Prefix | NO | NO | 4.8 |
| | | 2007-2009 Tahoe/Yukon | | | | |
| | | 2008-2009 Express 2500-3500 | | | | |
| | | 2008-2009 Savana 2500-3500 | | | | |
| L76 | 2007-2009 | 2007-2009 Silverado/Sierra | Single-Bolt 646 Prefix | NO | YES | 6.0 |
| | | 2007-2009 Suburban/Yukon XL | | | | |
| | | 2007-2009 Avalanche | | | | |

LS ENGINE TRUCK APPLICATIONS (CONTINUED)

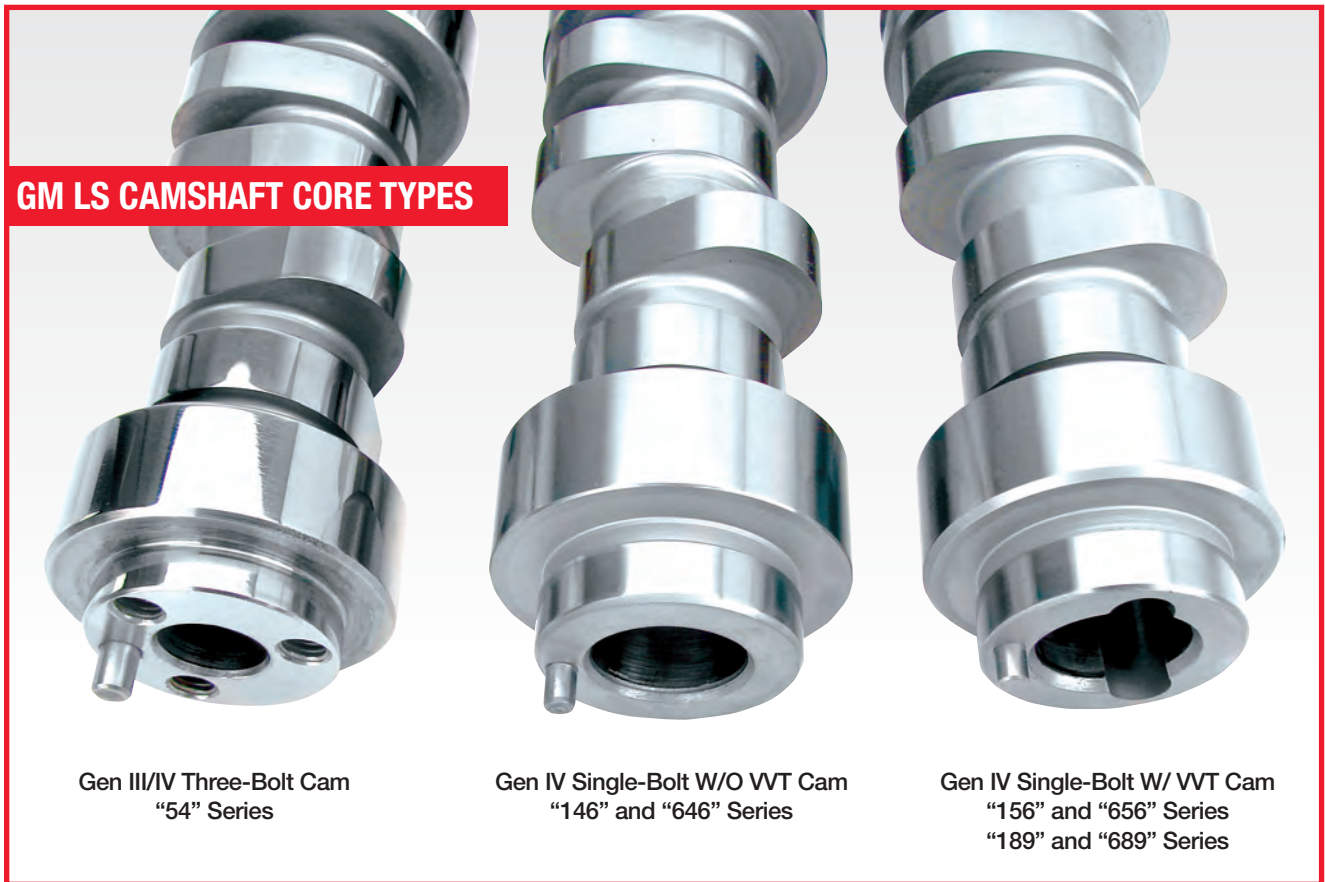
| RPO | YEAR | APPLICATIONS | CORE | VARIABLE VALVE TIMING | ACTIVE FUEL MANAGEMENT/DISPLACEMENT ON DEMAND | LITER |
|-----|--------------|--|--------------------------------------|-----------------------|---|-------|
| L92 | 2007-2013 | 2007-2013 Cadillac Escalade | Single-Bolt 656 & 689 Prefixes | YES | YES | 6.2 |
| | | 2007-2008 Yukon/Yukon XL Denali | | | | |
| | | 2008-2009 Hummer H2 | | | | |
| | | 2009 Tahoe LTZ | | | | |
| | | 2009-2013 Silverado/Sierra 1500 | | | | |
| LY5 | 2007-2014 | 2007-2013 Sierra Denali | Single-Bolt 646 Prefix | NO | YES | 5.3 |
| | | 2007-2014 Avalanche | | | | |
| | | 2007-2014 Silverado/Sierra | | | | |
| | | 2007-2014 Tahoe/Yukon | | | | |
| LMG | 2007-2014 | 2007-2014 Suburban/Yukon XL | Single-Bolt 646 Prefix | NO | YES | 5.3 |
| | | 2007-2014 Avalanche | | | | |
| | | 2007-2013 Tahoe/Yukon | | | | |
| LC9 | 2007-2014 | 2007-2014 Suburban/Yukon XL | Single-Bolt 656 & 689 Prefixes | YES | YES | 5.3 |
| | | 2007-2013 Silverado/Sierra | | | | |
| | | 2007-2013 Avalanche | | | | |
| LFA | 2008-2009 | 2008-2009 Tahoe/Yukon Hybrid | Single-Bolt 646 Prefix | NO | YES | 6.0 |
| | | 2008-2009 Cadillac Escalade Hybrid | | | | |
| | | 2008-2009 Silverado/Sierra Hybrid | | | | |
| LH8 | 2008-2010 | 2008-2010 Hummer H3 | Single-Bolt 146 Prefix | NO | NO | 5.3 |
| | | 2009-2010 Colorado/Canyon | | | | |
| L20 | 2009-2014 | 2009-2014 Silverado/Sierra | Single Bolt 689 Prefix | YES | YES | 4.8 |
| | | 2009-2014 Express/Savana | | | | |
| L9H | 2009-2014 | 2009-2014 Cadillac Escalade | Single-Bolt 689 Prefix | YES | YES | 6.2 |
| | | 2009-2014 Tahoe LTZ/Yukon Denali | | | | |
| | | 2009-2014 Sierra Denali/SLT | | | | |
| | | 2009-2014 Silverado LTZ | | | | |
| | | 2009 Hummer H2 | | | | |
| L96 | 2009-2015 | 2010-2015 Silverado/Sierra HD | Single Bolt 189 Prefix | YES | NO | 6.0 |
| | | 2010-2015 Suburban, Yukon XL 2500 | | | | |
| | | 2010-2015 Express/Savana | | | | |
| LH9 | 2010-2013 | 2010-2013 Colorado/Canyon | Single Bolt 689 Prefix | YES | YES | 5.3 |
| LZ1 | 2010-2013 | 2010-2013 Tahoe/Yukon Hybrid | Single-Bolt 689 Prefix | YES | YES | 6.0 |
| | | 2010-2013 Cadillac Escalade Hybrid | | | | |
| | | 2010-2013 Silverado/Sierra Hybrid | | | | |
| LMF | 2010-2014 | 2010-2014 Express/Savana | Single Bolt 689 Prefix | YES | YES | 5.3 |
| L94 | 2010-2014 | 2010-2014 Cadillac Escalade | Single Bolt 689 Prefix | YES | YES | 6.2 |
| | | 2010-2014 Yukon Denali | | | | |
| LC8 | 2011-Present | 2011 Present Silverado/Sierra HD-CNG | Single Bolt 189 Prefix | YES | NO | 6.0 |
| | | 2011-Present Suburban, Yukon XL 2500-CNG | | | | |
| | | 2011-Present Express/Savana-CNG | | | | |
| L83 | 2014-Present | 2014-Present Silverado/Sierra | Single Bolt 624 Prefix | YES | YES | 5.3 |
| | | 2014-Present Tahoe/Yukon | | | | |
| | | 2014-Present Suburban/Yukon XL | | | | |
| L86 | 2014-Present | 2014-Present Silverado/Sierra | Single Bolt 624 Prefix | YES | YES | 6.2 |
| | | 2014-Present Tahoe/Yukon | | | | |
| | | 2014-Present Suburban/Yukon XL | | | | |



Three-Bolt Cam
No or 1-Pole Reluctor
"54" Series

Three-Bolt Cam
4-Pole Reluctor
"54" Series

Single-Bolt Cam
4-Pole Reluctor
"146" and "646" Series



Gen III/IV Three-Bolt Cam
"54" Series

Gen IV Single-Bolt W/O VVT Cam
"146" and "646" Series

Gen IV Single-Bolt W/ VVT Cam
"156" and "656" Series
"189" and "689" Series

GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-----------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| FSL™ Hydraulic Roller Camshaft (50-State Legal CARB EO #D-279-11) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – First 50-state legal grind for the GM Gen III LS1/LS3 three-bolt family of engines. Drop-in with stock components and factory calibrated computer can produce 30 to 90 HP increase in peak power. | Hyd. | Hyd. | 1800 to 6500 | 54-103-11 | LS3LX270 | 270 | 270 | 210 | 218 | .570 | .541 | 118° |
| XFI™ RPM Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Very strong torque, good mileage. Noticeable increase over stock cam. | Hyd. | Hyd. | 800 to 5800 | 54-408-11⁷ | XR259HR | 259 | 265 | 206 | 212 | .515 | .522 | 112° |
| HYDRAULIC ROLLER – Good torque and very strong mid-range power. Good performance cam. | Hyd. | Hyd. | 1200 to 6000 | 54-412-11⁷ | XR265HR | 265 | 271 | 212 | 218 | .522 | .529 | 114° |
| HYDRAULIC ROLLER – Great mid-range with superior top end power. Needs programmer. | Hyd. | Hyd. | 1300 to 6300 | 54-414-11⁷ | XR269HR | 269 | 273 | 216 | 220 | .525 | .532 | 114° |
| HYDRAULIC ROLLER – Street/strip camshaft for high RPM power. Likes higher rocker ratios. Must have programmer. | Hyd. | Hyd. | 1600 to 6600 | 54-416-11⁷ | XR273HR | 273 | 277 | 220 | 224 | .530 | .534 | 112° |
| HYDRAULIC ROLLER – Street/strip camshaft designed for use with FAST™ LSX™ intake. Requires programmer. | Hyd. | Hyd. | 2000 to 6800 | 54-418-11⁷ | XR277HR | 277 | 281 | 224 | 228 | .534 | .537 | 112° |
| XFI™ RPM HI-LIFT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great street cam with very wide power range, good drivability and excellent response. | Hyd. | Hyd. | 1400 to 6700 | 54-424-11⁷ | XR265HR | 265 | 271 | 212 | 218 | .558 | .563 | 115° |
| HYDRAULIC ROLLER – Great street/strip camshaft for mid-range and high RPM power. Must have programmer. | Hyd. | Hyd. | 1800 to 6800 | 54-426-11⁷ | XR275HR | 275 | 277 | 222 | 224 | .566 | .568 | 112° |
| HYDRAULIC ROLLER – High RPM street/strip camshaft for use with FAST™ LSX™ intake. Requires programmer. | Hyd. | Hyd. | 2200 to 7200 | 54-428-11⁷ | XR281HR | 281 | 283 | 228 | 230 | .571 | .573 | 112° |
| XFI™ XE-R Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – High RPM street/strip with XE-R lobe designs. Requires custom tuning. | Hyd. | Hyd. | 2000 to 7000 | 54-444-11⁷ | XER273HR | 273 | 279 | 224 | 230 | .581 | .588 | 114° |
| HYDRAULIC ROLLER – Xtreme Energy XE-R design for standard displacement LS6 and LS1. | Hyd. | Hyd. | 2400 to 7200 | 54-446-11⁷ | XER281HR | 281 | 283 | 232 | 234 | .595 | .598 | 112° |
| HYDRAULIC ROLLER – Xtreme Energy XE-R design for large cubic inch LS6 and LS1. | Hyd. | Hyd. | 2800 to 7200 | 54-448-11⁷ | XER287HR | 287 | 289 | 238 | 240 | .605 | .609 | 112° |
| XFI™ XTREME TRUCK Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 4.8L/5.3L Chevrolet/GMC truck. Significant gains in mid and upper RPM range. Works best with programmer. | Hyd. | Hyd. | 800 to 5000 | 54-450-11⁷ | G3 XFI 260 HR15 | 260 | 266 | 206 | 212 | .513 | .520 | 115° |
| HYDRAULIC ROLLER – 6.0L Chevrolet/GMC truck. Significant gains in mid and upper RPM range. Works best with programmer. | Hyd. | Hyd. | 800 to 5200 | 54-452-11⁷ | G3 XFI 266 HR15 | 266 | 270 | 212 | 216 | .520 | .524 | 115° |
| HYDRAULIC ROLLER – 5.3L/6.0L Chevrolet/GMC truck. Significant gains in mid and upper RPM range. Exhaust upgrade needed for best performance. Needs programmer. | Hyd. | Hyd. | 1000 to 5700 | 54-451-11⁷ | G3 XFI 261 HR15 | 261 | 265 | 208 | 212 | .554 | .558 | 115° |

TECH TIP

It is NOT recommended to use synthetic oil for LS engine break-in.

⁷ Stock springs cannot be used
¹¹ Lifters only, does not include lifter guides

¹⁰⁹ 3-bolt w/ 1-pole retractor
¹¹⁰ 3-bolt w/ 3-pole retractor

GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|---|--|-------------------------------|---------------------------------|--------------------|---|----------------------------|----------------------------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| FSL™ Hydraulic Roller Camshafts (50-State Legal CARB EO #D-279-11) | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| XFI™ RPM Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| XFI™ RPM HI-LIFT Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| XFI™ XE-R Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | N/A | N/A | N/A | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | N/A | N/A | N/A | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26925TS-KIT | 26925TI-KIT |
| XFI™ XTREME TRUCK Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |

RED NUMBERS DENOTE PREMIUM OPTION



GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|--------------|------------|-----|---------|-----|---------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED | | @ .050" | | W/ 1.7 ROCKER | | |
| | | | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Optimized fuel mileage with good torque and horsepower. Needs programmer. | Hyd. | Hyd. | 800 to 5800 | 54-525-11⁷ | TPX 246HR-17 | 246 | 258 | 194 | 206 | .500 | .493 | 117° |
| HYDRAULIC ROLLER – Exceptional torque with good hp and moderate fuel economy. Needs programmer. | Hyd. | Hyd. | 1000 to 6000 | 54-530-11⁷ | TPX 254HR-16 | 254 | 264 | 202 | 212 | .507 | .500 | 116° |
| HYDRAULIC ROLLER – Optimized hp with good torque & average fuel economy. Programmer required. | Hyd. | Hyd. | 1200 to 6200 | 54-535-11⁷ | TPX 262HR-15 | 262 | 270 | 210 | 218 | .513 | .507 | 115° |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 2000 to 6400 | 54-600-11⁷ | 275THR9 | 275 | 295 | 219 | 233 | .553 | .536 | 109° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/ strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2300 to 6600 | 54-601-11⁷ | 283THR9 | 283 | 303 | 227 | 241 | .563 | .546 | 109° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2600 to 6800 | 54-602-11⁷ | 291THR9 | 291 | 311 | 235 | 249 | .573 | .558 | 109° |
| LS_R™ CATHEDRAL PORT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| Small Displacement or Max Torque, 4.8L-5.7L | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Very strong torque and excellent response. Works best in heavy vehicles, low RPM applications. | Hyd. | Hyd. | 1300 to 6500 | 54-455-11⁷ | 265Lr HR12 | 265 | 273 | 215 | 223 | .604 | .610 | 112° |
| HYDRAULIC ROLLER – Great torque w/ a very broad power band. Great for street performance & drivability. | Hyd. | Hyd. | 1500 to 6700 | 54-456-11⁷ | 269Lr HR12 | 269 | 277 | 219 | 227 | .607 | .614 | 112° |
| HYDRAULIC ROLLER – Steady power throughout broad range. Needs aftermarket airflow improvements on inlet and exhaust. | Hyd. | Hyd. | 1700 to 6800 | 54-457-11⁷ | 273Lr HR12 | 273 | 281 | 223 | 231 | .610 | .617 | 112° |
| HYDRAULIC ROLLER – Good street/strip camshaft with wide range. Must have substantial airflow upgrades, inlet and exhaust. | Hyd. | Hyd. | 1900 to 7000 | 54-458-11⁷ | 277Lr HR13 | 277 | 285 | 227 | 235 | .614 | .621 | 113° |
| LS_R™ CATHEDRAL PORT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| All Out Power for 5.7L-6.2L | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Very wide power range and excellent mid-range torque for LS engines with cathedral port cylinder heads. | Hyd. | Hyd. | 2000 to 7000 | 54-459-11⁷ | 281LR HR13 | 281 | 289 | 231 | 239 | .617 | .624 | 113° |
| HYDRAULIC ROLLER – Very strong from mid-range to high end torque and horsepower for LS engines with cathedral port cylinder heads. | Hyd. | Hyd. | 2200 to 7200 | 54-460-11⁷ | 285LR HR13 | 285 | 293 | 235 | 243 | .621 | .624 | 113° |
| HYDRAULIC ROLLER – Broad top end power range for high RPM, race only LS engines with aftermarket cathedral port cylinder heads and higher compression. | Hyd. | Hyd. | 2400 to 7200 | 54-461-11⁷ | 289LR HR14 | 289 | 297 | 239 | 247 | .624 | .624 | 114° |
| HYDRAULIC ROLLER – Excellent top end and high RPM power for race style LS engines with aftermarket cathedral port cylinder heads. | Hyd. | Hyd. | 2600 to 7200 | 54-462-11⁷ | 293LR HR14 | 293 | 301 | 243 | 251 | .624 | .624 | 114° |

⁷ Stock springs cannot be used

¹¹ Lifters only, does not include lifter guides

¹⁰⁹ 3-bolt w/ 1-pole retractor

¹¹⁰ 3-bolt w/ 3-pole retractor

GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | | |
|--|---|-------------------------------|------------------------------------|--------------------|---|----------------------------|----------------------------|---|-------------|--|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM | |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26915CS-KIT 26918CS-KIT | 26915TS-KIT 26918TS-KIT | 26915TI-KIT 26918TI-KIT | 26925TS-KIT | 26925TI-KIT | |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT | |
| 850-16 ¹¹ 875-16 ¹¹ | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT | |
| LS_R™ CATHEDRAL PORT Hydraulic Roller Camshafts | | | | | | | | | | |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| LS_R™ CATHEDRAL PORT Hydraulic Roller Camshafts | | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT | |

RED NUMBERS DENOTE PREMIUM OPTION

GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| LS[™] CATHEDRAL PORT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| For Large Displacement Only, 6.2L-7.4L | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 400+c.i., high RPM applications with major modifications and cathedral port cylinder heads. | Hyd. | Hyd. | 2400 to 7000 | 54-463-11⁷ | 297LRx HR14 | 297 | 305 | 247 | 255 | .624 | .624 | 114° |
| HYDRAULIC ROLLER – 420+c.i., high compression, high RPM, cathedral CNC-ported heads in race type applications. | Hyd. | Hyd. | 2600 to 7000 | 54-464-11⁷ | 301LRx HR15 | 301 | 309 | 251 | 259 | .624 | .624 | 115° |
| HYDRAULIC ROLLER – 440+c.i., purpose built applications focusing on power above 6000 RPM with cathedral port heads. | Hyd. | Hyd. | 2800 to 7200 | 54-465-11⁷ | 305LRx HR15 | 305 | 313 | 255 | 263 | .624 | .624 | 115° |
| HYDRAULIC ROLLER – All out power for extreme displacement race application engines with cathedral port cylinder heads. | Hyd. | Hyd. | 3000 to 7200 | 54-466-11⁷ | 309LRx HR15 | 309 | 317 | 259 | 267 | .624 | .624 | 115° |
| LS[™] RECTANGULAR PORT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| All Out Power for 5.7L-6.2L | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent torque with a very broad power band. Great for street performance & drivability. | Hyd. | Hyd. | 1500 to 6700 | 54-453-11 | 269LRR HR13 | 269 | 285 | 219 | 235 | .607 | .621 | 113° |
| HYDRAULIC ROLLER – Good street/strip camshaft with very wide range. | Hyd. | Hyd. | 1900 to 7000 | 54-454-11 | 277LRR HR13 | 277 | 293 | 227 | 243 | .614 | .624 | 113° |
| HYDRAULIC ROLLER – Very wide power range and excellent mid-range torque for LS engines with rectangular port cylinder heads. | Hyd. | Hyd. | 2000 to 7000 | 54-469-11⁷ | 281LRR HR13 | 281 | 297 | 231 | 247 | .617 | .624 | 113° |
| HYDRAULIC ROLLER – Very strong from mid-range to high end torque and horsepower for LS engines with rectangular port cylinder heads. | Hyd. | Hyd. | 2200 to 7200 | 54-470-11⁷ | 285LRR HR13 | 285 | 301 | 235 | 251 | .621 | .624 | 113° |
| HYDRAULIC ROLLER – Broad top end power range for high RPM, race only LS engines with aftermarket rectangular port heads and higher compression. | Hyd. | Hyd. | 2400 to 7200 | 54-471-11⁷ | 289LRR HR14 | 289 | 305 | 239 | 255 | .624 | .624 | 114° |
| HYDRAULIC ROLLER – Excellent top end and high RPM power for race style LS engines with aftermarket rectangular port cylinder heads. | Hyd. | Hyd. | 2600 to 7200 | 54-472-11⁷ | 293LRR HR14 | 293 | 309 | 243 | 259 | .624 | .624 | 114° |
| LS[™] RECTANGULAR PORT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| For Large Displacement Only, 6.2L-7.4L | | | | | | | | | | | | |
| HYDRAULIC ROLLER – 400+c.i., high RPM applications with major modifications and rectangular port cylinder heads. | Hyd. | Hyd. | 2400 to 7000 | 54-473-11⁷ | 297LRR HR14 | 297 | 313 | 247 | 263 | .624 | .624 | 114° |
| HYDRAULIC ROLLER – 420+c.i., high compression, high RPM, rectangular CNC-ported heads in race type applications. | Hyd. | Hyd. | 2600 to 7000 | 54-474-11⁷ | 301LRR HR15 | 301 | 317 | 251 | 267 | .624 | .624 | 115° |
| HYDRAULIC ROLLER – 440+c.i., purpose built applications focusing on power above 6000 RPM with rectangular port heads. | Hyd. | Hyd. | 2800 to 7200 | 54-475-11⁷ | 305LRR HR15 | 305 | 321 | 255 | 271 | .624 | .624 | 115° |
| HYDRAULIC ROLLER – All out power for extreme displacement race application engines with rectangular port cylinder heads. | Hyd. | Hyd. | 3000 to 7200 | 54-476-11⁷ | 309LRR HR15 | 309 | 325 | 259 | 275 | .624 | .624 | 115° |

⁷ Stock springs cannot be used¹¹ Lifters only, does not include lifter guides¹⁰⁹ 3-bolt w/ 1-pole reluctor¹¹⁰ 3-bolt w/ 3-pole reluctor

GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|--|--|-------------------------------|---------------------------------|--------------------|---|------------|----------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| LS_R™ CATHEDRAL PORT Hydraulic Roller Camshafts | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| LS_R™ RECTANGULAR PORT Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 850-16 ¹¹ 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| LS_R™ RECTANGULAR PORT Hydraulic Roller Camshafts | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ⁰⁹ 3172KT ¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |

RED NUMBERS DENOTE PREMIUM OPTION



GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| LS_R™ CENTRIFUGAL BLOWER Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong mid-range power when used with a centrifugal blower. | Hyd. | Hyd. | 2200 to 7000 | 54-477-11⁷ | 277LCB HR14 | 277 | 293 | 227 | 243 | .614 | .624 | 114° |
| HYDRAULIC ROLLER – Good high RPM power when used with a centrifugal blower. | Hyd. | Hyd. | 2500 to 7200 | 54-478-11⁷ | 285LCB HR15 | 285 | 301 | 235 | 251 | .621 | .624 | 115° |
| HYDRAULIC ROLLER – Best cam for high RPM power in race application when using a centrifugal blower. | Hyd. | Hyd. | 3000 to 7200 | 54-479-11⁷ | 293LCB HR16 | 293 | 309 | 243 | 259 | .624 | .624 | 116° |
| LS_R™ ROOTS BLOWER Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best in street/strip LS applications equipped with a Roots type supercharger. | Hyd. | Hyd. | 2400 to 7000 | 54-467-11⁷ | 289LRB HR14 | 289 | 293 | 239 | 243 | .624 | .624 | 114° |
| HYDRAULIC ROLLER – Designed for race applications with a Roots blower. Very strong high RPM power. | Hyd. | Hyd. | 2700 to 7200 | 54-468-11⁷ | 297LRB HR14 | 297 | 301 | 247 | 251 | .624 | .624 | 114° |
| LS_R™ TURBO Hydraulic Roller Camshafts (Remote Mount) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good responsiveness and excellent power when used with a remote mount turbo system. | Hyd. | Hyd. | 2200 to 7000 | 54-480-11⁷ | 277LTB HR15 | 277 | 273 | 227 | 223 | .614 | .610 | 115° |
| HYDRAULIC ROLLER – High RPM street/strip applications using a remote mount turbo system. | Hyd. | Hyd. | 2700 to 7200 | 54-481-11⁷ | 285LTB HR15 | 285 | 281 | 235 | 231 | .621 | .617 | 115° |
| XFI™ SOLID ROLLER Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – High performance street, excellent torque and mid-range power. Programmer and valve spring upgrade required. | .016 | .018 | 1800 to 6400 | 54-500-11⁷ | XF1270R113 | 270 | 277 | 235 | 240 | .646 | .641 | 113° |
| MECHANICAL ROLLER – Street/strip, superb mid and upper RPM power. Intake upgrade recommended. Programmer and valve spring upgrade required. | .016 | .018 | 2100 to 6700 | 54-501-11⁷ | XF1278R113 | 278 | 285 | 243 | 248 | .653 | .648 | 113° |
| MECHANICAL ROLLER – High RPM street/strip camshaft for large c.i. Gen III applications. Intake upgrade strongly recommended. Programmer and valve spring upgrade required. | .016 | .018 | 2400 to 7000 | 54-502-11⁷ | XF1286R113 | 286 | 293 | 251 | 256 | .660 | .655 | 113° |

GM LS2/LS3 GEN IV SINGLE-BOLT W/O VVT & AFM 8 CYL. 2007-2015

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| FSL™ Hydraulic Roller Camshafts (50-State Legal CARB EO #D-279-11) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – First 50-state legal grind for the single-bolt LS2/LS3/LY2 engine family w/o VVT or AFM. Works with stock components and factory calibrated computer can produce 30 to 90 HP increase in peak power. | Hyd. | Hyd. | 1800 to 6500 | 146-103-11 | LS3LX270 | 270 | 270 | 210 | 218 | .570 | .541 | 118° |
| XFI™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great street/strip camshaft for mid-range & high RPM power. Must have programmer. | Hyd. | Hyd. | 1800 to 6800 | 146-426-11⁷ | XR275HR13 | 275 | 287 | 222 | 234 | .566 | .576 | 113° |
| HYDRAULIC ROLLER – High RPM street/strip cam for use with FAST™ intake. Requires programmer. | Hyd. | Hyd. | 2200 to 7200 | 146-428-11⁷ | XR281HR13 | 281 | 293 | 228 | 240 | .571 | .590 | 113° |

⁷ Stock springs cannot be used

¹¹ Lifters only, does not include lifter guides

¹⁰⁹ 3-bolt w/ 1-pole retractor

¹¹⁰ 3-bolt w/ 3-pole retractor

GM LS GEN III/IV THREE-BOLT 8 CYL. 1997-2015 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|--|--|-------------------------------|---------------------------------|--------------------|---|------------|----------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| LS_R™ CENTRIFUGAL BLOWER Hydraulic Roller Camshafts | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| LS_R™ ROOTS BLOWER Hydraulic Roller Camshafts | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| LS_R™ TURBO Hydraulic Roller Camshafts (Remote Mount) | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|--|--|-------------------------------|---------------------------------|--------------------|---|------------|----------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| XFI™ SOLID ROLLER Mechanical Roller Camshafts | | | | | | | | | |
| 8956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 8956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 8956-16 | 3158KT ¹⁰⁹ 3172KT ¹¹⁰ | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |

GM LS2/LS3 GEN IV SINGLE-BOLT W/O VVT & AFM 8 CYL. 2007-2015

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|---|------------|-------------------------------|---------------------------------|--------------------|---|-------------|-------------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| FSL™ Hydraulic Roller Camshafts (50-State Legal CARB EO #D-279-11) | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918CS-KIT | 26918CS-KIT | 26925TS-KIT | 26925TI-KIT |
| XFI™ Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918CS-KIT | 26918CS-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918CS-KIT | 26918CS-KIT | 26925TS-KIT | 26925TI-KIT |

RED NUMBERS DENOTE PREMIUM OPTION



GM LS2/LS3 GEN IV SINGLE-BOLT W/O VVT & AFM 8 CYL. 2007-2015 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| LS_R™ TURBO Hydraulic Roller Camshafts (Remote Mount) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good responsiveness & excellent power when used w/ a remote mount turbo system. | Hyd. | Hyd. | 2200 to 7000 | 146-480-11 | 277LTB HR15 | 277 | 273 | 227 | 223 | .614 | .610 | 115° |
| HYDRAULIC ROLLER – High RPM street/strip applications using a remote mount turbo system. | Hyd. | Hyd. | 2700 to 7200 | 146-481-11 | 285LTB HR15 | 285 | 281 | 235 | 231 | .621 | .617 | 115° |
| LS_R™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent torque w/ a very broad power band. Great for street performance & drivability. | Hyd. | Hyd. | 1500 to 6700 | 146-456-11⁷ | 269LrR HR13 | 269 | 285 | 219 | 235 | .607 | .621 | 113° |
| HYDRAULIC ROLLER – Good street/strip camshaft with wide range. | Hyd. | Hyd. | 1900 to 7000 | 146-458-11⁷ | 277LrR HR13 | 277 | 293 | 227 | 243 | .614 | .624 | 113° |
| HYDRAULIC ROLLER – Very strong from mid-range to high end torque and hp for single-bolt LS3. | Hyd. | Hyd. | 2200 to 7200 | 146-460-11⁷ | 285LrR HR13 | 285 | 301 | 235 | 251 | .621 | .624 | 113° |
| HYDRAULIC ROLLER – Broad top end power range for high RPM race only, single-bolt LS3 applications. | Hyd. | Hyd. | 2400 to 7200 | 146-461-11⁷ | 289LrR HR14 | 289 | 305 | 239 | 255 | .624 | .624 | 114° |
| HYDRAULIC ROLLER – Excellent top end and high RPM power for race applications using the single-bolt LS3. | Hyd. | Hyd. | 2600 to 7200 | 146-462-11⁷ | 293LrR HR14 | 293 | 309 | 243 | 259 | .624 | .624 | 114° |

GM LS2/LS3 GEN IV SINGLE-BOLT W/ AFM, W/O VVT 8 CYL. 2005-2014

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-------------------|-------------|----------------|-------|-------------|-------|-------------------|--------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great all around torque for trucks and other heavy applications; across the board improvements power over stock AFM cams. | Hyd. | Hyd. | 1600 to 6300 | 646-431-13 | 262AFM15 | 275 D | 286 D | 212 D | 224 D | .500 D | .500 D | 115° |
| | | | | | | 262 N | 274 N | 210 N | 222 N | .500 N | .500 N | 115° |
| HYDRAULIC ROLLER – Excellent performance gains over the widest possible range in modified applications like a G8 with manifold and headers. | Hyd. | Hyd. | 1900 to 6500 | 646-432-13 | 266AFM16 | 278 D | 290 D | 216 D | 228 D | .500 D | .500 D | 116° |
| | | | | | | 266 N | 278 N | 214 N | 226 N | .500 N | .500 N | 116° |
| HYDRAULIC ROLLER – Outstanding top end power in modified AFM engines, requires higher stall, gears, headers, ect for best performance. | Hyd. | Hyd. | 2100 to 6700 | 646-433-13 | 270AFM17 | 282 D | 294 D | 220 D | 232 D | .500 D | .500 D | 117° |
| | | | | | | 270 N | 282 N | 218 N | 230 N | .500 N | .500 N | 117° |

GM LS GEN IV SINGLE-BOLT W/ VVT, W/O AFM (12585994) 8 CYL. 2007-2008

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| XFI™ RPM HI-LIFT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent responsiveness and low end torque with good power gains. | Hyd. | Hyd. | 1300 to 6500 | 156-400-13 | 263PHR14 | 263 | 277 | 210 | 224 | .556 | .568 | 114° |
| HYDRAULIC ROLLER – Substantial power and torque gains across the board. | Hyd. | Hyd. | 1600 to 6700 | 156-401-13 | 267PHR14 | 267 | 281 | 214 | 228 | .559 | .571 | 114° |
| HYDRAULIC ROLLER – Extremely strong from 4500 past 6700 RPM. Noticeable idle. | Hyd. | Hyd. | 1800 to 6900 | 156-402-13 | 271PHR14 | 271 | 285 | 218 | 232 | .563 | .575 | 114° |
| HYDRAULIC ROLLER – Best choice for maximum power in aftermarket/CNC head applications. | Hyd. | Hyd. | 2000 to 7100 | 156-403-13 | 275PHR14 | 275 | 289 | 222 | 236 | .566 | .578 | 114° |

⁷ Stock springs cannot be used

¹¹ Lifters only, does not include lifter guides

GM LS2/LS3 GEN IV SINGLE-BOLT W/O VVT & AFM 8 CYL. 2007-2015 (CONTINUED)

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|--|------------|-------------------------------|---------------------------------|--------------------|---|------------|----------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| LS_R™ TURBO Hydraulic Roller Camshafts (Remote Mount) | | | | | | | | | |
| 15850-16 ¹¹ 15956-16 | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| LS_R™ Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 ¹¹ 875-16 ¹¹ | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 850-16 ¹¹ 875-16 ¹¹ | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 15850-16 ¹¹ 15956-16 | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |

GM LS2/LS3 GEN IV SINGLE-BOLT W/ AFM, W/O VVT 8 CYL. 2005-2014

| LIFTERS | TIMING SET | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|--|------------|-------------------------------|---------------------------------|--------------------|---|-------------|-------------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | |
| N/A | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| N/A | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| N/A | 7107 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |

GM LS GEN IV SINGLE-BOLT W/ VVT, W/O AFM (12585994) 8 CYL. 2007-2008

| LIFTERS | PHASER LIMITER KIT | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|--|--------------------------|-------------------------------|---------------------------------|--------------------|---|-------------|-------------|---|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| XFI™ RPM HI-LIFT Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |

RED NUMBERS DENOTE PREMIUM OPTION



GM LS GEN IV SINGLE-BOLT W/ VVT (12585994) & AFM 8 CYL. 2007-2008

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-------------------|-------------|------------|-------|---------|-------|---------------|--------|-----------------|
| | IN. | EX. | | | | ADVERTISED | | @ .050" | | W/ 1.7 ROCKER | | |
| | | | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for vehicles requiring strong off idle torque, while improving power at all RPM. Great for trucks & heavy cars. | Hyd. | Hyd. | 1600 to 6500 | 656-421-13 | 266PHR14 | 278 D | 290 D | 216 D | 228 D | .500 D | .500 D | 114° |
| | | | | | | 266 N | 278 N | 214 N | 226 N | .500 N | .500 N | 114° |
| HYDRAULIC ROLLER – Very impressive mid-range to high RPM power improvements in modified applications with headers, intake and gears. | Hyd. | Hyd. | 1800 to 6700 | 656-422-13 | 270PHR15 | 282 D | 294 D | 220 D | 232 D | .500 D | .500 D | 115° |
| | | | | | | 270 N | 282 N | 218 N | 230 N | .500 N | .500 N | 115° |
| HYDRAULIC ROLLER – Outstanding top end power in significantly modified VVT & AFM applications. Best w/ stall, gears, headers & intake mods. | Hyd. | Hyd. | 2000 to 6900 | 656-423-13 | 274PHR16 | 286 D | 298 D | 224 D | 236 D | .500 D | .500 D | 116° |
| | | | | | | 274 N | 286 N | 222 N | 234 N | .500 N | .500 N | 116° |

GM LS GEN IV SINGLE-BOLT W/ VVT (12606358), W/ 0 AFM 8 CYL. 2008-2015

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------|-------------|------------|-----|---------|-----|---------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED | | @ .050" | | W/ 1.7 ROCKER | | |
| | | | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| XFI™ RPM HI-LIFT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great off idle torque for trucks and other heavy or low RPM applications, while still improving power at all RPM. | Hyd. | Hyd. | 1500 to 6600 | 189-400-13 | 263PIIHR14 | 263 | 277 | 210 | 224 | .556 | .568 | 114° |
| | | | | | | 267 | 281 | 214 | 228 | .559 | .571 | 114° |
| HYDRAULIC ROLLER – Excellent responsiveness & mid-range power w/ across the board gains. Best choice for heavy vehicles & stock gearing. | Hyd. | Hyd. | 1700 to 6800 | 189-401-13 | 267PIIHR14 | 267 | 281 | 214 | 228 | .559 | .571 | 114° |
| | | | | | | 271 | 285 | 218 | 232 | .563 | .575 | 114° |
| HYDRAULIC ROLLER – Outstanding top end power in modified non-AFM applications, w/o sacrificing low end if properly programmed. | Hyd. | Hyd. | 2100 to 7200 | 189-403-13 | 275PIIHR14 | 275 | 289 | 222 | 236 | .566 | .578 | 114° |
| | | | | | | 271 | 285 | 218 | 232 | .563 | .575 | 114° |
| XFI™ VVT Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent power improvements over stock in modified engines using new more asymmetrical VVI intake profiles. | Hyd. | Hyd. | 1700 to 6900 | 189-424-13 | 266WI14 | 266 | 278 | 218 | 230 | .612 | .609 | 114° |
| | | | | | | 270 | 282 | 222 | 234 | .615 | .612 | 115° |
| HYDRAULIC ROLLER – Great choice for max effort VVT street engines; great high RPM power. Higher lift takes full advantage of ported heads. | Hyd. | Hyd. | 1900 to 7100 | 189-426-13 | 270WI15 | 270 | 282 | 222 | 234 | .615 | .612 | 115° |
| | | | | | | 272 | 286 | 226 | 236 | .619 | .615 | 116° |
| HYDRAULIC ROLLER – Requires either added displacement or high RPM modifications in street/strip applications. Largest VVT cam w/ stock pistons. | Hyd. | Hyd. | 2100 to 7300 | 189-428-13 | 274WI16 | 272 | 286 | 226 | 236 | .619 | .615 | 116° |
| | | | | | | 272 | 286 | 226 | 236 | .619 | .615 | 116° |

GM LS GEN IV SINGLE-BOLT W/ VVT (12606358) & AFM 8 CYL. 2008-2015

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------|-------------|------------|-------|---------|-------|---------------|--------|-----------------|
| | IN. | EX. | | | | ADVERTISED | | @ .050" | | W/ 1.7 ROCKER | | |
| | | | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| FSL™ Hydraulic Roller Camshafts (50-State Legal CARB EO #D-279-11) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – First 50-state legal grind for the L99 and similar family of GM LS engines with VVT and AFM. Drop in with all stock components and factory calibrated computer will produce 30+ HP increase in peak power. | Hyd. | Hyd. | 1700 to 6400 | 689-199-13 | L99LX266 | 274 D | 282 D | 208 D | 220 D | .541 D | .541 D | 118° |
| | | | | | | 266 N | 266 N | 206 N | 214 N | .541 N | .541 N | 118° |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent responsiveness and mid-range power w/ across the board gains. Best choice for heavy vehicles & stock gearing. | Hyd. | Hyd. | 1600 to 6500 | 689-421-13 | 266PIIHR14 | 278 D | 290 D | 216 D | 228 D | .500 D | .500 D | 114° |
| | | | | | | 266 N | 278 N | 214 N | 226 N | .500 N | .500 N | 114° |
| HYDRAULIC ROLLER – Great all around performance and best choice for mildly modified L99 Camaro applications with AFM enabled. | Hyd. | Hyd. | 1800 to 6700 | 689-422-13 | 270PIIHR15 | 282 D | 294 D | 220 D | 232 D | .500 D | .500 D | 115° |
| | | | | | | 270 N | 282 N | 218 N | 230 N | .500 N | .500 N | 115° |
| HYDRAULIC ROLLER – Outstanding top end power in modified L99 style applications, w/o sacrificing low end if properly programmed. | Hyd. | Hyd. | 2000 to 6900 | 689-423-13 | 274PIIHR16 | 286 D | 298 D | 224 D | 236 D | .500 D | .500 D | 116° |
| | | | | | | 274 N | 286 N | 222 N | 234 N | .500 N | .500 N | 116° |

GM LS GEN IV SINGLE-BOLT W/ VVT (12585994) & AFM 8 CYL. 2007-2008

| LIFTERS | PHASER LIMITER KIT | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|---------|--------------------|----------------------------|------------------------------|--------------------|--|-------------|-------------|--|-------------|
| | | | | | STEEL | TOOL STEEL | TITANIUM | TOOL STEEL | TITANIUM |
| | | | | | XFI™ AFM Hydraulic Roller Camshafts | | | | |
| N/A | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| N/A | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| N/A | 5456 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |

GM LS GEN IV SINGLE-BOLT W/ VVT (12606358), W/ O AFM 8 CYL. 2008-2015

| LIFTERS | PHASER LIMITER KIT | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|-------------------------------------|--------------------|----------------------------|------------------------------|--------------------|--|-------------|-------------|--|-------------|
| | | | | | STEEL | TOOL | TITANIUM | TOOL STEEL | TITANIUM |
| | | | | | XFI™ RPM HI-LIFT Hydraulic Roller Camshafts | | | | |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| XFI™ VVT Hydraulic Roller Camshafts | | | | | | | | | |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |
| 850-16 | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7956-16 8407-16 | N/A | N/A | N/A | 26926TS-KIT | 26926TI-KIT |

GM LS GEN IV SINGLE-BOLT W/ VVT (12606358) & AFM 8 CYL. 2008-2015

| LIFTERS | PHASER LIMITER KIT | CATHEDRAL PORT ROCKER ARMS | RECTANGULAR PORT ROCKER ARMS | PUSHRODS | BEEHIVE™ VALVE SPRING KITS RETAINER MATERIAL | | | DUAL VALVE SPRING KITS RETAINER MATERIAL | |
|-------------------------------------|--------------------|----------------------------|------------------------------|--------------------|--|-------------|-------------|--|-------------|
| | | | | | STEEL | TOOL | TITANIUM | TOOL STEEL | TITANIUM |
| | | | | | FSL™ Hydraulic Roller Camshafts (50-State Legal CARB EO #D-279-11) | | | | |
| N/A | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | |
| N/A | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| N/A | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |
| N/A | 5460 | 1477-16 19024-16 | 1478-16 19028-16 | 7955-16 8406-16 | 26918CS-KIT | 26918TS-KIT | 26918TI-KIT | 26925TS-KIT | 26925TI-KIT |



GM LT1 GEN V W/ VVT & AFM 8 CYL. 2014-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------|-------------|----------------|-------|-------------|-------|-------------------|--------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.8 ROCKER IN. | EX. | |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | | | | |
| Larger Cam Lobes For Outboard Cylinders | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong power gains with Smooth Idle in LT1 w/ DI, VVT & AFM enabled. | Hyd. | Hyd. | 1400 to 6500 | 624-500-13 | 262PIIHR15 | 274 D | 286 D | 212 D | 224 D | .572 D | .529 D | 115° |
| | | | | | | 262 N | 274 N | 210 N | 222 N | .572N | .529 N | 115° |
| HYDRAULIC ROLLER – Excellent responsiveness and mid-range power with across the board gains with AFM enabled. | Hyd. | Hyd. | 1600 to 6700 | 624-512-13 | 266PIIHR16 | 274 D | 286 D | 216 D | 228 D | .572 D | .529 D | 116° |
| | | | | | | 262 N | 274 N | 214 N | 226 N | .572N | .529 N | 116° |
| HYDRAULIC ROLLER – Great all around performance and best choice for mildly modified LT1 applications with AFM enabled. | Hyd. | Hyd. | 1800 to 6900 | 624-524-13 | 270PIIHR17 | 282 D | 294 D | 220 D | 232 D | .572 D | .529 D | 117° |
| | | | | | | 270 N | 282 N | 218 N | 230 N | .572N | .529 N | 117° |
| HYDRAULIC ROLLER – Outstanding top end power in modified LT1 AFM applications w/ only slight low end losses if properly programmed. | Hyd. | Hyd. | 2000 to 7100 | 624-536-13 | 274PIIHR18 | 286 D | 298 D | 224 D | 236 D | .572 D | .529 D | 118° |
| | | | | | | 274 N | 286 N | 222 N | 234 N | .572N | .529 N | 118° |

CHEVROLET 348-409 C.I. 8 CYL. 1958-1965

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------|----------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.75 ROCKER IN. | EX. | |
| CLASSIC THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Classic Thumpr™ – Performance street with good low end, stock converter ok, needs gears. Choppy/thumping idle. | Hyd. | Hyd. | 1500-5000 | 48-600-5 | 279TH7 | 278 | 296 | 226 | 241 | .512 | .498 | 107° |
| HYDRAULIC – Classic Mutha' Thumpr™ – High performance street/strip, aluminum heads recommended, 2000+ stall, gears and headers, rough idle. | Hyd. | Hyd. | 2000-5500 | 48-601-5 | 287TH7 | 286 | 304 | 234 | 249 | .525 | .509 | 107° |
| HYDRAULIC – Classic Big Mutha' Thumpr™ – Street/strip, aluminum heads necessary, 2500+ stall, gears and headers, very rough idle. | Hyd. | Hyd. | 2500-6000 | 48-602-5 | 295TH7 | 294 | 312 | 242 | 257 | .537 | .521 | 107° |
| THUMPR™ 4 & 7 SWAP FIRING ORDER Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ - High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 48-600-10 | 47S 283THR-8 | 280 | 303 | 227 | 241 | .564 | .546 | 108° |
| HYDRAULIC ROLLER – Mutha Thumpr™ - High performance street/strip, needs 9:1 compression, 2500+ stall. Intake, gears, and headers. Rough idle. | Hyd. | Hyd. | 2200 to 6200 | 48-601-10 | 47S 291MTHR-8 | 291 | 311 | 235 | 249 | .574 | .558 | 108° |
| HYDRAULIC ROLLER – Big Mutha Thumpr™ - Street/strip, needs 9.5:1 compression, 2800+ stall. Intake, gears, and headers. Very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 48-602-10 | 47S 299BMTHR-8 | 299 | 319 | 243 | 257 | .586 | .571 | 108° |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great for street cruiser. Good throttle response in 409. Mild idle quality. | Hyd. | Hyd. | 1200 to 5600 | 48-800-11 | XE266HR-10 | 266 | 272 | 212 | 218 | .536 | .543 | 110° |
| HYDRAULIC ROLLER – Great for street rod. Excellent mid range & passing power. 2000 converter needed. Aftermarket intake & headers will yield best results. 9:1 compression. Mild rough idle. | Hyd. | Hyd. | 1400 to 5800 | 48-801-11 | XE272HR-10 | 272 | 278 | 218 | 224 | .543 | .550 | 110° |
| HYDRAULIC ROLLER – Great for street/strip 409. 2800 converter needed. Aftermarket intake & headers will yield best results. 9.5:1 compression. Rough idle. | Hyd. | Hyd. | 1800 to 6200 | 48-802-11 | XE284HR-10 | 284 | 290 | 230 | 236 | .555 | .560 | 110° |

GM LT1 GEN V W/ VVT & AFM 8 CYL. 2014-PRESENT

| LIFTERS | PHASER LIMITER KIT | TRUNION KIT | ROCKER ARMS & KITS | RPM KITS | PUSHRODS | CONICAL VALVE SPRINGS | RETAINERS | | VALVE LOCKS | VALVE SEALS | SPRING LOCATORS |
|--|--------------------|-------------|--------------------|----------|----------|-----------------------|-----------|----------|-------------|-------------|-----------------|
| | | | | | | | STEEL | TITANIUM | | | |
| XFI™ AFM Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | 5456 | 13702-KIT | N/A | N/A | N/A | 7230-16 | 1772-16 | N/A | 623-16 | 511-16 | 4680-16 |
| N/A | 5456 | 13702-KIT | N/A | N/A | N/A | 7230-16 | 1772-16 | N/A | 623-16 | 511-16 | 4680-16 |
| N/A | 5456 | 13702-KIT | N/A | N/A | N/A | 7230-16 | 1772-16 | N/A | 623-16 | 511-16 | 4680-16 |
| N/A | 5456 | 13702-KIT | N/A | N/A | N/A | 7230-16 | 1772-16 | N/A | 623-16 | 511-16 | 4680-16 |

CHEVROLET 348-409 C.I. 8 CYL. 1958-1965

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------|--------|---------|------------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| CLASSIC THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 812-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 812-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 812-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| THUMPR™ 4 & 7 SWAP FIRING ORDER Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 8959-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 8959-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 8959-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 8959-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 8959-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | 8959-16 | N/A | N/A | 1629-16 | N/A | N/A | N/A | N/A | N/A |

RED NUMBERS DENOTE PREMIUM OPTION

CAMSHAFTS GENERAL MOTORS

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Strong low speed torque, good economy. Best in 396-402c.i., stock transmission and gear ratios. Very smooth idle. | Hyd. | Hyd. | 800 to 4800 | 11-202-3 | 252H | 252 | 252 | 206 | 206 | .460 | .460 | 110° |
| HYDRAULIC – Good torque and power. Excellent towing in 454c.i. w/ manual or automatic, 3.73+ axle ratios. Smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 11-203-3 | 260H | 260 | 260 | 212 | 212 | .475 | .475 | 110° |
| HYDRAULIC – Performance with slight rough idle in 396. Great for heavy towing in 454c.i. | Hyd. | Hyd. | 1500 to 5500 | 11-205-3 | 268H | 268 | 268 | 218 | 218 | .485 | .485 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good for daily driven street machine, works with stock converter, likes headers. 396c.i. needs 3.55-3.73 gear and 1800+ stall. Slight rough idle. | Hyd. | Hyd. | 1500 to 5800 | 11-207-3 | 270H | 270 | 270 | 224 | 224 | .510 | .510 | 110° |
| HYDRAULIC – Great for street machines. Use headers and 9:1+ compression. In 396-402c.i. use 2500+ stall, lower gears. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 11-208-3 | 280H | 280 | 280 | 230 | 230 | .520 | .520 | 110° |
| HYDRAULIC – Needs 9.5:1 compression, 2800+ stall, headers and lower gears. Choppy idle. | Hyd. | Hyd. | 2200 to 6200 | 11-318-4 | 286H | 286 | 286 | 236 | 236 | .556 | .556 | 110° |
| HYDRAULIC – Street/strip applications. 10:1+ compression, 3000+ stall or 4 speed. 4.10 or lower gears and aftermarket intake. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 11-213-3 | 292H | 292 | 292 | 244 | 244 | .550 | .550 | 110° |
| HYDRAULIC – Limited street use or bracket racing. 10.5:1+ compression, 3500+ stall or 4 speed. 4.10 or lower gears. Radical Idle. | Hyd. | Hyd. | 3000 to 6800 | 11-214-4 | 305H | 305 | 305 | 253 | 253 | .575 | .575 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4800 | 11-230-3 | XE250H | 250 | 260 | 206 | 212 | .470 | .475 | 110° |
| HYDRAULIC – Strong torque thru low and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 11-234-3 | XE256H | 256 | 268 | 212 | 218 | .480 | .485 | 110° |
| HYDRAULIC – Strong torque. Excellent response, heavy towing in 454 with 4.10 gear. | Hyd. | Hyd. | 1300 to 5600 | 11-238-3 | XE262H | 262 | 270 | 218 | 224 | .504 | .510 | 110° |
| HYDRAULIC – Good for street machines, slightly rough idle, stock converter will work but best with 1800+ stall. | Hyd. | Hyd. | 1600 to 5800 | 11-242-3 11-242-20⁹⁴ | XE268H | 268 | 280 | 224 | 230 | .515 | .520 | 110° |
| HYDRAULIC – High performance street, very strong mid-range, with headers and 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 11-246-3 11-246-20⁹⁴ | XE274H | 274 | 286 | 230 | 236 | .552 | .555 | 110° |
| HYDRAULIC – Street/strip, 2800+ stall, rough idle, 9.5:1+ compression. | Hyd. | Hyd. | 2300 to 6500 | 11-250-3 11-250-20⁹⁴ | XE284H | 284 | 296 | 240 | 246 | .574 | .578 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, lower gears, 3200+ stall, 10.5:1+ compression. | Hyd. | Hyd. | 2800 to 7000 | 11-254-4 11-254-20⁹⁴ | XE294H | 294 | 306 | 250 | 256 | .588 | .593 | 110° |

TECH TIP

If you have a 1965-1966 Big Block Chevy engine, please notify your sales person before ordering.

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

¹⁶ Truck engines have .400" taller block

¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|------------|------------------|--------------|--|--|---------------------------------|------------------|--|-------------------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-202-3 | SK11-202-3 ⁷ | CL11-202-3 ⁷ | RP1411-16 | 812-16 858-16 | 3210 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ | 504-16 505-16 ² |
| K11-203-3 | SK11-203-3 ⁷ | CL11-203-3 ⁷ | RP1411-16 | 812-16 858-16 | 3210 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ | 504-16 505-16 ² |
| K11-205-3 | SK11-205-3 ⁷ | CL11-205-3 ⁷ | RP1411-16 | 812-16 858-16 | 3210 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ | 504-16 505-16 ² |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-207-3 | SK11-207-3 ⁷ | CL11-207-3 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-208-3 | SK11-208-3 ⁷ | CL11-208-3 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-318-4 | SK11-318-4 ⁷ | CL11-318-4 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 |
| K11-213-3 | SK11-213-3 ⁷ | CL11-213-3 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 |
| K11-214-4 | SK11-214-4 ⁷ | CL11-214-4 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-230-3 | SK11-230-3 ⁷ | CL11-230-3 ⁷ | RP1411-16 | 812-16 858-16 | 3210 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-234-3 | SK11-234-3 ⁷ | CL11-234-3 ⁷ | RP1411-16 | 812-16 858-16 | 3210 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-238-3 | SK11-238-3 ⁷ | CL11-238-3 ⁷ | RP1411-16 | 812-16 858-16 | 3210 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-242-3 | SK11-242-3 ⁷ | CL11-242-3 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-246-3 | SK11-246-3 ⁷ | CL11-246-3 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 |
| K11-250-3 | SK11-250-3 ⁷ | CL11-250-3 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 |
| K11-254-4 | SK11-254-4 ⁷ | CL11-254-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 |

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

⁹⁴ Nitrided version

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|----------------|---------------------|--|-------------|----------------|-------------|-------------|-------------------|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 1800 to 5600 | 11-600-4 11-600-20⁹⁴ | 279TH7 | 279 | 296 | 227 | 241 | .498 | .483 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2000 to 5900 | 11-601-4 11-601-20⁹⁴ | 287TH7 | 287 | 304 | 235 | 249 | .510 | .495 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2300 to 6200 | 11-602-4 11-602-20⁹⁴ | 295TH7 | 295 | 312 | 243 | 257 | .522 | .507 | 107° |
| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
| IN. | EX. | ADVERTISED IN. | | | | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | | |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good low end and mid-range torque and power, good idle. | Hyd. | Hyd. | 1000 to 5000 | 11-231-3 | X4 254H | 254 | 262 | 210 | 218 | .505 | .505 | 111° |
| HYDRAULIC – Great mid-range power, largest cam for stock converter. Good for heavy towing with 4.10 gear. | Hyd. | Hyd. | 1400 to 5400 | 11-235-3 | X4 262H | 262 | 270 | 218 | 226 | .505 | .515 | 111° |
| HYDRAULIC – Best with improved intake manifold, needs headers and 3.55-3.90 gears. 2000+ stall. | Hyd. | Hyd. | 1600 to 5800 | 11-239-3 | X4 270H | 270 | 278 | 226 | 234 | .544 | .564 | 111° |
| HYDRAULIC – Good top end power, needs good intake, headers & gears. 9.5:1 compression & 2500+ stall. | Hyd. | Hyd. | 2000 to 6200 | 11-243-4 | X4 278H | 278 | 288 | 234 | 244 | .564 | .570 | 111° |
| XTREME MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Biggest for inboard/outboard, good for ski, economy and performance. | Hyd. | Hyd. | 1000 to 5000 | 11-232-3 | XM262H | 262 | 268 | 218 | 224 | .505 | .515 | 112° |
| HYDRAULIC – Jet w/ A impeller, strong mid-range, good throttle response, noticeable idle. | Hyd. | Hyd. | 1600 to 5800 | 11-236-4 | XM270H | 270 | 286 | 226 | 236 | .544 | .547 | 112° |
| HYDRAULIC – Jet w/ A impeller, needs improved intake, likes headers. | Hyd. | Hyd. | 2000 to 6200 | 11-240-4 11-240-20⁹⁴ | XM278H | 278 | 292 | 234 | 244 | .564 | .566 | 112° |
| HYDRAULIC – Jet w/ A impeller, needs improved intake, likes headers. | Hyd. | Hyd. | 2200-6200 | 11-684-5 | CB XM575SCI | 283 | 283 | 240 | 240 | .576 | .576 | 110° |
| HYDRAULIC – Jet w/ A or B impeller, 9.5:1+ compression, needs headers, performance use. | Hyd. | Hyd. | 2500 to 6500 | 11-244-4 11-244-20⁹⁴ | XM288H | 288 | 304 | 244 | 254 | .570 | .575 | 112° |
| HYDRAULIC – Jet w/ B impeller, 10:1+ compression, river drags, bracket racing. | Hyd. | Hyd. | 3200 to 6800 | 11-252-4 | XM298H | 298 | 316 | 254 | 264 | .575 | .578 | 112° |
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good for jet boat or inboard/outboard drive for skiing, pleasure use, good economy. | Hyd. | Hyd. | 1700 to 5700 | 11-306-5 | 268AH | 268 | 276 | 222 | 226 | .525 | .525 | 110° |
| HYDRAULIC – Jet boat with A impeller. Skiing and pleasure use, good performance. | Hyd. | Hyd. | 2400 to 6400 | 11-314-5 | 280AH | 280 | 288 | 232 | 237 | .547 | .547 | 110° |
| HYDRAULIC – Jet boat with A or B impeller. Bracket racing or high performance use. | Hyd. | Hyd. | 2500 to 6500 | 11-324-5 | 292AH | 292 | 296 | 244 | 246 | .568 | .578 | 110° |
| HYDRAULIC – B impeller in jet boat. River drags and brackets. Use tunnel ram. | Hyd. | Hyd. | 3800 to 6800 | 11-336-5 | 305AH | 305 | 312 | 253 | 260 | .575 | .600 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

¹⁶ Truck engines have .400" taller block

¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | GK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|--------------------------|-------------------------|------------------|------------------|--------------|--|--|---------------------------------|-------------------|--|-------------------------------|
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-600-4 | GK11-600-4 ⁹³ | CL11-600-4 ⁷ | 812-16 858-16 | 2110 3110 | 4110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-601-4 | GK11-601-4 ⁹³ | CL11-601-4 ⁷ | 812-16 858-16 | 2110 3110 | 4110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-602-4 | GK11-602-4 ⁹³ | CL11-602-4 ⁷ | 812-16 858-16 | 2110 3110 | 4110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| XTREME 4X4™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-231-3 | SK11-231-3 ⁷ | CL11-231-3 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-235-3 | SK11-235-3 ⁷ | CL11-235-3 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-239-3 | SK11-239-3 ⁷ | CL11-239-3 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-243-4 | SK11-243-4 ⁷ | CL11-243-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| XTREME MARINE™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-232-3 | SK11-232-3 ⁷ | CL11-232-3 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-236-4 | SK11-236-4 ⁷ | CL11-236-4 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-240-4 | SK11-240-4 ⁷ | CL11-240-4 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-684-5 | SK11-684-5 | CL11-684-5 | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-244-4 | SK11-244-4 ⁷ | CL11-244-4 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-252-4 | SK11-252-4 ⁷ | CL11-252-4 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K11-306-5 | SK11-306-5 ⁷ | CL11-306-5 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-314-5 | SK11-314-5 ⁷ | CL11-314-5 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-324-5 | SK11-324-5 ⁷ | CL11-324-5 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-336-5 | SK11-336-5 ⁷ | CL11-336-5 ⁷ | RPM1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 | 741-16 1732-16 | 612-16 ⁷⁵ | 505-16 ² |

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

⁹³ GK-Kit contains cam, lifters & gear drive
⁹⁴ Nitrided version

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| HYDRAULIC – Exhaust note of GM LS6 cam w/ hydraulic lifters and increased horsepower. | Hyd. | Hyd. | 1800 to 6200 | 11-670-4 | N+LS6 | 276 | 283 | 229 | 236 | .530 | .524 | 112° |
| NITROUS HP™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – High performance street, 100-150 HP nitrous kit or small blower. | Hyd. | Hyd. | 1600 to 5900 | 11-556-4 | NX262H | 262 | 280 | 218 | 230 | .505 | .520 | 113° |
| HYDRAULIC – Street machines with 125+ hp nitrous kit, needs 2000+ stall, 3.73 gear, choppy idle. | Hyd. | Hyd. | 2000 to 6200 | 11-560-4 | NX268H | 268 | 286 | 224 | 236 | .515 | .547 | 113° |
| HYDRAULIC – Pro Street applications w/ multi-stage nitrous kits, 671 blower or Vortec Supercharger and 3000+ stall. | Hyd. | Hyd. | 2800 to 6800 | 11-568-4 | NX284H | 284 | 305 | 240 | 253 | .575 | .595 | 113° |
| HYDRAULIC – Race only, multi-stage kits w/ 871 blower, needs good heads, intake, gears and 3500+ stall. | Hyd. | Hyd. | 2800 to 7000 | 11-572-4 | NX294H | 294 | 316 | 250 | 264 | .588 | .600 | 113° |
| COMPUTER CONTROLLED Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – For TBI 454. Stock computer will work in some applications. | Hyd. | Hyd. | 800 to 4800 | 11-206-4 | 255DEH | 255 | 261 | 203 | 212 | .460 | .485 | 110° |
| HYDRAULIC – For TBI with stock converter and exhaust upgrade. | Hyd. | Hyd. | 1000 to 5200 | 11-302-4 | 260AH | 260 | 268 | 212 | 218 | .503 | .503 | 112° |
| BLOWER & TURBO Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good mid-range turbo grind. Short exhaust produces more velocity, helps increase boost. | Hyd. | Hyd. | 1800 to 5800 | 11-400-5 | 276TH | 276 | 268 | 226 | 218 | .525 | .514 | 115° |
| HYDRAULIC – Strong blower cam. Works well with small blowers, centrifugal or roots. | Hyd. | Hyd. | 2500 to 6500 | 11-404-5 | 280AH | 280 | 288 | 232 | 237 | .547 | .547 | 114° |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| HYDRAULIC – High performance street, strong mid-range, needs headers and 2500+ stall. | Hyd. | Hyd. | 1800 to 6000 | 11-650-47 | XE274H-10 | 274 | 286 | 230 | 236 | .552 | .555 | 110° |
| HYDRAULIC – Street/strip, 2800+ stall, rough idle, 9.5:1+ compression. | Hyd. | Hyd. | 2300 to 6500 | 11-651-47 | XE284H-10 | 284 | 296 | 240 | 246 | .574 | .578 | 110° |
| HYDRAULIC – Pro Street/bracket, needs good intake, headers, gear and 3200+ stall. | Hyd. | Hyd. | 2800 to 7000 | 11-652-47 | XE294H-10 | 294 | 306 | 250 | 256 | .588 | .593 | 110° |
| OVAL TRACK Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Good for hobby stock with 427-454 on 1/4 to 3/8 track. | Hyd. | Hyd. | 2600 to 6500 | 11-314-4 | 280AH-10 | 280 | 288 | 232 | 237 | .547 | .547 | 110° |
| HYDRAULIC – Good for hobby stock 454 where hydraulic lifters must be used. | Hyd. | Hyd. | 2500 to 6500 | 11-213-3 | 292H-10 | 292 | 292 | 244 | 244 | .550 | .550 | 110° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹⁶ Truck engines have .400" taller block
¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|-------------------------|--|--|--|---------------------------------|--|--|--|---------------------|--|-------------------------------|------|
| NOSTALGIA PLUS™ Hydraulic Flat Tappet Camshaft | | | | | | | | | | | | |
| K11-670-4 | SK11-670-4 ⁷ | CL11-670-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | |
| NITROUS HP™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K11-556-4 | SK11-556-4 ⁷ | CL11-556-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | |
| K11-560-4 | SK11-560-4 ⁷ | CL11-560-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | |
| K11-568-4 | SK11-568-4 ⁷ | CL11-568-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 1732-16 | 612-16 ⁷⁵ | 505-16 ² | |
| K11-572-4 | SK11-572-4 ⁷ | CL11-572-4 ⁷ | RP1411-16 | 812-16 858-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7854-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 1732-16 | 612-16 ⁷⁵ | 505-16 ² | |
| COMPUTER CONTROLLED Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K11-206-4 | SK11-206-4 ⁷ | CL11-206-4 ⁷ | RPM1411-16 | 812-16 | 3210 | 1411-16 ^{17,18} | 7154-16 ¹⁶ | 911-16 | 744-16 | 603-16 ⁷⁵ | 504-16 | |
| K11-302-4 | SK11-302-4 ⁷ | CL11-302-4 ⁷ | RPM1411-16 | 812-16 858-16 | 3210 2110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² | |
| BLOWER & TURBO Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K11-400-5 | SK11-400-5 ⁷ | CL11-400-5 ⁷ | RPM1411-16 | 812-16 858-16 | 3210 2110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² | |
| K11-404-5 | SK11-404-5 ⁷ | CL11-404-5 ⁷ | RPM1411-16 | 812-16 858-16 | 3210 2110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 911-16 924-16 ² | 744-16 741-16 | 603-16 ⁷⁵ 612-16 ⁷⁵ | 504-16 505-16 ² | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | | VALVE LOCKS | VALVE SEALS | LASH CAPS | DIST. GEAR | STUD GIRDLES | |
| | | | | | STEEL | TITANIUM | | | | | | |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| | 812-16 858-16 | 2110 7110 | 1620-16 ^{17,18} 1820-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 732-16 794-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | 622-16 | 412M 410M | 4021 |
| | 812-16 858-16 | 2110 7110 | 1620-16 ^{17,18} 1820-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 732-16 794-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | 622-16 | 412M 410M | 4021 |
| | 812-16 858-16 | 2110 7110 | 1620-16 ^{17,18} 1820-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 1732-16 | 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 412M 410M | 4021 |
| OVAL TRACK Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| 858-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ^{17,18} | 7954-16 ¹⁶ | 911-16 924-16 ² | 741-16 | 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 412M 410M | 4021 | |
| 858-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ^{17,18} | 7954-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 732-16 794-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | 622-16 | 412M 410M | 4021 | |

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| MAGNUM Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Most bottom end with stock engine. RV/towing use. Works with stock exhaust and intake, 3.73+ gear. | Hyd. | Hyd. | 1200 to 4500 | 11-410-8^{10,46} | 260HR | 260 | 260 | 206 | 206 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Daily driven street machines. Works with stock converters. Likes headers. 396c.i. needs 3.55-3.73+ gear. Slightly rough idle. | Hyd. | Hyd. | 1800 to 5000 | 11-420-8^{10,46} | 270HR | 270 | 270 | 215 | 215 | .566 | .566 | 110° |
| HYDRAULIC ROLLER – Great for street machines. Use headers, 9.5:1+ compression and 2000+ stall. Lower gears in all applications. Rough idle. | Hyd. | Hyd. | 2000 to 5500 | 11-430-8^{10,46} | 280HR | 280 | 280 | 224 | 224 | .566 | .566 | 110° |
| HYDRAULIC ROLLER – For hot street machines. 2500+ stall, 9.5:1+ compression. Best with headers and aluminum intake. Rough idle. | Hyd. | Hyd. | 2500 to 6200 | 11-450-8^{10,46} | 290HR | 290 | 290 | 232 | 232 | .578 | .578 | 110° |
| HYDRAULIC ROLLER – Street/strip. 10:1+ compression, 3000+ stall, 4.10+ gears, aftermarket intake and headers. Very rough idle. | Hyd. | Hyd. | 3000 to 6500 | 11-460-8^{10,46} | 304HR | 304 | 304 | 244 | 244 | .612 | .612 | 110° |
| HYDRAULIC ROLLER – Street/bracket racing. 10.5:1+ compression, 3500+ stall, 4.10 or lower gears. Headers, good intake and heads. Radical idle. | Hyd. | Hyd. | 3500 to 6500 | 11-470-8^{10,46} | 314HR | 314 | 314 | 252 | 252 | .612 | .612 | 110° |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1700 to 5500 | 11-600-8^{10,46} | 283THR7 | 283 | 303 | 227 | 241 | .547 | .530 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2000 to 5800 | 11-601-8^{10,46} | 291THR7 | 291 | 311 | 235 | 249 | .558 | .542 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2300 to 6100 | 11-602-8^{10,46} | 299THR7 | 299 | 319 | 243 | 257 | .570 | .554 | 107° |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Excellent mileage, smooth idle, strong torque through RPM range. | Hyd. | Hyd. | 600 to 4600 | 11-407-8^{10,46} | XR252HR | 252 | 258 | 200 | 206 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Strong torque, good mileage, RV and towing. | Hyd. | Hyd. | 1000 to 5000 | 11-408-8^{10,46} | XR258HR | 258 | 264 | 206 | 212 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Daily driver to mild performance, strong torque, good mileage. | Hyd. | Hyd. | 1200 to 5200 | 11-413-8^{10,46} | XR264HR | 264 | 270 | 212 | 218 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Performance application, great mid-range torque, likes headers. | Hyd. | Hyd. | 1600 to 5400 | 11-422-8^{10,46} | XR270HR | 270 | 276 | 218 | 224 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Great for street machines, needs intake, headers, 2000+ stall and gears. | Hyd. | Hyd. | 1900 to 5600 | 11-423-8^{10,46} | XR276HR | 276 | 282 | 224 | 230 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – High performance for street cars with 2200+ stall, 9:1+ compression, headers. | Hyd. | Hyd. | 2200 to 5800 | 11-432-8^{10,46} | XR282HR | 282 | 288 | 230 | 236 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Street/strip applications, works well in large ci street machine engines w/ 2500+ stall. | Hyd. | Hyd. | 2500 to 6000 | 11-433-8^{10,46} | XR288HR | 288 | 294 | 236 | 242 | .521 | .540 | 110° |

² Requires machining on cylinder heads
⁷ Stock springs cannot be used
¹⁰ Requires thrust button & wear plate

¹⁶ Truck engines have .400" taller block
¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|----------------------------|--------------------|--------------|--------------|--|--|---------------------------------|------------------|--|-------------------------------|
| MAGNUM Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K11-410-8 | SK11-410-8 ^{7,10} | CL11-410-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-420-8 | SK11-420-8 ^{7,10} | CL11-420-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-430-8 | SK11-430-8 ^{7,10} | CL11-430-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-450-8 | SK11-450-8 ^{7,10} | CL11-450-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-460-8 | SK11-460-8 ^{7,10} | CL11-460-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-470-8 | SK11-470-8 ^{7,10} | CL11-470-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K-KIT | GK-KIT | CL-KIT | LIFTERS | TIMING SET | GEAR DRIVE | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K11-600-8 | GK11-600-8 ^{7,93} | CL11-600-8 ⁷ | 854-16 15854-16 | 2110 3110 | 4110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7663-16 7998-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-601-8 | GK11-601-8 ^{7,93} | CL11-601-8 ⁷ | 854-16 15854-16 | 2111 3110 | 4110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7663-16 7998-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-602-8 | GK11-602-8 ^{7,93} | CL11-602-8 ⁷ | 854-16 15854-16 | 2112 3110 | 4110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7663-16 7998-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K11-407-8 | SK11-407-8 ^{7,10} | CL11-407-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-408-8 | SK11-408-8 ^{7,10} | CL11-408-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-413-8 | SK11-413-8 ^{7,10} | CL11-413-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-422-8 | SK11-422-8 ^{7,10} | CL11-422-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-423-8 | SK11-423-8 ^{7,10} | CL11-423-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-432-8 | SK11-432-8 ^{7,10} | CL11-432-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-433-8 | SK11-433-8 ^{7,10} | CL11-433-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

⁹³ GK-Kit contains cam, lifters & gear drive

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|---------------------------------|-------------|----------|-----|------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts (CONTINUED) | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Street/strip applications, 10:1+ compression, 3000+ stall, intake, headers, gears. | Hyd. | Hyd. | 2800 to 6100 | 11-443-8^{10,46} | XR294HR | 294 | 300 | 242 | 248 | .540 | .560 | 110° |
| HYDRAULIC ROLLER – Pro Street/bracket racing, 10:1+ compression, 3500+ stall, good intake, headers. | Hyd. | Hyd. | 3200 to 6200 | 11-444-8^{10,46} | XR300HR | 300 | 306 | 248 | 254 | .560 | .580 | 110° |
| XTREME MARINE™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for inboard/outboard pleasure boats, has good idle. | Hyd. | Hyd. | 1600 to 5400 | 11-445-8^{10,46} | XM270HR | 270 | 276 | 218 | 224 | .510 | .510 | 112° |
| HYDRAULIC ROLLER – Good for jet boat with A impeller. Great for pleasure or mild performance use. | Hyd. | Hyd. | 2200 to 5800 | 11-451-8^{10,46} | XM284HR | 284 | 290 | 230 | 236 | .547 | .547 | 112° |
| HYDRAULIC ROLLER – Good for jet boat with A or B impeller in bracket racing or performance use. | Hyd. | Hyd. | 2800 to 6200 | 11-456-8^{10,46} | XM296HR | 296 | 302 | 242 | 248 | .566 | .566 | 112° |
| HYDRAULIC ROLLER – Good in jet boat w/ B impeller, 10:1+ compression, running river drags or bracket racing. | Hyd. | Hyd. | 3500 to 6500 | 11-461-8^{10,46} | XM308HR | 308 | 314 | 254 | 260 | .575 | .575 | 112° |
| NITROUS HP™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Street machines with 125+ hp nitrous kit, 2200+ stall and lower gears. | Hyd. | Hyd. | 1800 to 5800 | 11-409-8^{10,46} | NX273HR | 273 | 292 | 224 | 236 | .537 | .547 | 113° |
| HYDRAULIC ROLLER – High performance street w/ 150+ hp nitrous kit or small supercharger, 2400+ stall & lower gears. | Hyd. | Hyd. | 2000 to 6200 | 11-411-8^{10,46} | NX279HR | 279 | 294 | 230 | 242 | .537 | .541 | 113° |
| HYDRAULIC ROLLER – 200+ hp nitrous system, 671 or larger supercharger, 9.5:1+ compression, 2800+ stall. | Hyd. | Hyd. | 2400 to 6500 | 11-414-8^{10,46} | NX298HR | 298 | 310 | 242 | 254 | .566 | .575 | 113° |
| COMPUTER CONTROLLED Retro-Fit Hydraulic Roller Camshaft | | | | | | | | | | | | |
| HYDRAULIC ROLLER – For throttle body injection 454. | Hyd. | Hyd. | 1000 to 5000 | 11-412-8^{10,46} | 266HR-12 | 266 | 276 | 210 | 220 | .485 | .485 | 112° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|------------------|-------------|----------|--------|------------|--------|-----------------|---------|----------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | | | |
| 4-PATTERN Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| Larger Cam Lobes For Outboard Cylinders | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Best choice for street 396-454c.i. engines with good cylinder heads. Very wide power range. 2600+ stall. | Hyd. | Hyd. | 2400-6700 | 11-615-44 | 281QI09 | 283 OB | 295 OB | 231 OB | 241 OB | .661 OB | .648 OB | 109.5 OB |
| | | | | | | 281 IB | 293 IB | 229 IB | 239 IB | .658 IB | .644 IB | 108.5 IB |
| HYDRAULIC ROLLER – Great in street strip 454-502c.i. engines with good heads & 9.5:1+ compression; 3000+ stall or manual transmissions. | Hyd. | Hyd. | 2900-7200 | 11-616-44 | 293QI010 | 295 OB | 307 OB | 243 OB | 253 OB | .678 OB | .661 OB | 110.5 OB |
| | | | | | | 293 IB | 305 IB | 241 IB | 251 IB | .677 IB | .661 IB | 109.5 IB |
| HYDRAULIC ROLLER – Recommended in highly modified street/strip or bracket race engines and also works well in 572+ c.i. applications. | Hyd. | Hyd. | 3200-7500 | 11-617-44 | 305QI010 | 307 OB | 319 OB | 255 OB | 265 OB | .678 OB | .661 OB | 110.5 OB |
| | | | | | | 305 IB | 317 IB | 253 IB | 263 IB | .678 IB | .661 IB | 109.5 IB |
| DRAG RACE Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Strong bracket cam for 396c.i. Needs 10.5:1+ compression & 4000 stall. | Hyd. | Hyd. | 3800-6800 | 11-870-11 | 313QNHR-8 | 313 | 325 | 260 | 270 | .676 | .659 | 108° |
| HYDRAULIC ROLLER – Best in 454c.i. engines with good cylinder heads. Needs 11:1 compression and 4500+ stall. | Hyd. | Hyd. | 4000-7000 | 11-871-11 | 321QNHR-10 | 321 | 329 | 267 | 275 | .680 | .680 | 110° |
| HYDRAULIC ROLLER – Serious bracket race cam for 454c.i. engines. Needs good cylinder heads and 11.5:1 compression. | Hyd. | Hyd. | 4500-7200 | 11-872-11 | 325QNHR-12 | 325 | 337 | 271 | 283 | .680 | .680 | 112° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

¹⁰ Requires thrust button & wear plate

¹² 11/32 Valves Required

¹⁶ Truck engines have .400" taller block

¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|----------------------------|----------------------------|--------------------|--------------|--------------|--|--|---------------------------------|-------------------|--|--|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts (CONTINUED) | | | | | | | | | | | |
| K11-443-8 | SK11-443-8 ^{7,10} | CL11-443-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-444-8 | SK11-444-8 ^{7,10} | CL11-444-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| XTREME MARINE™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K11-445-8 | SK11-445-8 ^{7,10} | CL11-445-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-451-8 | SK11-451-8 ^{7,10} | CL11-451-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-456-8 | SK11-456-8 ^{7,10} | CL11-456-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-461-8 | SK11-461-8 ^{7,10} | CL11-461-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| NITROUS HP™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K11-409-8 | SK11-409-8 ^{7,10} | CL11-409-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-411-8 | SK11-411-8 ^{7,10} | CL11-411-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-414-8 | SK11-414-8 ^{7,10} | CL11-414-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| COMPUTER CONTROLLED Retro-Fit Hydraulic Roller Camshaft | | | | | | | | | | | |
| K11-412-8 | SK11-412-8 ^{7,10} | CL11-412-8 ^{7,10} | 854-16 15854-16 | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7815-16 ¹⁶ 7663-16 ¹⁶ | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| 4-PATTERN Retro-Fit Hydraulic Roller Camshafts (Larger cam lobes for outboard cylinders) | | | | | | | | | | | |
| N/A | N/A | N/A | 15854-16 | 412M 410M | 3110 7110 | 19021-16 1620-16 | N/A | 953-16 933-16 | 1732-16 732-16 | 612-16 ⁷⁵ 611-16 ¹² | 515-16 ⁷⁵ 529-16 ¹² |
| N/A | N/A | N/A | 15854-16 | 412M 410M | 3110 7110 | 19021-16 1620-16 | N/A | 953-16 933-16 | 1732-16 732-16 | 612-16 ⁷⁵ 611-16 ¹² | 515-16 ⁷⁵ 529-16 ¹² |
| N/A | N/A | N/A | 15854-16 | 412M 410M | 3110 7110 | 19021-16 1620-16 | N/A | 953-16 933-16 | 1732-16 732-16 | 612-16 ⁷⁵ 611-16 ¹² | 515-16 ⁷⁵ 529-16 ¹² |
| DRAG RACE Hydraulic Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | 15854-16 | 412M 410M | 3110 7110 | 19021-16 1620-16 | N/A | 933-16 932-16 | 1732-16 | 612-16 ⁷⁵ 611-16 ¹² | 515-16 ⁷⁵ 529-16 ¹² |
| N/A | N/A | N/A | 15854-16 | 412M 410M | 3110 7110 | 19021-16 1620-16 | N/A | 933-16 932-16 | 1732-16 | 612-16 ⁷⁵ 611-16 ¹² | 515-16 ⁷⁵ 529-16 ¹² |
| N/A | N/A | N/A | 15854-16 | 412M 410M | 3110 7110 | 19021-16 1620-16 | N/A | 933-16 932-16 | 1732-16 | 612-16 ⁷⁵ 611-16 ¹² | 515-16 ⁷⁵ 529-16 ¹² |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|--|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good for everyday driving. Works well with headers. In 396-402c.i. use slightly lower gears. Slightly rough idle. | .022 | .022 | 1800 to 5800 | 11-217-4 | 270S | 270 | 270 | 224 | 224 | .530 | .530 | 110° |
| SOLID – Excellent for street machines. Use 2500+ stall, headers, 9:1+ compression & lower gears. Rough idle. | .022 | .022 | 2000 to 6000 | 11-218-4 | 282S | 282 | 282 | 236 | 236 | .561 | .561 | 110° |
| SOLID – Good for street/strip cars. 3000+ stall or 4 speed. 10:1+ compression, headers and low gears. Very rough idle. | .022 | .022 | 2500 to 6500 | 11-219-4 | 294S | 294 | 294 | 248 | 248 | .595 | .595 | 110° |
| SOLID – Great for Pro Street or bracket racing. 3500+ stall or 4 speed. 11:1+ compression, 4.10 or lower gear. Radical idle. | .022 | .022 | 3000 to 7000 | 11-220-4 | 306S | 306 | 306 | 260 | 260 | .629 | .629 | 110° |
| MAGNUM MARINE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Jet boat or inboard/outboard drive. Pleasure usage, skiing, economy. | .028 | .030 | 2500 to 6500 | 11-550-5 | 270B | 270 | 280 | 235 | 242 | .561 | .575 | 110° |
| SOLID – Jet boat with A or B impeller. Skiing, pleasure, performance. | .028 | .030 | 2800 to 6300 | 11-551-5 | 280S | 280 | 285 | 242 | 250 | .575 | .604 | 110° |
| SOLID – Excellent for jet boat, A or B impeller. 427-454c.i., 10:1+ compression. | .028 | .030 | 3500 to 6500 | 11-604-5 | 294B | 294 | 304 | 256 | 266 | .580 | .605 | 108° |
| SOLID – Jet boat with B impeller. Bracket race, 10.5:1+ compression. Use tunnel ram. | .028 | .030 | 3800 to 7000 | 11-220-4 | 306S | 306 | 306 | 260 | 260 | .629 | .629 | 110° |
| SOLID – Jet boat with B impeller. Flat and hydro. Bracket race. Use tunnel ram. | .028 | .030 | 4200 to 7200 | 11-605-5 | 310B | 310 | 314 | 270 | 276 | .638 | .631 | 108° |
| SOLID – For use in large engine. Flat or hydro. Use tunnel ram. 11.5:1+ compression. | .028 | .030 | 4500 to 7500 | 11-607-5 | 320B | 320 | 324 | 280 | 286 | .638 | .656 | 110° |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Strong torque through low end and mid-range, good idle. | .016 | .016 | 1000 to 5600 | 11-674-4 | XS256S | 256 | 262 | 218 | 224 | .527 | .532 | 110° |
| SOLID – Excellent response, good mid-range, noticeable idle. | .016 | .016 | 1300 to 5800 | 11-675-4 | XS262S | 262 | 268 | 224 | 230 | .532 | .532 | 110° |
| SOLID – Great for street machines, largest cam for stock converter. | .016 | .016 | 1600 to 6000 | 11-676-4 | XS268S | 268 | 274 | 230 | 236 | .553 | .568 | 110° |
| SOLID – Very strong mid-range torque and throttle response, 2500+ stall. | .016 | .016 | 2000 to 6400 | 11-677-4 11-677-20⁹⁴ | XS274S | 274 | 280 | 236 | 242 | .568 | .578 | 110° |
| SOLID – Street/strip, 3000+ stall, likes headers and gears, rough idle. | .016 | .016 | 2400 to 6800 | 11-678-5 11-678-20⁹⁴ | XS282S | 282 | 290 | 244 | 252 | .590 | .598 | 110° |
| SOLID – Pro Street/bracket, needs good intake, headers, gear and 3500+ stall. | .016 | .016 | 2800 to 7200 | 11-679-5 | XS290S | 290 | 298 | 252 | 260 | .598 | .598 | 110° |

TECH TIP If you have a 1965-1966 Big Block Chevy engine, please notify your sales person before ordering.

² Requires machining on cylinder heads
⁷ Stock springs cannot be used

¹⁶ Truck engines have .400" taller block
¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------------------------|------------------|--------------|--|----------------------------------|---------------------------------|-------------------|--|-------------------------------|
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K11-217-4 | SK11-217-4 ⁷ | CL11-217-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-218-4 | SK11-218-4 ⁷ | CL11-218-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-219-4 | SK11-219-4 ⁷ | CL11-219-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-220-4 | SK11-220-4 ⁷ | CL11-220-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 930-16 | 741-16 1731-16 | 612-16 ⁷⁵ | 505-16 ² |
| MAGNUM MARINE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K11-550-5 | SK11-550-5 ⁷ | CL11-550-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-551-5 | SK11-551-5 ⁷ | CL11-551-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-604-5 | SK11-604-5 ⁷ | CL11-604-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-220-4 | SK11-220-4 ⁷ | CL11-220-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 930-16 | 741-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-605-5 | SK11-605-5 ⁷ | CL11-605-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 930-16 ² | 741-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-607-5 | SK11-607-5 ⁷ | CL11-607-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 930-16 ² | 741-16 | 612-16 ⁷⁵ | 505-16 ² |
| XTREME ENERGY™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K11-674-4 | SK11-674-4 ⁷ | CL11-674-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-675-4 | SK11-675-4 ⁷ | CL11-675-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K11-676-4 | SK11-676-4 ⁷ | CL11-676-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-677-4 | SK11-677-4 ⁷ | CL11-677-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-678-5 | SK11-678-5 ⁷ | CL11-678-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-679-5 | SK11-679-5 ⁷ | CL11-679-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

⁹⁴ Nitrided version

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|------------------|-------------|----------------|-----------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" IN. EX. | W/ 1.7 ROCKER IN. | EX. | | | |
| XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| SOLID – Very strong mid-range torque and throttle response, 2500+ stall. | .016 | .016 | 2000 to 6400 | 11-653-47 | XE274S | 274 | 280 | 236 | 242 | .568 | .578 | 110° |
| SOLID – Street/strip, 3000+ stall, likes headers and gears, rough idle. | .016 | .016 | 2400 to 6800 | 11-654-47 | XE282S | 282 | 290 | 244 | 252 | .590 | .598 | 110° |
| SOLID – Pro Street/bracket, needs good intake, headers, gear and 3500+stall. | .016 | .016 | 2800 to 7200 | 11-655-47 | XE290S | 290 | 298 | 252 | 260 | .598 | .598 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" IN. EX. | W/ 1.7 ROCKER IN. | EX. | | | |
| NOSTALGIA PLUS™ Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Outstanding power and modern tight lash with the sound of the GM LS6 cam. | .012 | .012 | 1800 to 6500 | 11-671-4 | N+LS6S | 276 | 283 | 239 | 246 | .544 | .539 | 112° |
| SOLID – Nostalgia Plus™ version of legendary ZL-1 camshaft. Modern lobe design makes this cam better than the original. | .012 | .012 | 3500 to 7000 | 11-573-5 | N+ZL-1S | 299 | 309 | 262 | 272 | .581 | .622 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" IN. EX. | W/ 1.7 ROCKER IN. | EX. | | | |
| FACTORY MUSCLE™ Mechanical Flat Tappet Camshafts (Today's OEM Versions of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| SOLID – Factory I.D. #3863143 for: 396c.i., 1967-69 Z28, factory 375 HP 402c.i., 1970, factory 375 HP 427c.i., 1967-69, factory 425/435 HP 454c.i., 1970 LS6, factory 450/465 HP 454c.i., 1971 LS6, factory 425 HP | .024 | .024 | 2200 to 6200 | 11-106-3 | 143S | 316 | 302 | 242 | 242 | .520 | .520 | 114° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------------------|-------------|----------------|-----------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" IN. EX. | W/ 1.7 ROCKER IN. | EX. | | | |
| BLOWER & TURBO Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good for street and mild strip use with 671 or larger blower. | .028 | .030 | 3500 to 7000 | 11-405-5⁷ | 290DS | 290 | 304 | 255 | 266 | .612 | .605 | 114° |
| SOLID – Use in bracket racing and very hot street with 671 or larger blower. | .028 | .030 | 4000 to 7500 | 11-406-5⁷ | 310BS | 310 | 320 | 270 | 280 | .637 | .637 | 114° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" IN. EX. | W/ 1.7 ROCKER IN. | EX. | | | |
| PULLER & MUD RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good torque and power in 396-402c.i., 10:1+ compression. | .028 | .030 | 3000 to 6500 | 11-610-5 | 285B-8 | 285 | 295 | 250 | 260 | .604 | .629 | 108° |
| SOLID – Excellent choice for 427-454c.i., good power, 11:1+ compression. | .028 | .030 | 3800 to 6800 | 11-611-5 | 295B-8 | 295 | 310 | 260 | 270 | .629 | .638 | 108° |

⁷ Stock springs cannot be used

¹⁶ Truck engines have .400" taller block
¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

XTREME ENERGY™ 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|-------------------|--------------|---|----------------------------------|---------------------------------|------------------|--|---------------------|-----------|---------|--------------|--------------|
| 813-16 2900-16 | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 2900-16 | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 2900-16 | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |

NOSTALGIA PLUS™ Mechanical Flat Tappet Camshafts

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|-----------|-------------------------|-------------------------|--------------------------|------------------|--------------|--|----------------------------------|---------------------------------|------------------|--|---------------------|
| K11-671-4 | SK11-671-4 ⁷ | CL11-671-4 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |
| K11-573-5 | SK11-573-5 ⁷ | CL11-573-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 505-16 ² |

FACTORY MUSCLE™ Mechanical Flat Tappet Camshafts (Today's OEM Versions of Yesterday's Muscle Car Cams)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|-------------------|--------------|--|--------------------|---------------------------------|------------------|------------------|---------------------|-----------|---------|--------------|--------------|
| 813-16 2900-16 | 2110 7110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 7954-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 616-16 | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |

BLOWER & TURBO Mechanical Flat Tappet Camshafts

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|-----------|-------------------------|-------------------------|--------------------------|------------------|--------------|--|--|--|------------------|----------------------|---------------------|
| K11-405-5 | SK11-405-5 ⁷ | CL11-405-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-406-5 | SK11-406-5 ⁷ | CL11-406-5 ⁷ | RPM1411-16 ¹⁷ | 813-16 800-16 | 2110 3110 | 1411-16 ^{17,18} 1620-16 ^{17,18} | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |

PULLER & MUD RACE Mechanical Flat Tappet Camshafts

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|------------------|----------------|---|--|--|------------------|----------------------|---------------------|-----------|---------|--------------|--------------|
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – 427+c.i. engines, heavy car, 3500+ stall and 10:1+ compression. | .018 | .020 | 3500 to 6500 | 11-606-5 | MA283A-8 | 283 | 291 | 256 | 264 | .578 | .578 | 108° |
| SOLID – Use in 396-427c.i., heavy car, 3500+ stall and 10.5:1+ compression. | .028 | .030 | 3500 to 6500 | 11-604-5 | 294B-8 | 294 | 304 | 256 | 266 | .580 | .605 | 108° |
| SOLID – Works well in 396-427c.i., 4000+ stall and 11:1+ compression. | .028 | .030 | 3600 to 6800 | 11-601-5 | 295A-8 | 295 | 304 | 260 | 266 | .629 | .605 | 108° |
| SOLID – 427+c.i. engines, 4000+ stall, 11:1+ compression. | .018 | .020 | 3600 to 6800 | 11-608-5 | TL292A-8 | 292 | 308 | 262 | 270 | .635 | .637 | 108° |
| SOLID – 2600-3000 lbs. car, 11.5:1+ compression with 4500+ stall. Excellent for 427-454c.i. | .028 | .030 | 4200 to 7200 | 11-605-5 | 310B-8 | 310 | 314 | 270 | 276 | .638 | .631 | 108° |
| SOLID – Our best solid for 454c.i. with 4500+ stall and 11.5:1+ compression. | .028 | .030 | 4500 to 7500 | 11-613-5 | 310C-10 | 310 | 320 | 270 | 280 | .638 | .638 | 110° |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| SOLID – 427+ engines, 4000+ stall, 11:1+ compression. | .018 | .020 | 3600 to 6800 | 11-681-47 | 47S TL292A | 292 | 308 | 262 | 270 | .635 | .637 | 108° |
| SOLID – 2600-3000 lbs. car, 11.5:1+ compression with 4500+ stall. Excellent for 427-454c.i. | .028 | .030 | 4200 to 7200 | 11-682-47 | 47S 310B-8 | 310 | 314 | 270 | 276 | .638 | .631 | 108° |
| SOLID – Our best solid for 454c.i. with 4500+ stall and 11.5:1+ compression. | .028 | .030 | 4500 to 7500 | 11-683-47 | 47S 310C-10 | 310 | 320 | 270 | 280 | .638 | .638 | 110° |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Best short track cam w/ broad power range. Excellent low end torque, good for 396-427c.i. | .022 | .024 | 3000 to 6500 | 11-610-5 | 285B-8 | 285 | 295 | 250 | 260 | .604 | .629 | 108° |
| SOLID – Good for 1/4 to 1/2 mile track with slight banking, wide torque range. | .022 | .024 | 3500 to 6500 | 11-601-5 | 295A-8 | 295 | 304 | 260 | 266 | .629 | .605 | 108° |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great all around power. 3000+ stall with lower gear. Use headers and 9.5:1+ compression. Rough idle. | .020 | .020 | 2200 to 6500 | 11-692-8^{10,46} | 288AR | 288 | 288 | 246 | 246 | .623 | .623 | 110° |
| MECHANICAL ROLLER – Ultimate Pro Street cam. 10.5:1+ compression, 3500+ stall or 4 speed. 4.10 gear. | .020 | .020 | 3000 to 7200 | 11-693-8^{10,46} | 308AR | 308 | 308 | 262 | 262 | .652 | .652 | 110° |

TECH TIP

If you have a 1965-1966 Big Block Chevy engine, please notify your sales person before ordering.

² Requires machining on cylinder heads

⁶ Offset lifters available

⁷ Stock springs cannot be used

¹⁰ Requires thrust button & wear plate

¹⁶ Truck engines have .400" taller block

¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|----------------------------|---|--|--|------------------|---|--|--|------------------|----------------------|---------------------|
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 795-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| OVAL TRACK Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 813-16 800-16 | 3110 3110KT | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 924-16 ² 930-16 ² | 741-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K11-692-8 ¹⁰ | SK11-692-8 ^{7,10} | CL11-692-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 ² 933-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-693-8 ¹⁰ | SK11-693-8 ^{7,10} | CL11-693-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 2110 7110 | 1411-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 933-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great for Power Touring. Needs 2500+ stall, easy on parts. Very reliable power. Rough idle. | .016 | .018 | 2200 to 6200 | 11-770-8 ^{10,46} | XR274R | 274 | 280 | 236 | 242 | .639 | .646 | 110° |
| MECHANICAL ROLLER – Best in street machines with 2800+ stall, 10:1+ compression with 3.73-3.90 rear gears. | .016 | .018 | 2500 to 6500 | 11-771-8 ^{10,46} | XR280R | 280 | 286 | 242 | 248 | .646 | .653 | 110° |
| MECHANICAL ROLLER – Good in weekend warrior with 3000+ stall. Needs good intake and exhaust with low gears. | .016 | .018 | 3000 to 7000 | 11-772-8 ^{10,46} | XR286R | 286 | 292 | 248 | 254 | .653 | .660 | 110° |
| MECHANICAL ROLLER – Best for Pro Street. Needs good intake and exhaust, 11:1+ compression and 3500+ stall. | .016 | .018 | 3200 to 7200 | 11-773-8 ^{10,46} | XR292R | 292 | 298 | 254 | 260 | .660 | .666 | 110° |
| MARINE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Jet boat with A impeller, flat bottom, hydro. River race. | .028 | .030 | 3500 to 6500 | 11-706-9 ^{14,46} | 285CR-8 | 285 | 295 | 252 | 262 | .638 | .622 | 108° |
| MECHANICAL ROLLER – Jet boat with B impeller, flat, hydro. River race, bracket. | .028 | .030 | 4200 to 7000 | 11-744-9 ^{14,46} | 295DR-10 | 295 | 305 | 260 | 270 | .670 | .670 | 110° |
| MECHANICAL ROLLER – Hydro, flat bottom jet boat with B impeller. Bracket racing. Easy on parts. | .028 | .030 | 4500 to 7000 | 11-702-9 ^{14,46} | 306AR-10 | 306 | 319 | 270 | 280 | .680 | .680 | 110° |
| MECHANICAL ROLLER – Comp jet. Blown gasoline flat or hydro. | .028 | .030 | 5000 to 7500 | 11-745-9 ^{14,46} | 310AR-8 | 310 | 310 | 280 | 280 | .772 | .772 | 108° |
| MECHANICAL ROLLER – 454c.i. and larger engines. River racer – blown gasoline, flat or hydro. | .028 | .030 | 5500 to 7500 | 11-746-9 ^{14,46} | 319CR-10 | 319 | 326 | 285 | 288 | .782 | .714 | 110° |
| BLOWER Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best for Pro Street and bracket racing with 671 or larger blower. | .020 | .020 | 3500 to 7000 | 11-694-8 ^{10,46} | 300BR-14 | 300 | 308 | 255 | 262 | .652 | .652 | 114° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| PULLER & MUD RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best cam for 396-402c.i., strong torque easy on parts. | .028 | .030 | 3200 to 6500 | 11-700-9 ^{14,46} | 288AR-8 | 288 | 296 | 251 | 260 | .680 | .680 | 108° |
| MECHANICAL ROLLER – Use in 454c.i. or larger engines. 11.5:1+ compression. | .028 | .030 | 4200 to 7200 | 11-702-9 ^{14,46} | 306AR-10 | 306 | 319 | 270 | 280 | .680 | .680 | 110° |
| MECHANICAL ROLLER – Use in 427c.i. with 11:1+ compression. | .028 | .030 | 4000 to 7000 | 11-711-9 ^{14,46} | 306CR-8 | 306 | 319 | 271 | 280 | .680 | .680 | 108° |

² Requires machining on cylinder heads
⁶ Offset lifters available
⁷ Stock springs cannot be used
¹⁰ Requires thrust button & wear plate

¹⁴ Requires upgraded gear, thrust button & wear plate
¹⁶ Truck engines have .400" taller block
¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4
²⁰ Tall block engines require Part #4005

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | LIFTERS | DIST. GEAR | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|----------------------------|----------------------------|--|--------------|----------------|---|--|--|------------------|----------------------|---------------------|
| XTREME ENERGY™ Mechanical Roller Camshafts | | | | | | | | | | | |
| K11-770-8 ¹⁰ | SK11-770-8 ^{7,10} | CL11-770-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 ² 933-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-771-8 ¹⁰ | SK11-771-8 ^{7,10} | CL11-771-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 ² 933-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-772-8 ¹⁰ | SK11-772-8 ^{7,10} | CL11-772-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 ² 933-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-773-8 ¹⁰ | SK11-773-8 ^{7,10} | CL11-773-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 2110 7110 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 ² 933-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |
| MARINE Mechanical Roller Camshafts | | | | | | | | | | | |
| K11-706-9 ¹⁴ | SK11-706-9 ^{7,14} | CL11-706-9 ^{7,14} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-744-9 ¹⁴ | SK11-744-9 ^{7,14} | CL11-744-9 ^{7,14} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-702-9 ¹⁴ | SK11-702-9 ^{7,14} | CL11-702-9 ^{7,14} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-745-9 ¹⁴ | SK11-745-9 ^{7,14} | CL11-745-9 ^{7,14} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |
| K11-746-9 ¹⁴ | SK11-746-9 ^{7,14} | CL11-746-9 ^{7,14} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² |
| BLOWER Mechanical Roller Camshafts | | | | | | | | | | | |
| K11-694-8 ¹⁰ | SK11-694-8 ^{7,10} | CL11-694-8 ^{7,10} | 819-16 ⁶ 883-16 ⁶ | 412M 410M | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7154-16 ¹⁶ 7954-16 ¹⁶ | 953-16 ² 26112-16 ² | 741-16 729-16 | 612-16 ⁷⁵ | 505-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|----------------|---|-----------------------|--|------------------|----------------------|---------------------|-----------|--------------------|--------------|--------------|
| PULLER & MUD RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 819-16 ⁶ 96819-16 ¹⁰⁸ | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 819-16 ⁶ 96819-16 ¹⁰⁸ | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 819-16 ⁶ 96819-16 ¹⁰⁸ | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26097-16 ² | 731-16 732-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

¹⁰⁸ For bushing lifter upgrade, use part # 96819B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best for 396c.i. in 3200+ lbs., 3800+ stall, good torque. | .028 | .030 | 3200 to 6200 | 11-713-9 ^{14, 46} | 288CR-8 | 288 | 296 | 254 | 262 | .714 | .714 | 108° |
| MECHANICAL ROLLER – Works good in 396-427c.i. with 4000+ stall, 11:1+ compression. | .028 | .030 | 3500 to 6500 | 11-715-9 ^{14, 46} | 296CR-8 | 296 | 304 | 262 | 270 | .714 | .714 | 108° |
| MECHANICAL ROLLER – Super Street, 4500+ stall, 11.5:1+ compression, 427-454. | .028 | .030 | 4000 to 6800 | 11-717-9 ^{14, 46} | 304CR-8 | 304 | 312 | 270 | 276 | .714 | .714 | 108° |
| MECHANICAL ROLLER – Bracket race 468-496c.i. heavy car, 12:1+ compression. | .024 | .026 | 4800 to 7200 | 11-724-9 ^{14, 46} | 306BR-10 | 306 | 315 | 270 | 280 | .714 | .710 | 110° |
| MECHANICAL ROLLER – Super Gas/Super Comp. Aftermarket heads, up to 500c.i. | .026 | .028 | 5000 to 7500 | 11-825-9 ^{14, 46} | 311R-10 | 311 | 315 | 272 | 280 | .748 | .710 | 110° |
| MECHANICAL ROLLER – Super Street/Super Gas, 427-468c.i., 5000+ stall, 2500-3000 lbs. car. | .028 | .030 | 4500 to 7300 | 11-703-9 ^{14, 46} | 312CR-10 | 312 | 319 | 278 | 282 | .714 | .680 | 110° |
| MECHANICAL ROLLER – Super Street/Super Gas, 427-468c.i. 5000+ stall, 12:1+ compression. | .028 | .030 | 4500 to 7300 | 11-734-9 ^{14, 46} | 313GR-10 | 313 | 322 | 276 | 284 | .748 | .714 | 110° |
| MECHANICAL ROLLER – Super Gas/Super Comp. 496-540c.i. | .022 | .024 | 5000 to 7000 | 11-827-9 ^{14, 46} | 316FR-12 | 316 | 332 | 282 | 298 | .806 | .758 | 112° |
| MECHANICAL ROLLER – Bracket 500+c.i., tunnel cam, 5500+ stall or manual. | .024 | .028 | 5600 to 8000 | 11-733-9 ^{14, 46} | 322A-R12 | 322 | 339 | 282 | 298 | .806 | .758 | 112° |
| MECHANICAL ROLLER – Super Gas/Super Comp. 5000+ stall or 4 speed, 454+c.i. | .028 | .030 | 5000 to 7800 | 11-718-9 ^{14, 46} | 322AR-10 | 322 | 330 | 282 | 292 | .726 | .714 | 110° |
| MECHANICAL ROLLER – Super Gas/Super Comp. 5000+ stall or 4 speed, 500+c.i. | .028 | .030 | 5000 to 7800 | 11-736-9 ^{14, 46} | 324IR-10 | 324 | 332 | 286 | 294 | .775 | .748 | 110° |
| MECHANICAL ROLLER – Super Comp. Best in light car, 5500+ stall, 454+c.i. | .028 | .030 | 5500 to 8500 | 11-720-9 ^{14, 46} | 321CR-10 | 321 | 322 | 284 | 288 | .748 | .714 | 110° |
| MECHANICAL ROLLER – Super Comp. 5000+ stall, 500+c.i. | .028 | .030 | 5000 to 7500 | 11-740-9 ^{14, 46} | 321JR-12 | 321 | 336 | 284 | 296 | .748 | .748 | 112° |
| MECHANICAL ROLLER – Fast Bracket/Super Comp. 5500+ stall or 4-speed, 454+ c.i. engine. | .028 | .030 | 5200 to 7800 | 11-738-9 ^{14, 46} | 324FR-10 | 324 | 336 | 284 | 296 | .800 | .748 | 110° |
| MECHANICAL ROLLER – Bracket race 500-572c.i. | .026 | .028 | 5200 to 7500 | 11-721-9 ^{14, 46} | 324AR-12 | 324 | 332 | 284 | 292 | .775 | .748 | 112° |
| MECHANICAL ROLLER – Top Sportsman 550+c.i. nitrous or big mph bracket. | .024 | .028 | 5600 to 8000 | 11-726-9 ^{14, 46} | 316BR-14 | 316 | 348 | 284 | 308 | .824 | .782 | 114° |
| MECHANICAL ROLLER – 550-600c.i. engines. Pro Street. Pontiac heads, works with nitrous. | .028 | .030 | 5200 to 8000 | 11-727-9 ^{14, 46} | 324DR-12 | 324 | 340 | 284 | 300 | .800 | .748 | 112° |
| MECHANICAL ROLLER – Bracket/Quick 16 520-600c.i. w/ 300 hp nitrous. | .024 | .026 | 5200 to 7800 | 11-725-9 ^{14, 46} | 326AR-14 | 326 | 346 | 286 | 310 | .810 | .756 | 114° |
| MECHANICAL ROLLER – For 600+c.i. engines. Pro Street. Pontiac heads. Works well with nitrous. | .028 | .030 | 5200 to 8000 | 11-722-9 ^{14, 46} | 328BR-14 | 328 | 344 | 288 | 304 | .810 | .782 | 114° |
| MECHANICAL ROLLER – 550-600c.i. Pro Street engines w/ nitrous. More aggressive than Part #11-727-9. | .028 | .030 | 5400 to 8200 | 11-732-9 ^{14, 46} | 324FR-14 | 324 | 348 | 289 | 308 | .867 | .782 | 114° |

² Requires machining on cylinder heads

⁶ Offset lifters available

¹⁴ Requires upgraded gear, thrust button & wear plate

¹⁶ Truck engines have .400" taller block

¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS
GENERAL MOTORS

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|----------------|---|-----------------------|--|------------------|----------------------|---------------------|-----------|--------------------|--------------|--------------|
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 819-16 ⁶ 96819-16 ¹⁰⁸ | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 819-16 ⁶ 96819-16 ¹⁰⁸ | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 819-16 ⁶ 96819-16 ¹⁰⁸ | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 506-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |

²⁰ Tall block engines require Part #4005
⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

¹⁰⁸ For bushing lifter upgrade, use part # 96819B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|--|---------------|------|---------------------|-----------------------------------|---------------|----------------|-------------|-------------------|-----|-----------------|------|------|
| | IN. | EX. | | | | ADVERTISED IN. | @ .050" EX. | W/ 1.7 ROCKER IN. | EX. | | | |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| Xtreme RX Rollers use COMP RX Drag roller profiles to give more lift, more area under the curve and shorter seat timing than any other high RPM drag racing series we have offered. Great for all out drag racing. | | | | | | | | | | | | |
| MECHANICAL ROLLER – Lower RPM bracket with good heads. | .026 | .028 | 4300 to 8000 | 11-735-9 ^{14,46} | 310RXD-14 | 310 | 330 | 277 | 292 | .800 | .800 | 114° |
| MECHANICAL ROLLER – Small Comp Eliminator with high ratio rockers and Fast Bracket, 1.8 and 1.7. | .024 | .026 | 4800 to 8500 | 11-737-9 ^{14,46} | 314RXD-14 | 314 | 334 | 281 | 296 | .873 | .800 | 114° |
| MECHANICAL ROLLER – Large Comp Eliminator with high ratio rockers and Fast Bracket, 1.8 and 1.7. | .024 | .026 | 5000 to 9000 | 11-739-9 ^{14,46} | 318RXD-14 | 318 | 338 | 285 | 300 | .873 | .800 | 114° |
| MECHANICAL ROLLER – Large cubic inch and nitrous applications. | .024 | .026 | 5000 to 9000 | 11-741-9 ^{14,46} | 314RXH-15 | 314 | 338 | 281 | 300 | .839 | .800 | 115° |
| MECHANICAL ROLLER – Very large cubic inch and nitrous applications. | .024 | .026 | 5200 to 9200 | 11-742-9 ^{14,46} | 318RXH-16 | 318 | 352 | 285 | 312 | .846 | .810 | 116° |
| MECHANICAL ROLLER – Pro Mod and Mountain motor applications. | .024 | .026 | 4800 to 8500 | 11-743-9 ^{14,46} | 322RXH-18 | 322 | 360 | 292 | 320 | .878 | .867 | 118° |
| DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Roller Camshafts | | | | | | | | | | | | |
| 18736542 Firing Order | | | | | | | | | | | | |
| MECHANICAL ROLLER – Good bracket, good heads, 11:1+ compression, 4500-5000 stall. | .026 | .028 | 4800 to 7400 | 11-748-14 ^{14,46} | 47S 312R10 | 312 | 319 | 278 | 280 | .714 | .680 | 110° |
| MECHANICAL ROLLER – Good Super Gas, 11:1+ compression, 4500+ stall, 427-468c.i. | .028 | .030 | 4600 to 7400 | 11-749-14 ^{14,46} | 47S 313R10 | 313 | 322 | 276 | 284 | .748 | .714 | 110° |
| MECHANICAL ROLLER – Fast Bracket, good heads, 13:1+ compression., 5000+ stall, small N20. | .026 | .028 | 5000 to 8500 | 11-747-14 ^{14,46} | 47S 321R12 | 321 | 336 | 284 | 296 | .748 | .748 | 112° |
| MECHANICAL ROLLER – Lower RPM bracket with good heads. | .026 | .028 | 4300 to 8000 | 11-750-14 ^{14,46} | 47S 310RXD-14 | 310 | 330 | 277 | 292 | .800 | .800 | 114° |
| MECHANICAL ROLLER – Quick 16 and Fast Bracket, 1.8 and 1.7. | .024 | .026 | 4800 to 8500 | 11-751-14 ^{14,46} | 47S 314RXD-14 | 314 | 334 | 281 | 296 | .873 | .800 | 114° |
| MECHANICAL ROLLER – Large cubic inch Quick 16, Eliminator w/ high ratio rockers & Fast Bracket, 1.8 & 1.7. | .024 | .026 | 5000 to 9000 | 11-752-14 ^{14,46} | 47S 318RXD-14 | 318 | 338 | 285 | 300 | .824 | .800 | 114° |
| MECHANICAL ROLLER – Large cubic inch and nitrous applications. | .024 | .026 | 5000 to 9000 | 11-753-14 ^{14,46} | 47S 314RXH-15 | 314 | 338 | 281 | 300 | .839 | .800 | 115° |
| MECHANICAL ROLLER – Nitrous and blown race applications. | .024 | .026 | 5200 to 9200 | 11-754-14 ^{14,46} | 47S 318RXH-16 | 318 | 352 | 285 | 312 | .846 | .810 | 116° |
| MECHANICAL ROLLER – Pro Mod and Mountain motor applications. | .024 | .026 | 4800 to 8500 | 11-755-14 ^{14,46} | 47S 322PMR-18 | 322 | 360 | 292 | 320 | .878 | .867 | 118° |

² Requires machining on cylinder heads¹⁴ Requires upgraded gear, thrust button & wear plate¹⁶ Truck engines have .400" taller block¹⁷ Mark V & Mark VI heads must use kit w/ studs¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4²⁰ Tall block engines require Part #4005

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

DRAG RACE Mechanical Roller Camshafts

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|-----------------------|----------------|---|-----------------------|--|------------------|----------------------|---------------------|-----------|--------------------|--------------|--------------|
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |

DRAG RACE 4 & 7 SWAP FIRING ORDER Mechanical Roller Camshafts

| | | | | | | | | | | | |
|-----------------------|----------------|---|-----------------------|--|------------------|----------------------|---------------------|--------|--------------------|--------------|------|
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 948-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26082-16 ² 26028-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

RED NUMBERS DENOTE PREMIUM OPTION



CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------|-----|---------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | W/ 1.7 ROCKER | IN. | | EX. | |
| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Best cam for short track engines. 1/4 to 3/8 mile. | .022 | .024 | 3200 to 6200 | 11-700-9 ^{14, 46} | 288AR-8 | 288 | 296 | 251 | 260 | .680 | .680 | 108° |
| MECHANICAL ROLLER – Best for 3/8 to 1/2 mile with 468c.i. motor. Broad torque curve. | .022 | .024 | 3500 to 6500 | 11-701-9 ^{14, 46} | 296AR-8 | 296 | 306 | 260 | 270 | .680 | .680 | 108° |
| MECHANICAL ROLLER – 3/8 to 5/8 mile high bank track. Works best in large engine. | .022 | .024 | 3800 to 6800 | 11-704-9 ^{14, 46} | 300BR-8 | 300 | 308 | 266 | 274 | .714 | .714 | 108° |
| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | | |
| Note: Xtreme RX Rollers use COMP's RX intake and RZ exhaust profiles to provide the ultimate in high RPM power and durability. (Custom Grinds Available) | | | | | | | | | | | | |
| MECHANICAL ROLLER – 427-454c.i. Good torque for short tracks with tight turns. | .020 | .022 | 3200 to 6200 | 11-850-9 ^{14, 46} | 286RX-8 | 286 | 293 | 253 | 260 | .727 | .729 | 108° |
| MECHANICAL ROLLER – 468c.i. Broad power for mid-size tracks. Easy on parts. | .020 | .022 | 3600 to 6600 | 11-851-9 ^{14, 46} | 294RX-8 | 294 | 303 | 261 | 270 | .734 | .737 | 108° |
| MECHANICAL ROLLER – 468-500c.i. For larger tracks with wide turns. | .020 | .022 | 4000 to 7000 | 11-852-9 ^{14, 46} | 300RX-10 | 300 | 309 | 267 | 276 | .739 | .742 | 110° |

CHEVROLET GEN VI 454 & 502 C.I. 8 CYL. 1996-1999

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | VALVE LIFT | | LOBE SEP. ANGLE | | |
|---|---------------|------|---------------------|-----------------------------------|-------------|----------|-----|---------------|-----|-----------------|------|------|
| | IN. | EX. | | | | IN. | EX. | W/ 1.7 ROCKER | IN. | | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Very strong low speed torque with excellent mileage. | Hyd. | Hyd. | 600 to 4600 | 01-405-8 ^{37, 46} | XR252HR | 252 | 258 | 200 | 206 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Great low end torque, good for towing or in RV. Works w/ stock intake & exhaust. | Hyd. | Hyd. | 1000 to 5000 | 01-409-8 ^{37, 46} | XR258HR | 258 | 264 | 206 | 212 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Mild performance driving w/ good low end & great mid-range power. Good mileage. | Hyd. | Hyd. | 1200 to 5200 | 01-411-8 ^{37, 46} | XR264HR | 264 | 270 | 212 | 218 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Best in performance applications with great mid-range power. Likes headers. | Hyd. | Hyd. | 1600 to 5400 | 01-414-8 ^{37, 46} | XR270HR | 270 | 276 | 218 | 224 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Great for high perf. street, needs intake, headers, lower gears & 2000+ stall. | Hyd. | Hyd. | 1900 to 5600 | 01-416-8 ^{37, 46} | XR276HR | 276 | 282 | 224 | 230 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – For high performance street engines, needs 2500+ stall, improved intake manifold, headers and lower gears. | Hyd. | Hyd. | 2200 to 5800 | 01-418-8 ^{37, 46} | XR282HR | 282 | 288 | 230 | 236 | .510 | .510 | 110° |
| HYDRAULIC ROLLER – Street/strip applications with 10:1+ compression and 2800+ stall. Rough idle, needs good intake and headers. | Hyd. | Hyd. | 2500 to 6000 | 01-421-8 ^{37, 46} | XR288HR | 288 | 294 | 236 | 242 | .521 | .540 | 110° |
| HYDRAULIC ROLLER – Best for serious street/ strip use with 10.5:1+ compression and 3000+ stall. Needs good intake, headers and ported heads. | Hyd. | Hyd. | 2800 to 6200 | 01-424-8 ^{37, 46} | XR294HR | 294 | 300 | 242 | 248 | .540 | .560 | 110° |
| HYDRAULIC ROLLER – Good for Pro Street and bracket racing. Needs 10.5:1+compression, 3500+ stall, very good intake, headers with low gears. | Hyd. | Hyd. | 3000 to 6400 | 01-425-8 ^{37, 46} | XR300HR | 300 | 306 | 248 | 254 | .560 | .580 | 110° |
| HYDRAULIC ROLLER – Works well with nitrous & blower applications. Needs 3000+ stall & all upgraded parts. | Hyd. | Hyd. | 2800 to 6400 | 01-426-8 ^{37, 46} | XR294HR-14 | 294 | 300 | 242 | 248 | .540 | .560 | 114° |
| HYDRAULIC ROLLER – Works well with large c.i. engines. Great for bracket racing, with all upgraded parts, needs 3500+ stall. | Hyd. | Hyd. | 3000 to 6600 | 01-427-8 ^{37, 46} | XR300HR-14 | 300 | 306 | 248 | 254 | .560 | .580 | 114° |

² Requires machining on cylinder heads

⁶ Offset lifters available

⁷ Stock springs cannot be used

¹⁴ Requires upgraded gear, thrust button & wear plate

¹⁶ Truck engines have .400" taller block

¹⁷ Mark V & Mark VI heads must use kit w/ studs

¹⁸ 50-State legal for 1993 & earlier BB Chevrolet V8, 396-454c.i. C.A.R.B. E.O. #D-279-4

²⁰ Tall block engines require Part #4005

³⁷ Adjustable valve train required

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

CHEVROLET 396-454 C.I. 8 CYL. 1967-1996 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|----------------|---|-----------------------|--|------------------|----------------------|---------------------|-----------|--------------------|--------------|--------------|
| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | |
| 96819-16 ¹⁰⁸ 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26091-16 ² | 731-16 784-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 ¹⁰⁸ 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26091-16 ² | 731-16 784-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 ¹⁰⁸ 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 944-16 ² 26091-16 ² | 731-16 784-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| OVAL TRACK Mechanical Roller Camshafts | | | | | | | | | | | |
| 96819-16 ¹⁰⁸ 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26099-16 ² | 733-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 ¹⁰⁸ 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26099-16 ² | 733-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |
| 96819-16 ¹⁰⁸ 96819B-16 | 3110KT 6200 | 1620-16 ^{17,18} 1820-16 ¹⁷ | 7954-16 ¹⁶ | 26099-16 ² | 733-16 | 612-16 ⁷⁵ | 505-16 ² | 622-16 | 4003 ²⁰ | 412M 410M | 4021 |

CHEVROLET GEN VI 454 & 502 C.I. 8 CYL. 1996-1999

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|----------------------------|--------|---------|------------|--|----------|---------------------------------|------------------|----------------------|-------------------------------|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| K01-405-8 ⁵⁷ | SK01-405-8 ^{7,37} | CL01-405-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-409-8 ⁵⁷ | SK01-409-8 ^{7,37} | CL01-409-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-411-8 ⁵⁷ | SK01-411-8 ^{7,37} | CL01-411-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-414-8 ⁵⁷ | SK01-414-8 ^{7,37} | CL01-414-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-416-8 ⁵⁷ | SK01-416-8 ^{7,37} | CL01-416-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-418-8 ⁵⁷ | SK01-418-8 ^{7,37} | CL01-418-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-421-8 ⁵⁷ | SK01-421-8 ^{7,37} | CL01-421-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ | 505-16 ² |
| K01-424-8 ⁵⁷ | SK01-424-8 ^{7,37} | CL01-424-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ | 505-16 ² |
| K01-425-8 ⁵⁷ | SK01-425-8 ^{7,37} | CL01-425-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ | 505-16 ² |
| K01-426-8 ⁵⁷ | SK01-426-8 ^{7,37} | CL01-426-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ | 505-16 ² |
| K01-427-8 ⁵⁷ | SK01-427-8 ^{7,37} | CL01-427-8 ^{7,37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ | 505-16 ² |

⁵⁷ K-Kit includes Part #4514-KIT rocker arm adjusting kit and pushrods
⁵⁸ Requires Part #4514-KIT, except on factory aluminum heads

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

¹⁰⁸ For bushing lifter upgrade, use part # 96819B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET GEN VI 454 & 502 C.I. 8 CYL. 1996-1999 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good replacement cam for minimally modified fuel injection engines. | Hyd. | Hyd. | 800 to 4800 | 01-410-8 ^{37,46} | XR258HR-13 | 258 | 267 | 206 | 212 | .510 | .510 | 113° |
| HYDRAULIC ROLLER – Very good low RPM torque. Great for towing applications, works with fuel injection. | Hyd. | Hyd. | 1200 to 5200 | 01-412-8 ^{37,46} | XR264HR-13 | 264 | 270 | 212 | 218 | .510 | .510 | 113° |
| HYDRAULIC ROLLER – Great mid-range power, likes headers, needs custom tuning. | Hyd. | Hyd. | 1500 to 5500 | 01-415-8 ^{37,46} | XR270HR-13 | 270 | 276 | 218 | 224 | .510 | .510 | 113° |
| HYDRAULIC ROLLER – Great in performance applications w/ custom tuning and 2200+ stall converter. | Hyd. | Hyd. | 1800 to 5800 | 01-417-8 ^{37,46} | XR276HR-13 | 276 | 282 | 224 | 230 | .510 | .510 | 113° |
| HYDRAULIC ROLLER – Works well with ported heads, serious valve train upgrade required, needs 2200+ stall and programmer. | Hyd. | Hyd. | 1800 to 6000 | 01-775-8 ^{37,46} | XR271HR-12 | 271 | 279 | 224 | 232 | .591 | .601 | 112° |
| HYDRAULIC ROLLER – Best in high performance street engines, needs intake, headers, 2400+ stall converter and programmer. | Hyd. | Hyd. | 2000 to 6000 | 01-419-8 ^{37,46} | XR282HR-14 | 282 | 288 | 230 | 236 | .510 | .520 | 114° |
| HYDRAULIC ROLLER – Best in high performance street and race engines. Needs intake, headers, lower gear, 2600+ stall and programmer. | Hyd. | Hyd. | 2200 to 6200 | 01-422-8 ^{37,46} | XR288HR-14 | 288 | 294 | 236 | 242 | .520 | .539 | 114° |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™-High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1900 to 5600 | 01-600-8 ³⁷ | 283THR7 | 283 | 303 | 227 | 241 | .547 | .530 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™-High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 5900 | 01-601-8 ³⁷ | 291THR7 | 291 | 311 | 235 | 249 | .557 | .542 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™-Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6200 | 01-602-8 ³⁷ | 299THR7 | 299 | 319 | 243 | 257 | .569 | .554 | 107° |
| XTREME MARINE™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Good for inboard/outboard pleasure boats, has good idle. | Hyd. | Hyd. | 1600 to 5400 | 01-445-8 ^{37,46} | XM270HR | 270 | 276 | 218 | 224 | .510 | .510 | 112° |
| HYDRAULIC ROLLER – Good for jet boat with A impeller. Great for pleasure or mild performance use. | Hyd. | Hyd. | 2200 to 5800 | 01-451-8 ^{37,46} | XM284HR | 284 | 290 | 230 | 236 | .547 | .547 | 112° |
| HYDRAULIC ROLLER – Good for jet boat with A or B impeller in bracket racing or performance use. | Hyd. | Hyd. | 2800 to 6200 | 01-456-8 ^{37,46} | XM296HR | 296 | 302 | 242 | 248 | .566 | .566 | 112° |
| HYDRAULIC ROLLER – Good in jet boat with B impeller, 10:1+ compression, running river drags or bracket racing. | Hyd. | Hyd. | 3500 to 6500 | 01-461-8 ^{37,46} | XM308HR | 308 | 314 | 254 | 260 | .575 | .575 | 112° |
| XTREME MARINE EFI Hydraulic Roller Camshaft | | | | | | | | | | | | |
| HYDRAULIC ROLLER – EFI Marine cam for 525c.i.. Steel billet cam with cast distributor gear. | Hyd. | Hyd. | 2500-6000 | 01-446-11 ^{37,46} | XM289HR-14 | 289 | 297 | 235 | 243 | .610 | .627 | 114° |

² Requires machining on cylinder heads⁷ Stock springs cannot be used³⁷ Adjustable valve train required⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump⁵⁷ K-Kit includes Part #4514-KIT rocker arm adjusting kit and pushrods

CHEVROLET GEN VI 454 & 502 C.I. 8 CYL. 1996-1999 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|--|--------------------|---------------|-------------------|--|-------------|---------------------------------|------------------|---|-------------------------------|
| XTREME ENERGY™ Computer Controlled Hydraulic Roller Camshafts | | | | | | | | | | | |
| K01-410-8 ⁵⁷ | SK01-410-8 ^{7.37} | CL01-410-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-412-8 ⁵⁷ | SK01-412-8 ^{7.37} | CL01-412-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-415-8 ⁵⁷ | SK01-415-8 ^{7.37} | CL01-415-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-417-8 ⁵⁷ | SK01-417-8 ^{7.37} | CL01-417-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-775-8 ⁵⁷ | SK01-775-8 ^{7.37} | CL01-775-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| K01-419-8 ⁵⁷ | SK01-419-8 ^{7.37} | CL01-419-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-422-8 ⁵⁷ | SK01-422-8 ^{7.37} | CL01-422-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| THUMPR™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| K01-600-8 ⁵⁷ | N/A | CL01-600-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| K01-601-8 ⁵⁷ | N/A | CL01-601-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| K01-602-8 ⁵⁷ | N/A | CL01-602-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| XTREME MARINE™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| K01-445-8 ⁵⁷ | SK01-445-8 ^{7.37} | CL01-445-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 924-16 ² | 748-16 741-16 | 612-16 ⁷⁵ | 504-16 505-16 ² |
| K01-451-8 ⁵⁷ | SK01-451-8 ^{7.37} | CL01-451-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| K01-456-8 ⁵⁷ | SK01-456-8 ^{7.37} | CL01-456-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 ² | 505-16 ² |
| K01-461-8 ⁵⁷ | SK01-461-8 ^{7.37} | CL01-461-8 ^{7.37} | RPS302 | 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 924-16 ² 26120-16 | 741-16 795-16 | 612-16 ⁷⁵ 616-16 | 505-16 ² |
| XTREME MARINE EFI Hydraulic Roller Camshaft | | | | | | | | | | | |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| 900-16 | 3149KT | 1620-16 ⁵⁸ 1820-16 ⁵⁸ | 7663-16 7998-16 | 928-16 | 741-16 1731-16 | 612-16 | 505-16 | 622-16 | N/A | 412M 410M | N/A |

⁵⁸ Requires Part #4514-KIT, except on factory aluminum heads

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

RED NUMBERS DENOTE PREMIUM OPTION

CHEVROLET GEN VI 454 & 502 C.I. 8 CYL. 1996-1999 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Optimized fuel mileage with good torque and hp. | Hyd. | Hyd. | 600 to 4600 | 01-525-8⁴⁶ | TPX246HR-16 | 246 | 258 | 194 | 206 | .500 | .493 | 116° |
| HYDRAULIC ROLLER – Exceptional torque with good hp and moderate fuel economy. | Hyd. | Hyd. | 800 to 4800 | 01-530-8⁴⁶ | TPX254HR-15 | 254 | 264 | 202 | 212 | .507 | .500 | 115° |
| HYDRAULIC ROLLER – Optimized horsepower with good torque and average fuel economy. | Hyd. | Hyd. | 1200 to 5200 | 01-535-8⁴⁶ | TPX262HR-14 | 262 | 270 | 210 | 218 | .513 | .507 | 114° |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Great in Super Street when using a heavy car, very good power band. | .024 | .026 | 3500 to 6800 | 01-712-9^{37,46} | 296ER-8 | 296 | 304 | 260 | 268 | .714 | .714 | 108° |
| MECHANICAL ROLLER – Good for Super Street or Super Gas with 4500+ stall. | .024 | .026 | 4500 to 7300 | 01-708-9^{37,46} | 312AR-10 | 312 | 319 | 276 | 280 | .714 | .680 | 110° |
| MECHANICAL ROLLER – Best in Super Comp or Super Gas with 5000+ stall. | .024 | .026 | 5000 to 7800 | 01-710-9^{37,46} | 322CR-10 | 322 | 330 | 282 | 292 | .727 | .714 | 110° |

GM 8100/8.1L 8 CYL. 2001-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.7 ROCKER IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Great torque, good for towing and RVs. Works with OE intake and exhaust. | Hyd. | Hyd. | 800 to 4800 | 46-408-9^{37,46} | XR258HR | 258 | 264 | 206 | 212 | .510 | .510 | 112° |
| HYDRAULIC ROLLER – Good mid-range performance, great daily driver, headers recommended. | Hyd. | Hyd. | 1000 to 5000 | 46-413-9^{37,46} | XR264HR | 264 | 270 | 212 | 218 | .510 | .510 | 114° |
| HYDRAULIC ROLLER – Best in performance applications, aftermarket intake and exhaust recommended. | Hyd. | Hyd. | 1200 to 5200 | 46-422-9^{37,46} | XR270HR | 270 | 276 | 218 | 224 | .510 | .510 | 114° |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Optimized fuel mileage with good torque and HP. | Hyd. | Hyd. | 600 to 4600 | 46-525-9⁴⁶ | TPX246HR-16 | 246 | 258 | 194 | 206 | .500 | .493 | 116° |
| HYDRAULIC ROLLER – Exceptional torque with good hp and moderate fuel economy. | Hyd. | Hyd. | 800 to 4800 | 46-530-9⁴⁶ | TPX254HR-15 | 254 | 264 | 202 | 212 | .507 | .500 | 115° |
| HYDRAULIC ROLLER – Optimized horsepower with good torque and average fuel economy. | Hyd. | Hyd. | 1000 to 5000 | 46-535-9⁴⁶ | TPX262HR-14 | 262 | 270 | 210 | 218 | .513 | .507 | 114° |

GM 6600/6.6L DURAMAX DIESEL 2000-PRESENT

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-------------------|-------------|----------------|-----|-------------|-----|-------------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.37/1.69 ROCKER IN. | EX. | |
| TRI-POWER XTREME™ Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Perfect for mild modifications, optimized fuel mileage and improved torque/hp. Good for heavy towing. | .010 | .010 | 1200 to 3800 | 132-500-12 | 246XD R108 | 246 | 254 | 185 | 188 | .420 | .420 | 108° |
| MECHANICAL ROLLER – Designed for modified performance applications (Exh., programmer, etc.). Good for limited towing. | .010 | .010 | 1500 to 4200 | 132-501-12 | 258XD R109 | 258 | 268 | 197 | 202 | .450 | .450 | 109° |
| MECHANICAL ROLLER – Optimized HP for heavily modified, street/strip, non-towing, high RPM applications. | .010 | .010 | 1800 to 4600 | 132-502-12 | 270XD R109 | 270 | 282 | 209 | 216 | .480 | .480 | 109° |

² Requires machining on cylinder heads
³⁷ Adjustable valve train required

⁴⁶ Must use bronze tip fuel pump pushrod when using high pressure or high volume pump

⁵⁸ Requires Part #4514-KIT, except on factory aluminum heads

CHEVROLET GEN VI 454 & 502 C.I. 8 CYL. 1996-1999 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------|--|----------|--|------------------|--|--|-----------|---------|--------------|--------------|
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| 900-16 | 3149KT | 1620-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 900-16 | 3149KT | 1411-16 ⁵⁸ 1620-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| DRAG RACE Mechanical Roller Camshafts | | | | | | | | | | | |
| 883-16 96819-16 ¹⁰⁸ | 3149KT | 1620-16 ⁵⁸ 1820-16 ⁵⁸ | 7954-16 | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² 506-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 883-16 96819-16 ¹⁰⁸ | 3149KT | 1620-16 ⁵⁸ 1820-16 ⁵⁸ | 7954-16 | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² 506-16 ² | 622-16 | N/A | 412M 410M | 4021 |
| 883-16 96819-16 ¹⁰⁸ | 3149KT | 1620-16 ⁵⁸ 1820-16 ⁵⁸ | 7954-16 | 947-16 ² 26082-16 ² | 735-16 722-16 | 612-16 ⁷⁵ | 505-16 ² 506-16 ² | 622-16 | N/A | 412M 410M | 4021 |

GM 8100/8.1L 8 CYL. 2001-PRESENT

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|---|------------|-----------------------|----------|--------------------|------------------|--|-------------------------------|-----------|---------|------------|--------------|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| 900-16 | N/A | 1411-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | N/A | N/A | N/A | N/A |
| 900-16 | N/A | 1411-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | N/A | N/A | N/A | N/A |
| 900-16 | N/A | 1411-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | N/A | N/A | N/A | N/A |
| TRI-POWER XTREME™ Hydraulic Roller Camshafts | | | | | | | | | | | |
| 900-16 | N/A | 1411-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | N/A | N/A | N/A | N/A |
| 900-16 | N/A | 1411-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | N/A | N/A | N/A | N/A |
| 900-16 | N/A | 1411-16 ⁵⁸ | 7815-16 | 911-16 26120-16 | 748-16 795-16 | 612-16 ⁷⁵ 616-16 ⁷⁵ | 504-16 505-16 ² | N/A | N/A | N/A | N/A |

GM 6600/6.6L DURAMAX DIESEL 2000-PRESENT

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|--------|--------|--------|---------|------------|-------------|----------|----------------------|-----------|-------------|-------------|
| TRI-POWER XTREME™ Mechanical Roller Camshafts | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 26113-32 26125-32 | 701-32 | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 26113-32 26125-32 | 701-32 | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 26113-32 26125-32 | 701-32 | N/A | N/A |

⁷⁵ Most aluminum heads come standard with 11/32" valve stems. Use appropriate valve locks, retainers, and seals.

¹⁰⁸ For bushing lifter upgrade, use part # 96819B-16. Offsets available.

RED NUMBERS DENOTE PREMIUM OPTION

OLDSMOBILE 260-455 C.I. 8 CYL. 1967-1990

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Ideal for family sedans. Good low end torque and economy, smooth idle. | Hyd. | Hyd. | 800 to 4800 | 42-227-4 | 252H | 252 | 252 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC – Excellent power for towing. Good performance with highway gears, smooth idle. | Hyd. | Hyd. | 1200 to 5200 | 42-228-4 | 260H | 260 | 260 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC – Performance camshaft for mild street machines. Broad power, noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 42-229-4 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Great performance with stock to mild converter. Needs low gear in small engines, likes headers. Mild rough idle. | Hyd. | Hyd. | 1800 to 5800 | 42-308-4 | 270H | 270 | 270 | 224 | 224 | .501 | .501 | 110° |
| HYDRAULIC – Good for street machine with 2200+ stall. Use headers and lower gears. Rough idle. | Hyd. | Hyd. | 2000 to 6000 | 42-231-4 | 280H | 280 | 280 | 230 | 230 | .490 | .490 | 110° |
| HYDRAULIC – Street/strip, 3000+ stall, with aftermarket manifolds, lower gears, increased compression. Very rough idle. | Hyd. | Hyd. | 2500 to 6500 | 42-236-4³⁷ | 292H | 292 | 292 | 244 | 244 | .518 | .518 | 110° |
| HYDRAULIC – Pro Street/bracket race cam, good for large engines w/ 3500+ stall & low gears. Radical idle. | Hyd. | Hyd. | 3000 to 6800 | 42-237-4³⁷ | 305H | 305 | 305 | 253 | 253 | .540 | .540 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4800 | 42-220-4 | XE250H | 250 | 260 | 206 | 212 | .443 | .448 | 110° |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 42-221-4 | XE256H | 256 | 268 | 212 | 218 | .453 | .456 | 110° |
| HYDRAULIC – Excellent response, good mileage, stock converter, mild gear. | Hyd. | Hyd. | 1200 to 5600 | 42-222-4 | XE262H | 262 | 274 | 218 | 224 | .475 | .480 | 110° |
| HYDRAULIC – Good for street machines, slightly rough idle, 1800+ stall. | Hyd. | Hyd. | 1600 to 5800 | 42-223-4 | XE268H | 268 | 280 | 224 | 230 | .485 | .490 | 110° |
| HYDRAULIC – High performance street, very strong mid-range. Needs headers and 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 42-224-4³⁷ | XE274H | 274 | 286 | 230 | 236 | .520 | .523 | 110° |
| HYDRAULIC – Street/strip, needs 9:1+ compression. 2800+ stall, headers, gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 42-225-4³⁷ | XE284H | 284 | 296 | 240 | 246 | .541 | .544 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, gear, 3200+ stall. | Hyd. | Hyd. | 2800 to 6800 | 42-226-4³⁷ | XE294H | 294 | 306 | 250 | 256 | .554 | .558 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 42-600-5 | 279TH7 | 278 | 296 | 226 | 241 | .491 | .476 | 107° |
| HYDRAULIC – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 42-601-5 | 287TH7 | 286 | 304 | 234 | 249 | .500 | .486 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 42-602-5 | 295TH7 | 294 | 312 | 242 | 257 | .512 | .497 | 107° |

1 Requires screw-in studs & guide plates

2 Requires machining on cylinder heads

7 Stock springs cannot be used

37 Adjustable valve train required

42 Olds 400-455 use Part #7582-16

OLDSMOBILE 260-455 C.I. 8 CYL. 1967-1990

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|----------------------------|----------------------------|------------------------|--------------------------------|--------------|---|---|--|------------------|------------------|-------------------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K42-227-4 | SK42-227-4 | CL42-227-4 | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 3213 2113 | 1242-16 | 7842-16 ^{42,51} | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| K42-228-4 | SK42-228-4 | CL42-228-4 | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 3213 2113 | 1242-16 | 7842-16 ^{42,51} | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| K42-229-4 | SK42-229-4 ⁷ | CL42-229-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 3213 2113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K42-308-4 | SK42-308-4 ⁷ | CL42-308-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-231-4 | SK42-231-4 ⁷ | CL42-231-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-236-4 ³⁷ | SK42-236-4 ^{7,37} | CL42-236-4 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-237-4 ³⁷ | SK42-237-4 ^{7,37} | CL42-237-4 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K42-220-4 | SK42-220-4 | CL42-220-4 | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 3213 2113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| K42-221-4 | SK42-221-4 ⁷ | CL42-221-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 3213 2113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| K42-222-4 | SK42-222-4 ⁷ | CL42-222-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 3213 2113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² |
| K42-223-4 | SK42-223-4 ⁷ | CL42-223-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-224-4 ³⁷ | SK42-224-4 ^{7,37} | CL42-224-4 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-225-4 ³⁷ | SK42-225-4 ^{7,37} | CL42-225-4 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-226-4 ³⁷ | SK42-226-4 ^{7,37} | CL42-226-4 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K42-600-5 ³⁷ | N/A | CL42-600-5 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-601-5 ³⁷ | N/A | CL42-601-5 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-602-5 ³⁷ | N/A | CL42-602-5 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

⁴⁴ For 260-403 engines only. 455 use kit Part #1442-KIT.

⁵¹ Pushrod length may vary depending on combination, check for proper length

RED NUMBERS DENOTE PREMIUM OPTION



OLDSMOBILE 260-455 C.I. 8 CYL. 1967-1990 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Best cam for economy and improved power. Skiing and pleasure boating. | Hyd. | Hyd. | 1500 to 5500 | 42-229-4 | 268H | 268 | 268 | 218 | 218 | .456 | .456 | 110° |
| HYDRAULIC – Great cam for 455 jet boat with A or B impeller. Performance and skiing. | Hyd. | Hyd. | 2000 to 6000 | 42-231-4 | 280H | 280 | 280 | 230 | 230 | .490 | .490 | 110° |
| HYDRAULIC – Performance cam for B impeller in jet boat. River or bracket racing. | Hyd. | Hyd. | 2500 to 6500 | 42-236-4³⁷ | 292H | 292 | 292 | 244 | 244 | .518 | .518 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| FACTORY MUSCLE™ Hydraulic Flat Tappet Camshafts (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Factory I.D. # 402194 for: 350c.i., 1968-70, factory 325 HP 455c.i., 1968, factory 370 HP 455c.i., 1971, factory 340 HP | Hyd. | Hyd. | 1800 to 5800 | 42-114-3 | 194H | 308 | 308 | 233 | 233 | .474 | .474 | 113° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Magnum Muscle Camshaft for: 350c.i., 1968-70, factory 325 HP 455c.i., 1968, factory 370 HP 455c.i., 1971, factory 340 HP | Hyd. | Hyd. | 1600 to 5600 | 42-231-4 | 280H | 280 | 280 | 230 | 230 | .490 | .490 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Daily driver, strong torque, smooth idle. | Hyd. | Hyd. | 1000 to 5000 | 42-413-11^{5,37} | XR262HR | 262 | 268 | 210 | 216 | .505 | .505 | 110° |
| HYDRAULIC ROLLER – Great for street machines, needs headers, low gears, and 2200+ stall. | Hyd. | Hyd. | 1800 to 5600 | 42-423-11^{5,37} | XR276HR | 276 | 282 | 224 | 230 | .505 | .505 | 110° |
| HYDRAULIC ROLLER – Rough idle, needs 2800+ stall, lower gears and 9.5:1 compression. | Hyd. | Hyd. | 2200 to 6000 | 42-433-11^{5,37} | XR290HR | 290 | 296 | 236 | 242 | .515 | .533 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|---------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1700 to 5500 | 42-600-11^{5,37} | 283THR7 | 283 | 303 | 227 | 241 | .531 | .515 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2000 to 5800 | 42-601-11^{5,37} | 291THR7 | 291 | 311 | 235 | 249 | .540 | .526 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2300 to 6100 | 42-602-11^{5,37} | 299THR7 | 299 | 319 | 243 | 257 | .552 | .537 | 107° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.6 ROCKER IN. | EX. | |
| DRAG RACE Mechanical Flat Tappet Camshaft | | | | | | | | | | | | |
| SOLID – Great torque in full body car with 400c.i. and 3500+ stall. | .026 | .028 | 3500 to 6500 | 42-655-5 | 285B-8 | 285 | 294 | 250 | 256 | .568 | .545 | 108° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads
⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used
³⁷ Adjustable valve train required
⁴² Olds 400-455 use Part #7582-16

⁴³ Olds 260-403 use Part #7842-16
⁴⁴ For 260-403 engines only. 455 use kit Part #1442-KIT.

OLDSMOBILE 260-455 C.I. 8 CYL. 1967-1990 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | |
|---|----------------------------|----------------------------|------------------------|--------------------------------|--------------|---|---|--|------------------|------------------|-------------------------------|--|
| MARINE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| K42-229-4 | SK42-229-4 ⁷ | CL42-229-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² | |
| K42-231-4 | SK42-231-4 ⁷ | CL42-231-4 ⁷ | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |
| K42-236-4 ³⁷ | SK42-236-4 ^{7,37} | CL42-236-4 ^{7,37} | 1441-KIT ⁴⁴ | 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|--------------|--|---|-------------------------------|------------------|------------------|-------------------------------|-----------|---------|------------|--------------|
| FACTORY MUSCLE™ Hydraulic Flat Tappet Camshafts (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 1044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² | N/A | N/A | 442 | N/A |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 852-16 863-16 ³⁷ | 2113 3113 | 1442-16 ¹ 1044-16 ¹ | 7842-16 ^{42,51} 7131-16 ⁵¹ | 901-16 995-16 ² | 743-16 740-16 | 601-16 611-16 | 502-16 503-16 ² | N/A | N/A | 442 | N/A |

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------------|-------------------------------|--------|---------|--------------|---|--------------------------|--|------------------|------------------|---------------------|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K42-413-11 ^{5,37} | SK42-413-11 ^{5,7,37} | CL42-413-11 ^{5,7,37} | N/A | 857-16 | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7645-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-423-11 ^{5,37} | SK42-423-11 ^{5,7,37} | CL42-423-11 ^{5,7,37} | N/A | 857-16 | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7645-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-433-11 ^{5,37} | SK42-433-11 ^{5,7,37} | CL42-433-11 ^{5,7,37} | N/A | 857-16 | 2113 3113 | 1442-16 ¹ 1044-16 ¹ | 7645-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K42-600-11 ^{5,37} | N/A | CL42-600-11 ^{5,7,37} | N/A | 857-16 | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7645-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-601-11 ^{5,37} | N/A | CL42-601-11 ^{5,7,37} | N/A | 857-16 | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7645-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K42-602-11 ^{5,37} | N/A | CL42-602-11 ^{5,7,37} | N/A | 857-16 | 2113 3113 | 1442-16 ¹ 19044-16 ¹ | 7645-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|----------------|-----------------------|-----------------------|--|------------------|------------------|---------------------|-----------|---------|------------|--------------|
| DRAG RACE Mechanical Flat Tappet Camshaft | | | | | | | | | | | |
| 813-16 ³⁷ 800-16 ³⁷ | 3113 3113KT | 19044-16 ¹ | 7582-16 ⁴³ | 950-16 ² 26094-16 ² | 740-16 730-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 442 | N/A |

⁵¹ Pushrod length may vary depending on combination, check for proper length

⁶⁶ For 455 use Part #7783-16

RED NUMBERS DENOTE PREMIUM OPTION

PONTIAC 151 C.I. (2.5L IRON DUKE) 4 CYL. 1978-1989

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (TWO GEARS ON CAM CORE) | | | | | | | | | | | | |
| HYDRAULIC – Our best cam for economy. Excellent torque. | Hyd. | Hyd. | 500 to 4500 | 52-115-5 | 240H | 240 | 248 | 192 | 200 | .455 | .455 | 108° |
| HYDRAULIC – Good torque and power with smooth idle. Strong increase over stock cam. | Hyd. | Hyd. | 800 to 4800 | 52-119-5 | 252H | 252 | 252 | 206 | 206 | .474 | .474 | 110° |
| HYDRAULIC – Good combination of torque and power. Performance street driving. | Hyd. | Hyd. | 1200 to 5200 | 52-123-5 | 260H | 260 | 260 | 212 | 212 | .489 | .489 | 110° |
| HI-TECH™ Mechanical Flat Tappet Camshafts (TWO GEARS ON CAM CORE) | | | | | | | | | | | | |
| SOLID – Oval track/bracket race/street stock. After-market 2 BBL or stock carb. | .022 | .024 | 3000 to 6000 | 52-500-5⁷ | 272TL-5 | 272 | 272 | 242 | 242 | .595 | .595 | 105° |
| SOLID – Oval track/bracket race/street stock. Same as 272 with slightly more RPM. | .022 | .024 | 3500 to 6500 | 52-502-5⁷ | 276TL-5 | 276 | 276 | 246 | 246 | .606 | .606 | 105° |

PONTIAC 151 C.I. 4 CYL. 1977-1993

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (ONE GEAR ON CAM CORE) | | | | | | | | | | | | |
| HYDRAULIC – Good torque and power with smooth idle. Strong increase over stock cam. | Hyd. | Hyd. | 800 to 4800 | 14-119-5 | 252H | 252 | 252 | 206 | 206 | .474 | .474 | 110° |
| HYDRAULIC – Good combination of torque and power. Performance street and marine. | Hyd. | Hyd. | 1200 to 5200 | 14-123-5 | 260H | 260 | 260 | 212 | 212 | .489 | .489 | 110° |

PONTIAC 265-455 C.I. 8 CYL. 1955-1981

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------|-----|-----|-----|------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Smooth idle with fuel economy for 326 to 400c.i. Strong torque. Best cam for 301. | Hyd. | Hyd. | 800 to 4800 | 51-229-3 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Smooth idle, good mileage for 455c.i. Strong towing cam. Good power for 326-400c.i. | Hyd. | Hyd. | 1200 to 5200 | 51-230-3 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |
| HYDRAULIC – Good low end and mid-range torque. Street performance, noticeable idle. | Hyd. | Hyd. | 1500 to 5500 | 51-232-3 | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |

² Requires machining on cylinder heads

⁷ Stock springs cannot be used

⁸ Fits only certain years

⁴⁵ 265-301 use Part #864-16

⁴⁷ 1.65:1 ratio available

PONTIAC 151 C.I. (2.5L IRON DUKE) 4 CYL. 1978-1989

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|--|----------------|-------------|--------------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (TWO GEARS ON CAM CORE) | | | | | | | | | | | |
| K52-115-5 | SK52-115-5 | CL52-115-5 | N/A | 864-8 | 3252 | N/A | N/A | 988-8 | 743-8 | 601-8 | 501-8 |
| K52-119-5 | SK52-119-5 | CL52-119-5 | N/A | 864-8 | 3252 | N/A | N/A | 988-8 | 743-8 | 601-8 | 501-8 |
| K52-123-5 | SK52-123-5 ⁷ | CL52-123-5 ⁷ | N/A | 864-8 | 3252 | N/A | N/A | 988-8 | 743-8 | 601-8 | 501-8 |
| HI-TECH™ Mechanical Flat Tappet Camshafts (TWO GEARS ON CAM CORE) | | | | | | | | | | | |
| N/A | N/A | N/A | N/A | 2900-8 | 3252 | N/A | N/A | 986-8 ² 987-8 ² | 740-8 730-8 | 611-8 | 503-8 ² |
| N/A | N/A | N/A | N/A | 2900-8 | 3252 | N/A | N/A | 986-8 ² 987-8 ² | 740-8 730-8 | 611-8 | 503-8 ² |

PONTIAC 151 C.I. 4 CYL. 1977-1993

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|-------------------------|-------------------------|--------|---------|------------|-------------|----------|------------------|----------------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts (ONE GEAR ON CAM CORE) | | | | | | | | | | | |
| K14-119-5 | SK14-119-5 | CL14-119-5 | N/A | 812-8 | 3211 | 1261-8 | 7861-8 | 981-8 26981-8 | 742-8 787-8 | 601-8 | 501-8 |
| K14-123-5 | SK14-123-5 ⁷ | CL14-123-5 ⁷ | N/A | 812-8 | 3211 | 1261-8 | 7861-8 | 981-8 26981-8 | 742-8 787-8 | 601-8 | 501-8 |

PONTIAC 265-455 C.I. 8 CYL. 1955-1981

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-------------------------|----------------------|------------|-----------------------|----------------------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K51-229-3 | SK51-229-3 | CL51-229-3 | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ | 3212 | 1451-16 ⁴⁷ | 7851-16 ⁸ | 988-16 | 743-16 | 601-16 | 501-16 |
| K51-230-3 | SK51-230-3 | CL51-230-3 | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ | 3212 | 1451-16 ⁴⁷ | 7851-16 ⁸ | 988-16 | 743-16 | 601-16 | 501-16 |
| K51-232-3 | SK51-232-3 ⁷ | CL51-232-3 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ | 3212 | 1451-16 ⁴⁷ | 7851-16 ⁸ | 988-16 | 743-16 | 601-16 | 501-16 |

RED NUMBERS DENOTE PREMIUM OPTION

PONTIAC 265-455 C.I. 8 CYL. 1955-1981 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Fair idle, good mid-range torque. Can use stock torque converter, best with 2000+ stall. Daily performance use. | Hyd. | Hyd. | 1800 to 5800 | 51-233-4 | 270H | 270 | 270 | 224 | 224 | .476 | .476 | 110° |
| HYDRAULIC – Choppy idle, increased compression advised. Needs 2500+ stall and lower gear, use headers. | Hyd. | Hyd. | 2000 to 6000 | 51-234-4 | 280H | 280 | 280 | 230 | 230 | .480 | .480 | 110° |
| HYDRAULIC – Rough idle, performance usage. Increased compression required. Needs 3000+ stall and 3.73 or lower gears. | Hyd. | Hyd. | 2500 to 6500 | 51-240-4 | 292H | 292 | 292 | 244 | 244 | .501 | .501 | 110° |
| HYDRAULIC – Racy idle. Bracket racing cam. Needs 10.5:1 compression and 3500+ stall. Low gear ratio. | Hyd. | Hyd. | 3000 to 6500 | 51-241-4 | 305H | 305 | 305 | 253 | 253 | .525 | .525 | 110° |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Very strong torque, excellent mileage, smooth idle. | Hyd. | Hyd. | 600 to 4800 | 51-220-4 | XE250H | 250 | 260 | 206 | 212 | .432 | .444 | 110° |
| HYDRAULIC – Strong torque through low end and mid-range, good idle. | Hyd. | Hyd. | 1000 to 5200 | 51-221-4 | XE256H | 256 | 268 | 212 | 218 | .447 | .455 | 110° |
| HYDRAULIC – Excellent response, good mileage, stock converter or 1800 stall. Mild gear. | Hyd. | Hyd. | 1300 to 5500 | 51-222-4 | XE262H | 262 | 270 | 218 | 224 | .462 | .470 | 110° |
| HYDRAULIC – Good for street machines, slightly rough idle. 2000+ stall. | Hyd. | Hyd. | 1600 to 5800 | 51-223-4 | XE268H | 268 | 280 | 224 | 230 | .477 | .480 | 110° |
| HYDRAULIC – High performance street, very strong mid-range, headers and 2200+ stall. | Hyd. | Hyd. | 1800 to 6000 | 51-224-4 | XE274H | 274 | 286 | 230 | 236 | .488 | .491 | 110° |
| HYDRAULIC – Street/strip, needs 9:1+ compression. 2800+ stall, headers, gears, rough idle. | Hyd. | Hyd. | 2300 to 6500 | 51-225-4 | XE284H | 284 | 296 | 240 | 246 | .507 | .510 | 110° |
| HYDRAULIC – Pro Street/bracket, good intake, headers, gear, 3500+ stall. | Hyd. | Hyd. | 2800 to 6500 | 51-226-4 | XE294H | 294 | 306 | 250 | 256 | .519 | .524 | 110° |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Thumpr™-High performance street, stock converter ok, best with 2000+ converter and gears. Choppy/thumping idle. | Hyd. | Hyd. | 2000 to 5800 | 51-600-5 | 279TH7 | 279 | 297 | 227 | 241 | .478 | .465 | 107° |
| HYDRAULIC – Mutha' Thumpr™-High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2200 to 6100 | 51-601-5 | 287TH7 | 287 | 305 | 235 | 249 | .490 | .475 | 107° |
| HYDRAULIC – Big Mutha' Thumpr™-Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2500 to 6400 | 51-602-5 | 295TH7 | 295 | 313 | 243 | 257 | .501 | .486 | 107° |

¹ Requires screw-in studs & guide plates² Requires machining on cylinder heads.⁷ Stock springs cannot be used⁸ Fits only certain years³⁷ Adjustable valve train required⁴⁵ 265-301 use Part #864-16⁴⁷ 1.65:1 ratio available

PONTIAC 265-455 C.I. 8 CYL. 1955-1981 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|-------------------------|---|--------------|---|--|--|------------------|------------------|---------------------|
| MAGNUM Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K51-233-4 | SK51-233-4 ⁷ | CL51-233-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-234-4 | SK51-234-4 ⁷ | CL51-234-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-240-4 | SK51-240-4 ⁷ | CL51-240-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-241-4 | SK51-241-4 ⁷ | CL51-241-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| XTREME ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K51-220-4 | SK51-220-4 | CL51-220-4 | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 3212 2112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7851-16 ⁸ 7262-16 ⁸ | 988-16 | 743-16 | 601-16 | 501-16 |
| K51-221-4 | SK51-221-4 | CL51-221-4 | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 3212 2112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7851-16 ⁸ 7262-16 ⁸ | 988-16 | 743-16 | 601-16 | 501-16 |
| K51-222-4 | SK51-222-4 ⁷ | CL51-222-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 3212 2112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7851-16 ⁸ 7262-16 ⁸ | 988-16 | 743-16 | 601-16 | 501-16 |
| K51-223-4 | SK51-223-4 ⁷ | CL51-223-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-224-4 | SK51-224-4 ⁷ | CL51-224-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-225-4 | SK51-225-4 ⁷ | CL51-225-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-226-4 | SK51-226-4 ⁷ | CL51-226-4 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| THUMPR™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K51-600-5 | N/A | CL51-600-5 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-601-5 | N/A | CL51-601-5 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-602-5 | N/A | CL51-602-5 ⁷ | RP1451-16 ⁴⁷ | 852-16 ⁴⁵ 863-16 ^{37,45} | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7262-16 ⁸ 7786-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |

RED NUMBERS DENOTE PREMIUM OPTION

PONTIAC 265-455 C.I. 8 CYL. 1955-1981 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.65 ROCKER IN. | EX. | |
| FACTORY MUSCLE™ Hydraulic Flat Tappet Camshafts (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Factory I.D. #9794041 for: 400c.i., 1968 RAM AIR IV, factory 366 HP 400c.i., 1969, factory 345/370 HP 455c.i., 1970, factory 370 HP | Hyd. | Hyd. | 1800 to 5700 | 51-116-3 | 041H | 292 | 303 | 231 | 240 | .516 | .516 | 114° |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | | |
| HYDRAULIC – Magnum Muscle Camshaft for: 400c.i., 1968 RAM AIR IV, factory 366 HP 400c.i., 1969, factory 345/370 HP 455c.i., 1970, factory 370 HP | Hyd. | Hyd. | 1500 to 5500 | 51-314-4 | 280AH-10 | 280 | 280 | 232 | 237 | .531 | .531 | 110° |
| DRAG RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Bracket race with heavy car. 2500-3000 stall, 9.5:1+ compression, more gear, choppy idle. | Hyd. | Hyd. | 2000 to 6000 | 51-309-4 | 276AH-10 | 276 | 284 | 228 | 236 | .520 | .520 | 110° |
| HYDRAULIC – Rough idle, 3500+ stall, 10:1+ compression, 4:10 or lower gear ratio. | Hyd. | Hyd. | 3000 to 6500 | 51-316-4 | 296AH-8 | 296 | 305 | 246 | 253 | .562 | .577 | 108° |
| HYDRAULIC – Racy idle, bracket racing. Needs 10.5:1+ compression and 3500+ stall, low gear ratio. | Hyd. | Hyd. | 3500 to 6500 | 51-241-4 | 305H-10 | 305 | 305 | 253 | 253 | .525 | .525 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|--------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.65 ROCKER IN. | EX. | |
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Daily driver, strong torque, smooth idle. | Hyd. | Hyd. | 1000 to 5000 | 51-413-11⁵ | XR264HR | 264 | 270 | 212 | 218 | .487 | .495 | 110° |
| HYDRAULIC ROLLER – Great for street machines, needs headers, low gears and 2200+ stall. | Hyd. | Hyd. | 1800 to 5600 | 51-423-11⁵ | XR276HR | 276 | 282 | 224 | 230 | .502 | .510 | 110° |
| HYDRAULIC ROLLER – Rough idle, needs 2800+ stall, lower gears and 9.5:1 compression. | Hyd. | Hyd. | 2200 to 6000 | 51-433-11⁵ | XR288HR | 288 | 294 | 236 | 242 | .520 | .540 | 110° |

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¹ Requires screw-in studs & guide plates

² Requires machining on cylinder heads

⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used

³⁷ Adjustable valve train required

⁴⁵ 265-301 use Part #864-16



PONTIAC 265-455 C.I. 8 CYL. 1955-1981 (CONTINUED)

| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
|--|--------------|-------------------------------------|--|--|------------------|------------------|---------------------|-----------|---------|------------|--------------|
| FACTORY MUSCLE™ Hydraulic Flat Tappet Camshafts (Today's OEM Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 852-16 ⁴⁵ | 2112 3112 | 1452-16 19061-16 ^{1,47} | 7262-16 ⁷³ 7786-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |
| MAGNUM MUSCLE Hydraulic Flat Tappet Camshafts (Today's Versions Of Yesterday's Muscle Car Cams) | | | | | | | | | | | |
| 852-16 ⁴⁵ | 2112 3112 | 1452-16 19061-16 ^{1,47} | 7262-16 ⁷³ 7786-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |
| DRAG RACE Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| 863-16 ^{37,45} | 3112 | 1452-16 19061-16 ^{1,47} | 7262-16 ⁷³ 7786-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |
| 863-16 ^{37,45} | 3112 | 1452-16 19061-16 ^{1,47} | 7262-16 ⁷³ 7786-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |
| 863-16 ^{37,45} | 3112 | 1452-16 19061-16 ^{1,47} | 7262-16 ⁷³ 7786-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|--|----------------------------|----------------------------|--------|---------|--------------|---|----------|--|------------------|------------------|---------------------|
| XTREME ENERGY™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K51-413-11 ⁵ | SK51-413-11 ^{5,7} | CL51-413-11 ^{5,7} | N/A | 857-16 | 2112 3112 | 1451-16 ^{1,47} 19060-16 ^{1,47} | 7775-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-423-11 ⁵ | SK51-423-11 ^{5,7} | CL51-423-11 ^{5,7} | N/A | 857-16 | 2112 3112 | 1451-16 ^{1,47} 19060-16 ^{1,47} | 7775-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-433-11 ⁵ | SK51-433-11 ^{5,7} | CL51-433-11 ^{5,7} | N/A | 857-16 | 2112 3112 | 1451-16 ^{1,47} 19060-16 ^{1,47} | 7775-16 | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |



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⁴⁷ 1.65:1 ratio available
⁷³ Fits only 350-455

RED NUMBERS DENOTE PREMIUM OPTION



PONTIAC 265-455 C.I. 8 CYL. 1955-1981 (CONTINUED)

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | | |
| HYDRAULIC ROLLER – Thumpr™ – High performance street, stock converter ok, best with 2000+ converter and gears, choppy/thumping idle. | Hyd. | Hyd. | 1700 to 5500 | 51-600-11⁵ | 283THR7 | 283 | 303 | 227 | 241 | .513 | .498 | 107° |
| HYDRAULIC ROLLER – Mutha' Thumpr™ – High performance street/strip, needs 9:1 compression, 2500+ stall, intake, gears and headers, rough idle. | Hyd. | Hyd. | 2000 to 5800 | 51-601-11⁵ | 291THR7 | 291 | 311 | 235 | 249 | .522 | .508 | 107° |
| HYDRAULIC ROLLER – Big Mutha' Thumpr™ – Street/strip, needs 9.5:1 compression, 2800+ stall, intake, gears and headers, very rough idle. | Hyd. | Hyd. | 2300 to 6100 | 51-602-11⁵ | 299THR7 | 299 | 319 | 243 | 257 | .532 | .519 | 107° |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Good idle, strong mid-range torque. Excellent cam for mild street engines. | .022 | .022 | 1800 to 5800 | 51-244-4 | 270S | 270 | 270 | 224 | 224 | .468 | .468 | 110° |
| SOLID – Mild idle, street machine cam. Needs 9.5:1+ compression, 2000+ stall and headers. | .022 | .022 | 2000 to 6000 | 51-245-4 | 282S | 282 | 282 | 236 | 236 | .495 | .495 | 110° |
| SOLID – Rough idle, needs 10:1+ compression ratio. Maximum street performance. Use 3000+ stall and low gear. | .022 | .022 | 2500 to 6500 | 51-246-4 | 294S | 294 | 294 | 248 | 248 | .525 | .525 | 110° |
| SOLID – Race idle, Pro Street. Needs 10.5:1+ compression and 3500+ stall. Limited street use. | .022 | .022 | 3000 to 6500 | 51-247-4 | 306S | 306 | 306 | 260 | 260 | .555 | .555 | 110° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | | |
| SOLID – Super torque, 3500+ stall, works well in heavy car. | .026 | .028 | 3500 to 6500 | 51-659-5 | 290B-6 | 290 | 304 | 255 | 266 | .540 | .540 | 106° |
| SOLID – Excellent for 400-455, good torque. 4200+ stall. | .026 | .028 | 4200 to 6500 | 51-660-5 | 300B-6 | 300 | 314 | 265 | 276 | .562 | .556 | 106° |

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|-------------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | W/ 1.5 ROCKER IN. | EX. | |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | | |
| MECHANICAL ROLLER – Choppy idle, broad power range, increased compression, 3000+ stall, headers and lower gears. | .020 | .020 | 2200 to 6500 | 51-751-11⁵ | 288R | 288 | 288 | 243 | 243 | .550 | .550 | 110° |
| MECHANICAL ROLLER – Rough idle, maximum street effort. 10.5:1+ compression, 3500+ stall. | .020 | .020 | 3000 to 6700 | 51-752-11⁵ | 308R | 308 | 308 | 262 | 262 | .575 | .575 | 110° |

¹ Requires screw-in studs & guide plates
² Requires machining on cylinder heads
⁵ Requires distributor gear upgrade

⁷ Stock springs cannot be used
⁸ Fits only certain years

³⁷ Adjustable valve train required
⁴⁷ 1.65:1 ratio available

PONTIAC 265-455 C.I. 8 CYL. 1955-1981 (CONTINUED)

CAMSHAFTS GENERAL MOTORS

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|----------------------------|----------------------------|--|--|------------------|---|--|--|------------------|------------------|---------------------|
| THUMPR™ Retro-Fit Hydraulic Roller Camshafts | | | | | | | | | | | |
| K51-600-11 ⁵ | N/A | CL51-600-11 ^{5,7} | N/A | 857-16 | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7775-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-601-11 ⁵ | N/A | CL51-601-11 ^{5,7} | N/A | 857-16 | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7775-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-602-11 ⁵ | N/A | CL51-602-11 ^{5,7} | N/A | 857-16 | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7775-16 ^{51,66} | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| MAGNUM Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| K51-244-4 | SK51-244-4 ⁷ | CL51-244-4 ⁷ | N/A | 2900-16 ³⁷ | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7263-16 ⁸ 7789-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-245-4 | SK51-245-4 ⁷ | CL51-245-4 ⁷ | N/A | 2900-16 ³⁷ | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7263-16 ⁸ 7789-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-246-4 | SK51-246-4 ⁷ | CL51-246-4 ⁷ | N/A | 2900-16 ³⁷ | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7263-16 ⁸ 7789-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| K51-247-4 | SK51-247-4 ⁷ | CL51-247-4 ⁷ | N/A | 2900-16 ³⁷ | 2112 3112 | 1451-16 ⁴⁷ 19060-16 ^{1,47} | 7263-16 ⁸ 7789-16 ⁸ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² |
| LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS | LASH CAPS | REV KIT | DIST. GEAR | STUD GIRDLES |
| DRAG RACE Mechanical Flat Tappet Camshafts | | | | | | | | | | | |
| 2900-16 ³⁷ | 3112 | 19060-16 ^{1,47} | 7263-16 ⁷³ 7789-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |
| 2900-16 ³⁷ | 3112 | 19060-16 ^{1,47} | 7263-16 ⁷³ 7789-16 ⁷³ | 995-16 ² 26995-16 ² | 740-16 795-16 | 611-16 614-16 | 503-16 ² | 621-16 | N/A | 451 | 4051 |
| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
| MAGNUM Mechanical Roller Camshafts | | | | | | | | | | | |
| K51-751-11 ⁵ | SK51-751-11 ^{5,7} | CL51-751-11 ^{5,7} | N/A | 859-16 ³⁷ | 2112 3112 | 19060-16 ^{1,47} | 7262-16 7789-16 | 914-16 ² 26112-16 ² | 741-16 729-16 | 611-16 | 503-16 ² |
| K51-752-11 ⁵ | SK51-752-11 ^{5,7} | CL51-752-11 ^{5,7} | N/A | 859-16 ³⁷ | 2112 3112 | 19060-16 ^{1,47} | 7262-16 7789-16 | 914-16 ² 26112-16 ² | 741-16 729-16 | 611-16 | 503-16 ² |

⁵¹ Pushrod length may vary depending on combination, check for proper length

⁶⁶ For 455 use Part #7783-16
⁷³ Fits only 350-455

RED NUMBERS DENOTE PREMIUM OPTION

Harley-Davidson BIG TWIN EVOLUTION 1984-2006

| APPLICATIONS/CAMSHAFTS | RPM OPERATING RANGE | CAM PART # | DURATION @ .053" | | VALVE LIFT W/ 1.625 ROCKER | | LOBE SEPERATION ANGLE |
|--|---------------------|-------------------------------|------------------|-----|----------------------------|------|-----------------------|
| | | | IN. | EX. | IN. | EX. | |
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | |
| HYDRAULIC ROLLER – Excellent low end and mid-range power from idle up. Great for two up riding or pulling a trailer. | 1000 to 5300 | EVL-5000 ⁸⁵ | 230 | 230 | .562 | .562 | 102 |
| HYDRAULIC ROLLER – Strong low end and mid-range power for heavy bikes. Good on highway. | 1500 to 5500 | EVL-5005 ⁸⁵ | 236 | 236 | .569 | .569 | 102 |
| HYDRAULIC ROLLER – Increased mid and upper end power for lighter bikes. Stock heads with spring change ok. | 1800 to 5800 | EVL-5010 ⁸⁵ | 244 | 244 | .585 | .585 | 103 |
| HYDRAULIC ROLLER – Great mid and upper end power in modified 80-88c.i. Increased compression, pipes, and carb work. | 2200 to 6200 | EVL-5015 ⁸⁵ | 252 | 252 | .585 | .585 | 103 |
| HYDRAULIC ROLLER – 88c.i. and up, 10:1 compression, performance carb/exhaust. Good power in light bike. | 2500 to 6500 | EVL-5020 ⁸⁵ | 260 | 260 | .585 | .585 | 104 |
| HYDRAULIC ROLLER – For serious power in 88c.i. and up, 10.5:1 compression, head work, performance exhaust, and carb. | 2800 to 6800 | EVL-5025 ⁸⁵ | 268 | 272 | .601 | .601 | 105 |
| MAGNUM Hydraulic Roller Camshafts | | | | | | | |
| HYDRAULIC ROLLER – Excellent bolt-in cam for stock upgrade. Good flat torque curve with more power than stock. | 800 to 4800 | EVL-2000 ⁸⁵ | 220 | 214 | .480 | .456 | 108 |
| HYDRAULIC ROLLER – Bolt-in cam with good low end torque for heavy bikes, two up riding, or trailer pulling. | 1500 to 5500 | EVL-3000 ⁸⁵ | 224 | 224 | .500 | .500 | 102 |
| HYDRAULIC ROLLER – Good stock replacement for 80c.i. engines. Good low end torque and mid-range in heavy or light bikes. | 1500 to 5800 | EVL-3010 ⁸⁵ | 234 | 234 | .500 | .500 | 102 |
| HYDRAULIC ROLLER – Bolt-in for 80c.i. engines, strong mid-range and upper end power with stock heads. | 1800 to 6000 | EVL-3020 ⁸⁵ | 240 | 240 | .500 | .500 | 102 |
| HYDRAULIC ROLLER – Good in 80-88c.i. engines with up to 10:1 compression. More mid-range and upper end power. | 2000 to 6300 | EVL-3030 ⁸⁵ | 240 | 240 | .530 | .530 | 104 |
| HYDRAULIC ROLLER – Split duration cam for light bikes with 80-88c.i. engines, with more mid and upper end power than the 3030. | 2500 to 6500 | EVL-3040 ⁸⁵ | 242 | 252 | .510 | .510 | 104 |
| HYDRAULIC ROLLER – Good performance cam in light bikes. Pulls hard in upper end. Likes pipes, carb, and 9:1 compression. | 3000 to 7000 | EVL-3050 ⁸⁵ | 252 | 252 | .510 | .510 | 104 |
| HYDRAULIC ROLLER – Hot street/strip cam. Pipes, carb, and 10:1+ compression. Needs 88c.i. and larger engines. | 3000 to 7000+ | EVL-3060 ⁸⁵ | 260 | 270 | .585 | .585 | 106 |
| HYDRAULIC ROLLER – Serious cam for top end power. Needs good heads, pipes and carb. Best 88c.i. and larger engine with 11:1+ compression. | 3200 to 7500 | EVL-3070 ⁸⁵ | 270 | 274 | .608 | .608 | 106 |

⁸⁵ For a camshaft w/ NO timing gear, simply add NG to the end of the part #

⁸⁶ P-Kit contains cam, pushrods and camshaft bearing

⁸⁷ SP-Kit contains cam, pushrods, camshaft bearing, springs, locks, retainers & seats

⁸⁸ SP+Kit is an upgrade of the SP-Kit

⁹¹ Use Part #7002S for stroker engines & Part #7002R for engines using stock lifters

Harley-Davidson BIG TWIN EVOLUTION 1984-2006

CAMSHAFTS HARLEY-DAVIDSON

| P-KIT | SP KIT | SP+ KIT | PUSHRODS | BEEHIVE™ SPRING KITS | SPRING KITS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | SPRING SEATS |
|--|--------------------------|--------------------------|------------------------|--|--|--------------------|----------------|----------------|------------------|
| XTREME ENERGY™ Hydraulic Roller Camshafts | | | | | | | | | |
| EVL-5000P ⁸⁶ | EVL-5000SP ⁸⁷ | EVL-5001SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9702-KIT ⁹² | VT908-4 | 749-4 | 618-4 | 4784-4 |
| EVL-5005P ⁸⁶ | EVL-5005SP ⁸⁷ | EVL-5006SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9702-KIT ⁹² | VT908-4 | 749-4 | 618-4 | 4784-4 |
| EVL-5010P ⁸⁶ | EVL-5010SP ⁸⁷ | EVL-5011SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9702-KIT ⁹² | VT908-4 | 749-4 | 618-4 | 4784-4 |
| EVL-5015P ⁸⁶ | EVL-5015SP ⁸⁷ | EVL-5016SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9702-KIT ⁹² | VT908-4 | 749-4 | 618-4 | 4784-4 |
| EVL-5020P ⁸⁶ | EVL-5020SP ⁸⁷ | EVL-5021SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9702-KIT ⁹² | VT908-4 | 749-4 | 618-4 | 4784-4 |
| EVL-5025P ⁸⁶ | EVL-5025SP ⁸⁷ | EVL-5026SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9801-KIT ⁹² 9706-KIT | 927-4 26095-4 | 732-4 785-4 | 618-4 | 4770-4 4711-4 |
| MAGNUM Hydraulic Roller Camshafts | | | | | | | | | |
| N/A | N/A | N/A | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² | 977-4 | 740-4 | 618-4 | 4770-4 |
| EVL-3000P ⁸⁶ | EVL-3000SP ⁸⁷ | EVL-3001SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² 9704-KIT ⁹² | 977-4 26120-4 | 740-4 795-4 | 618-4 | 4770-4 4696-4 |
| EVL-3010P ⁸⁶ | EVL-3010SP ⁸⁷ | EVL-3011SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² 9704-KIT ⁹² | 977-4 26120-4 | 740-4 795-4 | 618-4 | 4770-4 4696-4 |
| EVL-3020P ⁸⁶ | EVL-3020SP ⁸⁷ | EVL-3021SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² 9704-KIT ⁹² | 977-4 26120-4 | 740-4 795-4 | 618-4 | 4770-4 4696-4 |
| N/A | EVL-3030SP ⁸⁷ | EVL-3031SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² 9704-KIT ⁹² | VT908-4 26120-4 | 749-4 795-4 | 618-4 | 4770-4 4696-4 |
| N/A | EVL-3040SP ⁸⁷ | EVL-3041SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² 9704-KIT ⁹² | VT908-4 26120-4 | 749-4 795-4 | 618-4 | 4770-4 4696-4 |
| N/A | EVL-3050SP ⁸⁷ | EVL-3051SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² | 9700-KIT ⁹² 9704-KIT ⁹² | VT908-4 26120-4 | 749-4 795-4 | 618-4 | 4770-4 4696-4 |
| N/A | EVL-3060SP ⁸⁷ | EVL-3061SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² 9709-KIT ⁹² | 9801-KIT ⁹² 9706-KIT ⁹² | 927-4 26095-4 | 732-4 785-4 | 618-4 | 4770-4 4711-4 |
| N/A | EVL-3070SP ⁸⁷ | EVL-3071SP ⁸⁸ | 7002-KIT ⁹¹ | 9708-KIT ⁹² 9709-KIT ⁹² | 9801-KIT ⁹² 9706-KIT ⁹² | 927-4 26095-4 | 732-4 785-4 | 618-4 | 4770-4 4711-4 |

⁹² Spring kit includes springs, retainers, locks & spring seats

RED NUMBERS DENOTE PREMIUM OPTION



HONDA D16Z6 1.6 LITER SOHC 4 CYL. W/ VTEC 1992-1995 CIVIC EX, 1993-1995 DEL SOL SI

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | CENTERLINE | |
|---|---------------|------|---------------------|--------------|-------------|----------|-----|-----|-----|------------|------|------------|------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | IN. | EX. | | |
| QUIKTYME™ Solid Swinging Follower Camshafts | | | | | | | | | | | | | |
| SERIOUS STREET – Great street cam for increased power and torque with efficiency. Works with stock components. | .007 | .009 | 2000 to 6700 | 59100 | 256 VTEC | 256 | 252 | 215 | 211 | .441 | .401 | 103° | 111° |
| SEVERE STREET/RACE – Best performance cam available. Large increases above stock cam from off idle to the rev limiter. Excellent high RPM power. | .007 | .009 | 2000 to 7200 | 59300 | 260 VTEC | 256 | 268 | 220 | 216 | .456 | .428 | 107° | 111° |

Valve springs (#912-16) and retainers (#753-16) available for these engines.

HONDA/ACURA TWIN CAM VTEC B16A, B17A, B18C, B18C5 1992-2000

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM ID | DURATION | | | | | | |
|--|---------------|------|---------------------|--------------|---------|------------|------|------|--------|------|------|--|
| | IN. | EX. | | | | ADVERTISED | | | @.050" | | | |
| | | | | | | VTEC | PRI. | SEC. | VTEC | PRI. | SEC. | |
| QUIKTYME™ Solid Swinging Follower Camshafts (Turbo Grinds Also Available) | | | | | | | | | | | | |
| SERIOUS STREET – Great street cam for increased power and torque with efficiency. Works with stock components. | .007 | .009 | 2000 to 8200 | 57100 | INTAKE | 260 | 252 | 240 | 220 | 210 | 194 | |
| | | | | | EXHAUST | 266 | 256 | 240 | 222 | 210 | 194 | |
| SERIOUS STREET/RACE – Best performance cam available. Large increases above stock cam from off idle to the rev limiter. Excellent high RPM power. | .007 | .009 | 2400 to 8600 | 57200 | INTAKE | 278 | 256 | 244 | 238 | 214 | 198 | |
| | | | | | EXHAUST | 284 | 260 | 244 | 240 | 214 | 198 | |
| SEVERE STREET/RACE – Excellent mid-range to top end power for serious performers. Excellent high RPM power. | .007 | .009 | 2600 to 9000 | 57300 | INTAKE | 290 | 260 | 248 | 250 | 218 | 202 | |
| | | | | | EXHAUST | 296 | 264 | 248 | 252 | 218 | 202 | |
| SEVERE STREET/COMPETITION – Great top end power for radical street or race applications. | .007 | .009 | 2800 to 9200 | 57400 | INTAKE | 300 | 260 | 260 | 260 | 222 | 222 | |
| | | | | | EXHAUST | 306 | 264 | 264 | 262 | 222 | 222 | |

Recommended valve spring and retainer kits offered on page 291.

INTERNATIONAL HARVESTER 304-392 C.I. 8 CYL. 1970-1978

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------|-----|-----|-----|---------------|------|-----------------|
| | IN. | EX. | | | | IN. | EX. | IN. | EX. | W/ 1.5 ROCKER | | |
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | | |
| HYDRAULIC – Low end power, strong torque, good mileage, best for 304 with stock transmission. | Hyd. | Hyd. | 800 to 4500 | 83-200-4 | 252H | 252 | 252 | 206 | 206 | .425 | .425 | 110° |
| HYDRAULIC – Best cam for towing, hauling and heavy-duty usage, lots of torque. | Hyd. | Hyd. | 1000 to 5000 | 83-201-4 | 260H | 260 | 260 | 212 | 212 | .440 | .440 | 110° |
| HYDRAULIC – High performance cam. Best in large engine with manual transmission. Noticeable idle. | Hyd. | Hyd. | 1200 to 5200 | 83-202-4 | 268H | 268 | 268 | 218 | 218 | .454 | .454 | 110° |

HONDA D16Y8 1.6L SOHC 4 CYL. W/ VTEC 1996-2000

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | CENTERLINE | |
|---|---------------|------|---------------------|---------------|-------------|------------|-----|-----|-----|------------|------|------------|-----|
| | IN. | EX. | | | | ADVERTISED | | IN. | EX. | IN. | EX. | IN. | EX. |
| | | | | | | IN. | EX. | | | | | | |
| QUIKTYME™ Solid Swinging Follower Camshafts | | | | | | | | | | | | | |
| SERIOUS STREET/RACE – Great street cam for increased power and torque with efficiency. Works with stock components. | .007 | .009 | 2000 to 6700 | 105100 | 256 VTEC | 256 | 252 | 215 | 211 | .441 | .401 | 103 | 111 |
| SEVERE STREET/COMPETITION – Best performance cam available. Large increases above stock cam from off idle to the rev limiter. Excellent high RPM power. Requires spring #912-16. | .007 | .009 | 2000 to 7200 | 105300 | 260 VTEC | 256 | 268 | 220 | 216 | .456 | .428 | 107 | 111 |

Valve springs (#912-16) and retainers (#753-16) available for these engines.

HONDA/ACURA TWIN CAM VTEC B16A, B17A, B18C, B18C5 1992-2000

| LOBE LIFT | | | VALVE LIFT | | | CENTERLINE | | | VALVE SPRINGS | RETAINERS | | VALVE SPRING KITS |
|--|------|------|------------|------|------|------------|------|------|---------------|-----------|----------|-------------------|
| VTEC | PRI. | SEC. | VTEC | PRI. | SEC. | VTEC | PRI. | SEC. | | STEEL | TITANIUM | |
| QUIKTYME™ Solid Swinging Follower Camshafts (Turbo Grinds Also Available) | | | | | | | | | | | | |
| .310 | .237 | .186 | .435 | .360 | .270 | 100° | 112° | 114° | 913-SET | 778-16 | 760-16 | 89000-16 |
| .297 | .230 | .186 | .390 | .350 | .270 | 106.5° | 112° | 110° | | | | 89012-16 |
| .316 | .250 | .186 | .490 | .380 | .270 | 100° | 112° | 114° | 913-SET | 778-16 | 760-16 | 89000-16 |
| .304 | .243 | .186 | .450 | .370 | .270 | 108° | 112° | 110° | | | | 89012-16 |
| .322 | .263 | .186 | .510 | .400 | .270 | 102° | 112° | 114° | 913-SET | 778-16 | 760-16 | 89000-16 |
| .310 | .257 | .186 | .470 | .390 | .270 | 110° | 112° | 110° | | | | 89012-16 |
| .321 | .266 | .246 | .496 | .404 | .374 | 97° | 97° | 97° | 913-SET | 778-16 | 760-16 | 89000-16 |
| .302 | .261 | .241 | .467 | .395 | .355 | 111° | 111° | 111° | | | | 89012-16 |

INTERNATIONAL HARVESTER 304-392 C.I. 8 CYL. 1970-1978

| K-KIT | SK-KIT | CL-KIT | RP-KIT | LIFTERS | TIMING SET | ROCKER ARMS | PUSHRODS | VALVE SPRINGS | RETAINERS | VALVE LOCKS | VALVE SEALS |
|---|-------------------------|-------------------------|--------|---------|------------|-------------|----------|---------------|-----------|-------------|-------------|
| HIGH ENERGY™ Hydraulic Flat Tappet Camshafts | | | | | | | | | | | |
| K83-200-4 | SK83-200-4 | CL83-200-4 | N/A | 855-16 | 3225 | N/A | N/A | 961-16 | N/A | 603-16 | 504-16 |
| K83-201-4 | SK83-201-4 | CL83-201-4 | N/A | 855-16 | 3225 | N/A | N/A | 961-16 | N/A | 603-16 | 504-16 |
| K83-202-4 | SK83-202-4 ⁷ | CL83-202-4 ⁷ | N/A | 855-16 | 3225 | N/A | N/A | 961-16 | N/A | 603-16 | 504-16 |

⁷ Stock springs cannot be used

RED NUMBERS DENOTE PREMIUM OPTION

MITSUBISHI 4G63 2.0L DOHC 4 CYL. 1989-1999

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | CENTERLINE | |
|---|---------------|------|---------------------|---------------|-------------|----------------|-----|-------------|-----|------------|------|------------|-------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | IN. | EX. |
| QUIKTYME™ Hydraulic Swinging Follower Camshafts (Custom Sets Available) | | | | | | | | | | | | | |
| SERIOUS STREET/RACE – Works w/ stock engine & turbo. Responds well to bolt-ons. Pulls strong throughout RPM band. | Hyd. | Hyd. | 1800 to 6800 | 101100 | XE251HR | 251 | 250 | 204 | 204 | .407 | .391 | 104° | 108° |
| SEVERE STREET/COMPETITION – Bigger turbo, manual transmission or automatic with 3000+ stall. Stronger mid to upper RPM. | Hyd. | Hyd. | 2600 to 7500 | 101200 | XE259HR | 259 | 258 | 212 | 212 | .411 | .395 | 107.5 | 111.5 |
| SEVERE STREET/COMPETITION – Works well with stroked engine and stock turbo. Responds well to bolt-ons. Pulls strong throughout RPM band. | Hyd. | Hyd. | 2400 to 7300 | 101300 | XE258HR | 258 | 258 | 212 | 212 | .411 | .395 | 102° | 111° |
| SEVERE STREET/COMPETITION – Works well with stroked engine w/ bigger turbo, manual transmission, or automatic w/ 3000+ stall. Stronger mid to upper RPM. | Hyd. | Hyd. | 3000 to 7800 | 101400 | XE266HR | 266 | 266 | 220 | 220 | .415 | .399 | 104° | 107° |

MITSUBISHI 4G63 EVOLUTION VIII 2.0L DOHC 4 CYL. 2003-2005

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | CENTERLINE | |
|--|---------------|------|---------------------|---------------|-------------|----------------|-----|-------------|-----|------------|------|------------|------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | IN. | EX. |
| QUIKTYME™ Hydraulic Swinging Follower Camshafts (Custom Sets Available) | | | | | | | | | | | | | |
| SERIOUS STREET/RACE – 264+c.i. works well w/ stock engine & turbo. Responds well to bolt-ons. Pulls strong throughout RPM band. | Hyd. | Hyd. | 1800 to 6800 | 119100 | XE248HR | 248 | 249 | 202 | 202 | .434 | .411 | 104° | 112° |
| SEVERE STREET/COMPETITION – 272+c.i. works well w/ upgraded turbos & higher boost levels. Stronger mid to upper RPM. | Hyd. | Hyd. | 2600 to 7500 | 119200 | XE256HR | 256 | 257 | 210 | 210 | .434 | .411 | 104° | 112° |
| SEVERE STREET/COMPETITION – 280+c.i. Excellent for big turbos, high boost levels, & ported heads. Maximum upper RPM horsepower. | Hyd. | Hyd. | 3000 to 7800 | 119300 | XE264HR | 264 | 285 | 218 | 218 | .434 | .411 | 104° | 112° |

Note: When replacing stock rotators, check installed height.

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NISSAN Z20, Z22, Z24 4 CYL. 1981-1989

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Solid Swinging Follower Camshafts | | | | | | | | | | | | |
| SOLID – Good cam to replace OEM grinds. Improved torque and power. Best in low RPM. | .010 | .010 | 800 to 4500 | 88-119-6 | 252S | 252 | 252 | 208 | 208 | .422 | .422 | 110° |
| SOLID – High performance cam for street driving. Good power in mid-range. | .010 | .010 | 1000 to 4800 | 88-123-6 | 260S | 260 | 260 | 214 | 214 | .420 | .420 | 110° |

NISSAN 2400-2800CC 6 CYL. 1970-1984

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|---|---------------|------|---------------------|-----------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Solid Swinging Follower Camshafts | | | | | | | | | | | | |
| SOLID – Power & torque improvement over stock cam. | .008 | .008 | 500 to 4500 | 84-115-6 | 240S | 240 | 240 | 194 | 194 | .400 | .400 | 110° |
| SOLID – Better torque and power than OEM cam, but smooth and efficient. Smooth idle. | .008 | .008 | 800 to 4800 | 84-119-6 | 252S | 252 | 252 | 204 | 204 | .410 | .410 | 110° |
| SOLID – Street performance. Smooth idle. Wide powerband. | .010 | .010 | 1000 to 5000 | 84-123-6 | 260S | 260 | 260 | 214 | 214 | .420 | .420 | 110° |



TOYOTA 20R AND 22R 4 CYL. 1974-1989

| APPLICATIONS/CAMSHAFTS | VALVE SETTING | | RPM OPERATING RANGE | CAM PART # | CAM GRIND # | DURATION | | | | VALVE LIFT | | LOBE SEP. ANGLE |
|--|---------------|------|---------------------|------------------------------|-------------|----------------|-----|-------------|-----|------------|------|-----------------|
| | IN. | EX. | | | | ADVERTISED IN. | EX. | @ .050" IN. | EX. | IN. | EX. | |
| HIGH ENERGY™ Solid Swinging Follower Camshafts | | | | | | | | | | | | |
| SOLID – Smooth torque and economy. Best cam to replace OEM grind. Very smooth idle. | .010 | .010 | 800 to 4500 | 87-119-6⁹⁹ | 252S | 255 | 255 | 214 | 214 | .420 | .420 | 110° |
| SOLID – Excellent cam for trucks. Good torque for heavy-duty use. Smooth idle. | .010 | .010 | 1000 to 4800 | 87-123-6⁹⁹ | 260S | 263 | 263 | 222 | 222 | .440 | .440 | 110° |
| SOLID – Performance use. Wide powerband. Smooth idle. | .010 | .010 | 1500 to 5500 | 87-127-6⁹⁹ | 268S | 271 | 271 | 230 | 230 | .445 | .445 | 110° |
| MAGNUM Solid Swinging Follower Camshafts | | | | | | | | | | | | |
| SOLID – Best cam for street performance with 5-speed. Good mid-range and top end. | .010 | .010 | 2000 to 6000 | 87-131-6⁹⁹ | 280S | 283 | 283 | 242 | 242 | .455 | .455 | 110° |

⁹⁹ Will not work in fuel injected applications



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| APPLICATIONS/CAMSHAFTS | PART # | GRIND # | DURATION IN DEGREES | | | | VALVE LIFT | | LOBE SEPARATION ANGLE |
|--|------------------------|----------|---|-------|---------|-----|------------|------|-----------------------|
| | | | ADVERTISED | | @ .050" | | IN | EX. | |
| | | | IN | EX. | IN | EX. | IN | EX. | |
| AMC 2.5L 1980-1983 | | | CUSTOM GRINDS AVAILABLE (114-000-5) | | | | | | |
| BUICK STAGE II EVEN FIRE 6 CYL. 1978-1988 | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| ROLLER | 93-850-9 | 296-R4 | 296-7 | 300-7 | 264 | 268 | .650 | .650 | 104° |
| ROLLER | 93-902-9 | 312-R6 | 312-5 | 312-5 | 276 | 276 | .672 | .672 | 106° |
| BUICK 215 ALUMINUM V8 1961-1963 | | | CUSTOM GRINDS AVAILABLE (90-000-5) | | | | | | |
| BUICK 364, 401, 425 V8 1957-1965 | | | CUSTOM GRINDS AVAILABLE (91-000-5) | | | | | | |
| CHEVROLET CHEVETTE 1400CC 1976-1977 & 1600CC 1976-1987 | | | CUSTOM GRINDS AVAILABLE (77-000-5) | | | | | | |
| CHEVROLET 235 L6 BLUE FLAME 1952-1962 | | | CUSTOM GRINDS AVAILABLE (60-000-5) | | | | | | |
| CHEVROLET 292 L6 1963-1990 | | | CUSTOM GRINDS AVAILABLE (62-000-5) | | | | | | |
| CHEVROLET V6 ODD FIRE RACE ENGINE | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| ROLLER | 17-900-9 | 288AR-4 | 288-8 | 300-5 | 260 | 264 | .660 | .630 | 104° |
| ROLLER | 17-901-9 | 292AR-5 | 292-8 | 304-5 | 264 | 268 | .660 | .630 | 105° |
| CHEVROLET V6 ODD FIRE w/ SPLAYED VALVE HEAD | | | CUSTOM GRINDS AVAILABLE (02-000-9) | | | | | | |
| CHEVROLET V8 262-400 1957-1998 W/ 1.5 ROCKERS | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| HYDRAULIC | 12-204-4 ⁴⁹ | 244H-10 | 244-2 | 244-2 | 196 | 196 | .400 | .400 | 110° |
| HYDRAULIC | 12-306-4 ⁴⁹ | 252AH-8 | 252-4 | 260-7 | 206 | 212 | .425 | .440 | 108° |
| HYDRAULIC | 12-308-4 ⁴⁹ | 252AH-10 | 252-4 | 260-7 | 206 | 212 | .425 | .440 | 110° |
| HYDRAULIC | 12-310-4 ⁴⁹ | 260AH-8 | 260-9 | 268-9 | 212 | 218 | .444 | .444 | 108° |
| HYDRAULIC | 12-312-4 ⁴⁹ | 260AH-10 | 260-9 | 268-9 | 212 | 218 | .444 | .444 | 110° |
| HYDRAULIC | 12-316-4 | 268H-8 | 268-4 | 268-4 | 222 | 222 | .464 | .464 | 108° |
| HYDRAULIC | 12-319-4 | 268AH-8 | 268-4 | 276-4 | 222 | 226 | .464 | .464 | 108° |
| HYDRAULIC | 12-320-4 | 270AH-10 | 270-4 | 280-3 | 224 | 230 | .470 | .460 | 110° |
| HYDRAULIC | 12-321-4 | 270AH-8 | 270-4 | 280-3 | 224 | 230 | .470 | .460 | 108° |
| HYDRAULIC | 12-328-4 | 286AH-10 | 286-3 | 292-3 | 236 | 244 | .490 | .485 | 110° |
| HYDRAULIC | 12-334-4 | 292AH-8 | 292-2 | 296-3 | 244 | 246 | .501 | .510 | 108° |
| HYDRAULIC | 12-336-4 | 292AH-10 | 292-2 | 296-3 | 244 | 246 | .501 | .510 | 110° |
| HYDRAULIC | 12-338-4 | 296H-10 | 296-3 | 296-3 | 246 | 246 | .510 | .510 | 110° |
| HYDRAULIC | 12-346-4 | 305H-8 | 305-2 | 305-2 | 253 | 253 | .525 | .525 | 108° |
| HYDRAULIC | 12-352-4 | 312H-8 | 312-5 | 312-5 | 260 | 260 | .540 | .540 | 108° |
| HYDRAULIC | 12-354-4 | 312H-10 | 312-5 | 312-5 | 260 | 260 | .540 | .540 | 110° |
| HYDRAULIC | 12-353-4 | 312AH-8 | 312-5 | 320-5 | 260 | 268 | .540 | .540 | 108° |
| HYDRAULIC | 12-356-4 | 312AH-10 | 312-5 | 320-5 | 260 | 268 | .540 | .540 | 110° |
| HYDRAULIC | 12-216-5 | 320H-10 | 320-10 | 328-8 | 270 | 276 | .551 | .551 | 110° |
| HYDRAULIC | 12-362-4 | 328H-8 | 328-8 | 328-8 | 276 | 276 | .551 | .551 | 108° |
| SOLID | 12-220-5 | 270S-8 | 270-1 | 270-1 | 235 | 235 | .495 | .495 | 108° |
| SOLID | 12-619-5 | 310C-6 | 310-1 | 320-2 | 275 | 280 | .585 | .562 | 106° |
| SOLID | 12-615-5 | 314B-8 | 314-1 | 324-1 | 276 | 286 | .557 | .578 | 108° |
| SOLID | 12-635-5 | 328B-9 | 328-3 | 334-2 | 290 | 296 | .600 | .600 | 109° |
| .875" DIAMETER LIFTER | 12-745-7 | 298Z-4 | 298-2 | 304-4 | 261 | 266 | .555 | .555 | 104° |
| .875" DIAMETER LIFTER | 12-747-7 | 296Z-6 | 296XX | 302XX | 264 | 270 | .593 | .605 | 106° |
| .875" DIAMETER LIFTER | 12-751-7 | 304NZ-6 | 304N-1 | 308XX | 272 | 276 | .615 | .615 | 106° |
| ROLLER | 12-707-8 | 288R-10 | 288-4 | 288-4 | 244 | 244 | .550 | .550 | 110° |
| ROLLER - .900" B.C. | 12-998-9 | 300B-6 | 300-5 | 308-6 | 264 | 270 | .630 | .630 | 106° |
| ROLLER | 12-904-9 | 304AR-6 | 304-5 | 308-6 | 268 | 270 | .630 | .630 | 106° |
| ROLLER | 12-710-9 | 313DR-2 | 313-6 | 316-6 | 276 | 278 | .660 | .630 | 102° |
| ROLLER - .900" B. C. | 12-997-9 | 316AR-8 | 316-5 | 326-4 | 280 | 288 | .630 | .630 | 108° |
| ROLLER | 12-810-9 | 312FR-4 | 312-8 | 312-8 | 284 | 284 | .660 | .660 | 104° |
| ROLLER | 12-758-9 | 328AR-8 | 328-6 | 288-9 | 288 | 292 | .684 | .660 | 108° |
| ROLLER 1.968" BRNG | 12-962-9 | 294RTR-6 | RT294-1 | 304-5 | 264 | 268 | .645 | .630 | 106° |
| ROLLER 1.968" BRNG | 12-964-9 | 298RTR-6 | RT298-1 | 308-5 | 268 | 272 | .653 | .630 | 106° |
| CHEVROLET V8 262-400 1957-1998 REVERSE ROTATION | | | CUSTOM GRINDS AVAILABLE (12-000-5RR) | | | | | | |
| CHEVROLET V8 262-400 V8 w/ SPLAYED VALVE, BUICK OR DART HEADS | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| ROLLER | 19-901-9 | 318BR-12 | 318-6 | 330-5 | 278 | 292 | .698 | .630 | 112° |
| ROLLER | 19-921-9 | 328DR-13 | 328-5 | 340-3 | 288 | 300 | .714 | .660 | 113° |

⁴⁹ 50-State legal for 1987 & earlier carbureted V8 SB Chevrolet 262-400 C.A.R.B. E.O. #D-279-3, #D-279-5, #D-279-6

| APPLICATIONS/CAMSHAFTS | PART # | GRIND # | DURATION IN DEGREES | | | | VALVE LIFT | | LOBE SEPARATION ANGLE |
|--|---------------------------|----------|--|-------|---------|-----|------------|------|-----------------------|
| | | | ADVERTISED | | @ .050" | | IN | EX. | |
| | | | IN | EX. | IN | EX. | IN | EX. | |
| CHEVROLET V8 262-400 V8 w/ SPLAYED VALVE, BUICK OR DART HEADS | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| ROLLER | 03-945-9 | 294ER-6 | RT294-1 | 304-5 | 264 | 268 | .645 | .632 | 106° |
| CHEVROLET SB2 HEAD & BLOCK WITH .875" TAPPETS AND 50MM JOURNALS | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| CHEVROLET 348-409 V8 1958-1965 | | | CUSTOM GRINDS AVAILABLE (48-000-5 & 48-000-9) | | | | | | |
| CHEVROLET V8 396-454 1965-1996 w/ 1.7 ROCKERS | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| HYDRAULIC | 11-200-4 | 252BH-14 | 252-5 | 252-5 | 206 | 206 | .460 | .460 | 114° |
| HYDRAULIC | 11-298-4 | 252AH-10 | 252-5 | 260-8 | 206 | 212 | .460 | .475 | 110° |
| HYDRAULIC | 11-206-4 | 255DEH | 255 | 261 | 203 | 212 | .460 | .485 | 110° |
| HYDRAULIC | 11-302-4 | 260AH-12 | 260-9 | 268-9 | 212 | 218 | .503 | .503 | 112° |
| HYDRAULIC | 11-204-4 | 265DEH | 265 | 272 | 211 | 221 | .476 | .507 | 110° |
| HYDRAULIC | 11-402-4 | 268AH-14 | 268-4 | 276-4 | 222 | 226 | .525 | .525 | 114° |
| HYDRAULIC | 11-310-4 | 270AH-12 | 270-4 | 280-3 | 224 | 230 | .532 | .520 | 112° |
| HYDRAULIC | 11-209-4 | 275DEH | 275 | 283 | 219 | 229 | .507 | .531 | 110° |
| HYDRAULIC | 11-312-4 | 276AH-12 | 276-3 | 284-3 | 228 | 236 | .537 | .537 | 112° |
| HYDRAULIC | 11-316-4 | 280AH-12 | 280-9 | 288-9 | 232 | 237 | .547 | .547 | 112° |
| HYDRAULIC | 11-326-4 | 292AH-12 | 292-2 | 296-3 | 244 | 246 | .567 | .578 | 112° |
| HYDRAULIC | 11-327-4 | 296H-10 | 296-3 | 296-3 | 246 | 246 | .578 | .578 | 110° |
| HYDRAULIC | 11-328-4 | 296AH-10 | 296-3 | 305-4 | 246 | 253 | .578 | .575 | 110° |
| HYDRAULIC | 11-334-4 | 305H-12 | 305-4 | 305-4 | 253 | 253 | .575 | .575 | 112° |
| HYDRAULIC | 11-215-5 | 312H-10 | 312-6 | 312-6 | 260 | 260 | .600 | .600 | 110° |
| HYDRAULIC | 11-340-4 | 312AH-10 | 312-6 | 320-9 | 260 | 268 | .600 | .600 | 110° |
| HYDRAULIC | 11-345-5 | 320AH-14 | 320-5 | 328-8 | 268 | 276 | .612 | .625 | 114° |
| HYDRAULIC | 11-216-5 | 320H-10 | 320-9 | 320-9 | 268 | 268 | .600 | .600 | 110° |
| SOLID | 11-603-5 | 270A-8 | 270-1 | 280-1 | 235 | 242 | .561 | .575 | 108° |
| SOLID | 11-612-5 | 310C-8 | 310-2 | 320-2 | 270 | 280 | .638 | .638 | 108° |
| SOLID | 11-680-5 | 328B-12 | 328-3 | 334-2 | 290 | 296 | .680 | .680 | 112° |
| ROLLER | 11-691-9 | 280A-R10 | 280-2 | 288-4 | 238 | 246 | .623 | .623 | 110° |
| ROLLER | 11-707-9 | 295D-R8 | 295-3 | 305-2 | 264 | 274 | .663 | .622 | 108° |
| ROLLER | 11-802-9 | 312JR-8 | 312-8 | 324-4 | 286 | 289 | .748 | .720 | 108° |
| ROLLER | 11-722-9 | 328B-R14 | 328-5 | 344-5 | 288 | 304 | .810 | .782 | 114° |
| ROLLER | 11-723-9 | 328CR-14 | 328-5 | 348-1 | 288 | 308 | .810 | .782 | 114° |
| ROLLER | 11-714-9 | 316BR-10 | 316-15 | 327-5 | 284 | 290 | .873 | .782 | 110° |
| ROLLER | 11-719-9 ^{14,46} | 316AR-11 | 316 | 338 | 284 | 295 | .873 | .782 | 111° |
| ROLLER | 11-716-9 | 316AR-12 | 316-15 | 327-5 | 284 | 290 | .873 | .782 | 112° |
| ROLLER | 11-728-9 ^{14,46} | 324PR-14 | 324 | 352 | 289 | 312 | .867 | .816 | 114° |
| ROLLER | 11-729-9 ^{14,46} | 328PR-16 | 328 | 356 | 288 | 316 | .819 | .816 | 116° |
| GM 6.5L DIESEL | | | CUSTOM GRINDS AVAILABLE (117-000-9) | | | | | | |
| CHRYSLER V8 273-360 1962-1997 w/ 1.5 ROCKERS | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| HYDRAULIC | 20-201-4 | 244H-10 | 244-2 | 244-2 | 196 | 196 | .400 | .400 | 110° |
| HYDRAULIC | 20-416-5 | 255DEH | 255 | 275 | 203 | 219 | .422 | .462 | 110° |
| HYDRAULIC | 20-306-4 | 260AH-10 | 260-9 | 268-9 | 212 | 218 | .444 | .444 | 108° |
| HYDRAULIC | 20-304-4 | 260AH-10 | 260-9 | 268-9 | 212 | 218 | .444 | .444 | 110° |
| HYDRAULIC | 20-417-5 | 265DEH | 265 | 276 | 211 | 227 | .442 | .462 | 110° |
| HYDRAULIC | 20-309-4 | 268AH-10 | 268-4 | 276-4 | 222 | 226 | .464 | .464 | 110° |
| HYDRAULIC | 20-311-4 | 270AH-10 | 270-4 | 280-3 | 224 | 230 | .470 | .480 | 110° |
| HYDRAULIC | 20-418-5 | 275DEH | 275 | 284 | 219 | 235 | .462 | .482 | 110° |
| HYDRAULIC | 20-316-4 | 280AH-8 | 280-9 | 288-9 | 232 | 237 | .483 | .483 | 108° |
| HYDRAULIC | 20-318-4 | 286AH-8 | 286-3 | 292-2 | 236 | 244 | .490 | .501 | 108° |
| HYDRAULIC | 20-321-4 | 292AH-10 | 292-2 | 296-3 | 244 | 246 | .501 | .510 | 110° |
| HYDRAULIC | 20-323-4 | 296H-8 | 296-3 | 296-3 | 246 | 246 | .510 | .510 | 108° |
| HYDRAULIC | 20-324-4 | 296AH-8 | 296-3 | 305-2 | 246 | 253 | .510 | .525 | 108° |
| HYDRAULIC | 20-328-4 | 305AH-8 | 305-2 | 312-5 | 253 | 260 | .525 | .540 | 108° |
| HYDRAULIC | 20-245-5 | 312H-6 | 312-5 | 312-5 | 260 | 260 | .540 | .540 | 106° |
| SOLID | 20-623-5 | 282XXB-6 | 282XX | 288XX | 250 | 258 | .556 | .570 | 106° |

¹⁴ Requires upgraded gear, thrust button & wear plate

⁴⁶ Must use bronze tip fuel pump pushrod when using high-pressure or high-volume pump



| APPLICATIONS/CAMSHAFTS | PART # | GRIND # | DURATION IN DEGREES | | | | VALVE LIFT | | LOBE SEPARATION ANGLE |
|---|-----------|----------|---------------------|--------|---------|--|------------|------|-----------------------|
| | | | ADVERTISED | | @ .050" | | IN | EX. | |
| | | | IN | EX. | IN | EX. | IN | EX. | |
| SOLID | 20-626-5 | 288XB-6 | 288XX | 296XX | 258 | 264 | .570 | .585 | 106° |
| SOLID | 20-620-5 | 310A-6 | 310-1 | 310-1 | 275 | 275 | .585 | .585 | 106° |
| SOLID | 20-622-5 | 330A-8 | 330-1 | 330-1 | 290 | 290 | .615 | .615 | 108° |
| ROLLER | 20-700-9 | 276R-8 | 276-2 | 280-2 | 232 | 236 | .525 | .550 | 108° |
| ROLLER | 20-712-9 | 312CR-6 | 312-5 | 312-2 | 276 | 281 | .630 | .638 | 106° |
| CHRYSLER V8 273-360 (w/ 48° BANK ANGLE AND 50MM JOURNALS) | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| ROLLER | 20-713-9 | 290RX-6 | RX290 | RZ297 | 257 | 264 | .644 | .645 | 106° |
| ROLLER | 20-714-9 | 294RX-6 | RX294 | RZ301 | 261 | 268 | .647 | .648 | 106° |
| ROLLER | 20-715-9 | 300RX-8 | RX300 | RZ309 | 267 | 276 | .651 | .654 | 108° |
| DODGE R5 BLOCK w/ P7 HEADS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| ROLLER | 55-800-10 | 298RX-8 | RX298 | RZ305 | 265 | 272 | .693 | .694 | 108° |
| CHRYSLER V8 383-440 1958-1980 w/ 1.5 ROCKERS (21: SINGLE-BOLT CORE, 23: THREE-BOLT CORE) | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 21-211-4 | 252BH | 252-4 | 260-9 | 206 | 212 | .425 | .445 | 110° |
| HYDRAULIC | 21-402-5 | 255DEH | 255 | 275 | 205 | 219 | .422 | .462 | 110° |
| HYDRAULIC | 21-404-5 | 265DEH | 265 | 277 | 214 | 229 | .442 | .482 | 110° |
| HYDRAULIC | 21-406-5 | 275DEH | 275 | 284 | 219 | 235 | .462 | .482 | 110° |
| HYDRAULIC | 21-310-4 | 286H-8 | 286-3 | 286-3 | 236 | 236 | .490 | .490 | 108° |
| HYDRAULIC | 21-314-4 | 296H-8 | 296-3 | 296-3 | 246 | 246 | .510 | .510 | 108° |
| HYDRAULIC | 21-318-4 | 312H-8 | 312-5 | 312-5 | 260 | 260 | .540 | .540 | 108° |
| HYDRAULIC | 21-244-5 | 312H-10 | 312-5 | 312-5 | 260 | 260 | .540 | .540 | 110° |
| HYDRAULIC | 21-320-4 | 320H-8 | 320-5 | 320-5 | 268 | 268 | .540 | .540 | 108° |
| SOLID | 21-629-5 | 310A-8 | 310-1 | 310-1 | 275 | 275 | .585 | .585 | 108° |
| SOLID | 21-631-5 | 320B-8 | 320-1 | 320-1 | 283 | 283 | .588 | .588 | 108° |
| ROLLER | 23-730-9 | 324CR-8 | 324-8 | 324-8 | 286 | 286 | .750 | .750 | 108° |
| CHRYSLER V8 392 HEMI 1957-1958 | | | | | | CUSTOM GRINDS AVAILABLE (26-000-5 & 26-000-9) | | | |
| CHRYSLER V8 426 HEMI 1966-1971 w/ 1.57 INTAKE / 1.52 EXHAUST ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 24-243-5 | 305H-10 | 305-3 | 305-3 | 253 | 253 | .549 | .532 | 110° |
| SOLID | 24-312-5 | 310S-6 | 310-1 | 310-1 | 275 | 275 | .612 | .593 | 106° |
| ROLLER | 24-731-11 | 324DR-6 | 324-8 | 324-8 | 286 | 286 | .785 | .760 | 106° |
| ROLLER | 24-734-11 | 333AR-6 | 333-1 | 333-1 | 292 | 292 | .785 | .760 | 106° |
| ROLLER | 24-722-11 | 320AR-8 | 320-30 | 320-30 | 284 | 284 | .800 | .775 | 108° |
| ROLLER | 24-779-11 | 336BR-10 | 336-4 | 324-9 | 296 | 286 | .747 | .669 | 110° |
| ROLLER | 24-740-11 | 336ER-12 | 336-5 | 332-2 | 296 | 292 | .690 | .669 | 112° |
| ROLLER | 24-750-11 | 331FR-16 | 331R-2 | 331R-2 | 296 | 296 | .788 | .763 | 116° |
| ROLLER | 24-758-11 | 326BR-15 | 326-30 | 326-30 | 293 | 293 | .800 | .775 | 115° |
| CHRYSLER V8 426 HEMI 1966-1971 (w/ 48° BANK ANGLE AND 2.124" JOURNALS) | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| ROLLER | 24-742-10 | 332FR-12 | 332-6 | 332-6 | 292 | 292 | .747 | .693 | 112° |
| FORD L4 2000, 2300 OHC 1983-1987 (SEE FOOTNOTE #53) | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| SOLID | 70-200-6 | 272S-12 | 272 | 272 | 236 | 236 | .437 | .437 | 112° |
| FORD 1600 L4 OHC 1965-1985 | | | | | | CUSTOM GRINDS AVAILABLE (71-000-5) | | | |
| FORD 2000 L4 OHC 1970-1977 (3 BEARING JOURNAL) | | | | | | CUSTOM GRINDS AVAILABLE (72-000-5) | | | |
| FORD L6 240-300 1965-1995 W/ 1.6 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| SOLID | 66-243-5 | 264S-8 | 264 | 264 | 220 | 220 | .469 | .469 | 108° |
| FORD V6 SVO ODD FIRE w/ 1.6 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| FORD V6 SVO EVEN FIRE w/ 1.6 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| ROLLER | 40-750-9 | 304DR-6 | 304-7 | 308-7 | 272 | 276 | .650 | .650 | 106° |
| FORD V8 221-302 (INCLUDES 221, 260, 289 & 302) 1963-1995 w/ 1.6 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 31-214-4 | 244H-10 | 244-1 | 244-1 | 196 | 196 | .410 | .410 | 110° |
| HYDRAULIC | 31-416-3 | 255DEH | 255 | 263 | 203 | 216 | .434 | .467 | 110° |
| HYDRAULIC | 31-412-4 | 260AH-8 | 260-9 | 268-9 | 212 | 218 | .474 | .474 | 108° |
| HYDRAULIC | 31-409-3 | 265DEH | 265 | 273 | 211 | 223 | .472 | .486 | 110° |
| HYDRAULIC | 31-416-4 | 268AH-8 | 268-4 | 276-4 | 222 | 226 | .494 | .494 | 108° |
| HYDRAULIC | 31-418-3 | 275DEH | 275 | 283 | 219 | 233 | .477 | .510 | 110° |
| HYDRAULIC | 31-430-4 | 296AH-8 | 296-3 | 305-2 | 246 | 253 | .544 | .560 | 108° |

| APPLICATIONS/CAMSHAFTS | PART # | GRIND # | DURATION IN DEGREES | | | | VALVE LIFT | | LOBE SEPARATION ANGLE |
|---|-----------|----------|---------------------|---------|---------|---|------------|------|-----------------------|
| | | | ADVERTISED | | @ .050" | | IN | EX. | |
| | | | IN | EX. | IN | EX. | | | |
| HYDRAULIC | 31-434-4 | 305AH-8 | 305-2 | 312-5 | 253 | 260 | .560 | .576 | 108° |
| SOLID | 31-600-5 | 270S-8 | 270-1 | 270-1 | 235 | 235 | .528 | .528 | 108° |
| ROLLER | 31-770-9 | 306CR-8 | 306-1 | 319-1 | 273 | 283 | .640 | .640 | 108° |
| FORD V8 5.0 1985-1995 w/ 1.6 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| FORD V8 351W 1968-1995 w/ 1.6 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 35-408-4 | 252AH-10 | 252-5 | 260-8 | 206 | 212 | .433 | .447 | 110° |
| HYDRAULIC | 35-416-4 | 255DEH | 255 | 263 | 203 | 216 | .434 | .467 | 110° |
| HYDRAULIC | 35-409-4 | 265DEH | 265 | 273 | 211 | 223 | .472 | .486 | 110° |
| HYDRAULIC | 35-418-4 | 275DEH | 275 | 283 | 219 | 233 | .477 | .510 | 110° |
| SOLID | 35-333-4 | 270S-10 | 270-3 | 270-3 | 224 | 224 | .499 | .499 | 110° |
| SOLID | 35-334-4 | 282S-10 | 282-2 | 282-2 | 236 | 236 | .528 | .528 | 110° |
| SOLID | 35-746-7 | 294Z-6 | 294N-1 | 304N-3E | 262 | 266 | .640 | .624 | 106° |
| SOLID | 35-750-7 | 306XZ-8 | 306XX | 320-12 | 274 | 284 | .652 | .658 | 108° |
| ROLLER | 35-805-9 | 300BR-6 | 300-5 | 304-5 | 264 | 268 | .672 | .672 | 106° |
| ROLLER | 35-821-9 | 298CR-6 | RT298-2 | 308-5 | 268 | 272 | .696 | .672 | 106° |
| ROLLER | 35-811-9 | 312BR-6 | 312-5 | 316-5 | 276 | 280 | .672 | .672 | 106° |
| FORD V8 351W 1968-1995 REVERSE ROTATION | | | | | | CUSTOM GRINDS AVAILABLE (35-000-5RR) | | | |
| FORD V8 351C, 351M 1970-1982 w/ 1.73 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 32-214-4 | 252BH-12 | 252-6 | 252-5 | 201 | 206 | .467 | .467 | 112° |
| HYDRAULIC | 32-206-4 | 255DEH | 255 | 265 | 203 | 216 | .465 | .495 | 110° |
| HYDRAULIC | 32-207-4 | 265DEH | 265 | 275 | 211 | 223 | .484 | .510 | 110° |
| HYDRAULIC | 32-208-4 | 275DEH | 275 | 285 | 219 | 232 | .515 | .541 | 110° |
| HYDRAULIC | 32-315-4 | 286AH-10 | 286-3 | 292-3 | 236 | 244 | .562 | .556 | 110° |
| HYDRAULIC | 32-318-4 | 296AH-8 | 296-3 | 305-4 | 246 | 253 | .585 | .581 | 108° |
| HYDRAULIC | 32-322-4 | 305AH-8 | 305-4 | 312-6 | 253 | 260 | .581 | .607 | 108° |
| HYDRAULIC | 32-324-4 | 312AH-8 | 312-6 | 320-9 | 260 | 268 | .607 | .607 | 108° |
| SOLID | 32-643-5 | 295B-6 | 295-1 | 310-2 | 260 | 270 | .645 | .648 | 106° |
| SOLID | 32-645-5 | 310B-6 | 310-2 | 314-1 | 270 | 276 | .648 | .641 | 106° |
| ROLLER | 32-684-9 | 292BR-4 | 292-6 | 296-4 | 262 | 266 | .702 | .702 | 104° |
| ROLLER | 32-778-9 | 306CR-8 | 306-1 | 319-1 | 273 | 283 | .692 | .692 | 108° |
| FORD V8 332-406 1958-1962 | | | | | | CUSTOM GRINDS AVAILABLE (104-000-5) | | | |
| FORD V8 352-428 1958-1976 w/ 1.73 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 33-300-4 | 252AH-10 | 252-5 | 260-8 | 206 | 212 | .476 | .492 | 110° |
| HYDRAULIC | 33-206-4 | 255DEH | 255 | 265 | 203 | 216 | .469 | .495 | 110° |
| HYDRAULIC | 33-207-4 | 265DEH | 265 | 275 | 211 | 223 | .484 | .510 | 110° |
| HYDRAULIC | 33-308-4 | 270AH-10 | 270-4 | 280-3 | 224 | 230 | .551 | .539 | 110° |
| HYDRAULIC | 33-208-4 | 275DEH | 275 | 285 | 219 | 232 | .515 | .541 | 110° |
| HYDRAULIC | 33-310-4 | 276AH-10 | 276-3 | 284-3 | 228 | 236 | .556 | .556 | 110° |
| HYDRAULIC | 33-312-4 | 286AH-8 | 286-3 | 292-3 | 236 | 244 | .575 | .569 | 108° |
| HYDRAULIC | 33-320-4 | 305AH-8 | 305-4 | 312-6 | 253 | 260 | .595 | .621 | 108° |
| HYDRAULIC | 33-243-5 | 320H-10 | 320-9 | 320-9 | 268 | 268 | .611 | .611 | 110° |
| SOLID | 33-640-5 | 279B-8 | MA279-1 | MA287-1 | 252 | 260 | .588 | .588 | 108° |
| SOLID | 33-649-5 | 304B-8 | 304-1 | 314-1 | 266 | 276 | .626 | .653 | 108° |
| ROLLER | 33-788-11 | 295DR-8 | 299 | 309 | 266 | 276 | .686 | .644 | 108° |
| ROLLER | 33-789-11 | 308BR-8 | 312 | 326 | 276 | 286 | .739 | .751 | 108° |
| ROLLER | 33-786-11 | 321BR-8 | 323 | 336 | 288 | 298 | .774 | .739 | 108° |
| FORD V8 429-460 1968-1999 w/ 1.73 ROCKERS | | | | | | CUSTOM GRINDS AVAILABLE | | | |
| HYDRAULIC | 34-228-4 | 252BH-10 | 252-5 | 260-8 | 206 | 212 | .467 | .484 | 110° |
| HYDRAULIC | 34-223-5 | 255DEH | 255 | 265 | 203 | 216 | .469 | .495 | 110° |
| HYDRAULIC | 34-240-4 | 260AH-10 | 260-8 | 268-5 | 212 | 218 | .484 | .496 | 110° |
| HYDRAULIC | 34-226-5 | 265DEH | 265 | 275 | 211 | 223 | .484 | .510 | 110° |
| HYDRAULIC | 34-244-4 | 268AH-10 | 268-4 | 276-4 | 222 | 226 | .535 | .535 | 110° |
| HYDRAULIC | 34-330-5 | 275DEH | 275 | 285 | 219 | 232 | .515 | .541 | 110° |
| HYDRAULIC | 34-246-4 | 276AH-10 | 276-3 | 284-3 | 228 | 236 | .547 | .547 | 110° |

| APPLICATIONS/CAMSHAFTS | PART # | GRIND # | DURATION IN DEGREES | | | | VALVE LIFT | | LOBE SEPARATION ANGLE |
|---|------------------------|----------|---------------------|-------|---------|-----|--|------|-----------------------|
| | | | ADVERTISED | | @ .050" | | IN | EX. | |
| | | | IN | EX. | IN | EX. | | | |
| HYDRAULIC | 34-248-4 | 286AH-8 | 286-3 | 292-3 | 236 | 244 | .565 | .560 | 108° |
| HYDRAULIC | 34-253-4 | 292AH-10 | 292-3 | 296-3 | 244 | 246 | .560 | .588 | 110° |
| HYDRAULIC | 34-338-5 | 312H | 312-6 | 312-6 | 260 | 260 | .610 | .610 | 110° |
| HYDRAULIC | 34-258-4 | 312AH-8 | 312-6 | 320-9 | 260 | 268 | .610 | .610 | 108° |
| HYDRAULIC | 34-339-5 | 320H-10 | 320-9 | 320-9 | 268 | 268 | .610 | .610 | 110° |
| SOLID | 34-655-5 | 324B-8 | 324-1 | 324-1 | 286 | 286 | .667 | .667 | 108° |
| ROLLER | 34-713-9 | 296BR-8 | 296-5 | 304-5 | 260 | 268 | .726 | .726 | 108° |
| ROLLER | 34-740-9 | 313CR-10 | 313 | 319 | 281 | 286 | .806 | .763 | 110° |
| ROLLER | 34-814-9 | 326QR-20 | 326-30 | 360-5 | 292 | 320 | .882 | .830 | 120° |
| ROLLER | 34-810-9 | 324DR-14 | 324-30 | 352-1 | 288 | 312 | .882 | .825 | 114° |
| ROLLER | 34-789-9 | 328QR-16 | 328-11 | 356-5 | 288 | 316 | .836 | .830 | 116° |
| Harley-Davidson SHOVELHEAD V-TWIN 1970-1977 | | | | | | | CUSTOM GRINDS AVAILABLE | | |
| Harley-Davidson SHOVELHEAD V-TWIN 1978-1984 | | | | | | | CUSTOM GRINDS AVAILABLE | | |
| HOLDEN 6 CYL. 173-202 1963-1986 | | | | | | | CUSTOM GRINDS AVAILABLE (81-000-5) | | |
| HOLDEN V8 252-308 1970-1988 w/ 1.5 ROCKERS | | | | | | | CUSTOM GRINDS AVAILABLE | | |
| HYDRAULIC | 82-205-4 | 252H | 252-5 | 252-5 | 206 | 206 | .433 | .433 | 110° |
| HYDRAULIC | 82-206-4 | 260H | 260-8 | 260-8 | 212 | 212 | .447 | .447 | 110° |
| HYDRAULIC | 82-210-4 | 268H | 268-5 | 268-5 | 218 | 218 | .456 | .456 | 110° |
| HYDRAULIC | 82-212-4 | 280H | 280-3 | 280-3 | 230 | 230 | .490 | .490 | 110° |
| HYDRAULIC | 82-213-4 | 292H | 292-3 | 292-3 | 244 | 244 | .518 | .518 | 110° |
| HYDRAULIC | 82-242-4 | XE268H | 268 | 280 | 224 | 230 | .509 | .512 | 110° |
| MITSUBISHI L4 2000, 2600 1979-1987 | | | | | | | CUSTOM GRINDS AVAILABLE (95-000-5) | | |
| NISSAN 1595-1952CC L16, 18, 20B 4 CYL. 1960-1980 | | | | | | | CUSTOM GRINDS AVAILABLE | | |
| SOLID | 79-119-6 | 252S-10 | 252 | 252 | 204 | 204 | .440 | .440 | 110° |
| SOLID | 79-123-6 | 260S-10 | 260 | 260 | 214 | 214 | .459 | .459 | 110° |
| SOLID | 79-127-6 | 268S-10 | 268 | 268 | 222 | 222 | .461 | .461 | 110° |
| SOLID | 79-131-6 | 280S-10 | 280 | 280 | 236 | 236 | .495 | .495 | 110° |
| SOLID | 79-135-6 | 292S-10 | 292 | 292 | 246 | 246 | .516 | .516 | 110° |
| NISSAN/DATSUN 6 CYL. SOHC | | | | | | | CUSTOM GRINDS AVAILABLE (80-000-5) | | |
| OLDSMOBILE V8 260-455 1967-1990 w/ 1.6 ROCKERS | | | | | | | CUSTOM GRINDS AVAILABLE | | |
| HYDRAULIC | 42-207-5 | 255DEH | 255 | 263 | 203 | 215 | .433 | .467 | 110° |
| HYDRAULIC | 42-208-5 | 265DEH | 265 | 273 | 211 | 223 | .472 | .486 | 110° |
| HYDRAULIC | 42-306-4 | 268AH-10 | 268-4 | 276-4 | 222 | 226 | .494 | .494 | 110° |
| HYDRAULIC | 42-210-5 ³⁷ | 275DEH | 275 | 282 | 219 | 233 | .476 | .508 | 110° |
| HYDRAULIC | 42-310-4 | 276AH-10 | 276-3 | 284-3 | 228 | 236 | .506 | .506 | 110° |
| HYDRAULIC | 42-313-4 | 280AH-10 | 280-9 | 288-9 | 232 | 237 | .515 | .515 | 110° |
| HYDRAULIC | 42-317-4 | 286AH-10 | 286-3 | 292-3 | 236 | 244 | .523 | .518 | 110° |
| OLDSMOBILE V8 260-455 45° BANK ANGLE | | | | | | | CUSTOM GRINDS AVAILABLE (103-000-5) | | |
| PONTIAC V8 265-455 1958-1981 w/ 1.5 ROCKERS | | | | | | | CUSTOM GRINDS AVAILABLE | | |
| HYDRAULIC | 51-228-4 | 244H-10 | 244-2 | 244-2 | 196 | 196 | .400 | .400 | 110° |
| HYDRAULIC | 51-300-4 | 252AH-10 | 252-4 | 260-7 | 206 | 212 | .424 | .440 | 110° |
| HYDRAULIC | 51-206-5 | 255DEH | 255 | 261 | 202 | 212 | .420 | .450 | 110° |
| HYDRAULIC | 51-304-4 | 260AH-10 | 260-9 | 268-9 | 212 | 218 | .444 | .444 | 110° |
| HYDRAULIC | 51-207-5 | 265DEH | 265 | 269 | 211 | 221 | .442 | .465 | 110° |
| HYDRAULIC | 51-308-4 | 268AH-8 | 268-4 | 276-4 | 222 | 226 | .463 | .463 | 108° |
| HYDRAULIC | 51-208-5 | 275DEH | 275 | 277 | 219 | 228 | .462 | .480 | 110° |
| HYDRAULIC | 51-318-4 | 286AH-10 | 286-3 | 292-2 | 236 | 244 | .489 | .500 | 110° |
| SOLID | 51-506-5 | 296TL-6 | TL296-1 | 310-1 | 266 | 275 | .570 | .585 | 106° |
| SOLID | 51-661-5 | 310B-8 | 310-1 | 314-1 | 275 | 276 | .585 | .556 | 108° |
| ROLLER | 51-813-11 | 285CR-6 | 285-2 | 295-2 | 252 | 262 | .619 | .604 | 106° |
| ROLLER | 51-816-11 | 306CR-8 | 306-1 | 319-1 | 270 | 280 | .660 | .660 | 108° |
| ROLLER | 51-822-11 | 306CR-4 | 306-2 | 309-2 | 275 | 278 | .688 | .693 | 104° |
| ROLLER | 51-823-11 | 316DR-6 | 316-2 | 316-2 | 284 | 284 | .715 | .715 | 106° |
| ROLLER | 51-825-11 | 312R-4 | 312-8 | 312-8 | 284 | 284 | .728 | .728 | 104° |

³⁷ Adjustable valve train required

| APPLICATIONS/CAMSHAFTS | PART # | GRIND # | DURATION IN DEGREES @ .050" | | | | VALVE LIFT | | LOBE SEPARATION ANGLE |
|---|----------|---------|---|-----|-----|-----|------------|------|-----------------------------|
| | | | ADVERTISED | | | | IN | EX. | |
| | | | IN | EX. | IN | EX. | IN | EX. | |
| TOYOTA 2TC-3TC OHV 1588CC, 1770CC 1971-1982 | | | CUSTOM GRINDS AVAILABLE (74-000-5) | | | | | | |
| VOLKSWAGEN 1200-1600CC TYPE 1 4 CYL. 1955-1971 | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| SOLID | 73-115-4 | 244S | 244 | 244 | 200 | 200 | .293 | .293 | 108° |
| SOLID | 73-119-4 | 252S | 252 | 252 | 210 | 210 | .319 | .319 | 108° |
| SOLID | 73-123-4 | 264S | 264 | 264 | 220 | 220 | .323 | .323 | 108° |
| SOLID | 73-130-4 | 280S | 280 | 280 | 242 | 242 | .372 | .372 | 108° |
| VOLKSWAGEN 1457-1788CC SOHC 4 CYL. 1974-1989 | | | CUSTOM GRINDS AVAILABLE | | | | | | |
| SOLID | 85-119-4 | 252S | 252 | 252 | 204 | 204 | .410 | .410 | 110° |
| SOLID | 85-123-4 | 260S | 260 | 260 | 214 | 214 | .410 | .410 | 110° |



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COMP CAMS® SPECIAL SERVICES

A partial listing of the most common high end treatments and special processes you can order for your COMP Cams® camshaft. Additional services are available; contact us for any special needs.

CAMSHAFT SURFACE PREPARATIONS

Nitriding – Part #1-111-1

This is the most effective process for extending the life of a high performance flat tappet camshaft. Nitriding increases the hardness of the camshaft surface metal by physically injecting nitrogen "needles" into the surface of the lobes and journals to increase their resistance to wear.

Camshaft Micropolishing – Part #1-114-1

This procedure removes microscopic imperfections in the surface of the metal. Micropolishing can further increase the durability of the camshaft and can be performed to only the camshaft lobes or all wear surfaces.

Micro Surface Enhancement™ - Part #1-673-1

This finishing process improves the traditional camshaft lobe and load-bearing faces through a reduction in surface peak roughness to provide improvement in the effective load bearing area. It utilizes uniform pressure across the camshaft lobe face to reduce surface waviness and more evenly distribute load for increased durability. MSE also removes sharp edges and microscopic machining marks resulting from the standard grinding process.

Xtreme Surface Finish Enhancement – Part #1-137-1

Our high-quality finishing process involving considerably more polishing than any other procedure. This is most commonly used in steel-on-steel contact valve train situations, such as high end circle track flat tappet camshafts where billet materials have repeated contact in extremely high RPM environments.

PRECISION CAMSHAFT MEASUREMENT

Basic Camshaft Profiling – Part #1-126-1

Performed on two lobes of any camshaft, the component is measured to determine its lift, duration and lobe centerline specifications.

Adcole Camshaft Profiling – Part #1-125-1

Our highest precision camshaft measuring device, the Adcole, checks all 16 camshaft lobes to determine that the cam meets all specifications requested by the customer. The Adcole measures camshaft specifications to 0.00001 of an inch.

SPECIAL OPERATIONS

Replacement of the Camshaft Dowel Pin – Part #1-120-1

This is a process which repairs camshafts when the current dowel pin has either been sheared off or damaged in some manner. The old dowel pin (or remaining part) is removed by machining and a new dowel pin is inserted.

Installation of Dual Dowel Pins – Part #1-121-1

For certain applications, dual dowel pins can be installed to further ensure that the camshaft and timing gear connection are secure. This is most commonly done with early model Ford V8s and classic Chrysler Hemi engines. The timing gear can also be machined to adapt to this new configuration.

Drilling and Tapping Camshaft Nose – Part #1-136-1

A process performed on Viper camshafts, the nose of the camshaft is drilled and then tapped to convert from a single timing gear bolt-up to a three-bolt aftermarket timing chain set. This allows for a wider selection of timing sets.

Machining a Rear Camshaft Journal Groove – Part #1-119-1

A process commonly performed on 1965-66 Big Block 396c.i. Chevrolet engines, which features oiling systems that require a groove be cut into the rear journal of the camshaft. This was a two-year only condition, not required in all 1967 and newer Big Block Chevrolet engines.

Machining of the Rear Pump Drive – Part #1-116-1

Allows sprint car-style engines to run the fuel pump from the rear of the camshaft rather than traditional placements.

Side Cutting of Camshaft Lobes – Part #1-127-1

A process often requested that helps to keep the lifters from making contact with adjacent lobes when the engine's lifter bores have been enlarged.

Sleeving of the Camshaft Journal – Part #1-132-1

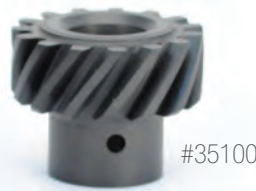
Most popular with Ford Windsor engine roller bearing camshaft applications, a sleeve is placed around the standard rear journal to increase the size of the journal, making it compatible with rear roller bearing usage.

Fuel Pump Lobe Regrinding – Part #1-147-1

A refinishing process used to clean up a fuel pump lobe which may have been damaged or is showing excessive wear.

Chamfer/Edge Break - Part #1-122-1

Common in NASCAR and other professional series, this process lightly chamfers the lobe surface edges on each side. This edge break minimizes corner stress concentration, resulting in improved endurance whenever follower contact runs close to the side of the lobe. Highly recommended in any application with narrow lobes.



MELONIZED DISTRIBUTOR GEARS

For your hydraulic or solid roller iron gear camshafts, it is recommended that you use a melonized distributor gear. These gears have undergone a "salt bath" nitriding process that gives them an extremely hard and slick surface to prevent excessive friction and wear, as well as rust accumulation. Used for factory engines, melonized distributor gears are harder than the standard iron or bronze gears and can be used with any cam material.

COMPOSITE DISTRIBUTOR GEARS

Manufactured from carbon ultra-poly, these represent the future of distributor gears. They are available for Small & Big Block Chevrolets with .500" or .491" distributor shafts, Small Block Ford and Chrysler R5 applications. These gears have undergone stringent testing in various applications with positive results and show great promise in solving the wear issues associated with bronze gears in racing applications with 300% increased durability. Can be used with any cam material. *Composite gears are not recommended for use with high volume or high pressure oil pumps.

BRONZE DISTRIBUTOR GEARS

One of the first requirements when installing a steel roller cam is the addition of a bronze distributor gear because a stock cast iron gear is not compatible with a steel camshaft. COMP Cams® bronze gears feature a high-strength tooth design that resists wear even when used with high-pressure oil pumps. These extra tough gears are the answer when higher mechanical properties are demanded. Can be used with any cam material.



SCAN THE QR CODE
to watch a video on proper
distributor gear selection.



| MAKE | DESCRIPTION | FITS SHAFT DIAMETER | PART # |
|------------------------------------|-------------------------------------|-----------------------------|--------------|
| MELONIZED DISTRIBUTOR GEARS | | | |
| Chevrolet | V8 Small & Big Block | .491" | 412M |
| | V8 Small & Big Block | .500" | 410M |
| Ford | V8 302-351W | .468" | 431M |
| | V8 302-351W | .531" | 435M |
| COMPOSITE DISTRIBUTOR GEARS | | | |
| Chevrolet | V8 Small & Big Block | .491" | 12200 |
| | V8 Small & Big Block | .500" | 12140 |
| | .006" Oversized | .500" | 12146 |
| | .009" Oversized | .500" | 12149 |
| Ford | 302-351W | .530" | 35100 |
| | 302-351W | .467" | 35200 |
| BRONZE DISTRIBUTOR GEARS | | | |
| Chevrolet | 4 Cyl. 153 | .491" | 461 |
| | 6 Cyl. 194-250, 292 | .491" | 461 |
| | 90° V6 200-262 | .491" | 412 |
| | 90° V6 200-262 w/ MSD Distributor | .500" | 410 |
| | 90° V6 200-262 w/ ACCEL Distributor | .500" | 411 |
| | V8 265-400 | .491" | 412 |
| | V8 265-400 w/ MSD Distributor | .500" | 410 |
| | V8 265-400 w/ ACCEL Distributor | .500" | 411 |
| | V8 265-400 (Reverse Rotation) | .491" | 413 |
| | V8 396-454 | .491" | 412 |
| | V8 396-454 w/ MSD Distributor | .500" | 410 |
| | V8 396-454 w/ ACCEL Distributor | .500" | 411 |
| | V8 396-454 (Reverse Rotation) | .491" | 413 |
| | Chrysler | V8 273-360 "LA", Donovan V8 | .484" |
| V8 "B" 383-400 | | .484" | 424 |
| V8 426 Hemi | | .484" | 424 |
| Ford | 6 Cyl. 240-300 | .530" | 466 |
| | V8 260-302, Boss 302-351W | .467" | 431 |
| | V8 260-302, Boss 302-351W | .500" | 438 |
| | SVO V8 302-351W | .530" | 435 |
| | V8 351C 351-400M | .530" | 436 |
| | V8 351C, Boss 351, 351-400M | .500" | 432 |
| | V8 352-428 | .467" | 433 |
| | V8 352-428 | .500" | 432 |
| | V8 429, 460 | .500" | 432 |
| | V8 429, 460 | .530" | 436 |
| Oldsmobile | V8 260-455 | .491" | 442 |
| Pontiac | 4 Cyl. 151 (1977-78) | .491" | 461 |
| | 4 Cyl. 151 (1979-89) Oil Pump Gear | .491" | 461 |
| | V8 265-455 | .491" | 451 |



#1591



#1590



#159

ENGINE BREAK-IN LUBRICANTS

Due to government regulations, in recent years oil manufacturers have removed the Zinc and many other additives from their motor oils. Using one of these “off-the-shelf” brands of oil during the critical break-in process can lead to a failure. Thus, COMP Cams® Engine Break-In Oil and Additive are designed to extend the durability of internal engine components including camshafts, valve train components and all moving parts in your new or rebuilt engine. They do so by using a special blend of extreme pressure additives no longer available in “off-the-shelf” motor oils. COMP Cams® Engine Break-In Oil provides added protection during the break-in process and is compatible with any petroleum, synthetic or blended motor oil.

- Improve surface mating of rotating assembly, rod journals, piston rings, valve guides, cam & lifters, etc.
- Protect all internal engine components, including both flat tappet & roller valve trains
- Proprietary additive package includes optimum amounts of ZDDP (Zinc & Phosphorus), Molybdenum & detergents
- Require no additives or supplements for maximum protection
- Compatible with gasoline, methanol & high octane race fuels

| DESCRIPTION | SIZE | PART # |
|------------------------------|---------------------|-----------------|
| 10W30 Engine Break-In Oil | 1 Qt. | 1590 |
| 10W30 Engine Break-In Oil | (12) 1 Qt. Bottles | 1590-12 |
| 10W30 Engine Break-In Oil | (56 Case) Pallet | 1590-PLT |
| 15W50 Engine Break-In Oil | 1 Qt. | 1591 |
| 15W50 Engine Break-In Oil | (12) 1 Qt. Bottles | 1591-12 |
| 15W50 Engine Break-In Oil | (56 Case) Pallet | 1591-PLT |
| Engine Break-In Oil Additive | 12 oz. Bottle | 159 |
| Engine Break-In Oil Additive | (12) 12 oz. Bottles | 159-12 |
| Engine Break-In Oil Additive | 5 Gallon Bucket | 260 |

Note: MSDS available on request.



SCAN THE QR CODE

to watch a video on the proper flat tappet camshaft break-in procedure.



SCAN THE QR CODE

to read the COMP Cams® Flat Tappet Tech Bulletin and learn ways to save your engine.





MUSCLE CAR & STREET ROD ENGINE OIL

The COMP Cams® Muscle Car & Street Rod Engine Oil is a blended-synthetic oil that delivers the time-tested wear protection of a mineral oil with the advanced performance, extended change intervals and internal cleanliness of a synthetic. Special corrosive protection additives and optimum amounts of ZDDP (Zinc and Phosphorus) provide unmatched anti-wear properties, even during extended periods of storage. This advanced engine oil is available in both 10W30 and 15W50 formulas and is perfect for late model or classic engines with flat tappet valve trains. After incorporating three decades of internal engine know-how and extensive testing data, we're certain that there's nothing better for your muscle car or street rod.

- Protects against internal engine corrosion, oxidation and rust; requires no extra additives
- Blended-synthetic lubricant includes Zinc, Phosphorus and Molybdenum for the ultimate in wear protection
- Unrivalled start-up protection for both classic flat tappet and late model roller valve trains
- 10W30 and 15W50 weights specially formulated for muscle car and street rod applications

| DESCRIPTION | SIZE | PART # |
|--|--------------------|-----------------|
| 10W30 Muscle Car & Street Rod Engine Oil | 1 Qt. | 1594 |
| 10W30 Muscle Car & Street Rod Engine Oil | (12) 1 Qt. Bottles | 1594-12 |
| 10W30 Muscle Car & Street Rod Engine Oil | (56) Case Pallet | 1594-PLT |
| 15W50 Muscle Car & Street Rod Engine Oil | 1 Qt. | 1595 |
| 15W50 Muscle Car & Street Rod Engine Oil | (12) 1 Qt. Bottles | 1595-12 |
| 15W50 Muscle Car & Street Rod Engine Oil | (56) Case Pallet | 1595-PLT |

Note: MSDS available on request.

SPECIALTY LUBRICANTS

COMP Cams® has taken great pains to develop what we feel to be the best line of lubricants on the market to protect your valve train and engine. These will protect your internal engine components before start-up, during break-in and throughout the life cycle of your engine.

- Three different formulas protect internal engine components
- Protected valve train parts include: camshaft, lifters, valve springs, rocker arms, pushrods and distributor gear
- Contain high viscosity, extreme pressure additives not found in today's conventional oils and lubricants
- Compatible with all petroleum, synthetic and blended engine oils

| DESCRIPTION | SIZE | PART # |
|---------------------------------------|-------------------|------------|
| Valve Train Assembly Spray | 6 oz. Aerosol Can | 106 |
| Cam & Lifter Installation Lube | 5/8 fl. oz. | 103 |
| Cam & Lifter Installation Lube | 4 oz. Bottle | 152 |
| Cam & Lifter Installation Lube | 8 oz. Bottle | 153 |
| Cam & Lifter Installation Lube 6-Pack | (6) 4 oz. Bottles | 198 |
| Engine Assembly Lube | 4 oz. Jar | 102 |
| Engine Assembly Lube | 8 oz. Jar | 104 |
| Engine Assembly Lube | 14 oz. Tube | 127 |

Note: MSDS available on request.



FLAT TAPPET VS. ROLLER TAPPET LIFTERS

In nearly all circumstances, a good roller camshaft design will outperform its flat tappet counterpart. Among the benefits of roller cams are higher tappet velocity, more lift and more area, along with reduced valve train friction (often a 20+ HP increase) and higher engine RPM with little effect on low speed drivability and power.

Roller tappets are also reusable, which makes it possible to swap just the camshaft without the expense of new lifters. And finally, roller tappets are far less prone to wear – allowing higher spring loads – and they are more consistent with today's oils.

The biggest advantage with a flat tappet cam and lifters is the upfront cost. It can be significantly less expensive to use a flat tappet setup but should you decide to install a new camshaft, you will need new lifters as well.

HYDRAULIC VS. MECHANICAL (SOLID) LIFTERS

Both lifter types look similar from the outside. In a hydraulic lifter, the seat moves by means of a hydraulic valve and oil pressure within the lifter. The mechanical lifter does not have a valve and is solid.

The pushrod seat in a solid lifter sits upon an internal step inside the lifter body, preventing it from moving. The hydraulic lifter, on the other hand, has a pushrod seat that sits on top of a moveable hydraulic mechanism that acts like a tiny hydraulic pump. Below this mechanism are a valve and spring that produce an upward force, moving the seat up against the pushrod when the lifter is on the base circle.

Solid cam designs require a running clearance or "valve lash." Hydraulic cams are the exact opposite. In a standard hydraulic lifter, the pushrod takes up all of the clearance and submerges into the lifter's pushrod seat approximately .020"-.070". The distance that the pushrod submerges is known as the "pre-load."

SHORT TRAVEL HYDRAULIC ROLLER LIFTERS

COMP Cams® Short Travel Hydraulic Roller Lifters are the perfect choice for use in mandated hydraulic roller racing classes and high performance/race applications. The limited plunger travel extends the usable RPM range by up to 500+ RPM, but still remains a hydraulic lifter while staying as close to a mechanical lifter as possible. See page 243 for more information.

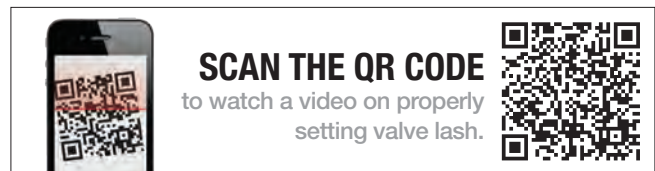


SETTING VALVE LASH WITH A SOLID LIFTER CAMSHAFT

First, check the spec card that came with your cam for the correct valve lash specifications. All COMP Cams® valve lash settings are “hot” settings (set at normal engine operating temperature) but will work for initial start-up as well.

Turn the crankshaft in the direction of normal engine rotation until the exhaust pushrod of the cylinder you are adjusting begins to move upward, opening the valve. Adjust the INTAKE lash by tightening the intake rocker nut with the correct thickness feeler gauge inserted between the valve stem and the rocker tip. Tighten the rocker nut until there is a slight drag when moving the feeler gauge. Next, rotate the engine until the intake pushrod fully opens the valve and then goes halfway back down. Adjust the EXHAUST rocker nut (with correct feeler gauge) using the same procedure previously described. Repeat for all remaining cylinders.

After setting your valve lash with the engine cold, start it and follow the appropriate break-in procedures. Your valve lash setting will change as the engine heats, dependent upon the material of your cylinder heads and block. You will need to repeat the process to ensure your valve lash matches that specified by your cam card at normal operating temperatures.



SETTING HYDRAULIC LIFTER PRE-LOAD (ADJUSTABLE VALVE TRAIN)

When installing a hydraulic camshaft, lifters or rocker arms, establishing the correct lifter pre-load improves both performance and engine life. Insufficient pre-load will create excessive valve train noise and wear. Excessive pre-load will cause rough idling and low manifold vacuum and can even lead to severe engine damage. With an adjustable valve train, proceed as follows:

Install the pushrods and rocker arms. Be sure the pushrods are seated correctly in the lifter and rocker arm. Turn the engine over in the direction of rotation until the EXHAUST pushrod just begins to move upward, opening the valve. Now adjust the INTAKE rocker of that cylinder. Carefully tighten the nut on the intake rocker while spinning the pushrod with your fingertips. You will feel a slight resistance in the pushrod when you have taken up all of the clearance. This is “zero lash.” Turn the adjusting nut to the specified pre-load – typically 1/4-3/4 of a turn, but this will vary based on the lifter model and the thread pitch of the rocker stud. Comp Cams® Short Travel Lifters requires 1/4-1/2 of a turn.

Turn the engine in its rotation direction until the INTAKE pushrod comes all the way up and almost all the way back down. Now set the EXHAUST rocker to “zero lash” and add the specified pre-load. Repeat this process for all remaining cylinders.

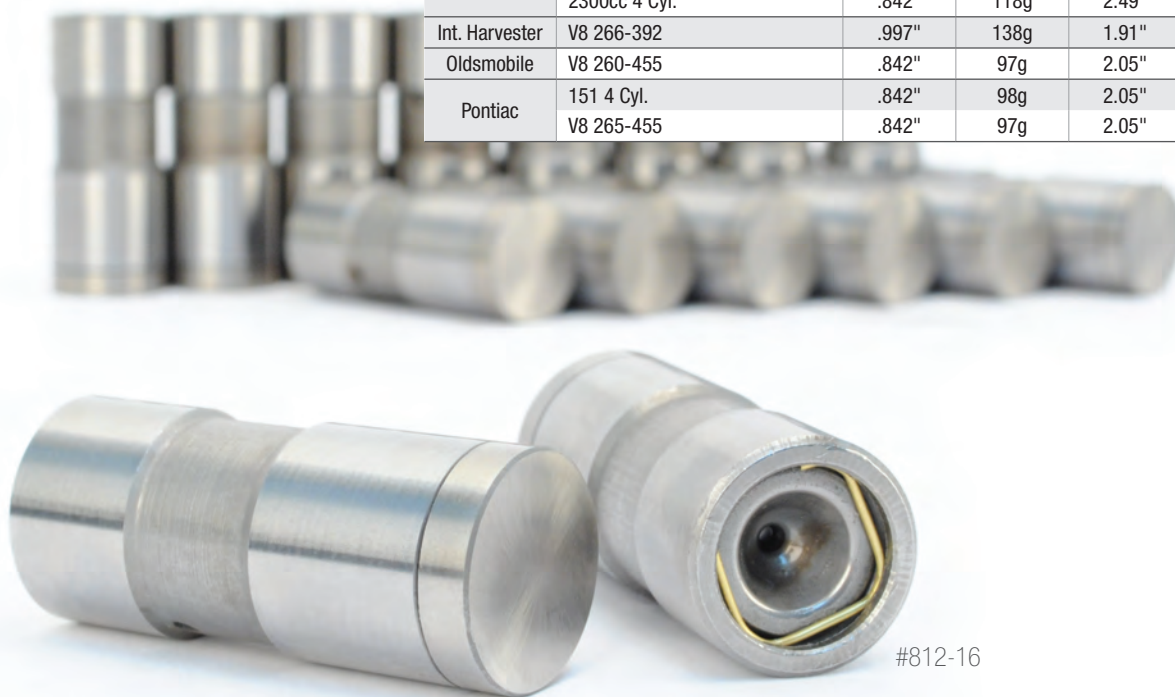
SETTING HYDRAULIC LIFTER PRE-LOAD (NON-ADJUSTABLE VALVE TRAIN)

COMP Cams® recommends using an adjustable/checking pushrod to check the pre-load. Typically, only one cylinder needs to be checked in this process. After applying lube, install the adjustable pushrods and assemble the valve train. Using the same procedure mentioned earlier, adjust the intake and exhaust valves to zero lash by changing the length of the adjustable pushrod for precise fitment. Order a pushrod that is .020"-.070" longer than the pushrod length at zero lash to ensure the proper pre-load. Adjustable/checking pushrods are located on page 255 of this catalog.

HIGH ENERGY™ HYDRAULIC LIFTERS

- Patented orifice metering valve precisely meters oil to the rocker arms
- Continuous contact between the metering valve and pushrod seat is maintained, eliminating excessive oiling at high engine speeds
- Pushrod seat is made of a special powdered metal iron alloy that is heat-treated for strength and wear resistance
- Contain a longer piston than conventional hydraulic lifters, which provides more load bearing surface and increases lifter longevity
- Lightweight check valve disc allows for quicker response, which results in increased engine speed before valve float
- Lightweight check valve disc maintains added control at all engine speeds and loads

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|----------------|------------------------------|----------|--------|--------------|---------------|
| AMC | V8 290-401 | .904" | 109g | 1.88" | 822-16 |
| | 6 Cyl. 199-258 | .904" | 109g | 1.88" | 822-12 |
| Buick | V8 350-455 | .842" | 98g | 2.05" | 869-16 |
| | V6 181-252 1962-Present | .842" | 98g | 2.05" | 869-12 |
| Cadillac | V8 472-500 | .842" | 98g | 2.05" | 869-16 |
| Chevrolet | V8 265-400 | .842" | 94g | 1.99" | 812-16 |
| | V8 396-454 | .842" | 94g | 1.99" | 812-16 |
| | V8 348-409, 1958-65 | .842" | 94g | 1.99" | 812-16 |
| | 6 Cyl. 194-292 | .842" | 94g | 1.99" | 812-12 |
| | V6 60° 173, 207, 2.8L-3.4L | .842" | 96g | 2.05" | 802-12 |
| | V6 90° 200-262 | .842" | 94g | 1.99" | 812-12 |
| Chrysler | V8 273-360 | .904" | 109g | 1.88" | 822-16 |
| | V8 B-383-440, 1958-67 | .904" | 110g | 1.91" | 824-16 |
| | V8 B-383-440, 1968-Present | .904" | 109g | 1.88" | 822-16 |
| | Hemi 426 | .904" | 110g | 1.91" | 824-16 |
| | 6 Cyl. 170-225, 1980-Present | .904" | 102g | 1.88" | 820-12 |
| Ford | 2.2L 4 Cyl. | .626" | 46g | 2.05" | 842-8 |
| | V8 289-302-351W | .875" | 105g | 2.02" | 832-16 |
| | V8 351C-351M-400M | .875" | 105g | 2.02" | 832-16 |
| | V8 352-428 | .875" | 97g | 1.88" | 834-16 |
| | V8 429-460 | .875" | 105g | 2.02" | 832-16 |
| | 6 Cyl. 240-300 | .875" | 105g | 2.02" | 832-12 |
| | 6 Cyl. 144-250 | .875" | 97g | 1.88" | 834-12 |
| | V6 231 | .875" | 105g | 2.02" | 832-12 |
| | 2600-2800cc V6 (158-171c.i.) | .875" | 97g | 1.88" | 834-12 |
| 2300cc 4 Cyl. | .842" | 118g | 2.49" | 846-8 | |
| Int. Harvester | V8 266-392 | .997" | 138g | 1.91" | 855-16 |
| Oldsmobile | V8 260-455 | .842" | 97g | 2.05" | 852-16 |
| Pontiac | 151 4 Cyl. | .842" | 98g | 2.05" | 864-8 |
| | V8 265-455 | .842" | 97g | 2.05" | 852-16 |



#812-16

PUSHROD MEASUREMENTS

Pushrod seat heights, diameters & weights are approximate (nominal). All weights are for individual lifters, excluding link bars, unless otherwise noted. All seat heights were determined with a 5/16" gauge ball in place. Illustration on page 243.



#858-16

PRO MAGNUM™ HYDRAULIC LIFTERS

- Specifically designed to perform at higher engine speeds
- Proper position of internal piston at higher RPM prevents lifters from harmful “pumping up”
- Unique design yields significant power increase over standard hydraulic lifters
- Adjustable valve train required

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|------------|---------------------------|----------|--------|-------------|---------------|
| AMC | V8 290-401 | .904" | 107g | 1.84" | 867-16 |
| | 6 Cyl. 199-258 | .904" | 107g | 1.84" | 867-12 |
| Buick | V8 350-455 | .842" | 94g | 2.01" | 865-16 |
| | V6 181-252, 1962-Present | .842" | 94g | 2.01" | 865-12 |
| Chevrolet | V8 265-400 | .842" | 99g | 1.93" | 858-16 |
| | V8 396-454 | .842" | 99g | 1.93" | 858-16 |
| | V8 348-409, 1958-65 | .842" | 99g | 1.93" | 858-16 |
| | 6 Cyl. 194-292 | .842" | 99g | 1.93" | 858-12 |
| | V6 90° 200-262 | .842" | 99g | 1.93" | 858-12 |
| Chrysler | V8 273-360 | .904" | 107g | 1.84" | 867-16 |
| | V8 B-383-440 1968-Present | .904" | 107g | 1.84" | 867-16 |
| Ford | V8 289-302-351W | .875" | 105g | 1.95" | 862-16 |
| | V8 351C-351M-400M | .875" | 105g | 1.95" | 862-16 |
| | V8 429-460 | .875" | 105g | 1.95" | 862-16 |
| | V6 231 | .875" | 105g | 1.95" | 862-12 |
| | 6 Cyl. 240-300 | .875" | 105g | 1.95" | 862-12 |
| Oldsmobile | V8 260-455 | .842" | 96g | 2.01" | 863-16 |
| Pontiac | V8 326-455 | .842" | 96g | 2.01" | 863-16 |



#884

HI-TECH™ HYDRAULIC LIFTERS

- Greater bleed rate increases vacuum
- Increased throttle response for extremely hot street and racing applications
- Not recommended for extended periods of street use

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|------------|--------------------------------------|----------|--------|-------------|---------------|
| AMC | V8 290-401 | .904" | 109g | 1.91" | 882-16 |
| Chevrolet | V8 265-400, 396-454, 348-409 | .842" | 95g | 1.99" | 880-16 |
| Chrysler | V8 273-360, 383-440 | .904" | 109g | 1.19" | 882-16 |
| Ford | V8 289-302, 351W, 429-460, 351C-400M | .875" | 106g | 2.09" | 884-16 |
| Oldsmobile | V8 260-455 | .842" | 95g | 2.02" | 886-16 |
| Pontiac | V8 326-455 | .842" | 95g | 2.02" | 886-16 |

Note: For V6, use -12 suffix



#84000

RACE HYDRAULIC LIFTERS

- Tighter plunger-to-body tolerances and premium one-piece pushrod seats
- Super strict tolerances for the mechanical internals optimize performance
- Extra heavy-duty snap ring design increases lifter strength and durability

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|-----------|--------------------------------|----------|--------|-------------|-----------------|
| Chevrolet | Small & Big Block Race Lifters | .842" | 104g | 2.01" | 84000-16 |
| Ford | Small & Big Block Race Lifters | .875" | 122g | 2.01" | 84035-16 |



#813

SOLID/MECHANICAL LIFTERS

- Designed and manufactured using the tightest tolerances in the industry for ultra-precise construction
- Face of the lifter is ground to precise radius for proper break-in and guaranteed longer life
- Oil metering band is milled to exact depth to prevent too much oil from being delivered to the top of the engine

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|------------|-------------------------------|----------|--------|-------------|-----------------|
| AMC | V8 290-401 | .904" | 101g | 1.79" | 801-16 |
| | V8 472-500 | .842" | 98g | 1.88" | 813-16 |
| Cadillac | V8 265-400 | .842" | 98g | 1.88" | 813-16 |
| Chevrolet | V8 265-400 w/ .875" Dia. | .875" | 109g | 1.95" | 833-16 |
| | V8 396-454 | .842" | 98g | 1.88" | 813-16 |
| | V8 348-409 1958-65 | .842" | 98g | 1.88" | 813-16 |
| | V6 90° 200-262 | .842" | 98g | 1.88" | 813-12 |
| | 6 Cyl. 194-292 | .842" | 98g | 1.88" | 813-12 |
| | V8 273-360 | .904" | 95g | 1.63" | 821-16 |
| Chrysler | 6 Cyl. 170-255 | .904" | 95g | 1.63" | 821-12 |
| | V8 273-360 (Oils Pushrod) | .904" | 101g | 1.79" | 801-16 |
| | V8 B-383-440 1958-Present | .904" | 95g | 1.63" | 821-16 |
| | V8 Hemi 426 | .904" | 95g | 1.63" | 821-16 |
| Ford | V8 221-351W 1963-69 | .875" | 108g | 1.95" | 831-16 |
| | V8 302-351W 1969-Present | .875" | 109g | 1.95" | 833-16 |
| | V8 Boss 302, 351C, 351M, 400M | .875" | 109g | 1.95" | 833-16 |
| | V8 352-428 | .875" | 102g | 1.79" | 835-16 |
| | V8 352-428 (Shell Type) | .875" | 61g | .46" | 837-16 |
| | V8 429-460 | .875" | 109g | 1.95" | 833-16 |
| | 6 Cyl. 240-300 | .875" | 108g | 1.95" | 831-12 |
| | 8 Cyl. 292, 312 Y-Block | .498" | 70g | 2.6" | 2931-16 |
| | 8 Cyl. 239, 255 Flathead | 1.000" | 102g | Adj. | 811FH-16 |
| | 6 Cyl. 144-250,V6 2600-2800cc | .875" | 102g | 1.79" | 835-12 |
| Oldsmobile | V8 260-455 | .842" | 98g | 1.88" | 813-16 |

TOOL STEEL SOLID/MECHANICAL LIFTERS

- Extremely tough and strong, yet lighter in weight than standard steel lifters
- DLC coating gives lifters slick and hard surface properties
- Wear resistance requires less power to run valve train and lowers friction, heat and oil temps
- Three diameters available in DLC coated, non-coated and non-coated EDM versions



| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | OIL BAND HEIGHT | OIL BAND WIDTH | PART # |
|-----------|---|----------|--------|-------------|-----------------|----------------|------------------|
| Chevrolet | Non-Coated for Use on Cast Cams w/ or w/o Nitriding, .012" Oil Hole | .842" | 76g | 1.88" | .90" | .50" | 89842H-16 |
| | Non-Coated for Use on Cast Cams w/ or w/o Nitriding | .842" | 76g | 1.88" | .90" | .50" | 89842-16 |
| | Coated for Use on Cams Using Steel Cores | .842" | 76g | 1.88" | .90" | .50" | 89842C-16 |
| Chrysler | Non-Coated for Use on Cams w/ or w/o Nitriding, .012" Oil Hole | .904" | 84g | 1.88" | .85" | .58" | 89904H-16 |
| | Non-Coated for Use on Cast Cams w/ or w/o Nitriding | .904" | 84g | 1.88" | .85" | .58" | 89904-16 |
| | Coated for Use on Cams Using Steel Cores | .904" | 84g | 1.88" | .85" | .58" | 89904C-16 |
| Ford | Non-Coated for Use on Cams w/ or w/o Nitriding, .012" Oil Hole | .875" | 76g | 1.95" | 1.02" | .50" | 89875H-16 |
| | Non-Coated for Use on Cast Cams w/ or w/o Nitriding | .875" | 76g | 1.95" | 1.02" | .50" | 89875-16 |
| | Coated for Use on Cams Using Steel Cores | .875" | 76g | 1.95" | 1.02" | .50" | 89875C-16 |

PERFORMANCE SERIES™ SOLID/MECHANICAL LIFTERS

Built to extreme precision tolerances to create the most durable solid lifters available, the COMP Cams® Performance Series™ Lifters are a premium lifter designed specifically for high-end street and race applications.

- Precision-ground crown radius and surface finish promote performance camshaft compatibility and high RPM durability
- Lightweight design and one-piece pushrod seat provide extended RPM range
- Feature a precision-machined and accurately located oil band to yield a consistent and properly metered oil flow
- Designed for elevated, race application valve spring pressures
- Ideal for high-end street and race engines



| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | OIL BAND HEIGHT | OIL BAND WIDTH | PART # |
|------------|--|----------|--------|-------------|-----------------|----------------|----------------|
| Cadillac | V8 472-500 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-16 |
| Chevrolet | V8 265-400 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-16 |
| | V8 396-454 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-16 |
| | V8 348-409 1958-65 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-16 |
| | V6 90° 200-262 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-12 |
| | 6 Cyl. 194-292 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-12 |
| Chrysler | V8 273-360, No Pushrod Oiling | .904" | 95g | 1.61" | – | – | 2921-16 |
| | V8 B-383-440 1958-Present, No Pushrod Oiling | .904" | 95g | 1.61" | – | – | 2921-16 |
| | V8 Hemi 426, No Pushrod Oiling | .904" | 95g | 1.61" | – | – | 2921-16 |
| Ford | V8 FS, FC, FF | .875" | 98g | 1.95" | 1.00" | .54" | 2910-16 |
| Pontiac | V8 260-455 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-16 |
| Oldsmobile | V8 265-455 | .842" | 86g | 1.88" | 1.10" | .41" | 2900-16 |

PERFORMANCE SERIES™ SOLID/MECHANICAL LIFTERS WITH EDM INJECTION™ TECHNOLOGY

Our Performance Series™ Lifters with EDM Injection™ Technology have all of the same high-quality features as our Performance Series™ Solid/Mechanical Lifters with the addition of the EDM oiling hole on the lifter face.



| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | OIL BAND HEIGHT | OIL BAND WIDTH | PART # |
|------------|---|----------|--------|-------------|-----------------|----------------|----------------------------|
| AMC | V8 290-401 w/ .012" Oil Hole | .904" | 101g | 1.79" | 1.06" | .35" | 2901-16 |
| Cadillac | V8 472-500 w/ .012" Oil Hole | .842" | 86g | 1.88" | 1.10" | .41" | 800-16 |
| | V8 265-400 w/ .012" Oil Hole | .842" | 86g | 1.88" | 1.10" | .41" | 800-16 |
| Chevrolet | V8 348-409 1958-65 | .842" | 86g | 1.88" | 1.10" | .41" | 800-16 |
| | V8 396-454 w/ .012" Oil Hole | .842" | 86g | 1.88" | 1.10" | .41" | 800-16 |
| Chrysler | V8 273-360 w/ .012" Oil Hole | .904" | 101g | 1.79" | 1.06" | .35" | 2901-16¹ |
| | V8 B-383-440 1958-Present w/ .012" Oil Hole | .904" | 101g | 1.79" | 1.06" | .35" | 2901-16¹ |
| | V8 Hemi 426 w/ .012" Oil Hole | .904" | 101g | 1.79" | 1.06" | .35" | 2901-16¹ |
| Ford | V8 302-351W 1969-Present w/ .012" Oil Hole | .875" | 97g | 1.95" | 1.02" | .54" | 817-16 |
| | V8 Boss 302, 351C, 351M, 400M w/ .012" Oil Hole | .875" | 97g | 1.95" | 1.02" | .54" | 817-16 |
| | V8 429-460 w/ .012" Oil Hole | .875" | 97g | 1.95" | 1.02" | .54" | 817-16 |
| Pontiac | V8 260-455 w/ .012" Oil Hole | .842" | 86g | 1.88" | 1.10" | .41" | 800-16 |
| Oldsmobile | V8 265-455 w/ .012" Oil Hole | .842" | 86g | 1.88" | 1.10" | .41" | 800-16 |
| Universal | V8 Lightweight (No Chamfer) w/ .012" Oil Hole | .875" | 79g | 1.95" | 1.00" | .53" | 810-16 |

¹ Oils through pushrods

Note: For V6 applications, use -12 suffix.


**BLACK OXIDED
OIL BAND**

#8931

RETRO-FIT LINK BAR HYDRAULIC ROLLER LIFTERS

- Precise piston fit for lowest leakdown rate
- Piston allows trapped air to escape lifter for faster “pump up”
- Lightweight body design
- Axles produced from premium 52100 heat-treated steel for increased wear resistance & overall strength



#850

OE-STYLE NO LINK BAR HYDRAULIC ROLLER LIFTERS

- Performance replacement for stock hydraulic roller lifters or retro-fit hydraulic roller lifters for non-roller blocks with the necessary hardware
- Decrease friction and increase longevity when compared to flat tappet lifters
- Accept much more aggressive cam profiles than flat tappet lifters will allow

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|--|---|----------|--------|-------------|----------------|
| OE-STYLE NO LINK BAR HYDRAULIC ROLLER LIFTERS | | | | | |
| Chevrolet | Small Block 305 and 350, Use in Blocks Originally Equipped w/ Hydraulic Roller Cam (1987-Present Including LT1 & LS Series) | .842" | 122g | 2.66" | 850-16 |
| | Big Block Gen VI and 8.1L, Use in Blocks Originally Equipped w/ Hydraulic Roller Cam (1996-Present) | .842" | 121g | 2.66" | 900-16 |
| Ford | Small Block 302, Use in Blocks Originally Equipped w/ Hydraulic Roller Cam & COMP Cams® Ford Retro-Fit Kit for 289-302, 351W, 351C, 351M and 400M (see page 244) | .875" | 135g | 2.60" | 851-16 |
| RETRO-FIT LINK BAR HYDRAULIC ROLLER LIFTERS | | | | | |
| AMC | AMC 290-401, Retro-Fit Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam | .904" | 145g | 2.30" | 8960-16 |
| Buick | Buick 231 6 Cyl. Requiring Shrouded Wheel, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks | .842" | 136g | 2.47" | 6853-12 |
| Cadillac | Cadillac 425, 472, 500, Retro-Fit Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam | .842" | 140g | 2.49" | 8962-16 |
| Chevrolet | Small Block 265-400, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks | .842" | 136g | 2.47" | 853-16 |
| | Big Block 396-454, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks | .842" | 137g | 2.47" | 854-16 |
| | Big Block 348, 409, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks | .842" | 136g | 2.47" | 8959-16 |
| GM LS | LS Series Captured Link Bar Retro-Fit Roller Lifter for 1997-Up, Fits Factory, RHS®, LSX & Warhawk Blocks | .842" | 140g | 2.66" | 8957-16 |
| Chrysler | Small Block 273-360, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam | .904" | 141g | 2.30" | 8920-16 |
| | Big Block 383-440, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam | .904" | 159g | 2.30" | 8921-16 |
| Ford | Small Block 289-302-351W, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam | .875" | 146g | 2.60" | 8931-16 |
| | Big Block & FE 390-428, 429, 460, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam | .875" | 147g | 2.60" | 8934-16 |
| Oldsmobile & Pontiac | Oldsmobile & Pontiac, Retro-Fit Roller Lifter for Blocks Originally Equipped w/ Flat Tappet Cam (Will Not Clear Stock Intake on Small Block Oldsmobile or Edelbrock #3711 Intake) | .842" | 136g | 2.47" | 857-16 |

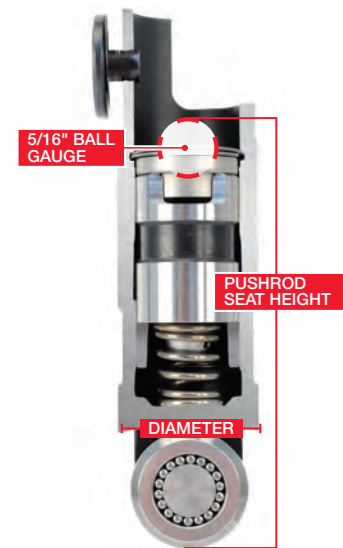


XD VERSIONS FEATURE
A TOOL STEEL
PUSHROD SEAT

#15853

ALL COMP CAMS® SHORT TRAVEL LINK BAR TYPE LIFTERS ARE IDENTIFI-
ABLE DUE TO THEIR BLACK OXIDED BODIES (AFTER GRIND AND POLISH).
FULL TRAVEL LIFTERS ARE ONLY BLACK OXIDED IN THE OIL BAND.

ROLLER LIFTER CROSS SECTION



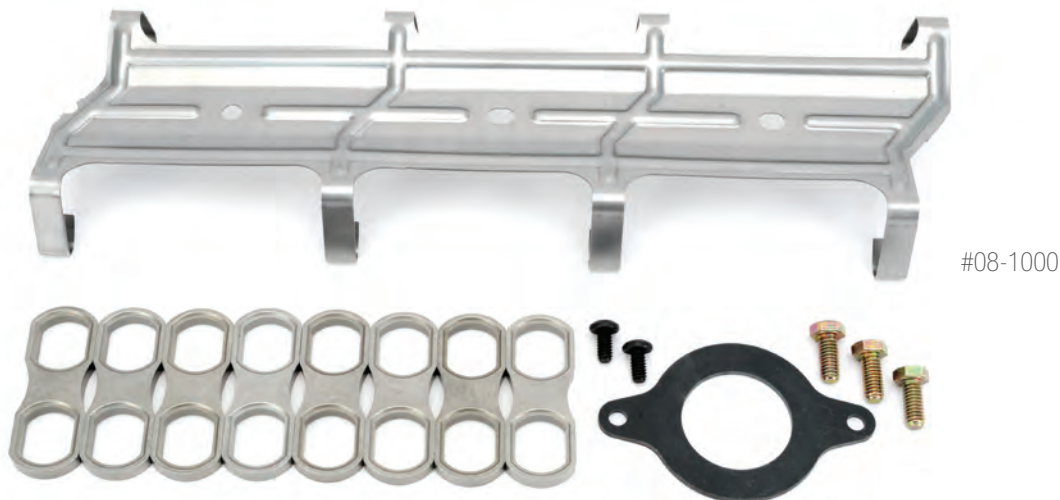
SHORT TRAVEL HYDRAULIC ROLLER LIFTERS

When dealing with full travel lifters, certain engines respond better to a light pre-load because it recovers more quickly from any bad harmonics in the valve train. Others work better with a heavy pre-load because oil volume is reduced under the plunger, which increases stiffness. COMP Cams® Short Travel Hydraulic Roller Lifters allow you to have the advantages of both light pre-load and reduced oil volume, producing the most stable and highest revving hydraulic lifter available. And COMP Cams® now offers an XD version of these lifters that feature a a billet pushrod seat for added strength and durability in Xtreme Duty applications such as turbo drag cars and offshore powerboats.

| MAKE | DESCRIPTION | DIAMETER | WEIGHT | SEAT HEIGHT | PART # |
|---|--|----------|--------|-------------|-------------------------------|
| OE-STYLE NO LINK BAR HYDRAULIC ROLLER LIFTERS | | | | | |
| Chevrolet | Small Block 305 & 350, Use in Blocks Originally Equipped w/ Hydraulic Roller Cam (1987-Present Including LT1 & LS Series), Reduced Travel, OE Guide | .842" | 122g | 2.60" | 875-16 |
| | Small Block 305 & 350, Use in Blocks Originally Equipped w/ Hydraulic Roller Cam (1987-Present Including LT1 & LS Series), Short Travel, OE Guide | .842" | 132g | 2.66" | 15850-16 |
| Chrysler | Gen III HEMI, Drop-In Roller Lifter, Short Travel Lifter, OE Guide1 | .842" | 215g | 3.05" | 15821-16¹ |
| Ford | Small Block 302, Use in Blocks Originally Equipped w/ Hydraulic Roller Cam and in COMP Cams® Specially Designed Ford Retro-Fit Kit for 289-302, 351W, 351C, 351M and 400M, Reduced Travel, OE Guide | .875" | 128g | 2.60" | 877-16 |
| RETRO-FIT LINK BAR HYDRAULIC ROLLER LIFTERS | | | | | |
| Chevrolet | Small Block 265-400, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks, Short Travel, Link Bar Guide | .842" | 152g | 2.66" | 15853-16 |
| | Big Block 396-454, Retro-Fit Roller Lifter For Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks, Short Travel, Link Bar Guide | .842" | 150g | 2.66" | 15854-16 |
| Chrysler | Gen III HEMI, Captured Link Bar Roller Lifter, Fits 5.7 Eagle, 6.1L & 6.4L Apache Cylinder Heads, Short Travel Lifter, Link Bar Guide | .842" | 215g | 3.05" | 15820-16² |
| Ford | Small Block 289-302-351W, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Short Travel, Link Bar Guide | .875" | 146g | 2.60" | 15931-16 |
| GM LS | LS Series Captured Link Bar Retro-Fit Roller Lifter for 1997-Present, Fits Factory, RHS®, LSX & Warhawk Blocks, Short Travel, Link Bar Guide | .842" | 145g | 2.66" | 15956-16 |
| XD RETRO-FIT LINK BAR HYDRAULIC ROLLER LIFTERS – BILLET PUSHROD SEAT, REM POLISHED | | | | | |
| Chevrolet | Small Block 265-400, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks, Short Travel, Link Bar Guide | .842" | 152g | 2.66" | 15853XD-16 |
| | Big Block 396-454, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Tall Body Fits Both Standard Blocks & Tall Lifter Bore Aftermarket Blocks, Short Travel, Link Bar Guide | .842" | 150g | 2.66" | 15854XD-16 |
| GM LS | LS Series, Captured Link Bar Roller Lifter For 1997-Present, Fits Factory, RHS, LSX, & Warhawk Blocks, Short Travel, Link Bar Guide | .842" | 145g | 2.66" | 15956XD-16² |
| Chrysler | Gen III Hemi 5.7/6.1/6.4L, Captured Link Bar Roller Lifter, Short Travel, Link Bar Guide | .842" | 215g | 3.05" | 15820XD-16 |
| | Viper V10, Captured Link Bar Roller Lifter, Short Travel, Link Bar Guide | .842" | 146g | 2.66" | 15111-20 |
| Ford | Small Block 289-302-351W, Retro-Fit Roller Lifter for Early Model Blocks Originally Equipped w/ Flat Tappet Cam, Short Travel, Link Bar Guide | .875" | 146g | 2.60" | 15931XD-16 |

¹ Not compatible with Multi-Displacement System (MDS)

² Check compatibility with head casting



#08-1000

HYDRAULIC ROLLER LIFTER INSTALLATION KITS

COMP Cams® has put together these time-saving kits that contain all of the necessary pieces to help you smoothly install hydraulic roller lifters in your V6 or V8 block originally equipped with a hydraulic roller cam. Each kit contains all required hardware, and all components are new.

- Convenient solution for installation of hydraulic roller lifters in V6 or V8 blocks equipped with hydraulic roller cams
- Contain cam bolts, lifter guides, lifter retainer, cam retainer and cam retain-bolts (except where noted)
- Detailed instructions and all hardware required for installation are included

FORD HYDRAULIC ROLLER RETRO-FIT KIT

This Ford Hydraulic Roller Retro-Fit Kit contains the pieces required to install our complete line of hydraulic roller cams in 302, 351W, 351C and 351M-400 Ford engines that did not come with an OEM hydraulic roller cam. This kit ships complete with detailed instructions and all necessary hardware.

- Works on all Small Block Ford engines originally equipped with a flat tappet or roller cam
- When being used in a non-roller block, a small base circle retro-fit cam must be used to ensure the lifters will not expose the oil hole or band out of the lifter bores
- Must be used with Part #851-16 or #877-16 lifters

| MAKE | DESCRIPTION | KIT CONTAINS: | PART # |
|------------------|---|---|----------------------------|
| Chevrolet | Chevy V6 4.3L w/ Balance Shaft (Except 1994-Present w/ Plastic Lifter Guides) | (3) #4605-B Camshaft Bolts (6) #8105-LG Lifter Guides (1) #8106-LR Lifter Retainer (1) #8106-CR Cam Retainer (2) #8106-B Cam Retainer Bolts | 09-1000 |
| | Chevy V6 4.3L w/o Balance Shaft (Except 1985-86 w/ Hyd. Roller Cam) | (6) #8105-LG Lifter Guides (1) #8105-CR Cam Retainer (2) #8105-B Cam Retainer Bolts | 09-1001¹ |
| | Chevy Small Block 1987-93 Non-Vortec V8 305 & 350 w/ OE Hyd. Roller Cam | (3) #4605-B Camshaft Bolts (8) #8105-LG Lifter Guides (1) #8105-LR Lifter Retainer (1) #8105-CR Cam Retainer (2) #8105-B Cam Retainer Bolts | 08-1000 |
| | Chevy Small Block 1991-02 Vortec Engines, 1991-97 LT1 | (3) #4605-B Camshaft Bolts (8) #8105-LG Lifter Guides (1) #8105-LR Lifter Retainer (1) #8104-CR Cam Retainer (2) #8105-B Cam Retainer Bolts | 08-1001 |
| Ford | 302 HD, 5.0 | (8) #8135-LG Lifter Guides (1) #8135-LR Lifter Retainer (2) #8135-B Cam Retainer Bolts | 35-1001 |
| RETRO-FIT | | | |
| Ford | Small Block 289-302, 351W, 351C, 351M-400M | (8) #8135-LG Lifter Guides (1) #8135-LR Lifter Retainer (2) #8135-CS Cap Screws | 31-1000 |

¹ Lifter retainer is not available for this engine



#31-1000

ENDURE-X™ SOLID ROLLER LIFTERS

Today's engines place a greater demand on lifters than ever before. With today's more aggressive cam lobe designs and increased RPM ranges, it takes a superior roller lifter to withstand the abuse. COMP Cams® has set the industry standard with the Endure-X™ Solid Roller Lifters.

Endure-X™ Lifters are fully heat-treated, machined to ultra-high tolerances, are fully rebuildable and are available for a wide variety of applications, including small base circle and offset applications.

THE FOUR MAIN FEATURES OF ENDURE-X™ SOLID ROLLER LIFTERS:

- 1. REMOVABLE LINK BAR** – COMP Cams® patented link bar assembly combines the benefits of a removable link bar with the safety of a captured link bar.
- 2. EDM OIL INJECTION™ TECHNOLOGY** – Guarantees that the bearing assembly receives a constant flow of pressurized oil via a precision hole aimed directly at the needle bearings.
- 3. PRECISION SORTED BEARINGS** – The needle bearings are precision sorted by size to distribute load evenly, preventing premature wear and failure.
- 4. TOOL STEEL AXLE** – The axle is made of wear resistant Tool Steel to prolong the life of the roller assembly, particularly in high RPM applications.

ENDURE-X™ SOLID ROLLER CROSS SECTION

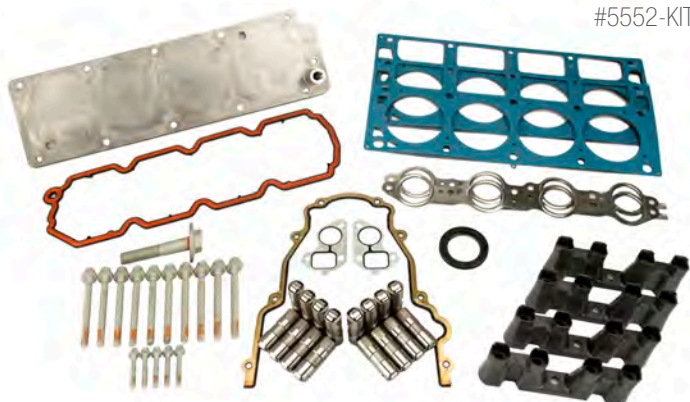


DOD DELETE KITS

These COMP Cams® DOD Delete Kits allow for removal of the Displacement on Demand/Active Fuel Management System on Gen IV 5.3/6.0/6.2L GM LS engines.

Kits are available in three different levels, each containing components needed to remove the systems that disable four engine cylinders under light-load conditions to improve fuel economy but also limit performance in the process.

| DESCRIPTION | PREMIUM KIT PART # | STANDARD KIT PART # | BASIC KIT PART # |
|-------------------|--------------------|---------------------|------------------|
| Gen IV 5.3L GM LS | 5552-KIT | 5552-16KIT | 5552-8KIT |
| Gen IV 6.0L GM LS | 5560-KIT | 5560-16KIT | 5560-8KIT |
| Gen IV 6.2L GM LS | 5561-KIT | 5561-16KIT | 5561-8KIT |



PREMIUM KITS INCLUDE:

- 16 OE-Style Drop-In Lifters
- Lifter Trays
- Head Gaskets & Bolt Kit
- Exhaust Gaskets
- Harmonic Balancer Bolt
- LS3 Valley Cover
- Timing Cover Gasket & Seal
- Water Pump Gasket

STANDARD & BASIC KITS INCLUDE:

- 16 (Standard Kit) or 8 (Basic Kit) OE-Style Drop-In Lifters
- Lifter Trays
- Head Gaskets & Bolt Kit
- LS3 Valley Cover



STYLE A
Cutaway – Oil Band



STYLE B
Solid – Oil Band

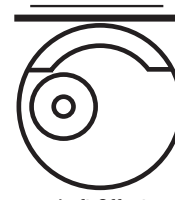


STYLE C
Cutaway – Solid

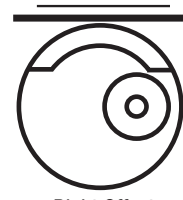


STYLE D
Solid

DETERMINING OFFSET



Left Offset



Right Offset

Note: On offset lifters, offset is determined by looking at the lifter with the link bar away from you.

ENDURE-X™ SOLID ROLLER LIFTERS

| DESCRIPTION | DIA. | WEIGHT | SET INCLUDES: | | PUSHROD SEAT LOCATION | OIL HOLE VS. AXLE | SEAT HEIGHT | PART #/ STYLE |
|--|-------|--------|--|--------------------------|---|-------------------|-------------|---------------------------|
| | | | LIFTERS | LINK BARS | | | | |
| AMERICAN MOTORS V8 290-401 1966-89 | | | | | | | | |
| Baseline Coverage for All Types of Motorsports Using the AMC Engine | .904" | 136g | (16) 861-1 | (8) 839-L | All Centered | Parallel | 1.91" | 861-16 Style A |
| BUICK V6 | | | | | | | | |
| Best for Any Application When a Centered Pushrod Can Be Used | .842" | 119g | (12) 818-1 | (5) 818-L (1) 814-L | All Centered | Perpendicular | 1.88" | 868-12 Style B |
| For Engines that Oil Through Rocker Arm Shafts, Not Through Pushrods | .842" | 110g | (12) 868S-1 | (5) 818-L (1) 814-L | All Centered | N/A | 1.30" | 868S-12 Style D |
| CHEVROLET 90° V6 (RACE) | | | | | | | | |
| Best All Around Set When a Centered Pushrod Can Be Used | .842" | 119g | (12) 818-1 | (6) 818-L | All Centered | Perpendicular | 1.88" | 818-12 Style B |
| Use When an Offset Intake Pushrod Set Is Required for Clearance, Centered Exhaust | .842" | 114g | (6) 894C-1 (2) 894R-1 (4) 894L-1 | (4) 818-L (2) 814-L | (6) Centered (2) Rights (4) Lefts | Perpendicular | 1.88" | 897-12 Style A |
| CHEVROLET V8 265-400 (*DENOTES TAPPETS FOR 1987-CURRENT, BOWTIE & SOME AFTERMARKET BLOCKS W/ TALLER LIFTER BORES) | | | | | | | | |
| Great for Any Application w/ Enlarged Lifter Bores, Ford Diameter | .875" | 127g | (16) 815-1 | (8) 818-L | All Centered | Perpendicular | 1.88" | 815-16 Style B |
| Perfect Roller Lifter for Any Application w/ No Offsets | .842" | 119g | (16) 818-1 | (8) 818-L | All Centered | Perpendicular | 1.88" | 818-16 Style B |
| Full Body Style of #873-16 .300" Taller Body for 1987 & Up, Bowtie & Most Aluminum Blocks | .842" | 138g | (16) 871-1 | (8) 818-L | All Centered | Perpendicular | 1.88" | 871-16 Style B |
| .300" Taller Body for 1987 & Up, Bowtie & Most Aluminum Blocks | .842" | 117g | (16) 873-1 | (8) 818-L | All Centered | Perpendicular | 1.88" | 873-16 Style A |
| .300" Taller Body Lifters Designed for Street & Marine Applications | .842" | 116g | (16) 888-1 | (8) 818-L | All Centered | Perpendicular | 1.88" | 888-16 Style A |
| .300" Taller Body Lifters w/ Offset Intakes for Additional Clearance & Enlarged Lifter Bores | .875" | 136g | (8) 890C-1 (4) 890R-1 (4) 890L-1 | (8) 818-L | (8) Centered (4) Rights (4) Lefts | Perpendicular | 1.88" | 890-16 Style A |
| Specifically Engineered for Any Application Using Small Base Circle Cams | .842" | 122g | (16) 891-1 | (8) 818-L | All Centered | Perpendicular | 1.88" | 891-16 Style B |
| A Proven Winner When Offset Intakes are Necessary for More Pushrod Clearance | .842" | 114g | (8) 894C-1 (4) 894R-1 (4) 894L-1 | (8) 818-L | (8) Centered (4) Rights (4) Lefts | Perpendicular | 1.88" | 894-16 Style A |
| For Use w/ Dart, Buick, Canted or Splayed Valve Heads, Left Offset Intakes | .842" | 114g | (8) 894C-1 (8) 894L-1 | (8) 818-L | (8) Centered (8) Lefts | Perpendicular | 1.88" | 896-16 Style A |
| .300" Taller Offset Lifters | .842" | 117g | (8) 873-1 (4) 873R-1 (4) 873L-1 | (8) 818-L | (8) Centered (4) Rights (4) Lefts | Perpendicular | 1.88" | 8995-16 Style A |
| CHEVROLET V8 SB2 | | | | | | | | |
| SB2 Block, SB2 Head .300" Tall Lifters w/ .874" Lifter Bore, Centered Pushrod Seats | .875" | 122g | (16) 890C-1 | (4) 0894-L (4) 0895-L | (16) Centered | Perpendicular | 1.88" | 8991-16 Style A |
| Standard GM Block, SB2 Head .300" Tall Offset .842" Lifter Bore, Offset Pushrod Seat | .842" | 114g | (8) 894L-1 (8) 894R-1 | (8) 818-L | (8) Lefts (8) Rights | Perpendicular | 1.88" | 8992-16 Style A |
| Standard GM Block, SB2 Head .300" Tall Offset .875" Lifter Bore, Offset Pushrod Seat | .875" | 122g | (8) 890L-1 (8) 890R-1 | (8) 818-L | (8) Lefts (8) Rights | Perpendicular | 1.88" | 8993-16 Style A |

| DESCRIPTION | DIA. | WEIGHT | SET INCLUDES: | | PUSHROD SEAT LOCATION | OIL HOLE VS. AXLE | SEAT HEIGHT | PART #/ STYLE |
|---|-------|-------------------|--|------------|---|-------------------|-------------|----------------------------|
| | | | LIFTERS | LINK BARS | | | | |
| GM GEN III/LS1/LS2/LS6/LS7/LSX | | | | | | | | |
| GM Gen III/LS1/LS2/LS6 Solid Roller Lifters – Not Designed for Street Use | .842" | 118g | (16) 8956-1 | (8) 838-L | (16) Centered | Perpendicular | 2.01" | 8956-16 Style A |
| GM Solid Roller Lifters for LSX/Warhawk Block | .842" | 118g | (16) 8956-1 | (8) 8958-L | (16) Centered | Perpendicular | 2.01" | 8958-16 Style A |
| CHEVROLET V8 396-454 1965-96 | | | | | | | | |
| Perfect for Any Application w/ No Offsets | .842" | 118g | (16) 819-1 | (8) 819-L | All Centered | Perpendicular | 1.88" | 819-16 Style B |
| Great for Any Application w/ Enlarged Lifter Bores, Ford Diameter | .875" | 127g | (16) 815-1 | (8) 819-L | All Centered | Perpendicular | 1.88" | 823-16 Style B |
| .300" Taller Body Designed for Street & Marine Applications | .842" | 116g | (16) 888-1 | (8) 873-L | All Centered | Perpendicular | 1.88" | 866-16 Style A |
| .300" Taller Body for Late Model, Bowtie & Most Aluminum Blocks | .842" | 117g | (16) 873-1 | (8) 873-L | All Centered | Perpendicular | 1.88" | 883-16 Style A |
| Specifically Engineered for Any Application Using Small Base Circle Cams | .842" | 122g | (16) 891-1 | (8) 819-L | All Centered | Perpendicular | 1.88" | 893-16 Style B |
| Most Durable Set When Right Offsets Are Necessary for More Pushrod Clearance | .842" | 114g | (8) 894C-1 (8) 894R-1 | (8) 819-L | (8) Centered (8) Rights | Perpendicular | 1.88" | 895-16 Style A |
| Best When Cutaway Style Lifter Bodies Are Necessary for Improved Clearance | .842" | 114g | (16) 894C-1 | (8) 819-L | All Centered | Perpendicular | 1.88" | 897-16 Style A |
| Best Available Lifters When Left Offsets Are Necessary for More Pushrod Clearance | .842" | 114g | (8) 894C-1 (8) 894L-1 | (8) 819-L | (8) Centered (8) Lefts | Perpendicular | 1.88" | 898-16 Style A |
| Proven Winner When Offset Intakes Are Necessary for More Pushrod Clearance | .842" | 114g | (8) 894C-1 (4) 894R-1 (4) 894L-1 | (8) 819-L | (8) Centered (4) Rights (4) Lefts | Perpendicular | 1.88" | 899-16 Style A |
| .300" Taller Cutaway Offset Lifters for Any Application w/ Extreme Pushrod Angles | .842" | 117g | (8) 873-1 (4) 873R-1 (4) 873L-1 | (8) 873-L | (8) Centered (4) Rights (4) Lefts | Perpendicular | 1.88" | 8996-16 Style A |
| CHRYSLER V8 273-360 | | | | | | | | |
| Best All Around Lifter for Engines That Oil Through Rocker Shafts, No Oil Hole | .904" | 125g | (8) 828-2 | Captured | All Centered | N/A | 1.79" | 828-16 Style C |
| Solid Roller Lifters w/ Oiling & Inboard Link Bars | .904" | 132g | (8) 8043-2 | Captured | All Centered | Parallel | 1.93" | 8043-16 Style A |
| CHRYSLER V8 383-440 & 426 HEMI | | | | | | | | |
| Note: "Fat Head" Spread Lifter Bore Requires Special Ordering (8) Link Bars #839-L | | | | | | | | |
| Standard Pushrod Seat Location, Best for Performance Street & Drag Racing | .904" | 127g | (16) 829-1 | (8) 829-L | All Centered | N/A | 1.79" | 829-16 Style C |
| Pushrod Seat Is Located .140" Deeper Than Standard Location | .904" | 122g | (16) 830-1 | (8) 829-L | All Centered | N/A | 1.65" | 830-16 Style C |
| .300" Tall Offset Lifters for Engines That Oil Through Rocker Shafts, No Oil Hole | .904" | 135g | (8) 87016C-1 (4) 87018R-1 (4) 87017L-1 | (8) 829-L | (8) Centered (4) Rights (4) Lefts | N/A | 1.91" | 87019-16 Style A |
| FORD V8 289-351W | | | | | | | | |
| Note: 289 & 302 Require Cylinder Head Removal to Install Lifters | | | | | | | | |
| Best All Around Lifter Available, Perfect for Any Application w/ No Offsets | .875" | 134g | (16) 838-1 | (8) 838-L | All Centered | Perpendicular | 2.01" | 838-16 Style B |
| FORD V8 SVO SMALL BLOCK DRAG RACE APPLICATIONS W/ YATES HEADS | | | | | | | | |
| Note: Must Have Modified Lifter Bores For Proper Oiling | | | | | | | | |
| Lifter Designed for Drag Race Applications Using Yates Heads | .875" | 236g ¹ | (8) 87879-2 | Captured | (8) Centered (8) Rights .180" | Parallel | 2.02" | 87879-16 Style A |
| FORD V8 351C, 351M, 400M | | | | | | | | |
| Note: W/ 5/16" Pushrods Only | | | | | | | | |
| Perfect Lifter for Cleveland Applications w/ No Offsets Necessary | .875" | 134g | (16) 836-1 | (8) 838-L | All Centered | Parallel | 2.01" | 840-16 Style B |

¹ Denotes weight of a pair of lifters, including link bar.

ENDURE-X™ SOLID ROLLER LIFTERS (continued)

| DESCRIPTION | DIA. | WEIGHT | SET INCLUDES: | | PUSHROD SEAT LOCATION | OIL HOLE VS. AXLE | SEAT HEIGHT | PART #/ STYLE |
|---|-------|--------|---------------|-----------|----------------------------------|-------------------|-------------|--------------------------|
| | | | LIFTERS | LINK BARS | | | | |
| FORD V8 352-428 | | | | | | | | |
| The Best FE Mechanical Roller Available, Works in Any High Performance Application | .875 | 134g | (16) 838-1 | (8) 839-L | All Centered | Perpendicular | 2.01 | 839-16 |
| FORD V8 429-460 | | | | | | | | |
| Our Most Durable Lifter Set, Fits Most Combinations in Any Application | .875" | 134g | (16) 836-1 | (8) 836-L | All Centered | Parallel | 2.01" | 836-16 Style B |
| The Same Durable Design Incorporated w/ a Unique Captured Link Bar System, for Most Hemi Type Fords | .875" | 108g | (8) 841-2 | Captured | All Centered | Parallel | 2.01" | 841-16 Style A |
| Special Arranged Set Featuring a Captured Link Bar Design w/ an Offset Intake | .875" | 112g | (8) 879-2 | Captured | (8) Centered (8) Rights .180" | Parallel | 2.01" | 879-16 Style A |
| HOLDEN V8 | | | | | | | | |
| The Best & Only Set Available for the Holden, Works in Any Application | .842" | 120g | (16) 881-1 | (8) 829-L | All Centered | Parallel | 2.01" | 881-16 Style A |
| OLDSMOBILE V8 350-455 | | | | | | | | |
| The Perfect Lifter for Street, Drag & Marine When No Offset is Necessary | .842" | 120g | (16) 859-1 | (8) 829-L | All Centered | Parallel | 2.01" | 849-16 Style B |
| PONTIAC V8 350-455 | | | | | | | | |
| The Best Choice for All Engine Sizes in Any Application, Especially Performance Street | .842" | 120g | (16) 859-1 | (8) 829-L | All Centered | Parallel | 2.01" | 859-16 Style A |

ENDURE-X™ SINGLE SOLID ROLLER LIFTERS

| DESCRIPTION | DIA. | WEIGHT | PUSHROD SEAT LOCATION | OFFSET DISTANCE | OIL HOLE VS. AXLE | WHEEL DIAMETER | SEAT HEIGHT | PART #/ STYLE |
|---------------------------------------|-------|--------|-----------------------|-----------------|-------------------|----------------|-------------|----------------------------|
| Roller Lifter | .842" | 114g | Centered | 0 | Perpendicular | .750" | 1.88" | 894C-1 Style A |
| Roller Lifter | .842" | 114g | Left | .180" | Perpendicular | .750" | 1.88" | 894L-1 Style A |
| Roller Lifter | .842" | 114g | Right | .180" | Perpendicular | .750" | 1.88" | 894R-1 Style A |
| .300" Tall Roller Lifter | .842" | 117g | Centered | 0 | Perpendicular | .750" | 1.88" | 873-1 Style A |
| .300" Tall Roller Lifter | .842" | 117g | Left | .180" | Perpendicular | .750" | 1.88" | 873L-1 Style A |
| .300" Tall Roller Lifter | .842" | 117g | Right | .180" | Perpendicular | .750" | 1.88" | 873R-1 Style A |
| .300" Tall Roller Lifter | .875" | 122g | Centered | 0 | Perpendicular | .750" | 1.88" | 890C-1 Style A |
| .300" Tall Roller Lifter | .875" | 122g | Left | .180" | Perpendicular | .750" | 1.88" | 890L-1 Style A |
| .300" Tall Roller Lifter | .875" | 122g | Right | .180" | Perpendicular | .750" | 1.88" | 890R-1 Style A |
| .300" Tall Roller Lifter | .904" | 133g | Centered | 0 | Perpendicular | .800" | 1.91" | 892C-1 Style A |
| .300" Tall Roller Lifter | .904" | 133g | Left | .210" | Perpendicular | .800" | 1.91" | 892L-1 Style A |
| .300" Tall Roller Lifter | .904" | 133g | Right | .210" | Perpendicular | .800" | 1.91" | 892R-1 Style A |
| .300" Tall Roller Lifter w/o Oil Hole | .904" | 135g | Centered | .210" | N/A | .800" | 1.91" | 87016C-1 Style A |
| .300" Tall Roller Lifter w/o Oil Hole | .904" | 135g | Left | .210" | N/A | .800" | 1.91" | 87017L-1 Style A |
| .300" Tall Roller Lifter w/o Oil Hole | .904" | 135g | Right | .210" | N/A | .800" | 1.91" | 87018R-1 Style A |

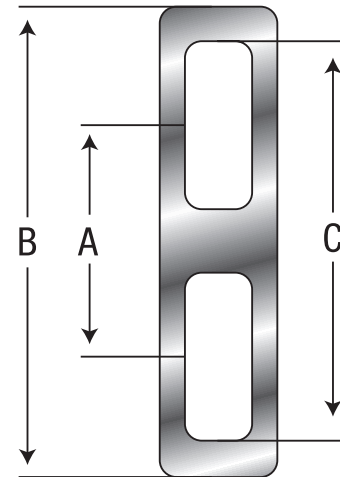


ROLLER LIFTER LINK BARS

COMP Cams® Roller Lifter Link Bars are precision-crafted from stainless steel and wear-coated for a long life in all applications.

| DESCRIPTION | LIFTER BORE CENTERLINE | A | B | C | PART # |
|--|------------------------|--------|--------|--------|---------------|
| FLAT STYLE | | | | | |
| Chevrolet Small Block | 1.560" | | | | |
| Chevrolet V6 Cylinders #1, #2, #5 & #6 | 1.560" | 1.350" | 2.380" | 2.000" | 818-L |
| Buick V6 Cylinders #1, #2, #4, #5 & #6 | 1.525" | | | | |
| Chevrolet V6 Cylinders #3 & #4 | 1.660" | 1.475" | 2.500" | 2.125" | 814-L |
| Buick V6 Cylinder #3 | 1.610" | | | | |
| GM Gen III/LS1/LS2/LS6 | 1.730" | 1.564" | 2.594" | 2.214" | 838-L |
| Ford Small Block 289-302, 351W, SV0 351 | 1.730" | | | | |
| Ford Big Block 429-460 | 2.075" | 2.019" | 3.044" | 2.669" | 836-L |
| Chrysler 426-440 | 1.800" | | | | |
| Pontiac 350-455 | 1.818" | 1.654" | 2.680" | 2.295" | 829-L |
| Oldsmobile 350-455 | 1.877" | | | | |
| AMC 360-401 | 1.940" | | | | |
| F.E. Style Ford 392-428 | 1.980" | 1.884" | 2.910" | 2.534" | 839-L |
| Chrysler "Fat Head" | 2.000" | | | | |
| "V" STYLE | | | | | |
| GM LS for LSX/Warhawk/RHS®/Factory Block | 1.827" | 1.500" | 2.470" | 2.340" | 8958-L |
| "STEPPED" STYLE | | | | | |
| Chevrolet Big Block 396-454 | 1.800" | 1.560" | 2.610" | 2.250" | 819-L |
| Chevrolet Big Block 396-454 for .300" Tall Lifters | 1.800" | 1.560" | 2.610" | 2.250" | 873-L |
| GM SB2 Cylinders #1 & #3 | 1.835" | 1.614" | 2.679" | 2.304" | 0894-L |
| GM SB2 Cylinders #2 & #4 | 1.834" | 1.614" | 2.679" | 2.304" | 0895-L |
| GM SB2 Cylinders #5 & #7 | 1.812" | 1.614" | 2.679" | 2.304" | 0895-L |
| GM SB2 Cylinders #6 & #8 | 1.813" | 1.614" | 2.679" | 2.304" | 0894-L |

Note: Dimensions are listed for popular applications. Other applications available.



ENDURE-X™ SOLID ROLLER LIFTER REBUILD PROGRAM

Today's roller lifters face grueling engine environments. COMP Cams® recognizes the high cost of new parts and designed the Endure-X™ Lifter Rebuild Program to help offset some of that cost.

There is a small fee to replace worn or damaged parts, and replacement lifters may be purchased to replace defective or destroyed ones.

| DESCRIPTION | PART # |
|--------------------------|------------------|
| For .750" Wheel Diameter | 800-RB1-1 |
| For .850" Wheel Diameter | 800-RB2-1 |



REBUILT SOLID ROLLER LIFTERS GO THROUGH THE FOLLOWING STEPS:

1. Lifter bodies are disassembled and inspected for cracks.
2. Retaining grooves are inspected and cleaned.
3. Lifter bodies are thoroughly washed.
4. A new axle and roller assembly are pressed into the body, and new retaining clips are installed.
5. Lifters are reboxed and returned to the customer.

SPORTSMAN SOLID ROLLER LIFTERS

Sportsman Lifters from COMP Cams® are designed to be a premium and lighter weight upgrade over Endure-X™ Lifters. Sportsman Lifters are offered in two configurations: a standard/traditional needle bearing axle/wheel design or an optional bronze bushing axle/wheel setup. And for Chevrolets, there are also left or right offset pushrod seat options. Each design features two pressurized EDM oil feeds to the axle, along with an edge orifice feed to the wheel. This design delivers a more reliable oil feed than most other options on the market. Sportsman™ Lifters also feature a shallower oil band than competitor's versions for increased strength and rigidity, while internal machining helps to reduce weight.

The body design utilizes a skirted wheel that strengthens the lifter ears and also provides more contact area with the lifter bore for further lifter stability. In addition, staked axles eliminate clips and provide robust axle retention. This permanent axle retention feature increases the stiffness of the lifter ears and helps prevent the ears from spreading. Sportsman Lifters are built from 8620 premium steel for increased strength and wear resistance and feature a captured link bar design. They utilize a tapered and slotted link bar tower for reduced weight and improved aesthetics. The lifters also feature a tall body to enable use in both standard and .300" tall lifter bores – the result is increased strength and less lifter bore wear.

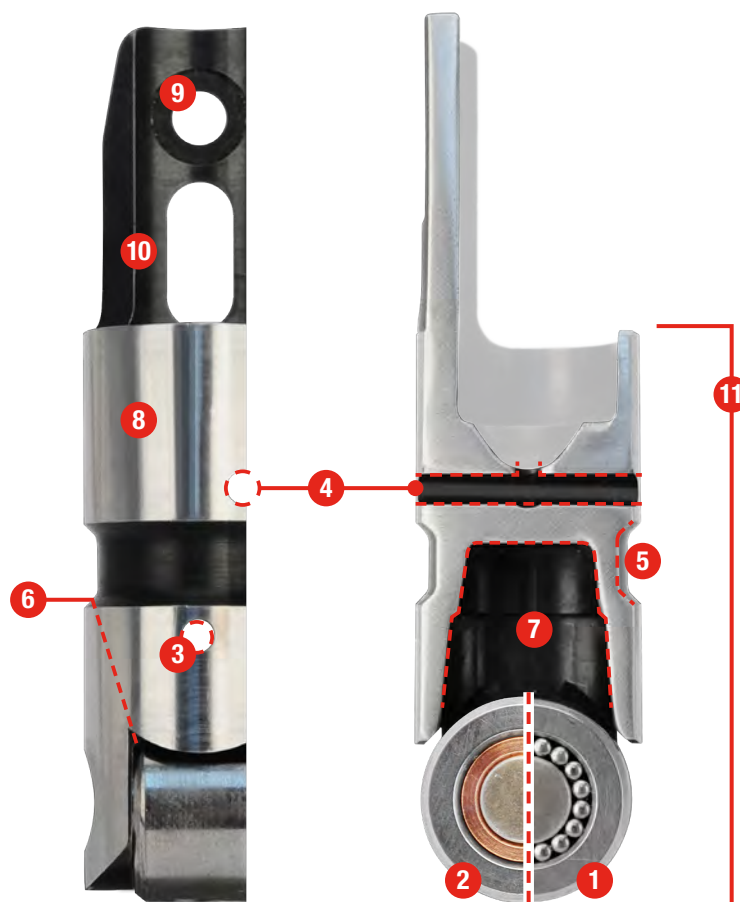
FEATURES:

- 1 Traditional Needle Bearing
- 2 Optional Bronze Bushing
- 3 Pressurized Oil Feed To Roller Wheel & Axle
- 4 Pressurized Oil Feed To Pushrod
- 5 Shallow Oil Band For Increased Strength & Rigidity
- 6 EDM Pressure-Fed Oiling To Roller Wheel & Axle (Both Sides Of Lifter)
- 7 Internal Machining To Reduce Overall Lifter Weight
- 8 8620 Premium Steel Body For Increased Strength & Wear Resistance
- 9 Captured Link Bar For Maximum Control & Durability
- 10 Tapered & Slotted Link Bar Tower For Overall Reduced Lifter Weight
- 11 Tall Body Enables Use In Standard And .300" Tall Lifter Bores For Reduced Lifter Bore Wear

THE FOUR MAIN FEATURES OF SPORTSMAN SOLID ROLLER LIFTERS:

1. **MULTIPLE CONFIGURATIONS** – Options are available for both the axle/wheel design and the pushrod seat location. You can select the standard/traditional needle bearing axle/wheel design or opt for the bronze bushing axle/wheel. And for Small and Big Block Chevrolet, there are also options for either a centered pushrod seat location or a left or right offset for race heads that have had pushrods relocated to maximize airflow.
2. **HIGH STRENGTH BODY** – The skirted wheel design strengthens the lifter ears and provides more contact area with the lifter bore for increased stability. Also, the shallow oil band increases strength and rigidity while internal machining helps to reduce weight. This results in a stronger but lighter lifter body with tremendous wear resistance.
3. **STAKED AXLES** – The permanent axle retention feature increases stiffness of the lifter ears and prevents them from spreading. This eliminates the use of clips and provides robust axle retention but still allows these lifters to be rebuildable.
4. **CAPTURED LINK BARS** – Designed specifically for sportsman and professional racing, along with high-end street machines, the tapered and slotted link bar tower reduces weight.

SPORTSMAN SOLID ROLLER CROSS SECTION



SPORTSMAN SOLID ROLLER LIFTERS

COMPONENTS LIFTERS

| DESCRIPTION | DIA. | WEIGHT | SET INCLUDES: | PUSHROD SEAT LOCATION | WHEEL DIA. | SEAT HEIGHT | BUSHING/ NEEDLE BEARING | PART #/ STYLE |
|---|-------|--------|-------------------------------|---|------------|-------------|-------------------------|------------------|
| SMALL BLOCK CHEVROLET V8 265-400 | | | | | | | | |
| Roller Lifters w/ Bushing | .842" | 118 | (8) 96818B | 8 Pairs Centered | .750" | 1.88" | Bushing | 96818B-16 |
| Roller Lifters w/ Needle Bearing | .842" | 118 | (8) 96818 | 8 Pairs Centered | .750" | 1.88" | Needle Bearing | 96818-16 |
| .160" Offset Roller Lifters w/ Bushing | .842" | 117 | (4) 96818CLB, (4) 96818CRB | 4 Pairs Centered & .160" Left, 4 Pairs Centered & .160" Right | .750" | 1.88" | Bushing | 96894B-16 |
| .160" Offset Roller Lifters w/ Needle Bearing | .842" | 117 | (4) 96818CL, (4) 96818CR | 4 Pairs Centered & .160" Left, 4 Pairs Centered & .160" Right | .750" | 1.88" | Needle Bearing | 96894-16 |
| Roller Lifters w/ Bushing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 134 | (8) 96904B | 8 Pairs Centered | .800" | 1.88" | Bushing | 96904B-16 |
| Roller Lifters w/ Needle Bearing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 134 | (8) 96904 | 8 Pairs Centered | .800" | 1.88" | Needle Bearing | 96904-16 |
| .180" Offset Roller Lifters w/ Bushing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 133 | (4) 96904CLB, (4) 96904CRB | 4 Pairs Centered & .180" Left, 4 Pairs Centered & .180" Right | .800" | 1.88" | Bushing | 96892B-16 |
| .180" Offset Roller Lifters w/ Needle Bearing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 133 | (4) 96904CL, (4) 96904CR | 4 Pairs Centered & .180" Left, 4 Pairs Centered & .180" Right | .800" | 1.88" | Needle Bearing | 96892-16 |
| .180" Offset Roller Lifters w/ Bushing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 132 | (8) 96904LRB | 8 Pairs .180" Left & .180" Right | .800" | 1.88" | Bushing | 96893B-16 |
| .180" Offset Roller Lifters w/ Needle Bearing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 132 | (8) 96904LR | 8 Pairs .180" Left & .180" Right | .800" | 1.88" | Needle Bearing | 96893-16 |
| BIG BLOCK CHEVROLET V8 396-454 | | | | | | | | |
| Roller Lifters w/ Bushing | .842" | 120 | (8) 96819B | 8 Pairs Centered | .750" | 1.88" | Bushing | 96819B-16 |
| Roller Lifters w/ Needle Bearing | .842" | 120 | (8) 96819 | 8 Pairs Centered | .750" | 1.88" | Needle Bearing | 96819-16 |
| .160" Offset Roller Lifters w/ Bushing | .842" | 121 | (4) 96819CLB, (4) 96819CRB | 4 Pairs Centered & .160" Left, 4 Pairs Centered & .160" Right | .750" | 1.88" | Bushing | 96996B-16 |
| .160" Offset Roller Lifters w/ Needle Bearing | .842" | 121 | (4) 96819CL, (4) 96819CR | 4 Pairs Centered & .160" Left, 4 Pairs Centered & .160" Right | .750" | 1.88" | Needle Bearing | 96996-16 |
| Roller Lifters w/ Bushing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 136 | (8) 96850B | 8 Pairs Centered | .800" | 1.88" | Bushing | 96850B-16 |
| Roller Lifters w/ Needle Bearing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 136 | (8) 96850 | 8 Pairs Centered | .800" | 1.88" | Needle Bearing | 96850-16 |
| .180" Offset Roller Lifters w/ Bushing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 135 | (4) 96850CLB, (4) 96850CRB | 4 Pairs Centered & .180" Left, 4 Pairs Centered & .180" Right | .800" | 1.88" | Bushing | 96998B-16 |
| .180" Offset Roller Lifters w/ Needle Bearing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 135 | (4) 96850CL, (4) 96850CR | 4 Pairs Centered & .180" Left, 4 Pairs Centered & .180" Right | .800" | 1.88" | Needle Bearing | 96998-16 |
| .180" Offset Roller Lifters w/ Bushing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 134 | (8) 96850LRB | 8 Pairs .180" Left & .180" Right | .800" | 1.88" | Bushing | 96999B-16 |
| .180" Offset Roller Lifters w/ Needle Bearing for Applications w/ Enlarged Lifter Bores (.904") | .904" | 134 | (8) 96850LR | 8 Pairs .180" Left & .180" Right | .800" | 1.88" | Needle Bearing | 96999-16 |
| GM GEN III/IV LS | | | | | | | | |
| Roller Lifters w/ Bushing | .842" | 137 | (8) 96956B | 8 Pairs Centered | .750" | 2.21" | Bushing | 96956B-16 |
| Roller Lifters w/ Needle Bearing | .842" | 137 | (8) 96956 | 8 Pairs Centered | .750" | 2.21" | Needle Bearing | 96956-16 |
| CHRYSLER V8 383-440 & 426 HEMI | | | | | | | | |
| Roller Lifters w/ Bushing | .904" | 128 | (8) 96829B | All Centered | .800" | 1.79" | Bushing | 96829B-16 |
| Roller Lifters w/ Needle Bearing | .904" | 128 | (8) 96829 | All Centered | .800" | 1.79" | Needle Bearing | 96829-16 |
| CHRYSLER V8 273-360 (INBOARD LINK BAR) | | | | | | | | |
| Roller Lifters w/ Bushing | .904" | 136 | (8) 96043B | All Centered | .800" | 1.93" | Bushing | 96043B-16 |
| Roller Lifters w/ Needle Bearing | .904" | 136 | (8) 96043 | All Centered | .800" | 1.93" | Needle Bearing | 96043-16 |

SPORTSMAN SOLID ROLLER LIFTERS (continued)

| DESCRIPTION | DIA. | WEIGHT | SET INCLUDES: | PUSHROD SEAT LOCATION | WHEEL DIA. | SEAT HEIGHT | BUSHING/ NEEDLE BEARING | PART #/ STYLE |
|---|-------|--------|---------------|--------------------------------|------------|-------------|-------------------------|-------------------|
| CHRYSLER R3 V8 (WITH 48° BANK ANGLE, FOR BUSHED OR MODIFIED LIFTER BORES W/ GM OILING) | | | | | | | | |
| Roller Lifters w/ Bushing | .904" | 134 | (8) 96904B | 8 Pairs Centered | .800" | 1.88" | Bushing | 96831B-16 |
| Roller Lifters w/ Needle Bearing | .904" | 134 | (8) 96904 | 8 Pairs Centered | .800" | 1.88" | Needle Bearing | 96831-16 |
| FORD V8 289-351W | | | | | | | | |
| Roller Lifters w/ Bushing | .875" | 133 | (8) 96838B | All Centered | .750" | 2.02" | Bushing | 96838B-16 |
| Roller Lifters w/ Needle Bearing | .875" | 133 | (8) 96838 | All Centered | .750" | 2.02" | Needle Bearing | 96838-16 |
| FORD V8 351C, 351M, 400M | | | | | | | | |
| Roller Lifters w/ Bushing | .875" | 128 | (8) 96840B | All Centered | .750" | 2.02" | Bushing | 96840B-16 |
| Roller Lifters w/ Needle Bearing | .875" | 128 | (8) 96840 | All Centered | .750" | 2.02" | Needle Bearing | 96840-16 |
| FORD V8 SVO SMALL BLOCK DRAG RACE APPLICATIONS W/ YATES HEADS | | | | | | | | |
| Roller Lifters w/ Bushing | .875" | 133 | (8) 96838CRB | 8 Pairs Centered & .180" Right | .750" | 2.02" | Bushing | 967879B-16 |
| Roller Lifters w Needle Bearing | .875" | 133 | (8) 96838CR | 8 Pairs Centered & .180" Right | .750" | 2.02" | Needle Bearing | 967879-16 |
| FORD V8 352-428 & 429-460 | | | | | | | | |
| Roller Lifters w/ Bushing | .875" | 128 | (8) 96836B | All Centered | .750" | 2.02" | Bushing | 96836B-16 |
| Roller Lifters w/ Needle Bearing | .875" | 128 | (8) 96836 | All Centered | .750" | 2.02" | Needle Bearing | 96836-16 |

SPORTSMAN INDIVIDUAL PAIRS W/ CAPTURED LINK BAR

| DESCRIPTION | DIA. | WEIGHT | PUSHROD SEAT LOCATION | OFFSET DISTANCE | WHEEL DIA. | SEAT HEIGHT | BUSHING/ NEEDLE BEARING | PART #/ STYLE |
|---|-------|--------|-----------------------|-----------------|------------|-------------|-------------------------|-------------------|
| SMALL BLOCK CHEVROLET V8 265-400 | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .842" | 118 | Both Centered | 0 | .750" | 1.88" | Bushing | 96818B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .842" | 118 | Both Centered | 0 | .750" | 1.88" | Needle Bearing | 96818-2 |
| Roller Lifter Pair – One Centered & One Offset Left, Bushing | .842" | 117 | Centered & Left | 0/.160" | .750" | 1.88" | Bushing | 96818CLB-2 |
| Roller Lifter Pair – One Centered & One Offset Right, Bushing | .842" | 117 | Centered & Right | 0/.160" | .750" | 1.88" | Bushing | 96818CRB-2 |
| Roller Lifter Pair – One Centered & Offset Left, Needle Bearing | .842" | 117 | Centered & Left | 0/.160" | .750" | 1.88" | Needle Bearing | 96818CL-2 |
| Roller Lifter Pair – One Centered & Offset Right, Needle Bearing | .842" | 117 | Centered & Right | 0/.160" | .750" | 1.88" | Needle Bearing | 96818CR-2 |
| Roller Lifter Pair – Both Centered – For Enlarged Lifter Bores (.904"), Bushing | .904" | 134 | Both Centered | 0 | .800" | 1.88" | Bushing | 96904B-2 |
| Roller Lifter Pair – Both Centered – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 134 | Both Centered | 0 | .800" | 1.88" | Needle Bearing | 96904-2 |
| Roller Lifter Pair – One Centered & One Offset Left – For Enlarged Lifter Bores (.904"), Bushing | .904" | 133 | Centered & Left | 0/.180" | .800" | 1.88" | Bushing | 96904CLB-2 |
| Roller Lifter Pair – One Centered & One Offset Right – For Enlarged Lifter Bores (.904"), Bushing | .904" | 133 | Centered & Right | 0/.180" | .800" | 1.88" | Bushing | 96904CRB-2 |
| Roller Lifter Pair – One Centered & One Offset Left – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 133 | Centered & Left | 0/.180" | .800" | 1.88" | Needle Bearing | 96904CL-2 |
| Roller Lifter Pair – One Centered & One Offset Right – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 133 | Centered & Right | 0/.180" | .800" | 1.88" | Needle Bearing | 96904CR-2 |
| Roller Lifter Pair – One Offset Left & One Offset Right – For Enlarged Lifter Bores (.904"), Bushing | .904" | 132 | Left & Right | .180" | .800" | 1.88" | Bushing | 96904LRB-2 |
| Roller Lifter Pair – One Offset Left & One Offset Right – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 132 | Left & Right | .180" | .800" | 1.88" | Needle Bearing | 96904LR-2 |

SPORTSMAN INDIVIDUAL PAIRS W/ CAPTURED LINK BAR (continued)

| DESCRIPTION | DIA. | WEIGHT | PUSHROD SEAT LOCATION | OFFSET DISTANCE | WHEEL DIA. | SEAT HEIGHT | BUSHING/ NEEDLE BEARING | PART #/ STYLE |
|---|-------|--------|-----------------------|-----------------|------------|-------------|-------------------------|-------------------|
| BIG BLOCK CHEVROLET V8 396-454 1965-1996 | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .842" | 120 | Both Centered | 0 | .750" | 1.88" | Bushing | 96819B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .842" | 120 | Both Centered | 0 | .750" | 1.88" | Needle Bearing | 96819-2 |
| Roller Lifter Pair – One Centered & One Offset Left, Bushing | .842" | 121 | Centered & Left | 0/.160" | .750" | 1.88" | Bushing | 96819CLB-2 |
| Roller Lifter Pair – One Centered & One Offset Right, Bushing | .842" | 121 | Centered & Right | 0/.160" | .750" | 1.88" | Bushing | 96819CRB-2 |
| Roller Lifter Pair – One Centered & One Offset Left, Needle Bearing | .842" | 121 | Centered & Left | 0/.160" | .750" | 1.88" | Needle Bearing | 96819CL-2 |
| Roller Lifter Pair – One Centered & One Offset Right, Needle Bearing | .842" | 121 | Centered & Right | 0/.160" | .750" | 1.88" | Needle Bearing | 96819CR-2 |
| Roller Lifter Pair – Both Centered – For Enlarged Lifter Bores (.904"), Bushing | .904" | 136 | Both Centered | 0 | .800" | 1.88" | Bushing | 96850B-2 |
| Roller Lifter Pair – Both Centered – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 136 | Both Centered | 0 | .800" | 1.88" | Needle Bearing | 96850-2 |
| Roller Lifter Pair – One Centered & One Offset Left – For Enlarged Lifter Bores (.904"), Bushing | .904" | 135 | Centered & Left | 0/.180" | .800" | 1.88" | Bushing | 96850CLB-2 |
| Roller Lifter Pair – One Centered & One Offset Right – For Enlarged Lifter Bores (.904"), Bushing | .904" | 135 | Centered & Right | 0/.180" | .800" | 1.88" | Bushing | 96850CRB-2 |
| Roller Lifter Pair – One Centered & One Offset Left – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 135 | Centered & Left | 0/.180" | .800" | 1.88" | Needle Bearing | 96850CL-2 |
| Roller Lifter Pair – One Centered & One Offset Right – For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 135 | Centered & Right | 0/.180" | .800" | 1.88" | Needle Bearing | 96850CR-2 |
| Roller Lifter Pair - One Offset Left & One Offset Right - For Enlarged Lifter Bores (.904"), Bushing | .904" | 134 | Left & Right | .180" | .800" | 1.88" | Bushing | 96850LRB-2 |
| Roller Lifter Pair - One Offset Left & One Offset Right - For Enlarged Lifter Bores (.904"), Needle Bearing | .904" | 134 | Left & Right | .180" | .800" | 1.88" | Needle Bearing | 96850LR-2 |
| GM GEN III/IV LS | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .842" | 137 | Centered | 0 | .750" | 2.21" | Bushing | 96956B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .842" | 137 | Centered | 0 | .750" | 2.21" | Needle Bearing | 96956-2 |
| CHRYSLER V8 383-440 & 426 HEMI | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .904" | 128 | Both Centered | 0 | .800" | 1.79" | Bushing | 96829B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .904" | 128 | Both Centered | 0 | .800" | 1.79" | Needle Bearing | 96829-2 |
| CHRYSLER V8 279-360 | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .904" | 135 | Both Centered | 0 | .800" | 1.93" | Bushing | 96043B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .904" | 135 | Both Centered | 0 | .800" | 1.93" | Needle Bearing | 96043-2 |
| FORD V8 289-351W | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .875" | 133 | Both Centered | 0 | .750" | 2.02" | Bushing | 96838B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .875" | 133 | Both Centered | 0 | .750" | 2.02" | Needle Bearing | 96838-2 |
| FORD V8 351C, 351M, 400M | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .875" | 128 | Both Centered | 0 | .750" | 2.02" | Bushing | 96840B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .875" | 128 | Both Centered | 0 | .750" | 2.02" | Needle Bearing | 96840-2 |
| FORD V8 SVO SMALL BLOCK DRAG RACE APPLICATIONS W/YATES HEADS | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .875" | 133 | Centered & Right | 0, .180" | .750" | 2.02" | Bushing | 96838CRB-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .875" | 133 | Centered & Right | 0, .180" | .750" | 2.02" | Needle Bearing | 96838CR-2 |
| FORD V8 352-428 & 429-460 | | | | | | | | |
| Roller Lifter Pair – Both Centered, Bushing | .875" | 128 | Both Centered | 0 | .750" | 2.02" | Bushing | 96836B-2 |
| Roller Lifter Pair – Both Centered, Needle Bearing | .875" | 128 | Both Centered | 0 | .750" | 2.02" | Needle Bearing | 96836-2 |



PUSHROD LENGTH & ROCKER ARM GEOMETRY

A large number of variables are involved in determining the correct length pushrod for your application. Pushrod length is affected by any of the following:

- Block deck height
- Head deck height
- Head stud boss height
- Rocker arm brand/design
- Cam base circle size
- Lifter design/brand/pushrod seat height
- Valve stem length

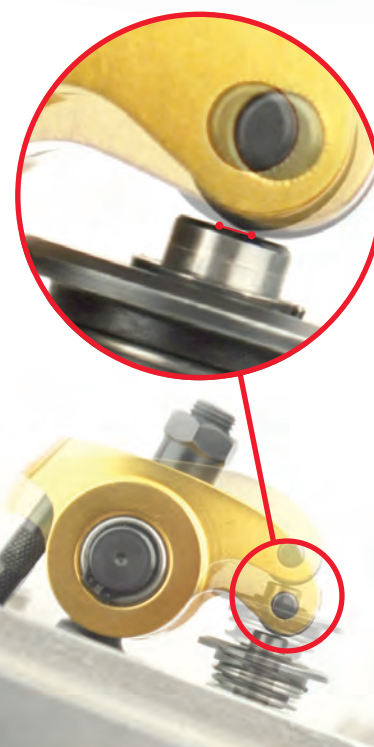
Don't assume anything when determining the right pushrod for your new engine. A pushrod that fits one engine may not necessarily work in another. Any number of items can vary from engine to engine, requiring you to use a different pushrod length. Following the steps below will streamline the pushrod selection process, ensuring that you get the right parts the first time.

- 1. BUY A CHECKING PUSHROD.** Invest in a checking pushrod at this time. They are available in two different designs on page 255 of this master catalog. With a checking pushrod, you can actually rotate the engine over and check the rocker arm/valve tip relationship as you adjust the pushrod length. When you get the correct geometry, it is then a simple matter to measure the length and place an order.
- 2. DETERMINE CORRECT VALVE TRAIN GEOMETRY.** What is the correct length pushrod for your application? The one that produces correct valve train geometry. What is correct valve train geometry? When the rocker arm roller tip rolls from the intake side of the valve tip, across the center of the tip (at approximately mid-lift), to the exhaust side of the valve tip (at full lift) and back. See Diagram A.
- 3. MEASURE THE RESULTING PUSHROD.** Measuring the length of a pushrod is a simple process. The most important thing to remember is that different manufacturers measure pushrods differently. Not all pushrods of a stated length will measure exactly the same. The three most common pushrod measurements are shown in Diagram B.

THEORETICAL LENGTH: This assumes that the pushrod has no oil hole in the end of it. Therefore, the radius at either end is complete, which lengthens the pushrod approximately .017" in the case of a 5/16" pushrod with .100" diameter oil holes, minimally chamfered.

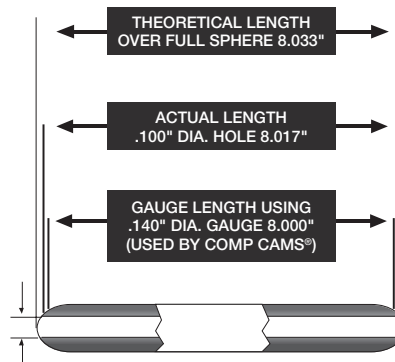
ACTUAL LENGTH: This is what you would measure if you had a set of calipers large enough to measure over the oil holes at each end of the pushrod. This is the measurement that most people can relate to. Unfortunately, this measurement is affected not only by the diameter of the oil holes but also by the entrance chamfer for each oil hole.

GAUGE LENGTH: Although the most difficult to measure (it requires a special length checking gauge), this measurement is the most reliable. This is because the oil holes and their chamfers are eliminated from the measurement. The only problem is that not all companies use the same gauge diameter. COMP Cams® uses a .140" gauge diameter. All Magnum and Hi-Tech™ Pushrods listed in this catalog are measured using this technique. See Diagram B.



THE GOAL IS TO MINIMIZE & CENTER THE ROLLER TIP'S SWEEP ACROSS THE VALVE

DIAGRAM A



COMMON PUSHROD MEASUREMENTS

DIAGRAM B

MAGNUM CHECKING PUSHRODS

These tools make it easy and economical to lay out and determine proper pushrod length during a high performance engine rebuild. This is necessary for correct valve train geometry to obtain the desired results from the cam and to ensure damage is not done to the rest of the valve train. They are made from a thin wall 5/16" pushrod that is cut and threaded with over 1" travel and feature a 5/16" ball on each end.

| DESCRIPTION | ADJUSTABLE | | PART # |
|--|------------|---------|---------------|
| | FROM | TO | |
| Individual Length Checker | 6.125" | 7.500" | 7905-1 |
| Individual Length Checker | 7.500" | 8.700" | 7901-1 |
| Individual Length Checker | 8.500" | 9.800" | 7902-1 |
| Individual Length Checker | 9.700" | 11.000" | 7903-1 |
| Individual Length Checker | 10.200" | 11.500" | 7904-1 |
| Master Pushrod Checking Kit – Contains 1 Each: #7905, #7901, #7902, #7903 & #7904 | 6.125" | 11.500" | 7900 |



HI-TECH™ CHECKING PUSHRODS

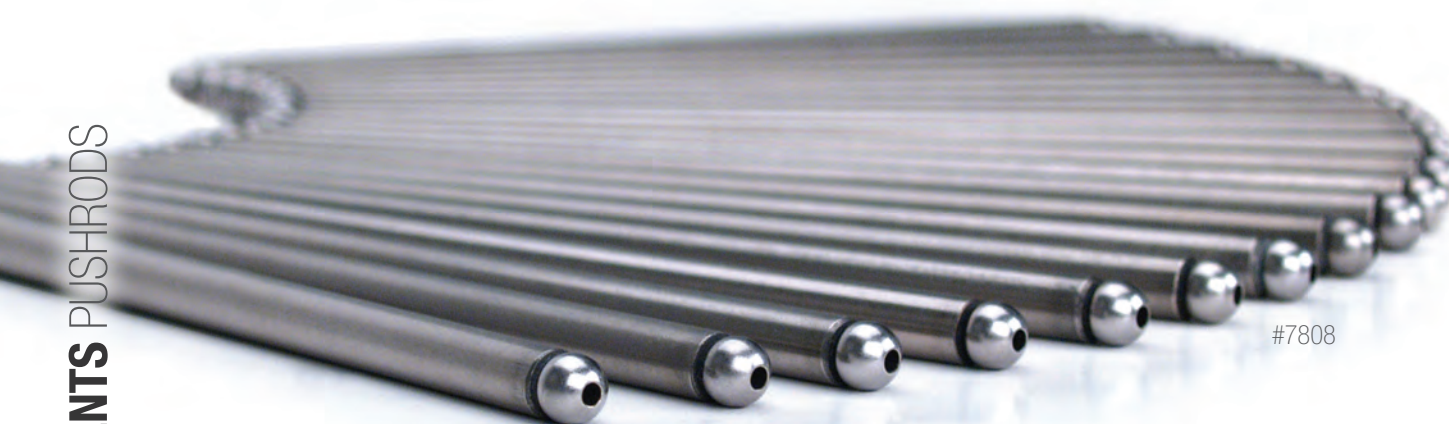
The COMP Cams® Hi-Tech™ Pushrod Length Checking Tools are precision-crafted from steel alloy and black oxidized to provide years of accurate measurements. The unique design is easy to read and eliminates the need for expensive calipers. Each complete revolution is equal to .050". Having the correct length pushrods in your engine is a critical factor in proper rocker arm geometry, and this is the best tool to measure pushrod length.

| DESCRIPTION | ADJUSTABLE | | PART # |
|---|------------|---------|---------------|
| | FROM | TO | |
| Individual Length Checker | 5.800" | 6.800" | 7701-1 |
| Individual Length Checker | 6.800" | 7.800" | 7702-1 |
| Individual Length Checker | 7.800" | 8.800" | 7703-1 |
| Individual Length Checker | 8.800" | 9.800" | 7704-1 |
| Individual Length Checker | 9.800" | 10.800" | 7706-1 |
| Individual Length Checker | 10.800" | 11.800" | 7707-1 |
| Individual Length Checker | 11.800" | 12.800" | 7708-1 |
| Length Checker w/ 5/16" Cup End | 6.800" | 7.800" | 7709-1 |
| Length Checker w/ 5/16" Cup End | 7.800" | 8.800" | 7711-1 |
| Length Checker w/ 5/16" Cup End | 8.800" | 9.800" | 7719-1 |
| Length Checker w/ 5/16" Cup End | 9.800" | 10.800" | 7710-1 |
| Length Checker w/ 5/16" Cup End | 10.800" | 11.800" | 7712-1 |
| Master Pushrod Checking Kit – Contains 1 Each: #7701, #7702, #7703 & #7704 | 5.800" | 9.800" | 7705 |



TECH TIP

We realize that most people don't have access to the special gauge required for the pushrod measurement techniques listed on the previous pages or even a dial caliper large enough for most pushrods. We've developed two techniques to help you determine exact pushrod length so that the perfect valve train geometry is achieved in your engine. Read about these techniques on the COMP Cams® website under the "Learning Center."



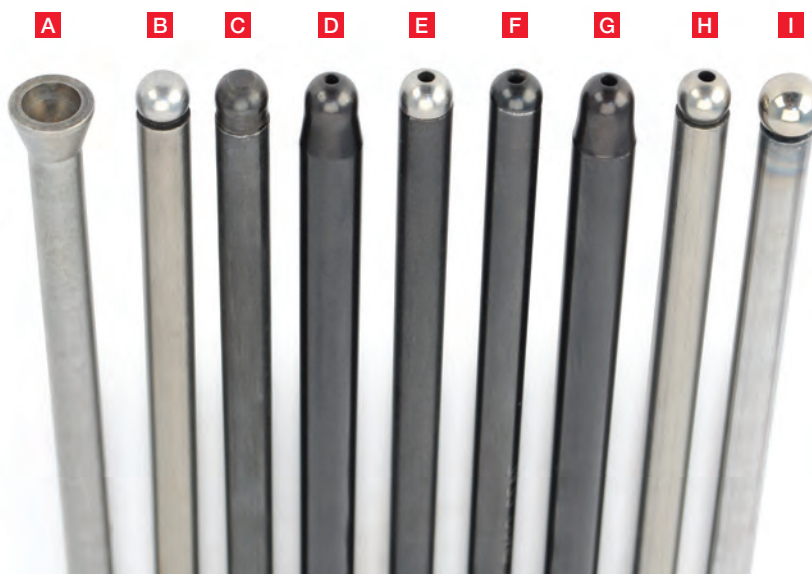
#7808

HIGH ENERGY PUSHRODS™

- Best choice when building street rods, RVs or daily driver engines
- Available in 3/8" or 5/16" diameters
- Meet or exceed all OE pushrod specifications
- Mate perfectly with High Energy™ or Magnum Rockers

| MAKE | DESCRIPTION | USE WITH GUIDE PLATES | DIAMETER | ACTUAL LENGTH | END TYPE | PART # |
|--|--|-----------------------|-------------------------|-------------------------|----------------|----------------|
| AMC | V8 290-401, Most 1970-Up | Yes | 5/16" | 7.794" | H-H | 7812-16 |
| Buick | V8 350, 1968-69 | No | 5/16" | 9.668" | H-H | 7892-16 |
| | V8 350, 1970-81 | No | 5/16" | 9.677" | H-H | 7861-16 |
| | V8 455, 1970-76 | No | 5/16" | 9.378" | H-H | 7896-16 |
| | V6 All, 1962-85 | No | 5/16" | 8.684" | H-H | 7869-12 |
| Chevrolet | 4 Cyl. 151, 1977-78 | No | 5/16" | 9.677" | H-H | 7861-8 |
| | 4 Cyl. 153. 1962-70 & Marine | No | 5/16" | 9.677" | H-H | 7861-8 |
| | 6 Cyl. 194-250, 1962-84 | No | 5/16" | 9.677" | H-H | 7861-12 |
| | V6 173 (60°), 1980-86 | Yes | 5/16" | 6.165" | H-H | 7816-12 |
| | V6 200-262, 1978-86, Hardened Replacement | Yes | 5/16" | 7.794" | H-H | 7812-12 |
| | V8 262-400 w/ OE Hydraulic Roller Cam 1987-Present | Yes | 5/16" | 7.205" | H-H | 7808-16 |
| | V8 262-400 w/ Retro-Fit Hydraulic Roller Cam 1955-Present | Yes | 5/16" | 7.266" | H-H | 7809-16 |
| | V8 262-400, 1955-Present w/ Flat Tappet | Yes | 5/16" | 7.794" | H-H | 7812-16 |
| | V8 396-454 Intake w/ Retro-Fit Hydraulic Roller Cam 1965-Present | Yes | 3/8" | 7.725" | H-H | 7813-8 |
| | V8 396-454 Exhaust w/ Retro-Fit Hydraulic Roller Cam 1965-Present | Yes | 3/8" | 8.684" | H-H | 7814-8 |
| | V8 396-454 Retro-Fit Pushrod Set, Intake & Exhaust 1965-Present (8) #7813 Intake (8) #7814 Exhaust | Yes | 3/8" | 7.725" Int 8.684" Ex | H-H | 7815-16 |
| | V8 396-454, Intake, Hardened Replacement | Yes | 3/8" | 8.280" | H-H | 7811-8 |
| | V8 396-454, Exhaust, Hardened Replacement | Yes | 3/8" | 9.252" | H-H | 7881-8 |
| V8 396-454, 1965-86 (8) #7811 Intake & (8) #7881 Exhaust (Standard Length, Standard Block) | Yes | 3/8" | 8.280" Int 9.252" Ex | H-H | 7854-16 | |
| Chrysler | 6 Cyl. 198-225, 1960-80 w/ Mechanical Cam | No | 5/16" | 9.954" | A-B | 7864-12 |
| | V8 273-360, 1964-86 | No | 5/16" | 7.500" | B-B | 7820-16 |
| | V8 273-360, 1964-86 Hyd. Cam w/ Adjustable Rockers | No | 5/16" | 7.389" | A-B | 7821-16 |
| | V8 273-360, 1964-86 Solid w/ Adjustable Rockers | No | 5/16" | 7.497" | A-B | 7822-16 |
| | V8 383-400, 1968-78 w/ Non-Adjustable Rockers | No | 5/16" | 8.575" | B-B | 7883-16 |
| | V8 440, 1968-78 w/ Non-Adjustable Rockers | No | 5/16" | 9.315" | B-B | 7840-16 |

| MAKE | DESCRIPTION | USE WITH GUIDE PLATES | DIAMETER | ACTUAL LENGTH | END TYPE | PART # |
|---------------------------------|---|-----------------------|----------|---------------|----------------|----------------|
| Ford | 6 Cyl. 170-200, 1965-83 | No | 5/16" | 8.350" | I-I | 7865-12 |
| | 6 Cyl. 240-300, 1965-84 | No | 5/16" | 10.136" | H-H | 7866-12 |
| | V6 171 (2800cc), 1974-86 | No | 5/16" | 5.429" | A-B | 7836-12 |
| | V8 255 & 302, 1965-Present w/ Flat Tappet | Yes | 5/16" | 6.881" | H-H | 7831-16 |
| | V8 302 w/ OEM Hydraulic Roller Cam 1985-Present | Yes | 5/16" | 6.248" | H-H | 7826-16 |
| | V8 255-302 .060" Short, 1968-85 | No | 5/16" | 6.821" | H-H | 7827-16 |
| | V8 255-302 .060" Long, 1968-85 | No | 5/16" | 6.936" | H-H | 7828-16 |
| | V8 302 Retro-Fit Hydraulic Roller | Yes | 5/16" | 6.400" | H-H | 7819-16 |
| | V8 351W, 1969-78 | No | 5/16" | 8.152" | H-H | 7835-16 |
| | V8 351W .060" Short, 1969-78 | No | 5/16" | 8.096" | H-H | 7829-16 |
| | V8 351W .060" Long, 1969-78 | No | 5/16" | 8.212" | H-H | 7830-16 |
| | V8 351W Retro-Fit Hydraulic Roller | Yes | 5/16" | 7.694" | H-H | 7823-16 |
| | V8 351C & Cobra Jet, 1970-74 | No | 5/16" | 8.412" | H-H | 7832-16 |
| | V8 351C Retro-Fit Hydraulic Roller | Yes | 5/16" | 7.870" | H-H | 7825-16 |
| | V8 351M & 400M, 1971-79 | No | 5/16" | 9.500" | H-H | 7837-16 |
| | V8 351M & 400M .060" Short, 1971-79 | No | 5/16" | 9.440" | H-H | 7838-16 |
| | V8 351M & 400M .060" Long, 1971-79 | No | 5/16" | 9.560" | H-H | 7839-16 |
| | V8 351M & 400M Retro-Fit Hydraulic Roller | Yes | 5/16" | 8.903" | H-H | 7824-16 |
| | V8 352-428, 1965-72 Factory Non-Adjustable Rockers Only | No | 3/8" | 9.621" | I-I | 7833-16 |
| | V8 429-460, 1972-78 | No | 5/16" | 8.550" | H-H | 7834-16 |
| V8 429-460 .060" Short, 1972-78 | Yes | 5/16" | 8.500" | H-H | 7843-16 | |
| V8 429-460 .060" Long, 1972-78 | No | 5/16" | 8.616" | H-H | 7844-16 | |
| Oldsmobile | V8 260-403, 1971-79 | No | 5/16" | 8.234" | H-H | 7842-16 |
| | V8 400-455, 1971-79 | Yes | 5/16" | 9.748" | H-H | 7845-16 |
| | Special for 455 Rocker Kit (#1442-KIT) | Yes | 5/16" | 9.654" | H-H | 7841-16 |
| | Special for 350 & 403 Rocker Kit (#1441-KIT) | Yes | 5/16" | 8.500" | H-H | 7843-16 |
| Pontiac | V8 350-455, 1955-79 | Yes | 5/16" | 9.146" | H-H | 7851-16 |
| | V8 326-421, 1962-67 | No | 5/16" | 8.684" | H-H | 7869-16 |



PUSHROD END TYPES

- A** 5/16" Non-Oiling Pressed-In Cup
- B** 5/16" Non-Oiling Welded Ball
- C** 5/16" Non-Oiling Pressed-In Ball
- D** One-Piece 3/8" Body With 5/16" Oil-Through Formed Tip
- E** 5/16" Oil-Through Pressed-In Ball
- F** One-Piece 5/16" Body With 5/16" Oil-Through Formed Tip
- G** 3/8" Body With 5/16" Oil-Through Pressed-In Tip
- H** 5/16" Oil Through Welded Ball
- I** 5/16" Tube 3/8" Welded Ball

All parts on this page are 50-state legal.

MAGNUM PUSHRODS *By Application*

The Magnum 5/16" and 3/8" Pushrods offer an affordable solution for your .080" wall chromemoly pushrod needs. Designed to withstand the stresses of a high performance engine, these pushrods are heat-treated for extended durability and may be ordered as single pieces or in sets of 16. Multiple end types are available to fit virtually any application.

- Durable, one-piece .080" wall chromemoly steel tubing
- Heat-treated for durability & guide plate compatibility
- Black oxide finished with laser-etched part number
- Ideal for street performance and mild race applications

| MAKE | DESCRIPTION | GUIDE PLATES | DIAMETER | LENGTH | END | PART # |
|--|--|--------------|----------|-------------------------|----------------|----------------|
| Chevrolet | V8 265-400 + 90° V6 200-262 w/ OEM Hydraulic Roller Cam | Yes | 5/16" | 7.200" | F-F | 7608-16 |
| | V8 265-400 + 90° V6 w/ Retro-Fit Hydraulic Roller Cam | Yes | 5/16" | 7.300" | F-F | 7609-16 |
| | V8 265-400 + 90° V6 200-262, Hardened Stock Length | Yes | 5/16" | 7.800" | F-F | 7372-16 |
| | V8 265-400 + 90° V6 200-262, +.100" Hardened | Yes | 5/16" | 7.900" | F-F | 7693-16 |
| | V8 265-400 + 90° V6 200-262, +.150" Hardened | Yes | 5/16" | 7.950" | F-F | 7694-16 |
| | V8 265-400 + 90° V6 200-262, +.200" Hardened | Yes | 5/16" | 8.000" | F-F | 7695-16 |
| | V8 265-400 + 90° V6 200-262, +.350" Hardened | Yes | 5/16" | 8.150" | F-F | 7472-16 |
| | V8 265-400 + 90° V6 200-262, Hardened Stock Length | Yes | 3/8" | 7.800" | D-D | 7513-16 |
| | V8 265-400 + 90° V6 200-262, +.100" Hardened | Yes | 3/8" | 7.900" | D-D | 7684-16 |
| | V8 396-454, (8) #7131 Intake (8) #7141 Exhaust (Standard Length & Block) | Yes | 3/8" | 8.280" Int 9.250" Ex | D-D | 7154-16 |
| | V8 396-454, Intake Stock Length (Standard Length & Block) | Yes | 3/8" | 8.280" | D-D | 7131-8 |
| | V8 396-454, Exhaust Stock Length (Standard Length & Block) | Yes | 3/8" | 9.250" | D-D | 7141-8 |
| | V8 396-454, (8) #7164 Intake (8) #7174 Exhaust (w/ Retro-Fit Hydraulic Roller Cam, Standard Block) | Yes | 3/8" | 7.750" Int 8.700" Ex | D-D | 7663-16 |
| | V8 366-427, (8) #7651 Intake (8) #7661 Exhaust (Truck & Marine Tall Deck Block) | Yes | 3/8" | 8.680" Int 9.652" Ex | D-D | 7654-16 |
| V8 366-427, Intake (Truck & Marine Tall Deck Block) | Yes | 3/8" | 8.680" | D-D | 7651-8 | |
| V8 366-427, Exhaust (Truck & Marine Tall Deck Block) | Yes | 3/8" | 9.650" | D-D | 7661-8 | |
| Chrysler | V8 273-360 w/ Non-Adjustable Rockers | No | 5/16" | 7.513" | C-C | 7592-16 |
| | V8 273-360 w/ Adjustable Rockers | No | 5/16" | 7.342" | A-C | 7692-16 |
| | V8 383-400 w/ Non-Adjustable Rockers | No | 5/16" | 8.555" | C-C | 7402-16 |
| | V8 383-400 w/ Adjustable Rockers | No | 3/8" | 8.710" | * | 7422-16 |
| | V8 440 w/ Non-Adjustable Rockers | No | 5/16" | 9.295" | C-C | 7412-16 |
| | V8 440 w/ Non-Adjustable Rockers | No | 3/8" | 9.400" | A-C | 7432-16 |
| | V8 440 w/ Adjustable Rockers | No | 3/8" | 9.030" | A-B | 7442-16 |
| | Special for Dodge Magnum Rocker Kit (#1425-KIT) | Yes | 5/16" | 6.800" | F-F | 7632-16 |
| Ford | V8 221-302, 1962-69 | Yes | 5/16" | 6.800" | F-F | 7632-16 |
| | V8 302, 1969-85 Non-Roller, Non-H.O. | Yes | 5/16" | 6.900" | F-F | 7631-16 |
| | V8 Boss 302, 1969-70 Boss | Yes | 5/16" | 7.605" | F-F | 7492-16 |
| | V8 351W, 1969-78 | Yes | 5/16" | 8.150" | F-F | 7472-16 |
| | V8 351C (Cobra Jet), 1970-74 | Yes | 5/16" | 8.400" | F-F | 7502-16 |
| | V8 351C, 1970-74 | Yes | 3/8" | 8.400" | D-D | 7522-16 |
| | V8 Boss 351C, 1971-72 | Yes | 3/8" | 8.492" | G-G | 7532-16 |
| | V8 352-428, 1965-76 w/ Adjustable Rockers | No | 11/32" | 9.350" | ** | 7530-16 |
| V8 429-460, 1969-71 | Yes | 3/8" | 8.680" | D-D | 7651-16 | |
| Oldsmobile | V8 260-403, .046" Longer Than Stock | Yes | 3/8" | 8.280" | D-D | 7131-16 |
| | V8 400 & 455, Hardened Replacement | Yes | 5/16" | 9.547" | E-E | 7582-16 |
| | V8 400 & 455, +.100" Hardened | Yes | 3/8" | 9.647" | G-G | 7664-16 |
| Pontiac | V8 350-455, 1968-79 | Yes | 5/16" | 9.130" | F-F | 7262-16 |
| | V8 350-455, 1968-79 w/ Solid Lifter Cam | Yes | 5/16" | 9.300" | F-F | 7263-16 |

*5/16" Non-oiling cup and 3/8" non-oiling formed tip

**3/8" Non-oiling cup and 3/8" non-oiling formed tip

All parts on this page are 50-state legal.

MAGNUM PUSHRODS *By Length*

| 5/16" DIAMETER | |
|----------------|---------|
| DESCRIPTION | PART # |
| 6.200" | 7620-16 |
| 6.250" | 7621-16 |
| 6.300" | 7622-16 |
| 6.400" | 7619-16 |
| 6.750" | 7623-16 |
| 6.800" | 7632-16 |
| 6.850" | 7633-16 |
| 6.900" | 7631-16 |
| 6.950" | 7634-16 |
| 7.150" | 7635-16 |
| 7.200" | 7608-16 |
| 7.250" | 7636-16 |
| 7.300" | 7609-16 |
| 7.350" | 7637-16 |
| 7.400" | 7638-16 |
| 7.450" | 7639-16 |
| 7.500" | 7640-16 |
| 7.550" | 7641-16 |
| 7.600" | 7492-16 |
| 7.650" | 7642-16 |
| 7.700" | 7643-16 |
| 7.750" | 7644-16 |
| 7.800" | 7372-16 |
| 7.850" | 7645-16 |
| 7.900" | 7693-16 |
| 7.950" | 7694-16 |
| 8.000" | 7695-16 |
| 8.150" | 7472-16 |
| 8.250" | 7646-16 |
| 8.350" | 7647-16 |
| 8.400" | 7502-16 |
| 8.450" | 7648-16 |
| 8.500" | 7649-16 |
| 8.600" | 7650-16 |
| 8.900" | 7652-16 |
| 9.130" | 7262-16 |
| 9.200" | 7653-16 |
| 9.300" | 7263-16 |
| 9.450" | 7655-16 |
| 9.500" | 7656-16 |
| 9.547" | 7582-16 |
| 9.600" | 7657-16 |
| 9.650" | 7658-16 |
| 9.700" | 7659-16 |
| 9.750" | 7660-16 |
| 9.800" | 7662-16 |

| 3/8" DIAMETER | |
|---------------|---------|
| DESCRIPTION | PART # |
| 6.850" | 7155-16 |
| 6.900" | 7156-16 |
| 7.150" | 7157-16 |
| 7.200" | 7158-16 |
| 7.250" | 7159-16 |
| 7.300" | 7160-16 |
| 7.350" | 7161-16 |
| 7.400" | 7162-16 |
| 7.450" | 7163-16 |
| 7.750" | 7164-16 |
| 7.800" | 7513-16 |
| 7.850" | 7165-16 |
| 7.900" | 7684-16 |
| 7.950" | 7166-16 |
| 8.200" | 7167-16 |
| 8.250" | 7168-16 |
| 8.280" | 7131-16 |
| 8.300" | 7169-16 |
| 8.350" | 7170-16 |
| 8.400" | 7522-16 |
| 8.450" | 7171-16 |
| 8.492" | 7532-16 |
| 8.550" | 7172-16 |
| 8.650" | 7173-16 |
| 8.680" | 7651-16 |
| 8.700" | 7174-16 |
| 8.750" | 7175-16 |
| 9.100" | 7176-16 |
| 9.150" | 7177-16 |
| 9.200" | 7178-16 |
| 9.250" | 7141-16 |
| 9.300" | 7179-16 |
| 9.600" | 7180-16 |
| 9.647" | 7664-16 |
| 9.650" | 7661-16 |
| 9.700" | 7181-16 |
| 9.750" | 7182-16 |
| 9.800" | 7183-16 |



COMPONENTS PUSHRODS

HI-TECH™ PUSHRODS

Prior to extensive research at COMP Cams®, it was thought that the pushrod only had to be strong enough not to fail, bend or burn up at the ends. But our engineers have learned that the frequency of the pushrod must match that of all the rest of the parts in the valve train, as well as the RPM at which the engine will be run. Today's all-out race engines demand the highest quality components at every step, and COMP Cams® Hi-Tech™ Pushrods fill that requirement.

The one-piece design from .080" wall seamless chromemoly tubing ensures the ultimate in strength and durability. The ends are precision formed, yielding added thickness in the critical tip area for strength while maintaining constant wall thickness and concentricity. The pushrods are then cryo-treated to ensure compatibility with guide plates and for maximum strength. They are OD-ground for consistency and black oxide finished with a length and part number laser etched on the OD for ease of identification. Hi-Tech™ Pushrods listed by length can be found on pages 262-263 while other wall thicknesses are available on pages 264-265. Hi-Tech™ Pushrods can be ordered as single units or in sets of 16.



#7972

- One-piece construction from .080" wall seamless chromemoly
- Cryo-treated for extended durability & guide plate compatibility
- Precision formed and reinforced 5/16" ball type ends
- Black oxide finished and laser etched part number & length
- Ideal for serious street performance and race applications

| MAKE | DESCRIPTION | WALL THICKNESS | DIAMETER | LENGTH | PART # |
|------------------------|--|----------------|----------|------------------|----------------|
| Small Block Chevrolet | -.600" Short Standard Length or OE Hydraulic Roller Lifter Standard Length | .080" | 5/16" | 7.200" | 7940-16 |
| | -.550" Short | .080" | 5/16" | 7.250" | 7944-16 |
| | -.500" Short Standard Length Hydraulic Roller Lifter Standard Length | .080" | 5/16" | 7.300" | 7949-16 |
| | -.450" Short | .080" | 5/16" | 7.350" | 7950-16 |
| | -.100" Short | .080" | 5/16" | 7.700" | 7963-16 |
| | -.050" Short | .080" | 5/16" | 7.750" | 7970-16 |
| | Standard Length Small Block Chevrolet | .080" | 5/16" | 7.800" | 7972-16 |
| | +.050" Long | .080" | 5/16" | 7.850" | 7974-16 |
| | +.100" Long | .080" | 5/16" | 7.900" | 7993-16 |
| | +.150" Long | .080" | 5/16" | 7.950" | 7994-16 |
| | +.200" Long | .080" | 5/16" | 8.000" | 7995-16 |
| | +.250" Long | .080" | 5/16" | 8.050" | 7996-16 |
| | +.300" Long | .080" | 5/16" | 8.100" | 7997-16 |
| | Standard Length Small Block Chevrolet | .080" | 3/8" | 7.800" | 7913-16 |
| +.100" Long | .080" | 3/8" | 7.900" | 7984-16 | |
| GM Gen III LS1/LS2/LS6 | -.100" Short | .080" | 5/16" | 7.300" | 7949-16 |
| | -.075" Short | .080" | 5/16" | 7.325" | 7794-16 |
| | -.050" Short | .080" | 5/16" | 7.350" | 7950-16 |
| | -.025" Short | .080" | 5/16" | 7.375" | 7795-16 |
| | Standard Length GM Gen III/LS1/LS2/LS6 | .080" | 5/16" | 7.400" | 7955-16 |
| | +.025" Long | .080" | 5/16" | 7.425" | 7796-16 |
| | +.050" Long | .080" | 5/16" | 7.450" | 7956-16 |
| | +.075" Long | .080" | 5/16" | 7.475" | 7797-16 |
| | +.100" Long | .080" | 5/16" | 7.500" | 7957-16 |
| | Standard Length GM LS7 | .080" | 3/8" | 7.750" | 8905-16 |
| Big Block Chevrolet | Standard Length Big Block Intake | .080" | 3/8" | 8.280" | 7931-8 |
| | Standard Length Big Block Exhaust | .080" | 3/8" | 9.250" | 7941-8 |
| | Standard Length Big Block Chevrolet, Set (8) #7931 Intake & (8) #7941 Exhaust | .080" | 3/8" | 8.280" 9.250" | 7954-16 |
| | Standard Big Block +.100" Long Intake | .080" | 3/8" | 8.380" | 7969-8 |
| | Standard Big Block +.100" Long Exhaust | .080" | 3/8" | 9.350" | 7979-8 |
| | Standard Big Block +.100" Long, Set (8) #7969 Intake & (8) #7979 Exhaust | .080" | 3/8" | 8.380" 9.350" | 7982-16 |
| | Standard Big Block w/ Retro-Fit Hydraulic Roller Cam, Set (8) #8905 Intake & (8) #7907 Exhaust | .080" | 3/8" | 7.750" 8.700" | 7998-16 |
| | Standard Length Big Block Tall Deck Intake | .080" | 3/8" | 8.680" | 7951-8 |
| | Standard Length Big Block Tall Deck Exhaust | .080" | 3/8" | 9.650" | 7961-8 |

HI-TECH™ PUSHRODS *continued*

COMPONENTS PUSHRODS

| MAKE | DESCRIPTION | WALL THICKNESS | DIAMETER | LENGTH | PART # |
|---|---|----------------|------------------|------------------|----------------------------|
| Big Block Chevrolet | Standard Length Big Block Tall Deck, Set (8) #7951 Intake & (8) #7961 Exhaust | .080" | 3/8" | 8.680" 9.650" | 7964-16 |
| | + .100" Long Big Block Tall Deck Intake | .080" | 3/8" | 8.780" | 7968-8 |
| | + .100" Long Big Block Tall Deck Exhaust | .080" | 3/8" | 9.750" | 7978-8 |
| | + .100" Long Big Block Tall Deck, Set (8) #7968 Intake & (8) #7978 Exhaust | .080" | 3/8" | 8.780" 9.750" | 7942-16 |
| | Standard Length Big Block Intake | .125" | 7/16" | 8.275" | 7911-8 |
| | Standard Length Big Block Exhaust | .125" | 7/16" | 9.250" | 7988-8 |
| | Standard Length Big Block, Set (8) #7911 Intake & (8) #7988 Exhaust | .125" | 7/16" | 8.275" 9.250" | 7962-16 |
| | Standard Length Big Block Tall Deck Intake | .125" | 7/16" | 8.675" | 7943-8 |
| | Standard Length Big Block Tall Deck Exhaust | .125" | 7/16" | 9.650" | 7953-8 |
| Standard Length Big Block Tall Deck, Set (8) #7943 Intake & (8) #7953 Exhaust | .125" | 7/16" | 8.675" 9.650" | 7952-16 | |
| Small Block Chrysler (Non-Adjustable Rockers) | -.050" Short Chrysler "A" 273-360 | .080" | 5/16" | 7.450" | 7956-16 |
| | Standard Length Chrysler "A" 273-360 | .080" | 5/16" | 7.500" | 7957-16 |
| | +.050" Long Chrysler "A" 273-360 | .080" | 5/16" | 7.550" | 7958-16 |
| Big Block Chrysler (Non-Adjustable Rockers) | Standard Length Chrysler "B" 383-400 | .080" | 3/8" | 8.550" | 7934-16 |
| | +.050" Long Chrysler "B" 383-400 | .080" | 5/16" | 8.600" | 7977-16 |
| | Standard Length Chrysler "RB" 413-440 | .080" | 3/8" | 9.300" | 7923-16 |
| | +.050" Long Chrysler "RB" 413-440 | .080" | 3/8" | 9.350" | 7979-16 |
| Big Block Chrysler (Adjustable Rockers) | Standard Length Chrysler "B" 383-400 w/ Adjustable Rocker Arms | .080" | 3/8" | 8.710" | 7924-16¹ |
| Chrysler 5.7L/6.1L Hemi | Standard Length 5.7L Hemi Intake | .080" | 5/16" | 7.850" | 7974-8 |
| | Standard Length 5.7L Hemi Exhaust | .080" | 5/16" | 6.600" | 7769-8 |
| | Standard Length 5.7L Hemi, Set (8) #7974-8 Intake & (8) #7769-8 Exhaust | .080" | 5/16" | 6.600" 7.850" | 7914-16 |
| Ford 6 Cylinder | -.050" Short Ford 6 Cyl., 1965-83 120-200 | .080" | 5/16" | 8.300" | 7971-12 |
| | Standard Length Ford 6 Cyl., 1965-83 120-200 | .080" | 5/16" | 8.350" | 7973-12 |
| | +.050" Long Ford 6 Cyl., 1965-83 120-200 | .080" | 5/16" | 8.400" | 7945-12 |
| Small Block Ford | Standard Length Ford 1962-69 221-302 | .080" | 5/16" | 6.800" | 7929-16 |
| | +.050" Long Ford 1962-69 221-302 | .080" | 5/16" | 6.850" | 7930-16 |
| | +.100" Long Ford 1962-69 221-302 | .080" | 5/16" | 6.900" | 7933-16 |
| | Standard Length Ford 1968-85 255 & 302 | .080" | 5/16" | 6.850" | 7930-16 |
| | +.100" Long Ford 1968-85 255 & 302 | .080" | 5/16" | 6.950" | 7935-16 |
| | -.050" Short Ford 1969-78 351W | .080" | 5/16" | 8.100" | 7997-16 |
| | Standard Length Ford 1969-78 351W | .080" | 5/16" | 8.150" | 7965-16 |
| | +.050" Long Ford 1969-78 351W | .080" | 5/16" | 8.200" | 7966-16 |
| | Standard Length Ford 1970-74 351C & Cobra Jet | .080" | 5/16" | 8.400" | 7945-16 |
| | +.050" Long Ford 1970-74 351C & Cobra Jet | .080" | 5/16" | 8.450" | 7975-16 |
| | +.100" Long Ford 1970-74 351C & Cobra Jet | .080" | 5/16" | 8.500" | 7976-16 |
| | Standard Length Ford 1971 and 1972 Boss 351 | .080" | 5/16" | 8.500" | 7976-16 |
| | Standard Length Ford 1971 and 1972 Boss 351 | .080" | 3/8" | 8.500" | 7932-16 |
| FE Ford | Standard Length Ford 1965-76 352-428 w/ Adjustable Rockers | .120" | 11/32" | 9.157" | 7999-16² |
| Big Block Ford | -.050" Short Ford 1972-78 429-460 | .080" | 5/16" | 8.500" | 7976-16 |
| | Standard Length Ford 1972-78 429-460 | .080" | 5/16" | 8.550" | 7948-16 |
| | +.050" Long Ford 1972-78 429-460 | .080" | 5/16" | 8.600" | 7977-16 |
| | -.100" Short Ford 1972-78 429-460 | .080" | 3/8" | 8.450" | 7992-16 |
| | Standard Length Ford 1972-78 429-460 | .080" | 3/8" | 8.550" | 7934-16 |
| | Standard Length Ford 1969-71 429-460 | .080" | 3/8" | 8.680" | 7951-16 |
| | +.100" Long Ford 1969-71 429-460 | .080" | 3/8" | 8.780" | 7968-16 |

¹ 5/16" Non-oiling cup and 3/8" non-oiling formed tip

² 3/8" Non-oiling cup and 3/8" non-oiling formed tip

HI-TECH™ PUSHRODS *By Length*

| 5/16" DIAMETER | |
|----------------|---------|
| LENGTH | PART # |
| 6.200" | 7751-16 |
| 6.250" | 7917-16 |
| 6.300" | 7752-16 |
| 6.350" | 7753-16 |
| 6.400" | 7754-16 |
| 6.450" | 7766-16 |
| 6.500" | 7767-16 |
| 6.550" | 7768-16 |
| 6.600" | 7769-16 |
| 6.650" | 7770-16 |
| 6.700" | 7771-16 |
| 6.750" | 7772-16 |
| 6.800" | 7929-16 |
| 6.850" | 7930-16 |
| 6.900" | 7933-16 |
| 6.950" | 7935-16 |
| 7.000" | 7936-16 |
| 7.050" | 7937-16 |
| 7.100" | 7938-16 |
| 7.150" | 7939-16 |
| 7.200" | 7940-16 |
| 7.250" | 7944-16 |
| 7.300" | 7949-16 |
| 7.325" | 7794-16 |
| 7.350" | 7950-16 |
| 7.375" | 7795-16 |
| 7.400" | 7955-16 |

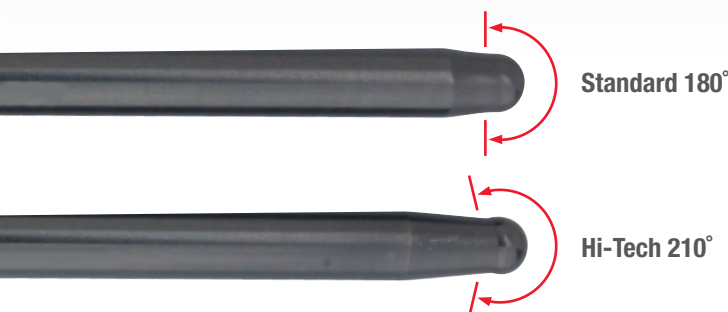
| LENGTH | PART # |
|--------|---------|
| 7.425" | 7796-16 |
| 7.450" | 7956-16 |
| 7.475" | 7797-16 |
| 7.500" | 7957-16 |
| 7.550" | 7958-16 |
| 7.600" | 7959-16 |
| 7.650" | 7960-16 |
| 7.700" | 7963-16 |
| 7.750" | 7970-16 |
| 7.800" | 7972-16 |
| 7.850" | 7974-16 |
| 7.900" | 7993-16 |
| 7.950" | 7994-16 |
| 8.000" | 7995-16 |
| 8.025" | 7746-16 |
| 8.050" | 7996-16 |
| 8.075" | 7747-16 |
| 8.100" | 7997-16 |
| 8.125" | 7748-16 |
| 8.150" | 7965-16 |
| 8.175" | 7749-16 |
| 8.200" | 7966-16 |
| 8.225" | 7750-16 |
| 8.250" | 7967-16 |
| 8.275" | 7773-16 |
| 8.300" | 7971-16 |
| 8.325" | 7774-16 |

| LENGTH | PART # |
|--------|---------|
| 8.350" | 7973-16 |
| 8.375" | 7730-16 |
| 8.400" | 7945-16 |
| 8.425" | 7731-16 |
| 8.450" | 7975-16 |
| 8.500" | 7976-16 |
| 8.550" | 7948-16 |
| 8.600" | 7977-16 |
| 8.650" | 7775-16 |
| 8.700" | 7776-16 |
| 8.750" | 7778-16 |
| 8.800" | 7779-16 |
| 8.850" | 7780-16 |
| 8.900" | 7781-16 |
| 8.950" | 7782-16 |
| 9.000" | 7783-16 |
| 9.050" | 7784-16 |
| 9.100" | 7785-16 |
| 9.150" | 7786-16 |
| 9.200" | 7787-16 |
| 9.250" | 7788-16 |
| 9.300" | 7789-16 |
| 9.350" | 7790-16 |
| 9.400" | 7791-16 |
| 9.450" | 7792-16 |
| 9.500" | 7793-16 |

Note: For single piece, use -1 suffix

HI-TECH™ 210° RADIUS PUSHRODS

- Designed for high lift applications where pushrod and seat interference are problems at maximum lift
- Work well with rocker arms that feature cup type adjusters and applications that require more load bearing surface from the pushrod
- Same features as other Hi-Tech™ Pushrods with addition of 210° radius rather than 180° radius
- Custom lengths available by special order



| 5/16" DIAMETER | | | |
|----------------|----------|----------------|---------|
| LENGTH | DIAMETER | WALL THICKNESS | PART # |
| 7.900" | 5/16" | .080" | 7946-16 |
| 7.950" | 5/16" | .080" | 7729-16 |
| 8.000" | 5/16" | .080" | 7761-16 |
| 8.050" | 5/16" | .080" | 7947-16 |
| 8.100" | 5/16" | .080" | 7762-16 |
| 8.500" | 5/16" | .080" | 7763-16 |
| 8.550" | 5/16" | .080" | 7764-16 |
| 8.600" | 5/16" | .080" | 7765-16 |

| 3/8" DIAMETER | | | |
|---------------|----------|----------------|---------|
| LENGTH | DIAMETER | WALL THICKNESS | PART # |
| 7.900" | 3/8" | .080" | 7732-16 |
| 7.950" | 3/8" | .080" | 7733-16 |
| 8.000" | 3/8" | .080" | 7734-16 |
| 8.050" | 3/8" | .080" | 7735-16 |
| 8.100" | 3/8" | .080" | 7736-16 |
| 8.500" | 3/8" | .080" | 7737-16 |
| 8.550" | 3/8" | .080" | 7738-16 |
| 8.600" | 3/8" | .080" | 7739-16 |

HI-TECH™ PUSHRODS *By Length*

| 3/8" DIAMETER | |
|---------------|----------------|
| LENGTH | PART # |
| 7.500" | 8900-16 |
| 7.550" | 8901-16 |
| 7.600" | 8902-16 |
| 7.650" | 8903-16 |
| 7.700" | 8904-16 |
| 7.750" | 8905-16 |
| 7.800" | 7913-16 |
| 7.850" | 7980-16 |
| 7.900" | 7984-16 |
| 7.950" | 7981-16 |
| 8.000" | 7983-16 |
| 8.050" | 7985-16 |
| 8.100" | 7986-16 |
| 8.150" | 7987-16 |
| 8.175" | 7740-16 |
| 8.200" | 7989-16 |
| 8.225" | 7741-16 |
| 8.250" | 7742-16 |
| 8.280" | 7931-16 |
| 8.300" | 7990-16 |
| 8.325" | 8700-16 |
| 8.350" | 7743-16 |
| 8.380" | 7969-16 |
| 8.400" | 7991-16 |
| 8.425" | 7745-16 |
| 8.450" | 7992-16 |
| 8.500" | 7932-16 |

| LENGTH | PART # |
|--------|----------------|
| 8.550" | 7934-16 |
| 8.600" | 7906-16 |
| 8.650" | 7912-16 |
| 8.680" | 7951-16 |
| 8.700" | 7907-16 |
| 8.780" | 7968-16 |
| 8.800" | 7908-16 |
| 8.850" | 7910-16 |
| 8.900" | 7927-16 |
| 8.950" | 7928-16 |
| 9.000" | 7918-16 |
| 9.050" | 7919-16 |
| 9.100" | 7920-16 |
| 9.150" | 7921-16 |
| 9.200" | 7922-16 |
| 9.250" | 7941-16 |
| 9.300" | 7923-16 |
| 9.350" | 7979-16 |
| 9.400" | 7755-16 |
| 9.450" | 7756-16 |
| 9.500" | 7757-16 |
| 9.550" | 7758-16 |
| 9.600" | 7759-16 |
| 9.650" | 7961-16 |
| 9.700" | 7760-16 |
| 9.750" | 7978-16 |
| 9.800" | 8701-16 |

| LENGTH | PART # |
|---------|----------------|
| 9.850" | 8702-16 |
| 9.900" | 8703-16 |
| 9.950" | 8704-16 |
| 10.000" | 8705-16 |
| 10.050" | 8706-16 |
| 10.100" | 8707-16 |
| 10.150" | 8708-16 |
| 10.200" | 8709-16 |
| 10.250" | 8710-16 |
| 10.300" | 8711-16 |
| 10.350" | 8712-16 |
| 10.400" | 8713-16 |
| 10.450" | 8714-16 |
| 10.500" | 8715-16 |
| 10.550" | 8716-16 |
| 10.600" | 8717-16 |
| 10.650" | 8718-16 |
| 10.700" | 8719-16 |
| 10.750" | 8733-16 |
| 10.800" | 8734-16 |
| 10.850" | 8735-16 |
| 10.900" | 8738-16 |
| 10.950" | 8739-16 |
| 11.000" | 8742-16 |
| 11.050" | 8743-16 |
| 11.100" | 8744-16 |

Note: For single piece, use -1 suffix




All parts on these pages are 50-state legal.




COMPONENTS PUSHRODS





STAY CONNECTED

Take your pick – social media, our e-newsletter or one of our forums. You'll have insider information on new products, specials and free giveaways, as well as access to our highly trained technical staff and our ever-expanding library of how-to videos.

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**HI-TECH™ 5/16"
.105" WALL PUSHRODS**

- 17% stiffer than .080" wall pushrods
- Same diameter oil holes as standard wall pushrods to retain full oil flow
- Available in a variety of lengths between 6.250" and 8.200"

| LENGTH | PART # |
|--------|----------------|
| 6.250" | 8400-16 |
| 7.050" | 8401-16 |
| 7.100" | 8402-16 |
| 7.200" | 8403-16 |
| 7.300" | 8404-16 |
| 7.350" | 8405-16 |
| 7.400" | 8406-16 |
| 7.450" | 8407-16 |
| 7.550" | 8408-16 |
| 7.700" | 8409-16 |

| LENGTH | PART # |
|--------|----------------|
| 7.750" | 8410-16 |
| 7.800" | 8411-16 |
| 7.850" | 8412-16 |
| 7.900" | 8413-16 |
| 7.950" | 8414-16 |
| 8.000" | 8415-16 |
| 8.050" | 8416-16 |
| 8.100" | 8417-16 |
| 8.150" | 8418-16 |
| 8.200" | 8419-16 |

Note: Designed for those applications where there is limited area for larger diameter pushrods.



#8411

**HI-TECH™
OIL RESTRICTING 5/16"
ONE-PIECE .080" WALL
PUSHRODS**

COMP Cams® offers Hi-Tech™ Pushrods for four different engine platforms that restrict oil flow. While the standard Hi-Tech™ Pushrods feature .100" oil holes, the oil restricting pushrod openings are half that size at .050". These pushrods are available for Ford 302c.i. Small Block engines as well as Ford 351c.i. Windsor engines, the classic Small Block Chevy engines and GM Gen III engines. For each engine platform, COMP Cams® offers five different pushrod lengths to meet any need. These pushrods maintain the consistent Hi-Tech™ Pushrod features, including one-piece 4130 chromemoly material with a wall thickness of 0.080" and 60 Rockwell hardness. To avoid confusion, each oil restricted pushrod is clearly labeled.

| MAKE | DESCRIPTION | WALL THICKNESS | DIAMETER | LENGTH | PART # |
|------------------------------|---------------------------------------|----------------|----------|--------|----------------|
| Small Block Chevrolet | -.100" Short | .080" | 5/16" | 7.700" | 8300-16 |
| | Standard Length Small Block Chevrolet | .080" | 5/16" | 7.800" | 8301-16 |
| | +.100" Long | .080" | 5/16" | 7.900" | 8302-16 |
| | +.150" Long | .080" | 5/16" | 7.950" | 8303-16 |
| | +.200" Long | .080" | 5/16" | 8.000" | 8304-16 |
| GM Gen III/LS1/LS2/LS6 | -.100" Short | .080" | 5/16" | 7.300" | 8305-16 |
| | -.050" Short | .080" | 5/16" | 7.350" | 8306-16 |
| | Standard Length Gen III/LS1/LS2/LS6 | .080" | 5/16" | 7.400" | 8307-16 |
| | +.050" Long | .080" | 5/16" | 7.450" | 8308-16 |
| | +.100" Long | .080" | 5/16" | 7.500" | 8309-16 |
| Small Block Ford 302 | -.100" Short | .080" | 5/16" | 6.750" | 8310-16 |
| | -.050" Short | .080" | 5/16" | 6.800" | 8311-16 |
| | Standard Length Small Block Ford 302 | .080" | 5/16" | 6.850" | 8312-16 |
| | +.050" Long | .080" | 5/16" | 6.900" | 8313-16 |
| Small Block Ford 351 Windsor | +.100" Long | .080" | 5/16" | 6.950" | 8314-16 |
| | -.100" Short | .080" | 5/16" | 8.050" | 8315-16 |
| | -.050" Short | .080" | 5/16" | 8.100" | 8316-16 |
| | Standard Length Small Block Ford 351W | .080" | 5/16" | 8.150" | 8317-16 |
| | +.050" Long | .080" | 5/16" | 8.200" | 8318-16 |
| | +.100" Long | .080" | 5/16" | 8.250" | 8319-16 |



HI-TECH™ 3/8" ONE-PIECE .135" WALL PUSHRODS

- 37% stiffer than .080" wall pushrods
- 210° Radius creates extra surface area at tip to allow proper seating for certain applications
- Same diameter oil holes as standard wall pushrods to retain full oil flow
- Available in a variety of lengths between 7.700" and 9.750"
- Black satin finish with laser etched part number and length



#8475

COMPONENTS PUSHRODS

| LENGTH | PART # |
|--------|----------------|
| 7.700" | 8479-16 |
| 7.750" | 8459-16 |
| 7.800" | 8460-16 |
| 7.850" | 8476-16 |
| 7.900" | 8473-16 |
| 7.950" | 8474-16 |
| 8.000" | 8475-16 |
| 8.050" | 8477-16 |
| 8.100" | 8478-16 |
| 8.150" | 8480-16 |
| 8.200" | 8481-16 |
| 8.250" | 8551-16 |
| 8.280" | 8461-16 |
| 8.300" | 8482-16 |
| 8.350" | 8483-16 |
| 8.380" | 8462-16 |
| 8.400" | 8484-16 |

| LENGTH | PART # |
|--------|----------------|
| 8.450" | 8485-16 |
| 8.500" | 8463-16 |
| 8.550" | 8464-16 |
| 8.600" | 8465-16 |
| 8.650" | 8486-16 |
| 8.680" | 8466-16 |
| 8.700" | 8467-16 |
| 8.750" | 8487-16 |
| 8.780" | 8468-16 |
| 8.800" | 8488-16 |
| 8.850" | 8489-16 |
| 8.900" | 8490-16 |
| 8.950" | 8491-16 |
| 9.000" | 8492-16 |
| 9.050" | 8493-16 |
| 9.100" | 8494-16 |
| 9.150" | 8495-16 |

| LENGTH | PART # |
|-------------------------|----------------|
| 9.200" | 8547-16 |
| 9.250" | 8469-16 |
| 9.300" | 8548-16 |
| 9.350" | 8470-16 |
| 9.400" | 8549-16 |
| 9.450" | 8550-16 |
| 9.500" | 8543-16 |
| 9.550" | 8544-16 |
| 9.600" | 8545-16 |
| 9.650" | 8471-16 |
| 9.700" | 8546-16 |
| 9.750" | 8472-16 |
| (8) 8.280" & (8) 9.250" | 8496-16 |
| (8) 8.380" & (8) 9.350" | 8497-16 |
| (8) 8.680" & (8) 9.650" | 8498-16 |
| (8) 8.780" & (8) 9.750" | 8499-16 |

Note: Designed for those applications where there is limited area for larger diameter pushrods.



#896807

XD-A™ ADJUSTABLE PUSHRODS (Patent Pending)

- Top section slides 2" inside a wider bottom section with shims captured in-between to allow adjustability
- Proven to 9,000+ RPM drop-in fitment in GM LS engines
- Can be adjusted over a range of .172" in .004" increments with shims, sold in sets of 16 by thickness
- 90% Increase in bending stiffness when compared to standard 5/16" .105" wall pushrods
- Enhanced valve train stability and excellent dynamics with light-weight rocker arm systems

| PUSHRODS ¹ | | | | | |
|-----------------------|-------------------|------------------|------------------|--------------------|-------------------------|
| DESCRIPTION | ADJUSTABLE LENGTH | LIFTER SIDE DIA. | ROCKER SIDE DIA. | PUSHROD SET PART # | PUSHROD/SHIM KIT PART # |
| GM LS | 7.320" - 7.552" | 3/8" | 5/16" | 896805-16 | 896805-KIT |
| | 7.530" - 7.762" | 3/8" | 5/16" | 896806-16 | 896806-KIT |
| | 7.740" - 7.972" | 3/8" | 5/16" | 896807-16 | 896807-KIT |
| | 7.950" - 8.182" | 3/8" | 5/16" | 896808-16 | 896808-KIT |
| | 8.160" - 8.392" | 3/8" | 5/16" | 896809-16 | 896809-KIT |

¹ Can be run with guide plates in older stud-mounted applications

| SHIMS | | |
|--|-----------|-----------------|
| DESCRIPTION | THICKNESS | SHIM KIT PART # |
| GM LS | .60" | 4124-060-16 |
| | .64" | 4124-064-16 |
| | .68" | 4124-068-16 |
| | .72" | 4124-072-16 |
| | .76" | 4124-076-16 |
| | .80" | 4124-080-16 |
| | .84" | 4124-084-16 |
| | .88" | 4124-088-16 |
| | .92" | 4124-092-16 |
| | .96" | 4124-096-16 |
| | .100" | 4124-100-16 |
| | .104" | 4124-104-16 |
| | .108" | 4124-108-16 |
| | .112" | 4124-112-16 |
| | .116" | 4124-116-16 |
| XD-A™ Adjustable Pushrod Shim Set - 240 Pieces | All | 896801 |

DUAL TAPER 7/16", .165" WALL PUSHRODS

Dual Taper 7/16", .165" Wall Pushrods from COMP Cams® are designed with the middle of the pushrod being larger in diameter than the two ends. The extra clearance at the top and the bottom offers the benefits of a large, 7/16" pushrod combined with clearance of a 3/8" option for a higher-flowing intake port. The pushrods are also tapered to clear the top of most offset roller lifters. Both 5/16" ball ends have a 210° radius to provide additional clearance to the rocker arm adjuster at peak lift. The thicker .165" wall is stiffer and stronger than previous .125" wall offerings, thereby providing more accurate valve motion and durability. The pushrods are made in the U.S.A. from one-piece, heat-treated 4130 chromemoly steel tubing, which makes them stronger than most pushrods on the market today.



Dual Taper

STRAIGHT 7/16", .165" WALL PUSHRODS

COMP Cams® Straight 7/16", .165" Wall Pushrods incorporate technology that was originally developed for NASCAR and NHRA race engines. Pushrods in many of these applications experience impact loads of up to 7500 lbs., meaning the incorrect one can cause catastrophic failure. The additional stiffness and higher natural frequency of a 7/16" diameter pushrod is a significant advantage in any application that has ample intake port and lifter clearance. The main bodies of these pushrods feature a straight 7/16" O.D. that tapers down to a 210° radius, 5/16" ball end. The radii on each end provide additional clearance for the rocker adjuster at high lift and allow the pushrods to be installed either "up" or "down." The pushrods have a consistent .165" wall thickness, even in the tapered ends, which is thicker, stiffer and stronger than common .080" or .125" wall designs. These pushrods are made in the USA from heat-treated, one-piece chromemoly tubing, which is much stronger than typical 1000 series steels and will better handle extreme valve train setups.



Straight

| LENGTH | DUAL TAPER ¹ | STRAIGHT |
|--------|-------------------------|----------|
| 7.400" | 8271-16 | 8600-16 |
| 7.450" | 8273-16 | 8601-16 |
| 7.500" | 8275-16 | 8602-16 |
| 7.550" | 8279-16 | 8603-16 |
| 7.600" | 8280-16 | 8604-16 |
| 7.650" | 8283-16 | 8605-16 |
| 7.700" | 8270-16 | 8606-16 |
| 7.750" | 8272-16 | 8607-16 |
| 7.800" | 8292-16 | 8608-16 |
| 7.850" | 8293-16 | 8609-16 |
| 7.900" | 8274-16 | 8610-16 |
| 7.950" | 8276-16 | 8611-16 |
| 7.975" | 8277-16 | - |
| 8.000" | 8278-16 | 8612-16 |
| 8.050" | 8659-16 | 8613-16 |
| 8.100" | 8660-16 | 8614-16 |
| 8.150" | 8661-16 | 8615-16 |
| 8.200" | 8284-16 | 8616-16 |
| 8.225" | 8281-16 | - |

| LENGTH | DUAL TAPER ¹ | STRAIGHT |
|--------|-------------------------|----------|
| 8.250" | 8662-16 | 8617-16 |
| 8.300" | 8663-16 | 8618-16 |
| 8.350" | 8664-16 | 8619-16 |
| 8.400" | 8665-16 | 8620-16 |
| 8.450" | 8666-16 | 8621-16 |
| 8.500" | 8667-16 | 8622-16 |
| 8.550" | 8668-16 | 8623-16 |
| 8.600" | 8669-16 | 8624-16 |
| 8.650" | 8670-16 | 8625-16 |
| 8.700" | 8671-16 | 8626-16 |
| 8.750" | 8672-16 | 8627-16 |
| 8.800" | 8673-16 | 8628-16 |
| 8.850" | 8674-16 | 8629-16 |
| 8.900" | 8675-16 | 8630-16 |
| 8.950" | 8676-16 | 8631-16 |
| 9.000" | 8677-16 | 8632-16 |
| 9.050" | 8678-16 | 8633-16 |
| 9.100" | 8679-16 | 8634-16 |
| 9.150" | 8680-16 | 8635-16 |

| LENGTH | DUAL TAPER ¹ | STRAIGHT |
|---------|-------------------------|----------|
| 9.200" | 8681-16 | 8636-16 |
| 9.250" | 8682-16 | 8637-16 |
| 9.300" | 8683-16 | 8638-16 |
| 9.350" | 8684-16 | 8639-16 |
| 9.400" | 8685-16 | 8641-16 |
| 9.450" | 8686-16 | 8642-16 |
| 9.500" | 8687-16 | 8643-16 |
| 9.550" | 8688-16 | 8644-16 |
| 9.600" | 8689-16 | 8645-16 |
| 9.650" | 8690-16 | 8646-16 |
| 9.700" | 8691-16 | 8647-16 |
| 9.750" | 8692-16 | 8648-16 |
| 9.800" | 8693-16 | 8649-16 |
| 9.850" | 8694-16 | 8650-16 |
| 9.900" | 8695-16 | 8651-16 |
| 9.950" | 8696-16 | 8652-16 |
| 10.000" | 8697-16 | 8653-16 |

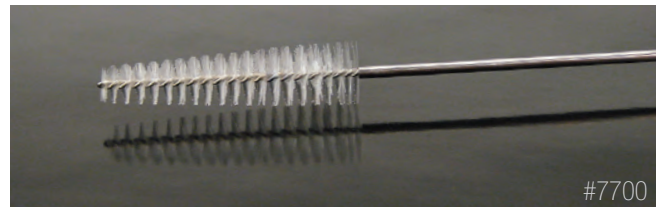
Note: For single piece use -1 suffix
¹Will not work with guide plates

TECH TIP COMP Cams® pushrods are identifiable by the part number and length laser-etched on the pushrod itself. Insist on the best and accept no imitations.

PUSHROD CLEANING BRUSH

There is a simple solution for thoroughly cleaning the internal oil passages of oiling pushrods. The COMP Cams® Pushrod Cleaning Brush is specifically designed with nylon bristles and a durable steel shaft to handle the task and built to withstand repeated use.

| DESCRIPTION | PART # |
|-------------------------------------|-------------|
| Pushrod Cleaning Brush - 12" Length | 7700 |



PUSHROD CUTTING BITS

These cutters are made specifically to cut pushrods and will cut up to 200 pieces. When the cut is finished, it leaves a .002" to .003" press fit between the pushrod and tip. Cutters may be ordered as needed.

Desired cutting speed is 200 RPM or less.

| DESCRIPTION | PILOT | BORE | PART # |
|------------------------------|-------|-------|---------------|
| 5/16" Pushrod Cutter | .157" | .169" | KD516 |
| 3/8" Pushrod Cutter | .213" | .222" | KD38 |
| 7/16" Pushrod Cutter | .184" | .284" | KD716 |
| 7/16" Tapered Pushrod Cutter | .184" | .222" | KD716T |



PUSHROD ASSEMBLY TOOL

This simple tool makes assembling kits so easy that anyone can do it. After cutting your pushrod to the correct length, use this assembly tool to press the tip into place. This eliminates the risk of splitting or bending the pushrod. The tool comes with two ends for cup or ball tips.

| DESCRIPTION | PART # |
|-----------------------|-------------|
| Pushrod Assembly Tool | 4913 |

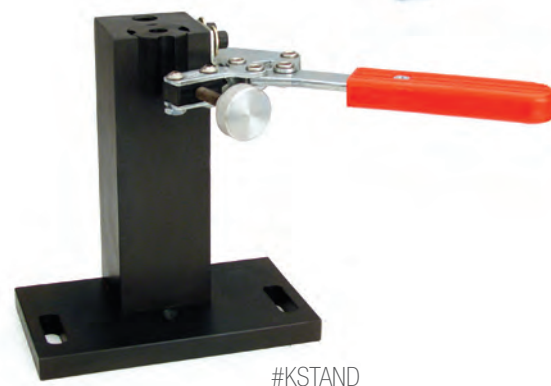


PUSHROD HOLDER (STABILIZER)

This tool is used to safely hold the pushrod while cutting to the desired length. The holder may be placed in a drill press for more secure and accurate cuts and also stabilizes the pushrod to control flex while cutting. The holder has a revolver that will accept 5/16", 3/8" and 7/16" pushrods. It also has a threaded hole located on top of the tool that can be used as a stop for quick, same-length cuts.

Desired cutting speed is 200 RPM or less.

| DESCRIPTION | PART # |
|-----------------------------|---------------|
| Pushrod Holder (Stabilizer) | KSTAND |

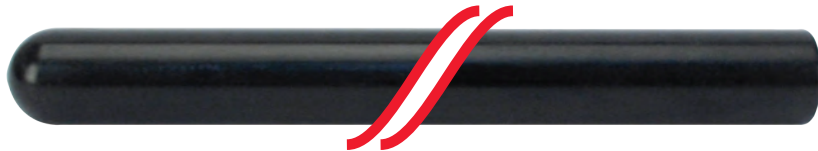


SEMI-FINISHED PUSHRODS

If you don't see the exact pushrod you need in our part number listings, check out these semi-finished pushrods for the correct length and end type you need.

You will order semi-finished pushrods in two separate pieces – 1) tubes and 2) ends.

1) Tubes



2) Ends



HOW TO ORDER SEMI-FINISHED PUSHRODS:

First, select the proper pushrod diameter.

Next, find the appropriate part # for your correct tube length and add "-16" to end of part number. This will be a quantity of 16 pushrod tubes. Select the appropriate end from the diagrams shown for the particular pushrod tube you ordered and add "-16" to part number. This will be a quantity of 16 ends. **With semi-finished pushrods, you MUST HAVE the proper pushrod cutter, which can be found on page 267 of this master catalog.**

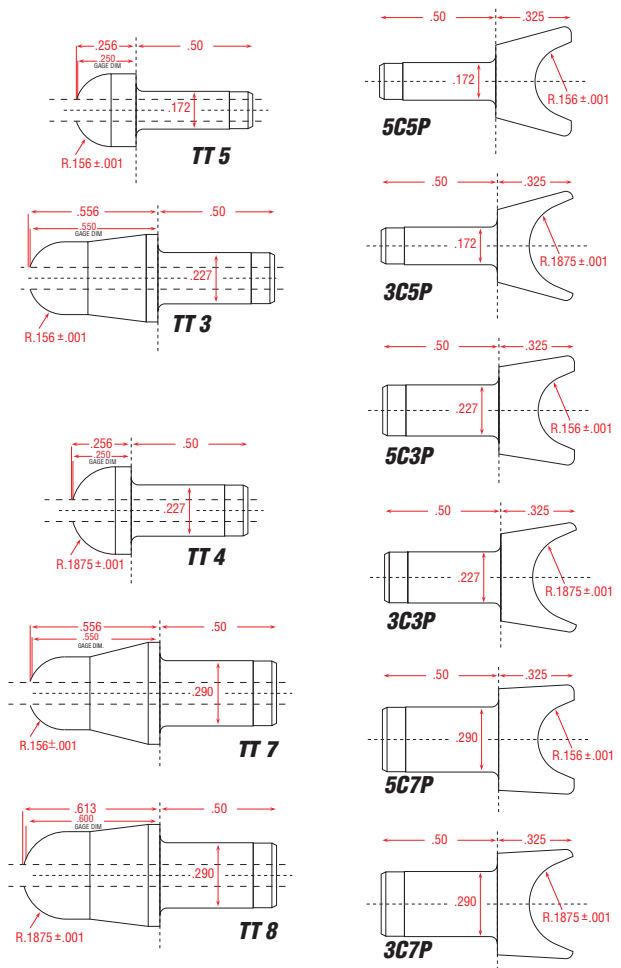
Example: To order a 5/16" diameter pushrod that is 5.000" long with a 3/8" cup end, you would order the following part numbers:

K6805-16 (Pushrod Tubes) 3C5P-16 (Pushrod Ends) KD516 (Cutter)

END TYPES

| END TYPE | PART # |
|---|--------------------|
| 5/16" | |
| 5/16" Ball for 5/16" Shaft | TT5 |
| 5/16" Ball w/ 210° Radius for 5/16" Shaft | TT5CL |
| 5/16" Cup for 5/16" Shaft | 5C5P |
| 3/8" Cup for 5/16" Shaft | 3C5P |
| 3/8" | |
| 5/16" Ball for 3/8" Shaft | TT3 |
| 5/16" Ball w/ 210° Radius for 3/8" Shaft | TT3CL |
| 3/8" Ball for 3/8" Shaft | TT4 |
| 5/16" Cup for 3/8" Shaft | 5C3P |
| 3/8" Cup for 3/8" Shaft | 3C3P |
| 7/16" | |
| 5/16" Ball for 7/16" Shaft | TT7 |
| 5/16" Ball w/ 210° Radius for 7/16" Shaft | TT7CL |
| 3/8" Ball for 7/16" Shaft | TT8 |
| 5/16" Cup for 7/16" Shaft | 5C7P |
| 3/8" Cup for 7/16" Shaft | 3C7P |
| 7/16" DUAL TAPER | |
| 5/16" Ball for 3/8" Shaft | TT3 ¹ |
| 5/16" Ball w/ 210° Radius for 3/8" Shaft | TT3CL ¹ |
| 3/8" Ball for 3/8" Shaft | TT4 ¹ |
| 5/16" Cup for 3/8" Shaft | 5C3P ¹ |
| 3/8" Cup for 3/8" Shaft | 3C3P ¹ |

¹ Must use Part #KD716T for all 7/16" Dual Taper Pushrod ends



SEMI-FINISHED PUSHROD TUBES

| TUBE LENGTH | DIAMETER | WALL TYPE | WALL THICKNESS | BALL END DIAMETER | PART # |
|-------------------------|----------|---------------------|----------------|-------------------|------------------|
| 5/16" | | | | | |
| 5.000" - 6.000" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | K6805 |
| 6.000" - 7.000" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | K7805 |
| 6.500" - 7.500" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | K75805 |
| 7.000" - 8.000" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | K8805 |
| 8.000" - 9.000" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | K9805 |
| 9.000" - 10.000" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | KK10805 |
| 10.000" - 11.000" | 5/16" | Hardened-Straight | .080" | 5/16" Ball End | KK11805 |
| 3/8" | | | | | |
| 6.000" - 7.000" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | K7803 |
| 6.000" - 7.000" | 3/8" | Hardened-Straight | .080" | 3/8" Ball End | K78033 |
| 7.000" - 8.000" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | K8803 |
| 7.000" - 8.000" | 3/8" | Hardened-Straight | .080" | 3/8" Ball End | K88033 |
| 8.000" - 9.000" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | K9803 |
| 8.000" - 9.000" | 3/8" | Hardened-Straight | .080" | 3/8" Ball End | K98033 |
| 8.750" - 9.750" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | K975803 |
| 9.000" - 10.000" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | KK10803 |
| 9.000" - 10.000" | 3/8" | Hardened-Straight | .080" | 3/8" Ball End | KK108033 |
| 10.000" - 11.000" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | KK11803 |
| 10.000" - 11.000" | 3/8" | Hardened-Straight | .080" | 3/8" Ball End | KK118033 |
| 11.000" - 12.000" | 3/8" | Hardened-Straight | .080" | 5/16" Ball End | KK12803 |
| 11.000" - 12.000" | 3/8" | Hardened-Straight | .080" | 3/8" Ball End | KK128033 |
| 7/16" | | | | | |
| 6.000" - 7.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | K7127 |
| 6.000" - 7.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | K71273 |
| 7.000" - 8.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | K8127 |
| 7.000" - 8.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | K81273 |
| 8.000" - 9.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | K9127 |
| 8.000" - 9.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | K91273 |
| 9.000" - 10.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | KK10127 |
| 9.000" - 10.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | KK101273 |
| 10.000" - 11.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | KK11127 |
| 10.000" - 11.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | KK111273 |
| 11.000" - 12.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | KK12127 |
| 11.000" - 12.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | KK121273 |
| 12.000" - 13.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | KK13127 |
| 12.000" - 13.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | KK131273 |
| 13.000" - 14.000" | 7/16" | Hardened-Straight | .125" | 5/16" Ball End | KK14127 |
| 13.000" - 14.000" | 7/16" | Hardened-Straight | .125" | 3/8" Ball End | KK141273 |
| 7/16" DUAL TAPER | | | | | |
| 6.000" - 7.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | K7127T |
| 6.000" - 7.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | K71273T |
| 7.000" - 8.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | K8127T |
| 7.000" - 8.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | K81273T |
| 8.000" - 9.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | K9127T |
| 8.000" - 9.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | K91273T |
| 9.000" - 10.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | KK10127T |
| 9.000" - 10.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | KK101273T |
| 10.000" - 11.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | KK11127T |
| 10.000" - 11.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | KK111273T |
| 11.000" - 12.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | KK12127T |
| 11.000" - 12.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | KK121273T |
| 12.000" - 13.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | KK13127T |
| 12.000" - 13.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | KK131273T |
| 13.000" - 14.000" | 7/16" | Hardened-Dual Taper | .125" | 5/16" Ball End | KK14127T |
| 13.000" - 14.000" | 7/16" | Hardened-Dual Taper | .125" | 3/8" Ball End | KK141273T |



THE IMPORTANCE OF THE ROCKER ARM

One of the most important components in your engine is the rocker arm. It is also one of the most vulnerable. As the turning point of the valve train, the rocker arm is basically a sophisticated lever that redirects the upward tappet and pushrod movement and then multiplies it by the rocker ratio to downward movement at the valve. This is a highly critical process. Due to stresses and vibrations, which are more prevalent during high speed operation, rocker arms undergo what is known as deflection. Severe rocker arm deflection causes inefficient engine performance, and often results in metal fatigue leading to increased wear and friction in the valve train and eventually engine failure.

THERE ARE THREE BASIC WAYS TO INCREASE POWER THROUGH A ROCKER ARM CHANGE.

- 1. LIFT THE VALVE MORE.** By increasing the rocker arm ratio, it's possible to increase valve lift without ever touching the camshaft. Valve lift can typically be increased as much as 10% by increasing rocker ratio.
- 2. MAKE THE ROCKER ARM STIFFER.** To increase stiffness, look at three characteristics: material, geometry and the rocker's holding fixture. The easiest way to increase stiffness is to switch to chromemoly steel. Although heavier than some other materials, it can offer some design advantages and have much thinner sections than aluminum due to its superior strength density. Stiffness of the mounting is just as important as the stiffness of the rocker body. For the ultimate in high performance, shaft mounted rockers may be the way to go.
- 3. DECREASE THE MOMENT OF INERTIA.** The moment of inertia is the rocker's resistance to rotation. The higher this measurement, the more valve spring pressure it takes to control the rocker arm instead of the valves – losing RPM and horsepower. The moment of inertia is lowered by lightening the rocker arm's weight, particularly at areas that are farther from the trunnion. Two ways you can do this are by switching to a lighter weight material or by removing mass from the rocker body design.

HAVE QUESTIONS?
WE CAN HELP YOU

Just Call Our
Toll Free Tech Line

CAMHELP[®]
800.999.0853

ALUMINUM ROCKERS

Until recently, aluminum rocker arms have been considered a more affordable but less durable option to steel rockers. This is because when directly compared to steel, aluminum requires more material to handle the stress of a given force. Since more material is required and there is a limited amount of space available in the trunnion, the bearing and axle are typically smaller in an aluminum rocker arm. Previous designs weren't able to be used in extreme applications and featured decreased stiffness and increased deflection. But COMP Cams[®] has developed aluminum rockers that use precision-sorted needle bearing trunnions to withstand both aggressive spring pressures and valve lift. The COMP[®] Ultra-Gold™ ARC Aluminum Roller Rockers actually have the highest rocker-to-valve spring clearance of any aluminum rocker – up to 1.625" valve spring O.D. And while these aluminum rockers are lightweight, they are still incredibly strong and feature a lifetime warranty.

STEEL ROCKERS

COMP Cams[®] steel rocker arms are all constructed from 8620 or 8650 chromemoly steel, which is a higher grade material that makes them extremely durable and tough. The material keeps them from flexing, and they have large trunnions and more needle bearings, which allow the load to be more evenly spread and the rocker to last longer. Steel can thus be run in harsh environments without fatigue issues. And some COMP[®] steel rockers are even lighter than most aluminum because COMP[®] has reduced mass in low stress areas.

STUD- AND SHAFT-MOUNTED ROCKERS

Rocker design continues to evolve as more aggressive cam profiles and cylinder heads are developed. Stud-mounted rockers have evolved over the years. Starting as a simple ball-and-socket mounted stamped steel piece, the first modification was to change the mount to a roller bearing and a transverse mounting axle. Next, larger screw-in studs were added. Soon, geometric designs had to change and stiffer material was required, giving way to the innovative arched web design as seen in today's Ultra Pro Magnum™ and Ultra Pro Magnum™ XD Rockers from COMP Cams[®].

The next step in rocker arm technology is the shaft mounted rocker. Rather than being mounted on a stud, a horizontal shaft works as the fulcrum. This significantly increases the mounting stiffness and valve train stability. Shaft-mounted systems are designed for high-end performance applications. A cost-effective alternative is to use a stud girdle to reduce deflection with stud mounted rockers.

MAGNUM ROLLER ROCKER ARMS

COMP Cams® Magnum Roller Rockers are the ultimate street rocker because they were designed with the serious performance enthusiast in mind. They will help your engine make more power and last longer.

- Ultimate street roller rocker arm designed for serious performance enthusiasts
- Constructed from 8620 chromemoly steel, a superior material that will not flex and ensures maximum lift
- Roller tip reduces friction while stiff design and superior ratio accuracy yield more effective valve lift
- For applications with less than 350 lbs. of open spring pressure



#1412

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|-----------------|--|-----------|-------|--------------------------|
| AMC | V8 290-401 | 3/8" | 1.6 | 1442-16 ¹ |
| Chevrolet | V6 60° 173 | 10mm | 1.52 | 1413-12 |
| | V6 60° 173 | 10mm | 1.6 | 1414-12 |
| | V6 200-262 | 3/8" | 1.52 | *1412-12 |
| | V6 200-262 | 3/8" | 1.6 | *1416-12 ² |
| | V8 265-400 | 3/8" | 1.52 | *1412-16 |
| | V8 265-400 | 3/8" | 1.6 | *1416-16 ² |
| | V8 396-454 | 7/16" | 1.72 | *1411-16 ³ |
| | V6 1988 & Later w/ Self-Aligning Rockers | 3/8" | 1.52 | 1417-12 |
| | V6 1988 & Later w/ Self-Aligning Rockers | 3/8" | 1.6 | 1418-12 |
| | V8 1988 & Later w/ Self-Aligning Rockers | 3/8" | 1.52 | 1417-16 |
| | V8 1988 & Later w/ Self-Aligning Rockers | 3/8" | 1.6 | 1418-16 |
| Ford | V8 289-351W (Rail Type) 1968-89 | 3/8" | 1.6 | 1431-16 ⁴ |
| | V8 289-351W (Rail Type) 1968-89 | 3/8" | 1.7 | 1450-16 ⁴ |
| | V8 289-351W (Non Rail) 1961-67 | 3/8" | 1.6 | 1442-16 ⁵ |
| | Boss 302, 351C-400M | 7/16" | 1.72 | 1411-16 ¹ |
| | V8 429-460 | 7/16" | 1.72 | 1411-16 ¹ |
| Oldsmobile | V8 260-455 | 3/8" | 1.6 | 1442-16 ⁶ |
| Pontiac | V8 265-455 | 7/16" | 1.52 | 1451-16 ⁷ |
| | V8 265-455 | 7/16" | 1.65 | 1452-16 ⁷ |
| NITRIDED | | | | |
| Chevrolet | V8 265-400 | 3/8" | 1.52 | *1412NIT-16 |
| | V8 265-400 | 3/8" | 1.6 | *1416NIT-16 ² |

Note: Rockers available as singles, half sets and full sets.

¹ Must have screw-in studs and guide plates

² May require machine work to the cylinder head

³ Use stud #4514-16 to replace late model pedestal

⁴ For 1978-present with Part #4504-16 studs, not for use with guide plates

⁵ Also can be used on heads with guide plates

⁶ See p.282 for the kit of necessary components that go with this part

⁷ Includes 7/16" balls, 3/8" and 7/16" nuts

*50-State legal for 1993 and older GM vehicles equipped with 200 c.i.d. (4.2L) to 454 c.i.d. (7.4L) gasoline engines. C.A.R.B. E.O. #D-279-4.

TECH TIP

Never install rockers dry. They must be lubricated during initial start-up with the proper lubricant to avoid permanent damage. A generous amount of COMP Cams® Valve Train Assembly Spray (Part #106) on each rocker arm, pivot ball, bushing pushrod tip and valve tip can prevent damage to new parts. The COMP Cams® special Valve Train Assembly Spray is the protection you need against premature wear.

**ULTRA PRO MAGNUM™
 ROLLER ROCKER ARMS**

The Ultra Pro Magnum™ Roller Rocker Arms not only live up to the lofty standards of the original Pro Magnum™ Rockers, but they also take stud mount rocker performance, stability and value to a whole new level. The modern arched, web-like design delivers increased strength and rigidity while reducing the moment of inertia and optimizing the dynamic balance.

- Investment cast 8650 chromemoly body and arched, web-like design deliver increased strength and rigidity while reducing moment of inertia
- Withstand valve spring pressures up to 850 lbs.
- Unique black oxide exterior finish helps prevent corrosion, thus increasing durability
- Increased retainer and valve spring clearances allow use of large diameter springs, retainers and +.050" locks without clearance or fitment issues
- Feature oversized trunnions, precision-sorted needle bearings and hardened roller tips


LIMITED LIFETIME WARRANTY:

Ultra Pro Magnum™ Rocker Arms are so strong that we warranty the rocker bodies against breakage for life.

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|--------------------------------------|---|----------------|----------------|----------------------------|
| Chevrolet | V6 200-262 | 3/8" | 1.52 | 1601-12 |
| | V6 200-262 | 3/8" | 1.6 | 1602-12 |
| | V6 200-262 | 7/16" | 1.52 | 1604-12 |
| | V6 200-262 | 7/16" | 1.6 | 1605-12 |
| | V8 265-400 | 3/8" | 1.52 | 1601-16 |
| | V8 265-400 | 3/8" | 1.6 | 1602-16 |
| | V8 265-400 | 7/16" | 1.52 | 1604-16 |
| | V8 265-400 | 7/16" | 1.6 | 1605-16 |
| | V8 265-400 Twisted Wedge Head, Intake Valve | 3/8" | 1.52 | 1607-8 |
| | V8 265-400 Twisted Wedge Head, Intake Valve | 3/8" | 1.6 | 1609-8 |
| | V8 265-400 Twisted Wedge Head, Intake Valve | 7/16" | 1.52 | 1608-8 |
| | V8 265-400 Twisted Wedge Head, Intake Valve | 7/16" | 1.6 | 1610-8 |
| | V6 1988 & Later w/ Self Aligning Rockers | 3/8" | 1.52 | 1617-12 |
| | V6 1988 & Later w/ Self Aligning Rockers | 3/8" | 1.6 | 1618-12 |
| | V8 1988 & Later w/ Self Aligning Rockers | 3/8" | 1.52 | 1617-16 |
| | V8 1988 & Later w/ Self Aligning Rockers | 3/8" | 1.6 | 1618-16 |
| | V8 348-409 | 3/8" | 1.7 | 1629-16 |
| | V8 396-454 | 7/16" | 1.7 | 1620-16 |
| V8 396-454 | 1/2" | 1.7 | 1625-16 | |
| GM LS | LS1/LS2/LS6 – Adjustable | 3/8" | 1.8 | 1675-16 |
| | LS1/LS2/LS6 | Pedestal Mount | 1.8 | 1677-16 |
| | LS3 (Factory Offset) – Adjustable | 3/8" | 1.8 | 1676-16 |
| | LS3 (Factory Offset) | Pedestal Mount | 1.8 | 1678-16 |
| Ford | V6 3.8L | 3/8" | 1.7 | 1619-12 |
| | V8 289-302-351W | 3/8" | 1.6 | 1631-16 |
| | V8 289-302-351W | 7/16" | 1.6 | 1632-16 |
| | V8 Boss 302, 351C, 429-460 | 7/16" | 1.7 | 1630-16 |
| | V8 Self Aligning Rockers | 3/8" | 1.6 | 1634-16 |
| SHAFT MOUNT (ALSO SEE P. 274) | | | | |
| Chrysler | V8 273-360 | Shaft | 1.5 | 1622-16¹ |
| | V8 383-440 | Shaft | 1.5 | 1621-16¹ |
| | Shafts for #1621 Rockers | — | — | 1077-2 |
| | Shafts for #1622 Rockers | — | — | 1079-2 |

¹ Requires a ball/ball pushrod

TECH TIP

Rebuildable! These heavy-duty rocker arms can be rebuilt. We will disassemble and inspect them, then replace the roller tips, axles, trunnions and bearings to make your rocker arms like new.

ULTRA PRO MAGNUM™ XD ROLLER ROCKER ARMS

Built to outlast and outperform in accuracy and strength, the Ultra Pro Magnum™ XD Rocker Arms are engineered from durable 8650 steel and include a machined billet pushrod seat insert for a wide range of super accurate ratios. A unique and wide ratio range to fit almost any popular application from 1.5 to 1.8 in .5" increments for Chevy and 1.6 to 1.73 for various Ford applications is available. These XD rockers are fully rebuildable and boast precision-sorted needle bearings and hardened roller tips. And, they work with most diameter springs and retainers. The XD design utilizes advanced FEA and CAD design and development to improve strength, stiffness and MOI (moment of inertia) optimization for drag and circle track applications.

- Machined billet pushrod seat insert for wide range of rocker ratios used in popular Chevy and Ford applications
- 8650 Steel construction outlasts and outperforms other rockers in accuracy and strength
- For applications with up to 1000 lbs. open spring pressure
- Precision-sorted needle bearings and hardened roller tips better distribute the load and reduce wear
- Engineered for use in circle track and drag race applications



LIMITED LIFETIME WARRANTY:
Ultra Pro Magnum™ XD Rocker Arms are so strong that we warranty the rocker bodies for life against breakage.

COMPONENTS
ROCKER ARMS

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|------------|----------------------------|-----------|----------------------------|----------------------------|
| AMC | V8 290-401 | 7/16" | 1.6 | 1832-16¹ |
| Chevrolet | V6 200-262 | 3/8" | 1.5 | 1801-12¹ |
| | V6 200-262 | 3/8" | 1.55 | 1807-12¹ |
| | V6 200-262 | 3/8" | 1.6 | 1802-12¹ |
| | V6 200-262 | 3/8" | 1.65 | 1803-12¹ |
| | V6 200-262 | 7/16" | 1.5 | 1804-12¹ |
| | V6 200-262 | 7/16" | 1.55 | 1808-12¹ |
| | V6 200-262 | 7/16" | 1.6 | 1805-12¹ |
| | V6 200-262 | 7/16" | 1.65 | 1806-12¹ |
| | V8 265-400 | 3/8" | 1.5 | 1801-16 |
| | V8 265-400 | 3/8" | 1.55 | 1807-16¹ |
| | V8 265-400 | 3/8" | 1.6 | 1802-16 |
| | V8 265-400 | 3/8" | 1.65 | 1803-16 |
| | V8 265-400 | 7/16" | 1.5 | 1804-16¹ |
| | V8 265-400 | 7/16" | 1.55 | 1808-16¹ |
| | V8 265-400 | 7/16" | 1.6 | 1805-16¹ |
| | V8 265-400 | 7/16" | 1.65 | 1806-16¹ |
| | V8 265-400 | 7/16" | 1.7 | 1817-16¹ |
| | V8 265-400 | 1/2" | 1.5 | 1810-16¹ |
| | V8 396-454 | 7/16" | 1.6 | 1826-16¹ |
| | V8 396-454 | 7/16" | 1.7 | 1820-16¹ |
| V8 396-454 | 7/16" | 1.73 | 1823-16¹ | |
| V8 396-454 | 7/16" | 1.8 | 1828-16¹ | |
| Ford | V8 Boss 302, 351C, 429-460 | 7/16" | 1.73 | 1830-16¹ |
| | V8 289-302-351W | 3/8" | 1.6 | 1831-16 |
| | V8 289-302-351W | 7/16" | 1.6 | 1832-16¹ |
| | V8 289-302-351W | 3/8" | 1.7 | 1833-16 |
| | V8 289-302-351W | 7/16" | 1.7 | 1834-16¹ |

¹ Must use screw-in studs and guide plates

Note: Most popular part #'s also available in -8 suffix; for single or spares, order -1 suffix.

1/2" STUD UPGRADE KIT FOR ULTRA PRO MAGNUM™/XD ROCKER ARMS

- Converts Ultra Pro Magnum™ and Ultra Pro Magnum™ XD Rockers to accommodate 1/2" rocker studs
- Increases stability and stiffness
- For extreme duty and race applications
- NHRA approved

| COMPONENTS | PART # |
|--|------------------|
| Includes (16) each: Trunnions, Bearings, Snap Rings, Polylocks & Studs | 13706-KIT |



#1622

**ULTRA PRO MAGNUM™
CHRYSLER SHAFT-MOUNT ROCKER SYSTEMS**

- Made from SAE 8620 chromemoly steel and heat-treated for maximum strength and stiffness
- Contain proprietary bushing inserts
- Designed to handle roller lobes and higher spring rates
- Unique oil system oils all critical parts for long-lasting service
- Systems include a special adjuster which allows the use of conventional ball end pushrods

| DESCRIPTION | RATIO | PART # |
|---|-------|----------------|
| Chrysler V8 273-360, (Spacers & Shafts Included) | 1.5 | 1622-16 |
| Chrysler V8 B/RB 383-440 (Complete Kit), Bolts, Shafts & Spacers Included | 1.5 | 1621-16 |
| Replacement Rocker Arm for #1622 | 1.5 | 1622-1 |
| Replacement Shafts for #1622 (Pair) | — | 1079-2 |
| Replacement Rocker Arm – Left for #1621 | 1.5 | 1621L-1 |
| Replacement Rocker Arm – Right for #1621 | 1.5 | 1621R-1 |
| Replacement Shafts for #1621 (Pair) | — | 1077-2 |
| Bolts and Dividers for #1621-16 | — | 1321H-1 |
| Replacement Spacer (1 Each – Requires 8) | — | CR40 |
| Replacement Nut for #1621/#1622 Adjuster | — | 1321N-1 |
| Replacement Adjusting Screw for #1621/#1622 | — | 1321S-1 |



#16765-KIT



**GM LS ULTRA PRO MAGNUM™
ROCKER ARM KITS**

COMP Cams® offers GM Gen III LS1/LS6 and Gen IV LS3 Ultra Pro Magnum™ Rocker Arm Kits, both of which include rocker arms, guide plates, rocker studs, adjusting nuts and set screws. Designed to fit under the stock valve covers without machining, COMP® GM LS Ultra Pro Magnum™ Rocker Arm Upgrade Kits are the simple solution for converting your GM Gen III/IV engine to an adjustable valve train.

All components listed are available separately and in sets. COMP Cams® Rocker Upgrade Kits do NOT include pushrods, but they are available separately; see pushrod lengths in the application chart.

| COMPONENTS | RATIO | COMPONENT PART # | PART # |
|--|-------|------------------|------------------|
| LS1/LS6 | | | |
| 1.8:1 Ultra Pro Magnum™ Rocker Arm Set | 1.8 | 1675-16 | 16755-KIT |
| 5/16" Flat Guide Plates for 5/16" Pushrods | | 4854-8 | |
| 3/8" Rocker Studs | | 4554-16 | |
| 3/8" Adjusting Nut | | 4654-16 | |
| Set Screw for #4654 | | 4654SS-16 | |
| LS3 | | | |
| 1.8:1 Ultra Pro Magnum™ Rocker Arm Set | 1.8 | 1676-16 | 16765-KIT |
| 5/16" Guide Plates for 5/16" Pushrods | | 4855-8 | |
| 3/8" Rocker Studs | | 4554-16 | |
| 3/8" Adjusting Nut | | 4654-16 | |
| Set Screw for #4654 | | 4654SS-16 | |

Upgraded Trunnion



#1477-16

GM LS UPGRADED OEM ROCKER ARMS

Stock LS rocker arms can experience cageless needle bearing failure when loads are increased. COMP Cams® engineers have solved this problem with upgraded rockers featuring a stronger and more durable trunnion and captured bearing design. These upgraded versions increase each rocker's lift capacity and utilize caged roller bearings to improve valve train durability. The trunnions are secured by snap rings. The rockers feature a black-oxide finish and are available for LS1, LS3 and LS7 valve train geometries. A DIY upgrade kit is also available for users with stock rockers. It features a magnetic installation tool, and its cylindrical construction is perfect for use in an arbor press, bench vice or c-clamp.

| DESCRIPTION | RATIO | PART # |
|--------------------------------------|-------|----------------|
| GM LS Upgraded OEM Rocker Arms (LS1) | 1.7 | 1477-16 |
| GM LS Upgraded OEM Rocker Arms (LS3) | 1.7 | 1478-16 |
| GM LS Upgraded OEM Rocker Arms (LS7) | 1.8 | 1479-16 |

Available in single units (-1)

OEM LS ROCKER ARM TRUNNION/ROLLER BEARING UPGRADE RETRO-FIT KIT

- Converts a stock LS series rocker arm into a captured roller trunnion for race applications
- Increases stability and stiffness
- NASCAR spec LS engine proven
- Trunnion install tool compatible with all stock LS rocker geometry
- Can be used with an arbor press, bench vise and c-clamp
- Trunnion upgrade in less than 30 minutes
- Tool and trunnions can be purchased separately or as a complete kit



| COMPONENTS | COMPONENT PART # | PART # |
|--|---------------------------------|--------------------|
| Rocker Arm Trunnion | 137021 | |
| Rocker Arm Bearing | 137022 | 13702-KIT |
| Rocker Arm Retaining Ring | 137023 | |
| LS Rocker Trunnion Install Tool | Tool Only | 54702-TL |
| LS Rocker Trunnion Install Tool & Trunnion Kit | 54702-TL & 13702-KIT | 13702TL-KIT |



#1212

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|-----------------|-------------------------|-----------|-------|----------------------------|
| AMC | 1974-79 | Pedestal | 1.6 | 1210-16 |
| Chevrolet | 6 Cyl. 173-207, 1980-95 | 3/8" | 1.5 | 1216-12¹ |
| | 6 Cyl. 194-292, 1962-84 | 3/8" | 1.75 | 1261-12 |
| | V8 265-400, V6 200-262 | 3/8" | 1.5 | 1212-16² |
| | 396-454, 1965-87 | 7/16" | 1.7 | 1211-16³ |
| Chrysler | 2.2, 1981-87 | OHC | — | 1222-8 |
| | 2300cc 4 Cyl. | OHC | — | 1270-8 |
| Ford | 6 Cyl. 240-300, 1967-78 | 3/8" | 1.6 | 1266-12 |
| | V8 289-351W, 1968-77 | 3/8" | 1.6 | 1231-16⁴ |
| | 351W | Pedestal | 1.6 | 1235-16 |
| | 351C-400M, 1970-87 | Pedestal | 1.73 | 1232-16 |
| | V8 429-460, 1968-86 | Pedestal | 1.73 | 1232-16 |
| Oldsmobile | 260-455, 1967-79 | Pedestal | 1.6 | 1242-16 |
| Pontiac | V8 265-455, 1967-79 | 7/16" | 1.5 | 1251-16 |
| NITRIDED | | | | |
| Chevrolet | V8 265-400, V6 200-262 | 3/8" | 1.5 | 1217-16 |
| | V8 265-400, V6 200-262 | 3/8" | 1.6 | 1218-16 |
| | V8 265-400 | 7/16" | 1.5 | 1220-16 |
| | 396-454, 1965-87 | 7/16" | 1.7 | 1219-16 |

¹ Will work in some 4 cyl. applications also

² Will not replace "late model" rail rocker

³ Will not replace "late model" pedestal rocker

⁴ Rail-type rocker arm

HIGH ENERGY STEEL ROCKER ARMS™

- Excellent replacement rocker arms for engine rebuilds with a stock or High Energy Camshaft™
- Help to eliminate noise and slop associated with worn or high mileage stock rockers
- Include adjusting nuts and pivot balls where required
- Feature a long slot for higher than stock lift camshafts
- Valve train deflectors recommended when using a high volume or high pressure oil pump
- Nitrided rockers are designed for higher valve spring pressures and hardened pushrods
- Nitriding increases hardness, thus improving durability and longevity of rocker arms



HIGH ENERGY™ DIE CAST ALUMINUM ROLLER ROCKER ARMS

The COMP Cams® High Energy™ Aluminum Roller Rocker Arms are designed for street and moderate race use and feature a die-cast body created from aluminum with a needle bearing fulcrum and roller tip. The die-cast, larger than stock body offers the strength properties and light weight of aluminum while the specially engineered fulcrum and roller tip decrease friction and lower oil temperatures, thus improving response and horsepower.

Note: Die-formed aluminum body is larger than stock and may require modifications to stock valve covers for clearance.

- Affordable aluminum rocker option
- Strength properties and light weight of aluminum
- Needle bearing fulcrum and roller tip reduce friction and lower oil temps for improved response and HP

¹ Must use screw-in studs and guide plates

² Will not replace "late model" rail rocker

³ May require machine work to the cylinder head

⁴ Requires Part #4514-16 to replace "late model" pedestal rocker



#17044

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|------------|----------------------------|-----------|-------|-------------------------------|
| AMC | V8 290-401 | 7/16" | 1.6 | 17044-16¹ |
| Chevrolet | V8 265-400 | 3/8" | 1.5 | 17001-16² |
| | V8 265-400 | 3/8" | 1.6 | 17002-16^{2,3} |
| | V8 265-400 | 7/16" | 1.5 | 17004-16^{1,2} |
| | V8 265-400 | 7/16" | 1.6 | 17005-16^{1,2} |
| | V8 396-454 | 7/16" | 1.7 | 17021-16⁴ |
| Ford | V8 289, 302-351W | 3/8" | 1.6 | 17043-16¹ |
| | V8 289, 302-351W | 7/16" | 1.6 | 17044-16¹ |
| | V8 Boss 302, 351C, 429-460 | 7/16" | 1.73 | 17045-16¹ |
| Oldsmobile | V8 260-455 | 7/16" | 1.6 | 17044-16¹ |



ULTRA-GOLD™ ARC ALUMINUM ROLLER ROCKER ARMS

The original Ultra-Gold™ Aluminum Rockers changed the way racing and high performance street engine builders approached valve train design. Now, COMP Cams® is revolutionizing valve train performance again with the next generation of Ultra-Gold™ ARC Series Aluminum Rocker Arms, featuring an Arced, Recessed, Contoured design. Using cutting-edge design techniques and manufacturing processes, Ultra-Gold™ ARC Rockers increase engine power, enhance valve train stability and improve oiling. Ultra-Gold™ ARC Rockers feature an extrusion based on improvements developed through FEA analysis, resulting in an even stronger, stiffer body without compromising mass. An arced channel and contoured top, similar to a bridge design, give the rockers the best strength-to-weight ratio possible. The body has additional CNC contouring to improve clearances for valve covers and springs. Manufactured entirely in the U.S.A., all Ultra-Gold™ ARC Series Aluminum Rocker Arms feature a spring oiler channel through the body for improved lubrication. Trunnion retaining clips have been replaced with an ultra durable spiral lock type clip, similar to what holds a piston pin in place. Stress relieving radii have also been added to areas of the body, trunnion and pushrod seat insert. Even the included locking nuts (not used in LS applications) have been revised to increase surface area to better maintain lash and eliminate wear.

- Increase engine power, enhance valve train stability and improve oiling
- CNC-machined, lightweight design removes weight and yields unrivaled quality and ratio accuracy
- Arced channel & contoured top give the rockers the best strength to weight ratio possible
- Precision-sorted trunnion bearings withstand valve spring pressure up to 700 lbs.
- Designed for high performance street and race engines

ULTRA-GOLD™ ARC CROSS SECTION

Precision-sorted trunnion bearing withstands aggressive valve spring pressure & valve lift

Arc design with channel & contoured top give best strength-to-weight ratio



Multiple oil passages for valve & spring tip lubrication

LIMITED LIFETIME WARRANTY:

Ultra-Gold™ ARC Aluminum Roller Rocker Arms are so strong that we warranty the rocker bodies against breakage for life.



HAVE QUESTIONS?
WE CAN HELP YOU

Just Call Our
Toll Free Tech Line

CAMHELP®
800.999.0853

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|---|--|----------------|-------|-------------------------------|
| AMC | V8 290-401 | 7/16" | 1.6 | 19044-16^{3,4} |
| Chevrolet | V6 200-262 | 3/8" | 1.5 | 19001-12^{1,3} |
| | V6 200-262 | 3/8" | 1.6 | 19002-12^{1,3} |
| | V6 200-262 | 7/16" | 1.5 | 19004-12^{1,3} |
| | V6 200-262 | 7/16" | 1.6 | 19005-12^{1,3} |
| | V8 265-400 | 3/8" | 1.5 | 19001-16^{1,3} |
| | V8 265-400 | 3/8" | 1.6 | 19002-16^{1,3} |
| | V8 265-400 | 7/16" | 1.5 | 19004-16^{1,3} |
| | V8 265-400 | 7/16" | 1.6 | 19005-16^{1,3} |
| | V8 396-454 | 7/16" | 1.7 | 19021-16³ |
| GM LS | GM LS1/LS2/LS6 - Non-Adjustable | Pedestal Mount | 1.72 | 19024-16² |
| | GM LS1/LS2/LS6 - Non-Adjustable | Pedestal Mount | 1.82 | 19025-16² |
| | GM LS3/L92 - Non-Adjustable | Pedestal Mount | 1.72 | 19028-16² |
| | GM LS3/L92 - Non-Adjustable | Pedestal Mount | 1.82 | 19029-16² |
| Ford | V8 289-302-351W | 3/8" | 1.6 | 19043-16^{3,4} |
| | V8 289-302-351W | 3/8" | 1.72 | 19048-16^{3,4} |
| | V8 289-302-351W | 7/16" | 1.6 | 19044-16^{3,4} |
| | V8 289-302-351W | 7/16" | 1.72 | 19049-16^{3,4} |
| | V8 302-351W 1977-92 | 5/16" | 1.6 | 19052-16⁶ |
| | V8 302-351W 1977-93 | 5/16" | 1.7 | 19054-16⁶ |
| | V8 351C, 429-460 | 7/16" | 1.73 | 19045-16³ |
| Oldsmobile | V8 260-455 | 7/16" | 1.6 | 19044-16^{3,4} |
| Pontiac | V8 265-455 | 7/16" | 1.5 | 19060-16³ |
| | V8 265-455 | 7/16" | 1.65 | 19061-16³ |
| NARROW BODY | | | | |
| Chevrolet | V8 1988-Up 305-350 w/ Center Bolt Valve Covers, Narrow Body Rocker Arm w/ Self Aligning Roller Tip | 3/8" | 1.5 | 19015-16 |
| | V8 1988-Up 305-350 w/ Center Bolt Valve Covers, Narrow Body Rocker Arm, NON Self Aligning | 3/8" | 1.5 | 19017-16 |
| | V8 1988-Up 305-350 w/ Center Bolt Valve Covers, Narrow Body Rocker Arm w/ Self Aligning Roller Tip | 3/8" | 1.6 | 19016-16 |
| | V8 1988-Up 305-350 w/ Center Bolt Valve Covers, Narrow Body Rocker Arm, NON Self Aligning | 3/8" | 1.6 | 19018-16 |
| BREAK-IN ROCKER ARMS | | | | |
| Chevrolet | Small Block V6 200-262, V8 265-400 | 7/16" | 1.3 | 19012-16^{1,5} |
| REPLACEMENT PARTS | | | | |
| Single Replacement Pedestal for #19024/19025 Rockers | | | | 4663-1 |
| Set of Replacement Pedestals for #19024/19025 Rockers | | | | 4663-8 |
| Single Replacement Pedestal for #19028/19029 Rockers | | | | 4662-1 |
| Set of Replacement Pedestals for #19028/19029 Rockers | | | | 4662-8 |
| Single Replacement Pedestal Bolt | | | | 4661-1 |
| Set of Replacement Pedestal Bolts | | | | 4661-16 |
| Single Replacement Cup Adjuster Screw | | | | 4660-1 |
| Set of Replacement Cup Adjuster Screws | | | | 4660-16 |

¹ Will not replace late model rocker

² Includes pedestals and bolts

³ Must use screw-in studs and guide plates

⁴ Requires stud #4514-16 to replace late model pedestal

⁵ For V6 use -12 suffix

⁶ Clearance must be checked when using stock valve cover



#19046

ULTRA-GOLD™ ARC ALUMINUM SHAFT-MOUNT ROLLER ROCKER ARMS

Featuring high-lift capabilities in a lightweight design, the system is designed exclusively for use in high-performance street and race engines. Steel stands offer extra shaft support for strength and rigidity, while shims are adjustable left and right for intake runner clearance. The rockers feature a 1.76 ratio.

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|------|-------------|-----------|-------|--------------|
| Ford | Ford FE | Shaft | 1.76 | 19046 |

- Side-shim adjustable for runner clearance
- Steel stands provide additional shaft support for strength & rigidity
- Designed for use in high-performance street & race engines



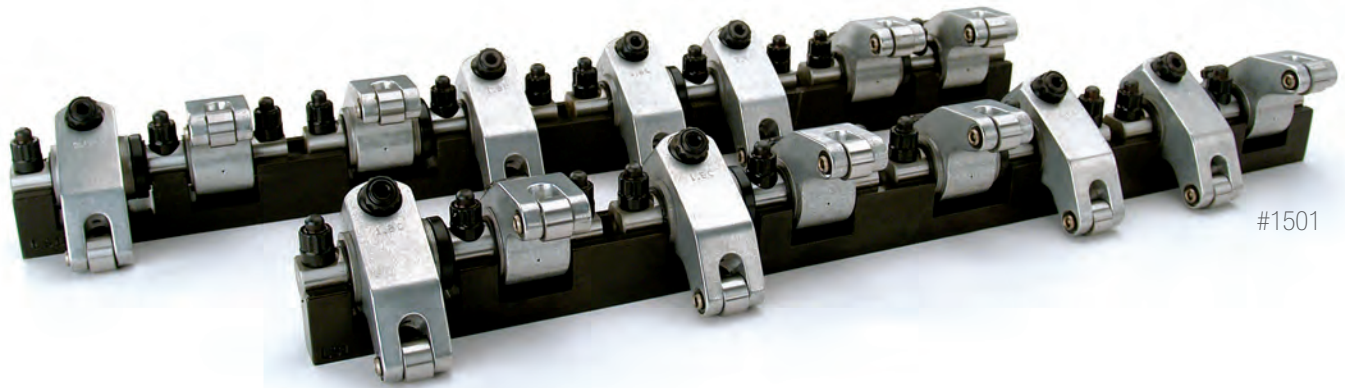
#1074-KIT

CHRYSLER SHAFT-MOUNT ALUMINUM ROCKER SYSTEMS

- Constructed from an aluminum alloy with tensile strength of 80,000 psi
- Good choice for any race application

| MAKE | DESCRIPTION | STUD DIA. | RATIO | PART # |
|----------|---|-----------|-------|-----------------------------|
| Chrysler | V8 273-360 | Shaft | 1.5 | 1074-16 |
| | V8 273-360 | Shaft | 1.5 | 1074-KIT¹ |
| | V8 273-360 | Shaft | 1.6 | 1076-16 |
| | V8 273-360 | Shaft | 1.6 | 1076-KIT¹ |
| | V8 383-440 | Shaft | 1.5 | 1071-16 |
| | V8 383-440 | Shaft | 1.5 | 1071-KIT¹ |
| | V8 383-440 | Shaft | 1.6 | 1073-16 |
| | V8 383-440 | Shaft | 1.6 | 1073-KIT¹ |
| | V8 273-360 Hard Chrome Shaft | | | 1078-2 |
| | V8 273-360 Hard Chrome Shaft, .100" Offset (For Spring Clearance) | | | 1084-2 |
| | V8 383-440 Hard Chrome Shaft | | | 1072-2 |
| | V8 383-440 Hard Chrome Shaft, .100" Offset (For Spring Clearance) | | | 1085-2 |
| | Spacers for #1074 & #1076 Rockers .480" Wide | | | 1082-8 |
| | Spacers for #1071 & #1073 Rockers .700" Wide | | | 1083-8 |

¹ Includes shafts, spacers & rockers assembled



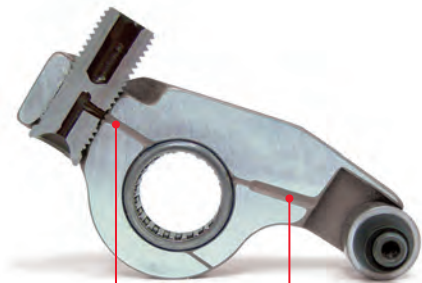
#1501

SHAFT-MOUNT ALUMINUM ROCKER SYSTEMS

Using COMP® Shaft-Mount Rocker Systems is one of the most effective ways to increase horsepower. These systems transfer the power of the camshaft to the valve by properly positioning the rocker over the valve. Constructed from 2024 aluminum and using an 8620 hardened steel shaft, COMP® shaft rockers are designed using the latest in computer technology and are field tested by experts in every type of racing.

- Made from 2024 aluminum and use 8620 hardened steel shaft
- Most efficient way to transfer the power of the cam to the valve
- Rigidity of the shaft system adds stability to the cylinder head and the valve train
- Use an oiling system that ensures consistent oil flow from the pushrod cup to the shaft bearings and then on to the roller tip (see cross section to the right)

SHAFT-MOUNT CROSS SECTION



INTERNAL OILING SYSTEM

| MAKE | DESCRIPTION | RATIO | | OFFSET | | PART # |
|--|--|-------|------|--------|-------------|-------------------------|
| | | IN. | EX. | IN. | EX. | |
| Chevrolet | Small Block RHS® Pro Action™ Aluminum | 1.5 | 1.5 | .250 | .080 | 1511 |
| | Small Block Brodix Track 1 | 1.6 | 1.5 | .170 | .080 | 1506 |
| | Small Block Dart Iron Eagle | 1.6 | 1.5 | .170 | .170 | 1503¹ |
| | Small Block AFR#190-195-210 | 1.6 | 1.5 | .250 | .080 | 1502 |
| | Small Block RHS® 23° Pro Elite™ CNC-Ported 240cc Runner | 1.6 | 1.5 | .375" | .170" | 1524² |
| | Small Block Brodix 8X, 10X, 11X | 1.6 | 1.5 | .450 | .080 | 1519 |
| | Small Block GM Bowtie 18° | 1.6 | 1.5 | .550 | .000 | 1508 |
| | Big Block Standard/Dart Iron Eagle | 1.7 | 1.7 | .000 | .000 | 1504 |
| | Big Block RHS® Pro Action™ Aluminum 320/360 Runner | 1.7 | 1.7 | .000 | .000 | 1520 |
| | Big Block Brodix 2+, Dart 320/360 | 1.7 | 1.7 | .000 | .000 | 1505 |
| | Big Block Brodix 2 Xtra | 1.7 | 1.7 | .000 | .000 | 1507 |
| | Big Block Brodix Big Duke/Dart Iron Eagle, World Products Grumpy | 1.7 | 1.7 | .000 | .000 | 1512 |
| Big Block 18 Degree Brodix Big Duke/Dart Big Chief | 1.7 | 1.7 | .750 | .400 | 1513 | |
| GM LS | LS1/LS2/LS6 | 1.7 | 1.7 | .000 | .000 | 1500⁴ |
| | LS1/LS2/LS6 | 1.8 | 1.8 | .000 | .000 | 1501⁴ |
| | LS3/L92 | 1.7 | 1.7 | .215 | .000 | 1521 |
| | LS7 | 1.8 | 1.8 | .350 | .000 | 1523 |
| | LS7/RHS® Raised Port | 1.8 | 1.8 | .420 | .000 | 1525 |
| Chrysler | Small Block (273-360) OEM Iron Head Single (OE Through Shaft Oiling) | 1.5 | 1.5 | .000 | .000 | 1515 |
| | Big Block (383-440) OEM Iron Head Single (OE Through Shaft Oiling) | 1.5 | 1.5 | .250 | .080 | 1516 |
| | Big Block (383-440) Indy Head 440-1 & 440-C Single (OE Through Shaft Oiling) | 1.5 | 1.5 | .800 | .000 | 1517 |
| | 426 Hemi OEM Iron Head | 1.6 | 1.5 | 1.950 | .000 | 1522³ |
| Ford | 289-351W Production Head | 1.6 | 1.6 | .000 | .000 | 1514 |
| Pontiac | Edelbrock P8 | 1.5 | 1.5 | .080 | .080 | 1518 |
| | 867 with 40/60 Spacing | 1.6 | 1.5 | .450 | .080 | 1519 |

Note: Custom applications available, call CAM HELP® 1.800.999.0853 or email camhelp@compcams.com.

¹ This system will not work on the 49cc Dart Iron Eagle Cylinder Heads

² Designed for RHS Part #12328 and #12329

³ Requires spray bar oiling or oiling valve cover

⁴ Requires valve cover spacer or baffle removal

| APPLICATION | DESCRIPTION | PART # |
|---|--|-------------------------------|
| AMC | | |
| 290-401 V8 | 1.6 Magnum Rockers & Magnum Pushrods | RPM1410-16¹ |
| CHRYSLER | | |
| Dodge Magnum V8 1992-02 | 1.6 Magnum Rockers, Magnum Pushrods, Guide Plates & Rocker Studs | 1425-KIT |
| 273-360 V8 w/ Hydraulic Lifters | 1.5 Ultra Pro Magnum™ Rockers, Shafts, Spacers & Hi-Tech™ Pushrods | RP1622-16 |
| 273-360 V8 w/ Solid Lifters | 1.5 Ultra Pro Magnum™ Rockers, Shafts, Spacers & Hi-Tech™ Pushrods | RP1623-16 |
| FORD | | |
| 1968-89 289-302 Rail Type (All Except Hyd. Roller Engine) | 1.6 Magnum Rockers & High Energy Pushrods™ | RP1431-16 |
| 1968-89 289-302 Rail Type (All Except Hyd. Roller Engine) | 1.6 Magnum Rockers & Magnum Pushrods | RPM1431-16² |
| 1968-89 289-302 Rail Type (All Except Hyd. Roller Engine) | 1.7 Magnum Rockers & High Energy Pushrods™ | RP1453-16 |
| 1968-89 289-302 Rail Type (All Except Hyd. Roller Engine) | 1.7 Magnum Rockers & Magnum Pushrods | RPM1453-16 |
| 1968-89 289-302 Rail Type Retro-Fit Hydraulic Roller | 1.6 Magnum Rockers & High Energy Pushrods™ | RPR1428-16² |
| 1985-Present 302 HO w/ OE Hydraulic Roller Cam | 1.6 Magnum Rockers & High Energy Pushrods™ | RP1427-16 |
| 1985-Present 302 HO w/ OE Hydraulic Roller Cam | 1.7 Magnum Rockers & High Energy Pushrods™ | RP1450-16 |
| 1969-95 351W (All Except Hydraulic Roller Engine) | 1.6 Magnum Rockers & High Energy Pushrods™ | RP1436-16² |
| 1969-95 351W (All Except Hydraulic Roller Engine) | 1.6 Magnum Rockers & Magnum Pushrods | RPM1436-16 |
| CHEVROLET/GM | | |
| 173 V6 60° | 1.52 Magnum Rockers & High Energy Pushrods™ | RP1413-12 |
| 173 V6 60° | 1.6 Magnum Rockers & High Energy Pushrods™ | RP1414-12 |
| 262-400 V8 | 1.52 Magnum Rockers & High Energy Pushrods™ | RP1412-16³ |
| 262-400 V8 | 1.52 Magnum Rockers & Magnum Pushrods | RPM1412-16 |
| 262-400 V8 | 1.52 Ultra Pro Magnum™ Rockers & Magnum Pushrods | RPM1601-16 |
| 262-400 V8 | 1.5 Ultra Pro Magnum™ XD Rockers & Magnum Pushrods | RPM1801-16 |
| 262-400 V8 Retro-Fit Hydraulic Roller | 1.52 Magnum Rockers & High Energy Pushrods™ | RPR200³ |
| 262-400 V8 | 1.52 Magnum Rockers, High Energy Pushrods™ & Guide Plates | RPG100 |
| 262-400 V8 | 1.6 Magnum Rockers & High Energy Pushrods™ | RP1416-16³ |
| 262-400 V8 | 1.6 Magnum Rockers & Magnum Pushrods | RPM1416-16 |
| 262-400 V8 | 1.6 Ultra Pro Magnum™ XD Rockers & Magnum Pushrods | RPM1802-16 |
| 262-400 V8 Retro-Fit Hydraulic Roller | 1.6 Magnum Rockers & High Energy Pushrods™ | RPR201³ |
| 262-400 V8 | 1.6 Magnum Rockers, High Energy Pushrods™ & Guide Plates | RPG101 |
| 265-400 V8 for 1987 & Later w/ OE Hyd. Roller Cam & Non Self Aligning Rocker Arms | 1.6 Magnum Rockers, High Energy Pushrods & Guide Plates | RPG103 |
| 265-400 V8 for 1987 & Later w/ OE Hydraulic Roller Cam | 1.52 Magnum Rockers & High Energy Pushrods™ | RP1417-16³ |
| 265-400 V8 for 1987 & Later w/ OE Hydraulic Roller Cam | 1.52 Magnum Rockers & Magnum Pushrods | RPM1417-16 |
| 265-400 V8 for 1987 & Later w/ OE Hydraulic Roller Cam | 1.52 Ultra Pro Magnum™ Rockers & Magnum Pushrods | RPM1617-16 |
| 265-400 V8 for 1987 & Later w/ Flat Tappet Cam | 1.52 Magnum Rockers & High Energy Pushrods™ | RPE1417-16³ |
| 265-400 V8 for 1987 & Later w/ OE Hyd. Roller Cam & Non Self Aligning Rocker Arms | 1.52 Magnum Rockers & High Energy Pushrods™ | RPH300³ |
| 265-400 V8 for 1987 & Later w/ OE Hyd. Roller Cam & Non Self Aligning Rocker Arms | 1.52 Magnum Rockers, High Energy Pushrods™ & Guide Plates | RPG102 |
| 265-400 V8 for 1987 & Later w/ OE Hydraulic Roller Cam | 1.6 Magnum Rockers & High Energy Pushrods™ | RP1418-16³ |
| 265-400 V8 for 1987 & Later w/ OE Hydraulic Roller Cam | 1.6 Magnum Rockers & Magnum Pushrods | RPM1418-16 |
| 265-400 V8 for 1987 & Later w/ OE Hydraulic Roller Cam | 1.6 Ultra Pro Magnum™ Rockers & Magnum Pushrods | RPM1618-16 |
| 265-400 V8 for 1987 & Later w/ Flat Tappet Cam | 1.6 Magnum Rockers & High Energy Pushrods™ | RPE1418-16³ |
| 265-400 V8 for 1987 & Later w/ OE Hyd. Roller Cam & Non Self Aligning Rocker Arms | 1.6 Magnum Rockers & High Energy Pushrods™ | RPH301³ |
| 396-454 V8 | 1.72 Magnum Rockers & High Energy Pushrods™ | RP1411-16 |
| 396-454 V8 | 1.72 Magnum Rockers & Magnum Pushrods | RPM1411-16⁴ |
| 396-454 V8 | 1.7 Ultra Pro Magnum™ Rockers & Magnum Pushrods | RPM1620-16 |
| 396-454 V8 | 1.7 Ultra Pro Magnum™ XD Rockers & Magnum Pushrods | RPM1820-16 |
| 396-454 V8 Retro-Fit Hydraulic Roller | 1.72 Magnum Rockers & High Energy Pushrods™ | RPR205 |
| Mark V V8 | 1.72 Magnum Rockers, High Energy Pushrods™ & Rocker Studs | RPS300 |
| Mark V V8 | 1.72 Magnum Rockers, Magnum Pushrods & Rocker Studs | RPS301 |
| Mark VI V8 | 1.72 Magnum Rockers, High Energy Pushrods™ & Rocker Studs | RPS302 |
| OLDSMOBILE | | |
| 350-403 V8 | 1.6 Magnum Rockers, High Energy Pushrods™, Rocker Arm Studs & Guide Plates | 1441-KIT |
| 455 V8 | 1.6 Magnum Rockers, High Energy Pushrods™, Rocker Arm Studs & Guide Plates | 1442-KIT |
| PONTIAC | | |
| 1965-79 326-455 V8 | 1.52 Magnum Rockers & High Energy Pushrods™ | RP1451-16 |
| 1965-79 326-455 V8 | 1.52 Magnum Rockers & Magnum Pushrods | RPM1451-16 |
| 1965-79 326-455 V8 | 1.65 Magnum Rockers & High Energy Pushrods™ | RP1452-16 |
| 1965-79 326-455 V8 | 1.65 Magnum Rockers & Magnum Pushrods | RPM1452-16 |

¹ Requires screw-in studs and guide plates² Part #4504 studs REQUIRED for 1978-Present³ Use -12 for V6 engines⁴ Mark V and Mark VI heads must use kit w/ studs

ROCKER ARM ADJUSTING NUTS

- Tapered for extra strength in locking areas
- High Energy™ and Magnum Polylocks are best for moderate lift and spring pressure applications
- Hi-Tech™ Polylocks work well in all high end race applications
- Stud girdle polylocks are precision ground for minimum runout

| DESCRIPTION | STUD DIA. | PART # |
|--|-----------|---------|
| High Energy™ Polylock | 3/8" | 4604-16 |
| 1.125" Tall Polylock for High Energy™ Aluminum Rockers | 3/8" | 4631-16 |
| High Energy™ Polylock | 7/16" | 4606-16 |
| 1.125" Tall Polylock for High Energy™ Aluminum Rockers | 7/16" | 4630-16 |
| Magnum Polylock | 3/8" | 4602-16 |
| Magnum Polylock | 7/16" | 4603-16 |
| Hi-Tech™ Polylock for Ultra Pro Magnum™/Ultra Pro Magnum™ XD Rockers | 3/8" | 4601-16 |
| Hi-Tech™ Polylock for Ultra Pro Magnum™/Ultra Pro Magnum™ XD Rockers | 7/16" | 4600-16 |
| Hi-Tech™ Polylock for Ultra Pro Magnum™/Ultra Pro Magnum™ XD Rockers | 1/2" | 4657-16 |
| Stud Girdle Adjusting Nut | 7/16" | 4508-1 |
| Stud Girdle Adjusting Nut (12) #4508 & (4) #4508S | 7/16" | 4508-16 |
| Stud Girdle Adjusting Nut (w/ Snap Ring to Hold Girdle Bar) | 7/16" | 4508S-1 |
| Stud Girdle Adjusting Nut | 3/8" | 4509-1 |
| Stud Girdle Adjusting Nut (12) #4509 & (4) #4509S | 3/8" | 4509-16 |
| Stud Girdle Adjusting Nut (w/ Snap Ring to Hold Girdle Bar) | 3/8" | 4509S-1 |
| Stud Girdle Adjusting Nut, Intake BB Chevrolet | 7/16" | 4510-8 |
| Stud Girdle Adjusting Nut, BB Ford Threaded Through Full Length | 7/16" | 4511-16 |

REPLACEMENT PARTS

| | | |
|--|-------|----------------------|
| GM Gen III/LS1/LS2/LS6 Adjusting Nut | 3/8" | 4654-16 ¹ |
| Replacement Nut for Magnum Rockers | 3/8" | 1400N-16 |
| Replacement Nut for Magnum Rockers | 7/16" | 1401N-16 |
| Replacement Nut for Magnum Rockers | 10mm | 1403N-12 |
| Pivot Ball Replacement for Magnum Rockers | 3/8" | 1400B-16 |
| Pivot Ball Replacement for Magnum Rockers | 7/16" | 1401B-16 |
| Pivot Ball Replacement for Magnum Rockers | 10mm | 1403B-12 |
| Replacement Nut & Screw for #1071, #1073, #1074, #1076 Rockers | — | 1406-1 |
| Replacement Nut & Screw for #1046 Rocker | — | 1407-1 |

Note: Dash -1 indicates one piece, dash -8 indicates a set of eight, dash -16 indicates a set of sixteen.

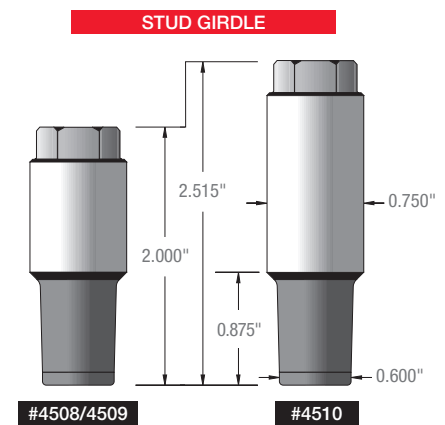
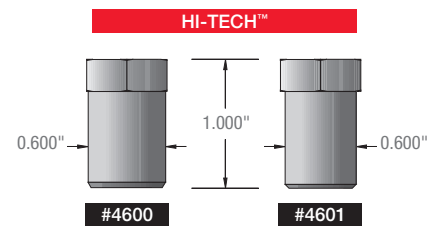
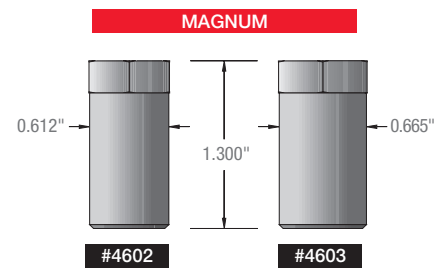
¹ Replacement components only, must be used with #16755-KIT and #16765-KIT

ROCKER ARM ADJUSTING NUT KITS

Many of the popular engine families utilize a positive stop type of rocker arm attachment, which does not allow for any adjustment, and consequently there is no consideration for different cam sizes or other modifications to the engine block and heads. For that reason, COMP® has designed a kit to convert this setup to a fully adjustable valve train.

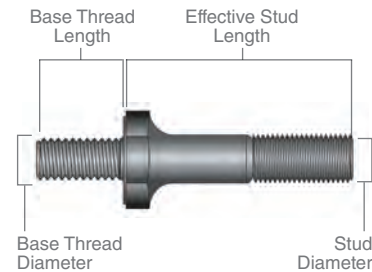
On the 302-351W Fords, simply remove the standard adjusting nut, slip the spacer over the stud, install the new nut and adjust the valves as necessary. On the Mark V and VI Big Block Chevrolet engines, replace the screw-in studs with those provided, slip the spacer insert through the rocker arm ball, and adjust with the new adjusting nut. These kits are a simple, easy and inexpensive alternative to give the flexibility of an adjustable valve train.

| DESCRIPTION | STUD DIA. | PART # |
|--|-----------|----------|
| Small Block Ford w/ Non-Adjusting Rockers, Includes: (16) #4610-W FS/FW Washer, #4610-N FS/FW 5/16" Adjusting Nut | 5/16" | 4610-16 |
| Big Block Chevrolet Late Model Adjusting Rocker Kit, Includes: (16) #4514 Studs, #4514SP Spacer, #1401-N Rocker Nut | 7/16" | 4514-KIT |



Note: Diameters are nominal specifications and should be considered maximum dimension.





ROCKER ARM STUDS

COMP Cams® takes pride in having the finest rocker arm studs available on the market. The High Energy™ and Magnum series studs work well in applications with moderate lifts and spring pressures and are available in the popular 3/8" and 7/16" sizes. When ultimate strength is required, as with high RPM roller cam applications, the Hi-Tech™ Race Stud is the answer. This stud has a thin jam nut for rocker clearance, rolled threads for maximum contact and a ground-flat top so that accurate valve adjustment can be achieved and maintained. The diameter of the jam nut is larger in order to spread the load over a larger area. All COMP Cams® studs have generous radii and a black oxide finish.

| DESCRIPTION | BASE THREAD | | STUD DIA. | EFFECTIVE STUD LENGTH | PART # |
|--|-------------|--------|-----------|-----------------------|------------------------------|
| | DIAMETER | LENGTH | | | |
| High Energy™ Rocker Stud | 7/16" | .680" | 3/8" | 1.750" | 4500-16 |
| High Energy™ Rocker Stud | 7/16" | .825" | 7/16" | 1.750" | 4501-16 |
| Magnum Rocker Stud | 7/16" | .680" | 3/8" | 1.750" | 4502-16 |
| Magnum Rocker Stud | 7/16" | .825" | 7/16" | 1.750" | 4503-16 |
| Magnum Rocker Stud for Ford | 5/16" | .680" | 3/8" | 1.750" | 4504-16 |
| Magnum Rocker Stud for Oldsmobile | 5/16" | .580" | 3/8" | 1.520" | 4542-16¹ |
| Magnum Rocker Stud for Dodge Magnum V6, V8, V10 | 5/16" | .580" | 3/8" | 1.520" | 4542-16^{1,2} |
| Hi-Tech™ Race Rocker Stud | 7/16" | .680" | 3/8" | 1.750" | 4505-16 |
| Hi-Tech™ Race Rocker Stud | 7/16" | .710" | 3/8" | 1.895" | 4515-16 |
| Hi-Tech™ Race Rocker Stud | 7/16" | .710" | 7/16" | 1.750" | 4506-16 |
| Hi-Tech™ Race Rocker Stud | 7/16" | .735" | 1/2" | 1.900" | 4543-16 |
| Hi-Tech™ Race Exhaust for 396-454 for Chevrolet w/ Aluminum Heads | 7/16" | 1.680" | 7/16" | 2.000" | 4507-8 |
| Hi-Tech™ Race Rocker Stud for GM Gen III/LS1/LS2/LS6 | 8mm | .800" | 3/8" | 1.500" | 4554-16³ |
| Hi-Tech™ Race Rocker Stud for Chevrolet Big Block | 7/16" | .750" | 7/16" | 1.900" | 4512-16 |
| Hi-Tech™ Race Rocker Stud for Chevrolet Big Block Mark V & Mark VI | 3/8" | .750" | 7/16" | 1.900" | 4514-16 |

¹ Must be used with guide plates

² For V6 use -12 suffix, for V10 use -20 suffix

³ Replacement components only, must be used with #16755-KIT & #16765-KIT, see page 274 for more information

STUD BOSS CUTTER

- When using screw-in studs on a factory head it is necessary to machine down the stud boss equal to the thickness of the new stud's jam nut plus the guide plate thickness
- Includes a universal arbor that also acts as a pilot/guide and fits into the original stud hole

| DESCRIPTION | O.D. | I.D. | PILOT DIA. | PART # |
|------------------|-------|-----------|------------|-------------|
| Stud Boss Cutter | 1.150 | .320/.330 | .364/.365 | 4729 |



STUD GIRDLES

- Solid bar, one-piece design ties studs together and properly locates them
- Two-piece, spring loaded designs available for Small Block Chevy
- Constructed of 6061-T6 aluminum for light weight and anodized for durability
- Kits come complete with hex head adjusting nuts, interlocking set screws and all hardware



#4004

| MAKE | DESCRIPTION | STUD DIA. | PART # |
|-----------|--|-----------|-------------------------|
| Chevrolet | 265-400 Solid Bar Design | 3/8" | 4007 |
| | 265-400 Solid Bar Design | 7/16" | 4009 |
| | 265-400 Spring Loaded Design | 3/8" | 4001 |
| | 265-400 Spring Loaded Design | 7/16" | 4004 |
| | 265-400 Brodix Pontiac Spring Loaded Design, 40/60 Stud Spacing | 3/8" | 4019 |
| | 265-400 Brodix Pontiac Spring Loaded Design, 40/60 Stud Spacing | 7/16" | 4018 |
| | 265-400 Vortec Aluminum Bowtie Cylinder Head Solid Bar Design | 7/16" | 4010¹ |
| | 265-400 Brownfield Cylinder Head Solid Bar Design | 7/16" | 4011 |
| | 265-400 Brodix Pontiac Solid Bar Design 40/60 Stud Spacing | 7/16" | 4012 |
| | 396-454 Solid Bar Design Standard Stud Spacing, Brodix-2 | 7/16" | 4021 |
| Ford | 289-302, 351W Standard Head | 3/8" | 4013 |
| | 289-302, 351W Standard Head | 7/16" | 4014 |
| | 289-302, 351W RHS® Pro Action™ or Motorsport Aluminum Head | 7/16" | 4015 |
| | 351C Boss, Motorsport Aluminum Head | 7/16" | 4016 |
| | 429-460 TFS Motorsport Aluminum Head, Will Not Fit Stock OEM Head | 7/16" | 4017 |
| | 429-460 Production Heads, Including Cobra Jet & Super Cobra Jet Models | 7/16" | 4034 |
| Pontiac | 265-455 Solid Bar Design | 7/16" | 4051 |

Note: All COMP Cams® Ford stud girdles shown above are solid bar design.

¹ Cast iron Bowtie heads & Dart Iron Eagle heads use standard Chevrolet girdles Part #4007, #4009, #4001 & #4004



#4020



#4023

#4022

UNDRILLED GIRDLE BAR

- Allows measuring and drilling of bar to your own specs
- Intended for use on small block engines but may also work in other applications

| DESCRIPTION | STUD DIA. | PART # |
|-----------------------------------|-----------|-------------|
| Undrilled Girdle Bar 17.5" x 1.5" | 1.500" | 4020 |

ULTRA-GOLD™ STUD GIRDLES

| MAKE | DESCRIPTION | STUD DIA. | PART # |
|-----------|-------------------------------------|-----------|-------------|
| Chevrolet | 265-400 Solid Bar Design | 3/8" | 4026 |
| | 265-400 Solid Bar Design | 7/16" | 4023 |
| | 265-400 Spring Loaded Design | 3/8" | 4027 |
| | 265-400 Spring Loaded Design | 7/16" | 4022 |
| | 265-400 Spring Loaded for RHS® Head | 7/16" | 4036 |
| | 396-454 Solid Bar Design | 7/16" | 4025 |
| | 396-454 for RHS® Head | 7/16" | 4035 |
| Ford | 289-302, 351W Solid Bar Design | 3/8" | 4030 |
| | 289-302, 351W Solid Bar Design | 7/16" | 4024 |



GUIDE PLATES

- Designed using rapid prototype techniques for accurate fit; hardened and black oxide finished
- Feature exact stud placement and rounded contact points
- Necessary for high lift/spring pressure environments of performance engines

2-PIECE ADJUSTABLE GUIDE PLATES

- Available for Small and Big Block Chevy and Small Block Ford applications
- Designed for use on cylinder heads with relocated intake ports
- Able to be welded after final adjustment (SBC and SBF only); BBC is bolt-together design
- Contoured & clearanced for head bolts

| MAKE | DESCRIPTION | TYPE | PUSHROD SIZE | STUD DIA. | PART # |
|--|--------------|-------------------|--------------|-----------|---------------------------|
| STANDARD ONE-PIECE NON-ADJUSTABLE¹ | | | | | |
| AMC | 290-401 | Flat | 5/16" | 7/16" | 4851-8 |
| Chevrolet | 265-400 | Raised | 5/16" | 7/16" | 4800-8 |
| | 265-400 | Raised | 3/8" | 7/16" | 4802-8 |
| | 265-400 | Flat | 5/16" | 7/16" | 4808-8 |
| | 265-400 | Flat | 3/8" | 7/16" | 4810-8 |
| | 396-454 | Raised | 3/8" | 7/16" | 4806-8 |
| | 396-454 | Raised | 7/16" | 7/16" | 4820-8 |
| GM LS | GM LS Series | Flat | 5/16" | 8mm | 4854-8² |
| | GM LS Series | Flat | 3/8" | 8mm | 4856-8² |
| | GM LS3/L92 | Flat | 5/16" | 8mm | 4840-8 |
| Dodge | Magnum V8 | Flat | 5/16" | 5/16" | 4825-8³ |
| Ford | 289-351W | Flat | 5/16" | 7/16" | 4816-8 |
| | 289-351W | Flat | 3/8" | 7/16" | 4818-8 |
| | Cleveland | Raised | 5/16" | 7/16" | 4803-8 |
| | Cleveland | Raised | 3/8" | 7/16" | 4804-8 |
| | 429-460 | Raised | 5/16" | 7/16" | 4834-8 |
| | 429-460 | Raised | 3/8" | 7/16" | 4838-8 |
| Oldsmobile | 350-455 | Flat | 5/16" | 5/16" | 4842-8⁴ |
| | 350-455 | Flat | 3/8" | 5/16" | 4843-8⁴ |
| Pontiac | 350-455 | Flat | 5/16" | 7/16" | 4851-8 |
| | 350-455 | Flat | 3/8" | 7/16" | 4852-8 |
| TWO-PIECE ADJUSTABLE | | | | | |
| Chevrolet | 265-400 | Flat Adjustable | 5/16" | 7/16" | 4835-8 |
| | 265-400 | Flat Adjustable | 3/8" | 7/16" | 4839-8 |
| | 396-454 | Raised Adjustable | 3/8" | 7/16" | 4811-8⁵ |
| Ford | 289-351W | Flat Adjustable | 5/16" | 7/16" | 4835-8⁵ |
| | 289-351W | Flat Adjustable | 3/8" | 7/16" | 4839-8 |

¹ Some applications require machine work

² Replacement components only, must be used with #16755-KIT and #16765-KIT, see page 274 for more information

³ Only for engines with stud mount rockers. No machine work required. For 3.9L V6, use -6 suffix, for 8.0L V10 trucks, use -10 suffix.

⁴ No machine work required with Part #4542-16 stud

⁵ Requires 7/16" stud base thread (standard on RHS® and aftermarket heads)



REV KITS

In some endurance uses and most oval track applications, it is necessary to use a rev kit for the lifter to precisely follow the profile of the cam. This safety measure ensures that in the event of pushrod or rocker arm failure, the lifter will not come out of the lifter bore. This could cause a loss of oil pressure and subsequent engine failure.

- Constructed from the toughest extruded aluminum (except Big Block Chevrolet, which is a casting)
- Kit comes with all necessary springs and buttons
- Notched to fit the block & should require no machine work
- Angle of the spring pocket in the bar has been changed to duplicate the lifter angle in the block

| DESCRIPTION | PART # |
|--|-----------------------------|
| Chevrolet 90° V6 w/ .842" Lifter Diameter | 4006 |
| Rev Kit Plate - Fits #4006 V6 | 4006-P |
| Chevrolet 265-400 Kit w/ .842" Lifter Diameter | 4000 |
| Chevrolet 265-400 w/ .874" Lifter Diameter | 4008 |
| Chevrolet 265-400 Rev Kit Buttons - Fits #4000, #4006, #4008 | 4000B-16¹ |
| Rev Kit Button (.874" Diameter) | 4008B-16¹ |
| Chevrolet 265-400 Rev Kit Plate - Fits #4000, #4008 | 4000-P |
| .940" Inner (Blue) - Fits #4000, #4006, #4008 | 974-1 |
| Chevrolet 396-454 w/ .842" Lifter Diameter | 4003 |
| Chevrolet 396-454 Rev Kit Buttons - Fits #4003, #4005 | 4003B-16¹ |
| Chevrolet 396-454 Rev Kit Plate - Fits #4003 | 4003-P |
| .970" Inner - Fits #4003, #4005 | 973-1 |

¹ For single piece use -1 suffix

Note: For use with COMP Cams® full round body solid roller lifters only. It is recommended to have 30-50 lbs of spring load on the lifter when on the base circle. Open load will vary, depending on lobe lift.

VALVE SPRING CHECKLIST

Proper selection of the valve spring begins with identifying the application and selecting all of the valve train components necessary to achieve the engine builders' goals. Improper selection of the wrong valve spring is one of the most common causes of engine failure. Other common causes are the incorrect installation and improper handling of the valve springs.

SELECTING A SPRING

1. Use only the valve springs that will give the recommended spring pressure with the valve both on the seat and at maximum lift.
2. The O.D. of the recommended valve spring may require that the spring pocket of the head be machined to a bigger size.
3. We have a large selection of steel and titanium retainers (pages 308-310), hardened steel spring seat cups and I.D. locators (page 313) to match our springs. A spring that is contained properly at the retainer and the cylinder head will offer the longest possible service life.

PROPER SPRING HANDLING

1. Handle springs with care. Never place in a vise, grab with pliers or hit them with a hammer. This will damage the surface of the spring, which will cause it to fail.
2. When separating double or triple springs, use only a durable plastic object that cannot harm the shot-peened surface of the spring.
3. Valve springs are shipped with a rust preventative coating that should remain on the spring throughout engine assembly. Do not clean springs with acidic or evaporative cleaners. This causes rapid drying and promotes the formation of rust on the surface, which can cause catastrophic failures. Even a slight amount of corrosion can be a problem.
3. When installing springs, use COMP Cams® Valve Train Assembly Spray (Part #106) to ease assembly and improve the life of the spring.

CHECKING LOADS

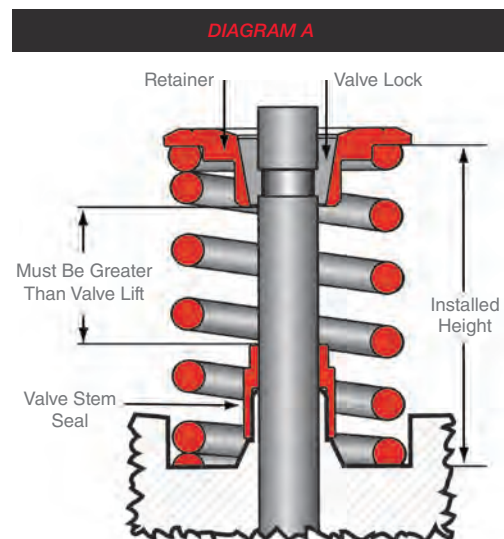
1. COMP Cams® has matched each set of springs for load consistency. A variance of +/-10% is acceptable for new springs.
2. When checking the spring loads on a load tester, measure and note the thickness of the retainer where the outer spring sits. Assemble the retainer on the spring and place on the base of the spring checker.
3. Compress the spring to the desired installed height. This is the measurement between the top of the spring (on the bottom side of the retainer where the outer spring sits) and the bottom of the spring on the base.

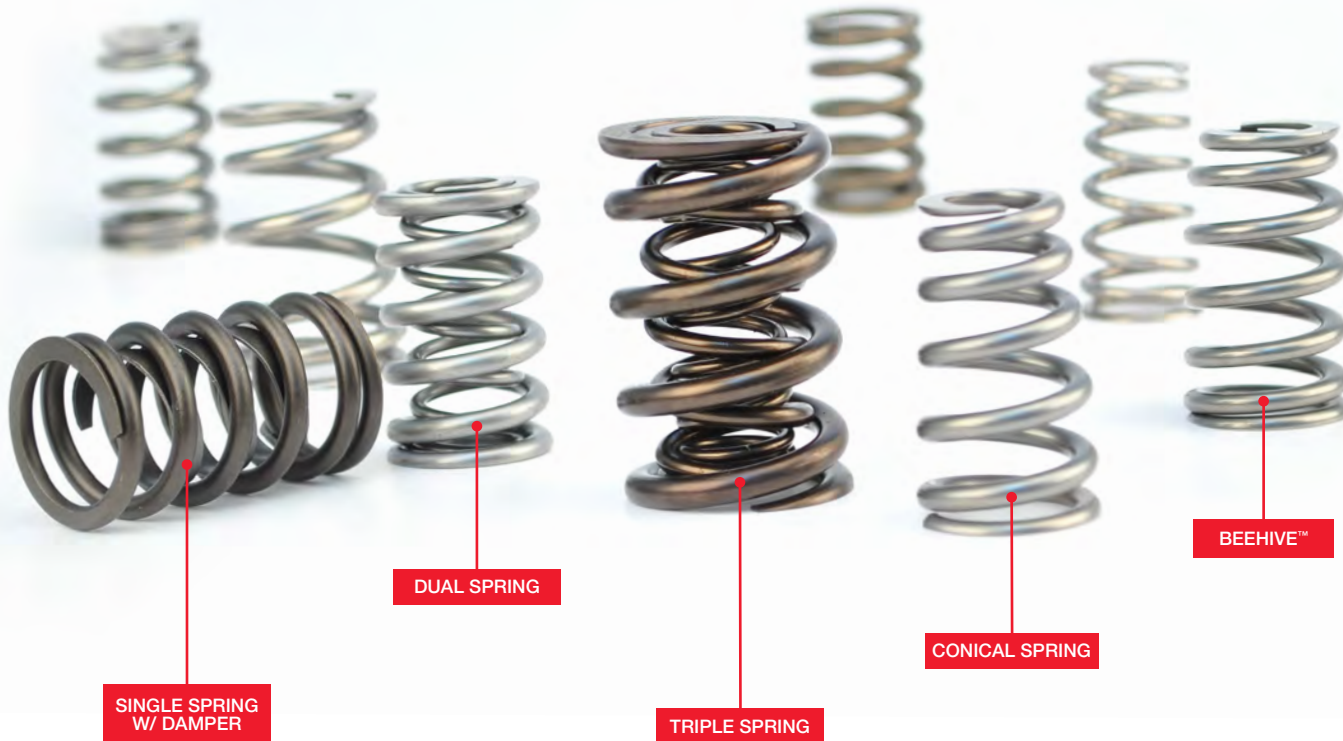
BREAKING IN A SPRING

1. It is important for new springs to take a heat-set. Upon initial start-up, limit RPM to 1500 to 2000 until the temperature has reached operating levels. Shut off the engine and allow the springs to cool to room temperature. This usually will eliminate early breakage and prolong spring life. After the spring has been broken-in, it is common for it to lose a slight amount of pressure. However, it should then remain constant unless the engine is abused and the spring becomes overstressed. If this occurs the springs must either be replaced or shimmed to the correct pressure.

INSTALLATION

1. Before installing the spring on the cylinder heads, check the installed spring height. This is the distance from the bottom of the retainer to the surface where the spring rests on the head. First, install the valve in the guide, then install the retainer and valve locks. Pull the retainer tightly against the valve locks while holding the valve assembly steady. Measure the distance between the spring seat and the outside step of the retainer using your height micrometer (Part #4928 or #4929). After you have measured all the valves, find the shortest height. This will become the spring's installed height on your heads. If your combination includes a dual or triple spring assembly, it will be necessary to allow for the inner steps of the retainer.
2. It will then be necessary to use shims to obtain the shortest installed height ($\pm .020"$ is acceptable) on the remaining valves.
3. Before removing the retainers, measure the distance from the bottom of the retainer to the top of the valve seal (Diagram A). This distance must be greater than the lift of the valve. If not, the guide must be machined to avoid cam failure.
4. Once the valve springs have been installed, it is important to check for coil bind. This means that when the valve is fully open, there must be a minimum of .060" clearance between the coils of both the inner and outer springs. If this clearance doesn't exist, you must change either the retainer or the valve to gain more installed height, or change to a spring that will accommodate more lift or machine the spring seat for extra depth.
5. Always check for clearance between the retainer and the inside face of the rocker arm. You should check to see that you have the proper rocker arm/retainer combination and rocker geometry.
6. To aid in the engine break in process, spray the springs, rocker arms and pushrods with COMP Cams® Valve Train Assembly Spray (Part #106).





PERFORMANCE STREET

COMP Cams® Performance Street Valve Springs provide extra stability and endurance. These are the most popular COMP® springs for street applications and are used primarily by customers with performance hydraulic flat tappet & hydraulic rollers in mind. COMP® technicians will match the proper spring for each customer's given lift and install height requirements.

RACE/STREET

Race/Street Valve Springs provide extra stability and endurance for most race/street applications. These springs are used by the street customer who has chosen a larger lift cam with race being the primary focus, along with limited street use. COMP® technicians will match the proper spring for the customer exploring more race than street driving for larger hydraulic, hydraulic rollers and some solid flat tappet profiles, given lift and install height requirements.

RACE SPORTSMAN

Race Sportsman Valve Springs offer extra stability and endurance for those weekend-minded racers in oval track and bracket drag race applications. These springs are the most popular choice for flat tappet hydraulic and solid lifter and larger hydraulic roller applications. COMP® technicians will match the proper springs for each customer's given lift and install height requirements.

RACE ENDURANCE

COMP Cams® Race Endurance Valve Springs offer extra stability and endurance based on enhancements added during the finishing process. These are the most popular springs for the serious oval track and drag race customer using nitrided solid lifters and roller cams. COMP® technicians will match the proper springs for the customer's given lift and install height requirements. Race Endurance Springs typically run a little closer to coil bind when better valves, retainers and keepers are present.

RACE EXTREME

Race Extreme Valve Springs are for the serious racer because they offer increased stability and endurance due to enhancements added during the finishing process. These are the best choice for the roller cam customer with higher lift and RPM in mind. These springs must be recommended with valve, retainer and keeper weights all being considered first. COMP® technicians will match the proper spring given the application, RPM and lobe families for each individual application.

OUR EXPERIENCED TEAM OF
TECHNICIANS CAN HELP ANSWER
YOUR VALVE TRAIN QUESTIONS

CAMHELP® 800.999.0853

| MAX LIFT | O.D. OF BASE | O.D. OF TOP | I.D. OF BASE | I.D. OF TOP | INSTALLED LOAD | INSTALLED HEIGHT | OPEN LOAD | OPEN HEIGHT | COIL BIND | RATE (LBS./IN.) | PART # |
|---------------------------|--------------|-------------|--------------|-------------|----------------|------------------|-----------|-------------|-----------|-----------------|--------------|
| PERFORMANCE STREET | | | | | | | | | | | |
| .500 | 1.105 | .943 | .742 | .580 | 90 | 1.470 | 252 | .970 | .900 | 324 | 26123 |
| .525 | 1.240 | 1.065 | .825 | .650 | 110 | 1.700 | 292 | 1.175 | 1.115 | 347 | 26981 |
| .550 | 1.061 | .959 | .738 | .636 | 93 | 1.570 | 198 | 1.020 | 1.010 | 191 | 26113 |
| .550 | 1.415 | 1.065 | 1.000 | .650 | 137 | 1.700 | 305 | 1.100 | 1.060 | 280 | 26995 |
| .600 | 1.290 | 1.055 | .885 | .650 | 105 | 1.800 | 293 | 1.200 | 1.100 | 313 | 26915 |
| .625 | 1.415 | 1.065 | 1.000 | .650 | 137 | 1.700 | 284 | 1.175 | 1.060 | 280 | 26986 |
| .625 | 1.310 | 1.075 | .885 | .650 | 125 | 1.800 | 367 | 1.150 | 1.100 | 372 | 26918 |
| .650 | 1.509 | 1.509 | .697 | 1.125 | 112 | 1.900 | 355 | 1.200 | 1.175 | 347 | 924 |
| RACE STREET | | | | | | | | | | | |
| .600 | 1.101 | 1.013 | .738 | .650 | 120 | 1.640 | 275 | 1.040 | .970 | 258 | 26125 |
| .600 | 1.444 | 1.059 | 1.000 | .650 | 155 | 1.880 | 377 | 1.280 | 1.230 | 370 | 26120 |
| .625 | 1.290 | 1.020 | .920 | .650 | 136 | 1.800 | 412 | 1.170 | 1.125 | 438 | 7228 |
| .650 | 1.550 | 1.550 | .795 | .795 | 153 | 1.900 | 383 | 1.250 | 1.160 | 354 | 930 |
| .660 | 1.320 | 1.320 | .680 | .680 | 141 | 1.810 | 405 | 1.150 | 1.070 | 400 | 26925 |
| .675 | 1.320 | 1.320 | .654 | .654 | 129 | 1.835 | 470 | 1.160 | 1.100 | 505 | 26926 |
| .750 | 1.590 | 1.186 | 1.125 | .721 | 150 | 2.000 | 375 | 1.250 | 1.130 | 300 | 26095 |
| RACE SPORTSMAN | | | | | | | | | | | |
| .575 | 1.269 | 1.269 | .711 | .711 | 130 | 1.750 | 391 | 1.175 | 1.100 | 454 | 941 |
| .600 | 1.475 | 1.475 | .712 | .712 | 133 | 1.900 | 332 | 1.300 | 1.200 | 332 | 950 |
| .650 | 1.454 | 1.185 | 1.000 | .731 | 160 | 1.800 | 420 | 1.150 | 1.100 | 400 | 26056 |
| .650 | 1.550 | 1.550 | .795 | .795 | 160 | 1.880 | 383 | 1.250 | 1.160 | 354 | 928 |
| .650 | 1.585 | 1.204 | 1.102 | .721 | 150 | 1.925 | 410 | 1.275 | 1.225 | 400 | 26055 |
| .675 | 1.320 | 1.320 | .654 | .654 | 129 | 1.835 | 470 | 1.160 | 1.100 | 505 | 26526 |
| .675 | 1.332 | 1.060 | .932 | .660 | 145 | 1.900 | 495 | 1.225 | 1.175 | 519 | 7230 |
| .690 | 1.390 | 1.060 | .990 | .660 | 160 | 1.900 | 495 | 1.210 | 1.160 | 486 | 7256 |
| RACE ENDURANCE | | | | | | | | | | | |
| .625 | 1.564 | 1.564 | .742 | .742 | 178 | 1.900 | 459 | 1.275 | 1.200 | 454 | 26094 |
| .650 | 1.553 | 1.553 | .740 | .740 | 150 | 1.850 | 421 | 1.250 | 1.160 | 439 | 929 |
| .650 | 1.551 | 1.551 | .721 | .721 | 195 | 2.000 | 563 | 1.250 | 1.135 | 502 | 26097 |
| .650 | 1.551 | 1.551 | .721 | .721 | 201 | 1.950 | 550 | 1.250 | 1.175 | 499 | 927 |
| .650 | 1.565 | 1.565 | .804 | .804 | 240 | 1.900 | 598 | 1.250 | 1.160 | 551 | 943 |
| .700 | 1.565 | 1.565 | .803 | .803 | 230 | 2.000 | 580 | 1.300 | 1.230 | 500 | 26089 |
| .700 | 1.565 | 1.565 | .803 | .803 | 240 | 2.000 | 608 | 1.300 | 1.230 | 526 | 955 |
| .750 | 1.560 | 1.560 | .709 | .709 | 225 | 2.050 | 633 | 1.300 | 1.165 | 544 | 26115 |
| .800 | 1.657 | 1.442 | .861 | .646 | 150 | 2.000 | 630 | 1.200 | 1.115 | 600 | 7245 |
| RACE EXTREME | | | | | | | | | | | |
| .750 | 1.635 | 1.635 | .836 | .836 | 230 | 1.950 | 710 | 1.200 | 1.100 | 640 | 951 |
| .750 | 1.640 | 1.640 | .759 | .759 | 250 | 2.050 | 700 | 1.250 | 1.184 | 563 | 26099 |
| .800 | 1.660 | 1.660 | .627 | .627 | 285 | 2.000 | 800 | 1.250 | 1.130 | 689 | 946 |
| .800 | 1.660 | 1.660 | .627 | .627 | 304 | 2.050 | 849 | 1.250 | 1.145 | 681 | 947 |
| .900 | 1.520 | 1.520 | .711 | .711 | 325 | 2.100 | 1045 | 1.200 | 1.130 | 800 | 26956 |
| .900 | 1.660 | 1.660 | .627 | .627 | 332 | 2.100 | 950 | 1.200 | 1.130 | 687 | 948 |
| .900 | 1.683 | 1.683 | .627 | .627 | 382 | 2.100 | 1067 | 1.200 | 1.130 | 761 | 26082 |
| .950 | 1.520 | 1.520 | .711 | .711 | 405 | 2.150 | 1166 | 1.200 | 1.130 | 788 | 26957 |
| 1.000 | 1.520 | 1.520 | .711 | .711 | 455 | 2.175 | 1280 | 1.175 | 1.130 | 835 | 26955 |
| 1.000 | 1.686 | 1.686 | .624 | .624 | 342 | 2.200 | 1054 | 1.200 | 1.161 | 712 | 26028 |



#26918CS-KIT

GM LS BEEHIVE™ VALVE SPRING KITS

- Kits for hydraulic roller cams that include carefully matched Beehive™ Springs, retainers, locks, seals and spring seats
- Kits available with steel or lightweight tool steel retainers
- .600" Maximum lift for kits including Part #26915 valve springs
- .625" Maximum lift for kits including Part #26918 valve springs

| COMPONENTS | COMPONENT PART #s | KIT PART # |
|------------------------|-------------------|--------------------|
| PART #26915 | | |
| Beehive™ Valve Springs | 26915-16 | 26915CS-KIT |
| Steel Retainers | 774-16 | |
| 7° Steel Valve Locks | 623-16 | |
| Valve Seals | 511-16 | |
| Spring Seats | 4705-16 | |

| COMPONENTS | COMPONENT PART #s | KIT PART # |
|----------------------------------|-------------------|--------------------|
| PART #26918 | | |
| Beehive™ Valve Springs | 26918-16 | 26918CS-KIT |
| Steel Retainers | 774-16 | |
| 7° Steel Valve Locks | 623-16 | |
| Valve Seals | 511-16 | |
| Spring Seats | 4705-16 | |
| Beehive™ Valve Springs | 26918-16 | 26918TS-KIT |
| Lightweight Tool Steel Retainers | 1772-16 | |
| 7° Steel Valve Locks | 623-16 | |
| Valve Seals | 511-16 | |
| Spring Seats | 4705-16 | |

GM LS DUAL VALVE SPRING KITS

- Dual valve spring kits designed for hydraulic roller and some solid roller camshafts
- Include matched valve springs, retainers, locks, seals & seats
- Kits available with tool steel or titanium retainers
- .660" Maximum lift for kits including Part #26925 springs
- .675" Maximum lift for kits including Part #26926 springs

| COMPONENTS | COMPONENT PART #s | KIT PART # |
|----------------------------------|-------------------|--------------------|
| PART #26925 | | |
| Street/Strip Dual Valve Springs | 26925-16 | 26925TS-KIT |
| Lightweight Tool Steel Retainers | 1717-16 | |
| 7° Steel Valve Locks | 623-16 | |
| Valve Seals | 511-16 | |
| Spring Seats | 4695-16 | |

| COMPONENTS | COMPONENT PART #s | KIT PART # |
|----------------------------------|-------------------|--------------------|
| PART #26926 | | |
| Street/Strip Dual Valve Springs | 26926-16 | 26926TS-KIT |
| Lightweight Tool Steel Retainers | 1779-16 | |
| 7° Steel Valve Locks | 623-16 | |
| Valve Seals | 511-16 | |
| Spring Seats | 4695-16 | |
| Street/Strip Dual Valve Springs | 26926-16 | 26926TI-KIT |
| Titanium Retainers | 779-16 | |
| 7° Steel Valve Locks | 623-16 | |
| Valve Seals | 511-16 | |
| Spring Seats | 4695-16 | |

LS1 CONICAL VALVE SPRING KITS

- Designed for aggressive hydraulic and solid roller applications with performance at the forefront of design
- Design driven natural damping for increased RPM capabilities
- Kits available with steel or lightweight tool steel retainers
- .615" Maximum lift; 1.800" install height



| COMPONENTS | COMPONENT PART #s | KIT PART # |
|----------------------------------|-------------------|------------|
| PART #7228 | | |
| Conical Valve Springs | 7228-16 | 7228CS-KIT |
| Steel Retainer | 774-16 | |
| Valve Locks | 623-16 | |
| Valve Seal | 511-16 | |
| Spring Seat | 4680-16 | 7228TS-KIT |
| Conical Valve Springs | 7228-16 | |
| Lightweight Tool Steel Retainers | 1772-16 | |
| Valve Locks | 623-16 | |
| Spring Seat | 4680-16 | |
| Valve Seal | 511-16 | |

GT500 SPRING & RETAINER KITS

- Specifically matched kit for Ford GT500 cylinder heads
- Increased lift and RPM capabilities for higher performance applications
- Matched components for correct fitment and increased valvetrain life
- .520" Maximum lift; 1.470" install height



| COMPONENTS | COMPONENT PART #s | KIT PART # |
|------------------------|-------------------|-------------|
| PART #26123 | | |
| Beehive™ Valve Springs | 26125-16 | GT500ST-KIT |
| Beehive™ Valve Springs | 26123-16 | |
| Steel Retainers | 792-16 | |
| Steel Retainers | 799-16 | |
| Beehive™ Valve Springs | 26125-16 | GT500TI-KIT |
| Beehive™ Valve Springs | 26123-16 | |
| Titanium Retainers | 791-16 | |
| Titanium Retainers | 798-16 | |

FORD 5.0L COYOTE VALVE SPRING KITS

- Designed for both 2011-2014 and 2015-Later Ford Coyote and Boss 5.0L engines
- Create higher load, higher RPM and more lift capacity than stock
- Increased valve control at high RPM
- .510" Maximum lift; 1.570" install height for kits including Part #26123 valve springs
- .600" Maximum lift; 1.640" install height for kits including Part #26125 valve springs

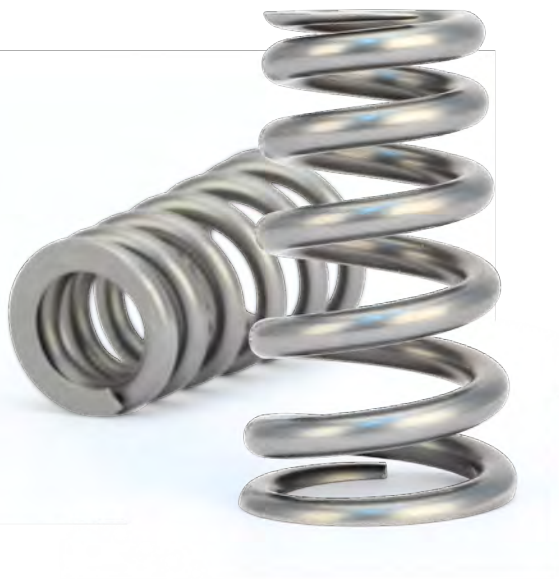


| COMPONENTS | COMPONENT PART #s | KIT PART # |
|----------------------------------|-------------------|--------------|
| PART #26113 | | |
| Beehive™ Valve Springs | 26113-32 | 26113CY-KIT |
| Steel Retainers | 710-32 | |
| Valve Seal | 523-32 | |
| Spring Seats | 4673-32 | |
| PART #26125 | | |
| Beehive™ Valve Springs | 26125-32 | 26125CTS-KIT |
| Lightweight Tool Steel Retainers | 1763-32 | |
| Valve Seal | 523-32 | |
| Spring Seats | 4673-32 | 26125CTI-KIT |
| Beehive™ Valve Springs | 26125-32 | |
| Titanium Retainers | 763-32 | |
| Valve Seal | 523-32 | |
| Spring Seats | 4673-32 | |

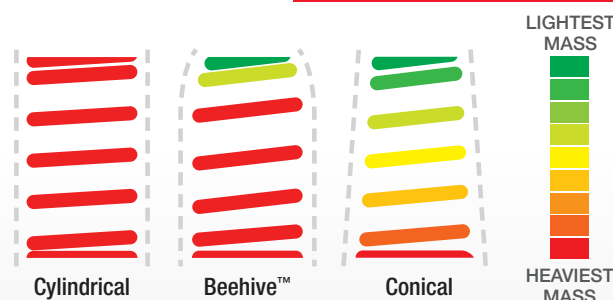
*All kits utilize stock locks

HONDA/ACURA DOHC VALVE SPRING KITS

| O.D. OF OUTER DIA. 1 | I.D. OF OUTER DIA. 2 | I.D. OF INNER DIA. 3 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | INCLUDES | PART # |
|----------------------|----------------------|----------------------|---|---|-----------|-----------------|---|-----------|
| .896 | .600 | N/A | 50 @ 1.950 | 170 @ 1.450 | 1.360 | 240 | Intake and Exhaust Springs & #753 Titanium Ret. | 89001-KIT |
| 1.171 | .875 | .615 | 23 @ 1.500 | 178 @ .975 | .858 | 296 | Intake and Exhaust Springs & #778 Steel Ret. | 89000-KIT |
| 1.171 | .875 | .615 | 23 @ 1.500 | 178 @ .975 | .858 | 296 | Intake and Exhaust Springs & #760 Titanium Ret. | 89012-KIT |
| 1.171 | .875 | Int. - .615 | Int. - 60 @ 1.375" Ex. - 43 @ 1.375" | Int. - 222 @ .875" Ex. - 148 @ .875" | .858 | 296 | Dual Intake and Single Exhaust Springs | 913-SET |



SPRING MASS COMPARISON



Force = Mass x Acceleration

Dynamic force on the valve train is calculated by the formula above. The constantly decreasing diameter from the bottom of the conical spring to the top reduces the spring's active mass where it's most important. But the rate of acceleration is the exact opposite – it's the highest on the top coil and decreases with each coil downward. Because the mass is so much lighter in the upper coils of the conical spring, it actually requires less force than a standard cylindrical spring or even a Beehive™ to move the spring coils themselves, therefore creating less overall force on the valve train and reducing the deflections that occur in the rocker arm and pushrod side of the system.

CONICAL VALVE SPRINGS

Expected to become the new standard in high performance valve spring design, COMP Cams® Conical and Dual Conical Valve Springs utilize round wire and feature a diameter-driven and progressive- pitch-driven natural frequency. This design increases the valve train RPM limit while reducing resonance concerns and decreasing dynamic spring oscillations. The result is longer spring life and the ability to run more aggressive camshafts. A breakthrough in valve spring development, COMP Cams® is the very first to market with this advanced conical design.

- The best natural frequency damping setup – dampens without wear, heat/friction or risk from interference contact
- Superfinish surface processing increases both lift capability and spring longevity without increasing wire size
- Designed for circle track, road race and drag racing applications, as well as all-out, high-RPM street/strip hydraulic roller valve train systems with optimized lifters

DUAL CONICAL VALVE SPRINGS

As opposed to dual cylindrical spring systems, COMP Cams® Dual Conical Valve Springs require no interference fit to dampen spring surge. They are constrained at the top and bottom with stepped retainers and spring seats to create separation. The result is that the springs' naturally progressive nature can provide outstanding damping without rubbing friction or the associated heat and surface damage.



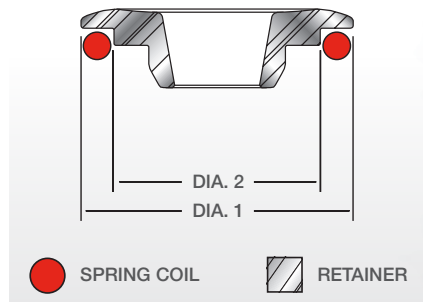
| | O.D. DIA. 1 | I.D. DIA. 2 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR ¹ | SHIMS |
|---------------------|----------------|----------------|--------------|--------------|--------------|--------------------|----------------|----------------------|---------------------------------------|-------------------------|-------|
| CONICAL | | | | | | | | | | | |
| Top | 1.020" | .650" | 136 @ 1.800 | 412 @ 1.170 | 1.125 | 438 | 7228-16 | 762, 772, 788 | 761, 774, 787, 1772, 1774 | 4680, 4676, 4677 | 4753 |
| Bottom | 1.290" | .920" | | | | | | | | | |
| Top | 1.060" | .660" | 145 @ 1.900 | 495 @ 1.225 | 1.175 | 519 | 7230-16 | 762, 772, 788 | 761, 774, 787, 1772, 1774 | 4680, 4676, 4677 | 4753 |
| Bottom | 1.332" | .932" | | | | | | | | | |
| Top | 1.060" | .660" | 160 @ 1.900 | 495 @ 1.210 | 1.160 | 486 | 7256-16 | 762, 772, 788 | 761, 774, 787, 1772, 1774 | 4670, 4667, 4697 | 4754 |
| Bottom | 1.390" | .990" | | | | | | | | | |
| DUAL CONICAL | | | | | | | | | | | |
| Top | 1.442" | .646" | 150 @ 2.000" | 630 @ 1.200" | 1.115" | 600 | 7245-16 | 716 ² | 1738 ² , 1739 ² | 4668, 4669 ³ | 4756 |
| Bottom | 1.657" | .861" | | | | | | | | | |

¹ Part #4680 features a .500" guide; Part #s 4667 & 4676 features a.530" guide; Part #4670 features a .570" guide; Part #4697 features a .630" guide

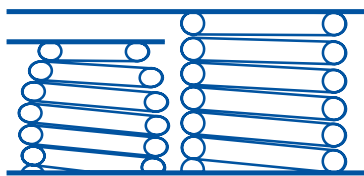
² 7° Retainer

³ Part #4668 features a .530" guide; Part #4669 features a .570" guide

Available in single units (-1).

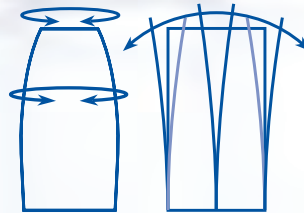


BEEHIVE™ VALVE SPRINGS



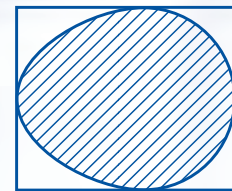
Beehive Shape Reduces Spring & Retainer Weight

- More stability, higher RPM, longer life and more horsepower
- Requires less spring pressure for better valve control
- Reduces the weight of the spring and allows a smaller, lighter retainer



Unique Design Yields Greater Spring Stability

- Handles stress more efficiently
- Increases harmonic resistance for greater stability
- Eliminates damaging harmonics
- Increases high RPM horsepower and durability



Oval/Multi-Arc Wire Shape

- Places the maximum area of the wire at the point of highest stress
- Handles stress more efficiently
- Allows better heat dissipation for longer life of the spring

| | O.D. DIA. 1 | I.D. DIA. 2 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR | SHIMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|----------------|----------------|--------------|--------------|--------------|--------------------|--------------------------|----------------------|---|------------------------------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------------------|---------------|---|------------------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------|-----|----------------|------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|-----|--------------|-----|----------------|------------------|------|--------|-------|-------|-----|-------|------|-------------|-------------|-------|
| Top | .943 | .580 | 90 @ 1.470 | 252 @ .970 | .900 | 324 | 26123 | 798 | 799 | N/A | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.105 | .742 | | | | | | | | | | Top | .943 | .580 | 90 @ 1.470 | 252 @ .970 | .900 | 324 | 26523¹ | 798 | 799 | N/A | N/A | Bottom | 1.105 | .742 | Top | .959 | .636 | 93 @ 1.570 | 198 @ 1.020 | 1.010 | 191 | 26113 | 702, 763, 791 | 710, 792, 1723, 1763 | 4673 | N/A | Bottom | 1.061 | .738 | Top | 1.013 | .650 | 120 @ 1.640 | 275 @ 1.040 | .970 | 258 | 26125 | 702, 763 | 710, 1723, 1763 | 4673 | N/A | Bottom | 1.101 | .738 | Top | 1.055 | .650 | 105 @ 1.800 | 293 @ 1.200 | 1.100 | 313 | 26915 | 762, 772, 788 | 761, 774, 783, 787, 1772, 1787 | 4705 | 4753 | Bottom | 1.290 | .885 | Top | 1.059 | .650 | 155 @ 1.880 | 377 @ 1.280 | 1.230 | 370 | 26120 | 794 | 795, 1795 | 4696, 4697, 4698 | 4754 | Bottom | 1.444 | 1.000 | Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | Bottom | 1.240 | .825 | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 |
| Top | .943 | .580 | 90 @ 1.470 | 252 @ .970 | .900 | 324 | 26523¹ | 798 | 799 | N/A | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.105 | .742 | | | | | | | | | | Top | .959 | .636 | 93 @ 1.570 | 198 @ 1.020 | 1.010 | 191 | 26113 | 702, 763, 791 | 710, 792, 1723, 1763 | 4673 | N/A | Bottom | 1.061 | .738 | Top | 1.013 | .650 | 120 @ 1.640 | 275 @ 1.040 | .970 | 258 | 26125 | 702, 763 | 710, 1723, 1763 | 4673 | N/A | Bottom | 1.101 | .738 | Top | 1.055 | .650 | 105 @ 1.800 | 293 @ 1.200 | 1.100 | 313 | 26915 | 762, 772, 788 | 761, 774, 783, 787, 1772, 1787 | 4705 | 4753 | Bottom | 1.290 | .885 | Top | 1.059 | .650 | 155 @ 1.880 | 377 @ 1.280 | 1.230 | 370 | 26120 | 794 | 795, 1795 | 4696, 4697, 4698 | 4754 | Bottom | 1.444 | 1.000 | Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | Bottom | 1.240 | .825 | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | |
| Top | .959 | .636 | 93 @ 1.570 | 198 @ 1.020 | 1.010 | 191 | 26113 | 702, 763, 791 | 710, 792, 1723, 1763 | 4673 | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.061 | .738 | | | | | | | | | | Top | 1.013 | .650 | 120 @ 1.640 | 275 @ 1.040 | .970 | 258 | 26125 | 702, 763 | 710, 1723, 1763 | 4673 | N/A | Bottom | 1.101 | .738 | Top | 1.055 | .650 | 105 @ 1.800 | 293 @ 1.200 | 1.100 | 313 | 26915 | 762, 772, 788 | 761, 774, 783, 787, 1772, 1787 | 4705 | 4753 | Bottom | 1.290 | .885 | Top | 1.059 | .650 | 155 @ 1.880 | 377 @ 1.280 | 1.230 | 370 | 26120 | 794 | 795, 1795 | 4696, 4697, 4698 | 4754 | Bottom | 1.444 | 1.000 | Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | Bottom | 1.240 | .825 | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.013 | .650 | 120 @ 1.640 | 275 @ 1.040 | .970 | 258 | 26125 | 702, 763 | 710, 1723, 1763 | 4673 | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.101 | .738 | | | | | | | | | | Top | 1.055 | .650 | 105 @ 1.800 | 293 @ 1.200 | 1.100 | 313 | 26915 | 762, 772, 788 | 761, 774, 783, 787, 1772, 1787 | 4705 | 4753 | Bottom | 1.290 | .885 | Top | 1.059 | .650 | 155 @ 1.880 | 377 @ 1.280 | 1.230 | 370 | 26120 | 794 | 795, 1795 | 4696, 4697, 4698 | 4754 | Bottom | 1.444 | 1.000 | Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | Bottom | 1.240 | .825 | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.055 | .650 | 105 @ 1.800 | 293 @ 1.200 | 1.100 | 313 | 26915 | 762, 772, 788 | 761, 774, 783, 787, 1772, 1787 | 4705 | 4753 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.290 | .885 | | | | | | | | | | Top | 1.059 | .650 | 155 @ 1.880 | 377 @ 1.280 | 1.230 | 370 | 26120 | 794 | 795, 1795 | 4696, 4697, 4698 | 4754 | Bottom | 1.444 | 1.000 | Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | Bottom | 1.240 | .825 | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.059 | .650 | 155 @ 1.880 | 377 @ 1.280 | 1.230 | 370 | 26120 | 794 | 795, 1795 | 4696, 4697, 4698 | 4754 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.444 | 1.000 | | | | | | | | | | Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | Bottom | 1.240 | .825 | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.065 | .650 | 110 @ 1.700 | 292 @ 1.175 | 1.115 | 347 | 26981 | 788 | 787, 795, 1787, 1795 | 4693 | 4753 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.240 | .825 | | | | | | | | | | Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.065 | .650 | 137 @ 1.700 | 284 @ 1.175 | 1.060 | 280 | 26986 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.415 | 1.000 | | | | | | | | | | Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | Bottom | 1.415 | 1.000 | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.065 | .650 | 137 @ 1.700 | 305 @ 1.100 | 1.060 | 280 | 26995 | 788 | 787, 795, 1787, 1795 | 4694 | 4755 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.415 | 1.000 | | | | | | | | | | Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | Bottom | 1.310 | .885 | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.075 | .650 | 125 @ 1.800 | 367 @ 1.150 | 1.100 | 372 | 26918¹ | 762, 772, 788 | 761, 774, 783, 787, 795, 1772, 1787, 1795 | 4678, 4679, 4690, 4705, 4872 | 4753 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.310 | .885 | | | | | | | | | | Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | Bottom | 1.454 | 1.000 | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.185 | .731 | 160 @ 1.800 | 420 @ 1.150 | 1.100 | 400 | 26056 | 785 | 703, 705, 1756 | 4696, 4697, 4704 | 4757 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.454 | 1.000 | | | | | | | | | | Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | Bottom | 1.590 | 1.125 | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.186 | .721 | 150 @ 2.000 | 375 @ 1.250 | 1.130 | 300 | 26095 | 785 | 703, 705, 1756 | 4689, 4702, 4711 | 4757 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.590 | 1.125 | | | | | | | | | | Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Top | 1.204 | .721 | 150 @ 1.925 | 410 @ 1.275 | 1.225 | 400 | 26055 | 785 | 703, 705, 1756 | 4640, 4697, 4702 | 4757 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bottom | 1.585 | 1.102 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

¹ Super Finish – surface enhancement that increases life and load loss



SINGLE OUTER VALVE SPRINGS

| O.D. DIA. 1 | I.D. DIA. 2 | DAMPER | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR | SHIMS |
|-------------|-------------|--------|-------------|-------------|-----------|-----------------|--------------------------|-------------------|---------------------|-------------------|-------|
| .896 | .590 | N | 50 @ 1.950 | 170 @ 1.450 | 1.360 | 240 | 912 | 753 | N/A | N/A | N/A |
| 1.159 | .836 | N | 75 @ 1.550 | 195 @ 1.050 | .917 | 240 | 909 | N/A | N/A | N/A | N/A |
| 1.230 | .876 | Y | 92 @ 1.700 | 230 @ 1.250 | 1.150 | 308 | 980 | 728 | 742, 750, 1750 | N/A | 4753 |
| 1.254 | .880 | Y | 105 @ 1.700 | 273 @ 1.250 | 1.150 | 373 | 981 | 728 | 742, 750, 1750 | N/A | 4753 |
| 1.269 | .871 | Y | 130 @ 1.750 | 391 @ 1.175 | 1.100 | 454 | 941 | 728 | 750, 1750 | N/A | 4753 |
| 1.320 | .920 | N | 103 @ 1.780 | 325 @ 1.160 | 1.100 | 356 | 26975¹ | N/A | 1777, 1779 | N/A | N/A |
| 1.354 | .930 | Y | 94 @ 1.850 | 323 @ 1.350 | 1.280 | 458 | 910 | N/A | N/A | N/A | N/A |
| 1.355 | 1.000 | N | 48 @ 1.600 | 146 @ 1.250 | 1.125 | 280 | 902 | N/A | N/A | N/A | 4754 |
| 1.355 | 1.011 | N | 61 @ 1.600 | 137 @ 1.250 | 1.054 | 219 | 906 | N/A | N/A | N/A | 4754 |
| 1.390 | .990 | Y | 77 @ 1.800 | 234 @ 1.300 | 1.260 | 313 | 961 | N/A | N/A | N/A | N/A |
| 1.400 | 1.015 | N | 80 @ 1.700 | 212 @ 1.250 | 1.125 | 293 | 903 | N/A | N/A | N/A | 4754 |
| 1.406 | 1.020 | N | 80 @ 1.700 | 180 @ 1.300 | 1.203 | 251 | 970 | N/A | N/A | N/A | N/A |
| 1.430 | 1.070 | Y | 105 @ 1.750 | 205 @ 1.250 | 1.150 | 200 | 984 | 730 | 740, 743, 744, 1730 | 4704 | 4754 |
| 1.437 | 1.027 | Y | 115 @ 1.700 | 284 @ 1.200 | 1.125 | 339 | 942 | 730 | 747, 768, 1730 | 4704 | 4754 |
| 1.437 | 1.073 | Y | 113 @ 1.500 | 207 @ 1.150 | .950 | 269 | 990 | 730 | 740, 743, 744, 1730 | 4704 | 4754 |
| 1.460 | 1.060 | Y | 124 @ 1.800 | 293 @ 1.250 | 1.195 | 308 | 972 | 730 | 740, 743, 744, 1730 | 4704 | 4755 |
| 1.464 | 1.070 | Y | 93 @ 1.900 | 237 @ 1.300 | 1.200 | 241 | 940 | 730 | 740, 1730 | 4704 | 4755 |
| 1.476 | 1.062 | Y | 109 @ 1.800 | 317 @ 1.300 | 1.140 | 415 | 926 | 730 | 740, 1730 | 4704 | 4755 |
| 1.494 | 1.080 | Y | 104 @ 1.650 | 236 @ 1.250 | 1.100 | 330 | 901 | 730 | 740, 743, 744, 1730 | 4769 | 4754 |
| 1.509 | 1.125 | Y | 137 @ 1.750 | 262 @ 1.250 | 1.175 | 251 | 920 | 721, 732 | 741, 1732 | 4704 | 4755 |
| 1.524 | 1.110 | Y | 122 @ 1.900 | 309 @ 1.400 | 1.200 | 373 | 911 | 721, 732 | 748, 1732 | 4779 ² | 4757 |
| 1.539 | 1.115 | Y | 149 @ 1.900 | 328 @ 1.350 | 1.225 | 328 | 936 | 721, 732 | 741, 1732 | 4700 | 4757 |

¹Works with GM 604 circle track crate engines

²Rotator Eliminator

SINGLE INNER VALVE SPRINGS

| O.D. DIA. 1 | I.D. DIA. 2 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # |
|-------------|-------------|------------|-------------|-----------|-----------------|------------|
| .937 | .697 | 27 @ 1.650 | 70 @ 1.200 | .920 | 96 | 974 |
| .953 | .697 | 58 @ 1.500 | 110 @ 1.100 | .928 | 130 | 975 |
| .970 | .700 | 46 @ 1.750 | 126 @ 1.150 | 1.040 | 134 | 973 |
| 1.015 | .731 | 54 @ 1.800 | 147 @ 1.200 | 1.100 | 156 | 937 |

OVATE WIRE VALVE SPRINGS

Ovate wire springs (constructed from oval shaped wire as opposed to round) have more material occupying the same area than round wire springs to more efficiently distribute the operation stresses.

| O.D. DIA. 1 | I.D. DIA. 2 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR | SHIMS | |
|--|-------------|-------------|-------------|-----------|-----------------|------------|-------------------|----------------|---------|-------|--|
| 1.260 | .836 | 105 @ 1.700 | 310 @ 1.200 | 1.150 | 410 | 983 | N/A | 751 | N/A | N/A | |
| OVATE WIRE VALVE SPRING KIT | | | | | | | | | | | |
| Includes Part #983 springs, #751 retainers and #613 locks. | | | | | | | 983-KIT | | | | |

SPACE SAVER VALVE SPRINGS

Space Saver Valve Springs have a unique inverted cone shape – large at the top and small at the bottom for head clearance. They were specifically designed for Small Block Chevrolets with up to .500" lift but require no machining to the spring pockets.

| | O.D. DIA. 1 | I.D. DIA. 2 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR | SHIMS | |
|--|-------------|-------------|-------------|-------------|-----------|-----------------|----------------|-------------------|----------------|---------|-------|--|
| Top | 1.454 | 1.070 | 100 @ 1.750 | 281 @ 1.250 | 1.135 | 362 | 982 | 730 | 740, 743 | N/A | 4754 | |
| Bottom | 1.250 | .866 | | | | | | | | | | |
| REVERSE CONICAL VALVE SPRING KIT | | | | | | | | | | | | |
| Includes Part #982 springs, #743 steel retainers, #601 locks and #502 seals. | | | | | | | 982-KIT | | | | | |

DUAL VALVE SPRINGS

| O.D. OF OUTER DIA. 1 | I.D. OF OUTER DIA. 1 | I.D. OF INNER DIA. 2 | DAMPER | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR | SHIMS |
|----------------------|----------------------|----------------------|--------|-------------|--------------|-----------|-----------------|--------------------------|-------------------|---------------------|------------------------|-------|
| 1.320 | .895 | .655 | N | 135 @ 1.770 | 400 @ 1.120 | 1.040 | 408 | 26921 | 754 | 1754 | 4695, 4682, 4709, 4731 | 4753 |
| 1.320 | .920 | .654 | N | 129 @ 1.835 | 470 @ 1.160 | 1.100 | 505 | 26926 | 779 | 1777, 1779 | 4695, 4682, 4709, 4731 | 4753 |
| 1.320 | .920 | .654 | N | 129 @ 1.835 | 470 @ 1.160 | 1.100 | 505 | 26526¹ | 779 | 1777, 1779 | 4682 | 4753 |
| 1.320 | .958 | .680 | N | 141 @ 1.810 | 405 @ 1.150 | 1.070 | 400 | 26925 | 717 | 713, 714, 1717 | 4682, 4709 | 4753 |
| 1.384 | 1.060 | .804 | N | 117 @ 1.600 | 232 @ 1.100 | 1.000 | 230 | 988 | 730 | 740, 743, 744, 1730 | N/A | 4754 |
| 1.430 | 1.070 | .697 | Y | 121 @ 1.800 | 343 @ 1.200 | 1.150 | 370 | 987 | 730 | 740, 1730 | 4704 | 4754 |
| 1.430 | 1.070 | .697 | Y | 132 @ 1.750 | 293 @ 1.250 | 1.150 | 322 | 986 | 730 | 740, 1730 | 4704 | 4754 |
| 1.430 | 1.070 | .700 | Y | 165 @ 1.750 | 346 @ 1.250 | 1.150 | 366 | 985 | 730 | 740, 1730 | 4704, 4770 | 4754 |
| 1.437 | 1.073 | .697 | Y | 102 @ 1.700 | 303 @ 1.150 | 1.065 | 367 | 994 | 730 | 740, 1730 | 4704 | 4754 |
| 1.437 | 1.073 | .697 | Y | 115 @ 1.700 | 336 @ 1.150 | 1.020 | 402 | 995 | 730 | 740, 1730 | N/A | 4754 |
| 1.460 | 1.060 | .697 | Y | 127 @ 1.850 | 369 @ 1.250 | 1.195 | 403 | 978 | 730 | 740, 1730 | 4704, 4770 | 4755 |
| 1.460 | 1.060 | .700 | Y | 155 @ 1.850 | 420 @ 1.250 | 1.195 | 441 | 977 | 730 | 740, 1730 | 4704 | 4755 |
| 1.475 | 1.080 | .712 | Y | 133 @ 1.900 | 332 @ 1.300 | 1.200 | 332 | 950 | 730 | 740, 743, 744, 1730 | 4781, 4782, 4704 | 4755 |
| 1.489 | 1.105 | .819 | N | 165 @ 1.800 | 385 @ 1.200 | 1.100 | 367 | 914 | 731, 720 | 741, 1731 | 4704, 4776, 4777 | 4755 |
| 1.509 | 1.125 | .697 | Y | 111 @ 1.900 | 388 @ 1.200 | 1.175 | 395 | 925 | 732, 721 | 741, 1732 | 4700, 4771, 4783 | 4757 |
| 1.509 | 1.125 | .697 | Y | 112 @ 1.900 | 355 @ 1.200 | 1.175 | 347 | 924 | 732, 721 | 741, 1732 | 4700, 4770, 4783 | 4757 |
| 1.520 | 1.042 | .711 | N | 325 @ 2.100 | 1045 @ 1.200 | 1.130 | 800 | 26956 | 718 | 1718 | 4769, 4781, 4782 | 4755 |
| 1.520 | 1.042 | .711 | N | 445 @ 2.175 | 1280 @ 1.175 | 1.130 | 835 | 26955 | 718 | 1718 | 4769, 4781, 4782 | 4755 |
| 1.536 | 1.112 | .720 | Y | 210 @ 1.900 | 524 @ 1.250 | 1.170 | 483 | 954 | 732, 721 | 741, 1732 | 4700, 4781, 4782 | 4757 |
| 1.539 | 1.125 | .697 | Y | 138 @ 1.950 | 419 @ 1.350 | 1.225 | 469 | 939 | N/A | 741 | 4700, 4770, 4771, 4783 | 4757 |
| 1.539 | 1.125 | .731 | Y | 204 @ 1.900 | 516 @ 1.250 | 1.225 | 480 | 938 | 738 | 741, 1732 | 4700, 4778, 4780 | 4757 |
| 1.550 | 1.106 | .784 | N | 285 @ 2.150 | 810 @ 1.250 | 1.190 | 583 | 26547 | 732, 721 | 1732 | 4641, 4642, 4643 | 4757 |
| 1.550 | 1.137 | .737 | Y | 148 @ 1.900 | 456 @ 1.250 | 1.085 | 473 | 953 | 732, 721 | 741, 1732 | 4700, 4772, 4780 | 4757 |
| 1.550 | 1.150 | .795 | Y | 153 @ 1.900 | 383 @ 1.250 | 1.160 | 354 | 930 | 732, 721 | 741, 1732 | 4700, 4776, 4777 | 4757 |
| 1.550 | 1.150 | .795 | Y | 160 @ 1.880 | 383 @ 1.250 | 1.160 | 354 | 928 | 732, 721 | 741, 1732 | 4700, 4776, 4777 | 4757 |
| 1.551 | 1.094 | .712 | Y | 215 @ 1.900 | 690 @ 1.150 | 1.090 | 633 | 999 | 732, 721 | 1732 | 4700, 4781, 4782 | 4757 |
| 1.551 | 1.117 | .721 | Y | 195 @ 2.000 | 572 @ 1.250 | 1.135 | 502 | 26097 | 732, 721 | 1732 | 4700, 4781, 4782 | 4757 |
| 1.551 | 1.117 | .721 | Y | 201 @ 1.950 | 550 @ 1.250 | 1.175 | 499 | 927 | 732, 721 | 1732 | 4700, 4778, 4780 | 4757 |
| 1.553 | 1.140 | .740 | Y | 158 @ 1.850 | 421 @ 1.250 | 1.160 | 439 | 929 | 732, 721 | 741, 1732 | 4700, 4780, 4781 | 4757 |
| 1.555 | 1.117 | .803 | N | 194 @ 1.950 | 579 @ 1.250 | 1.100 | 550 | 919 | 731, 720 | 741, 1731 | 4700, 4785 | 4757 |
| 1.557 | 1.143 | .749 | Y | 196 @ 2.000 | 513 @ 1.300 | 1.160 | 452 | 932 | 738 | 748, 1732 | 4700, 4772, 4773 | 4757 |
| 1.585 | 1.111 | .787 | N | 190 @ 1.950 | 747 @ 1.200 | 1.100 | 743 | 944 | 731, 720 | 1731 | 4702, 4776, 4777 | 4757 |
| 1.560 | 1.114 | .709 | Y | 225 @ 2.050 | 633 @ 1.300 | 1.165 | 544 | 26115 | 732 | 748, 1732 | 4700, 4781, 4782 | 4757 |
| 1.563 | 1.128 | .719 | Y | 171 @ 1.950 | 492 @ 1.300 | 1.200 | 494 | 933 | 732, 721 | 741, 1732 | 4700, 4781, 4782 | 4757 |

COMPONENTS VALVE SPRINGS

¹ Super Finish - surface enhancement that increases life and load loss

DUAL VALVE SPRINGS *(continued)*

| O.D. OF OUTER DIA. 1 | I.D. OF OUTER DIA. 1 | I.D. OF INNER DIA. 2 | DAMPER | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | STEEL RETAINER | LOCATOR | SHIMS |
|----------------------|----------------------|----------------------|--------|-------------|-------------|-----------|-----------------|--------------|-------------------|----------------|------------------|-------|
| 1.564 | 1.127 | .742 | Y | 178 @ 1.900 | 459 @ 1.275 | 1.200 | 454 | 26094 | 732, 721 | 749, 1732 | 4700, 4772, 4773 | 4757 |
| 1.565 | 1.127 | .803 | N | 230 @ 2.000 | 580 @ 1.300 | 1.230 | 500 | 26089 | 731, 720 | 1731 | 4700, 4776, 4777 | 4757 |
| 1.565 | 1.127 | .803 | N | 240 @ 2.000 | 608 @ 1.300 | 1.230 | 526 | 955 | 731, 720 | 749, 1731 | 4700, 4776, 4777 | 4757 |
| 1.565 | 1.127 | .804 | N | 240 @ 1.900 | 598 @ 1.250 | 1.160 | 551 | 943 | 731, 720 | 749, 1731 | 4700, 4785, 4777 | 4757 |
| 1.565 | 1.131 | .747 | Y | 203 @ 1.950 | 534 @ 1.250 | 1.180 | 473 | 935 | 724 | 748, 1732 | 4700, 4772, 4773 | 4757 |
| 1.565 | 1.136 | .824 | N | 200 @ 1.800 | 596 @ 1.100 | 1.050 | 566 | 917 | 731, 720 | 741, 1731 | 4700, 4759, 4785 | 4757 |
| 1.567 | 1.166 | .896 | N | 200 @ 1.700 | 474 @ 1.000 | .900 | 392 | 916 | 731, 720 | 741, 1731 | 4700 | 4757 |
| 1.635 | 1.161 | .836 | N | 230 @ 1.950 | 710 @ 1.200 | 1.100 | 640 | 951 | 736 | N/A | 4702, 4714 | 4756 |
| 1.638 | 1.167 | .757 | Y | 275 @ 2.000 | 816 @ 1.150 | 1.100 | 637 | 996 | 733 | N/A | 4702, 4774, 4775 | 4756 |
| 1.638 | 1.167 | .759 | Y | 250 @ 1.900 | 724 @ 1.200 | 1.090 | 677 | 998 | 733 | N/A | 4702, 4774, 4775 | 4756 |
| 1.640 | 1.167 | .759 | Y | 250 @ 2.050 | 700 @ 1.250 | 1.184 | 563 | 26099 | 733 | N/A | 4702, 4774, 4775 | 4757 |
| 1.650 | 1.180 | .772 | Y | 214 @ 1.950 | 662 @ 1.250 | 1.125 | 640 | 991 | 733 | N/A | 4702, 4774, 4775 | 4756 |
| 1.660 | 1.186 | .859 | N | 236 @ 2.000 | 671 @ 1.250 | 1.130 | 580 | 959 | 739 | N/A | 4702, 4786 | 4756 |

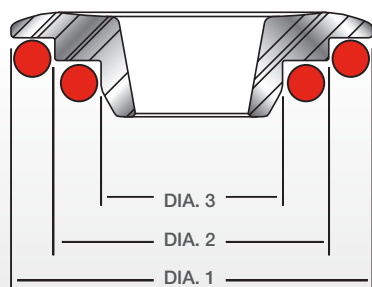
TRIPLE VALVE SPRINGS

| O.D. OF OUTER DIA. 1 | I.D. OF OUTER DIA. 2 | I.D. OF MIDDLE DIA. 3 | I.D. OF INNER DIA. 4 | SEAT LOAD | OPEN LOAD | COIL BIND | RATE (LBS./IN.) | PART # | TITANIUM RETAINER | LOCATOR | SHIMS |
|----------------------|----------------------|-----------------------|----------------------|-------------|--------------|-----------|-----------------|--------------|-------------------|---------|-------|
| 1.660 | 1.196 | .863 | .627 | 285 @ 2.000 | 800 @ 1.250 | 1.130 | 689 | 946 | 722, 735, 739 | 4702 | 4756 |
| 1.660 | 1.196 | .863 | .627 | 304 @ 2.050 | 849 @ 1.250 | 1.145 | 681 | 947 | 722, 735, 739 | 4708 | 4756 |
| 1.660 | 1.196 | .863 | .627 | 332 @ 2.100 | 950 @ 1.200 | 1.130 | 687 | 948 | 722, 735, 739 | 4708 | 4756 |
| 1.683 | 1.196 | .863 | .627 | 382 @ 2.100 | 1067 @ 1.200 | 1.130 | 761 | 26082 | 722, 735, 739 | 4708 | 4756 |
| 1.686 | 1.203 | .864 | .624 | 342 @ 2.200 | 1054 @ 1.200 | 1.161 | 712 | 26028 | 722, 735, 739 | 4708 | 4756 |

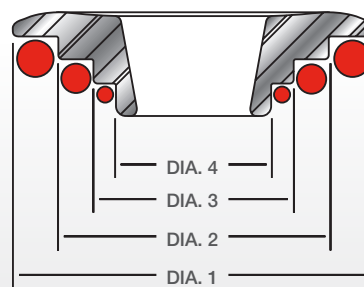
Note: Spring pressures may vary +/- 10%, available as singles or in sets of 8, 12 or 16

Note: Special seals available to fit these springs (see p. 315), use #735 retainers for +.050" installed height

DUAL



TRIPLE



SPRING COIL

RETAINER

| PART # | 26123 | 26523 | 913 | 975 | 990 | 909 | 906 | 902 | 988 |
|--------------------------------|------------|------------|--------|--------|----------------------------|--------|--------|--------|-------------|
| # of Springs | Beehive™ | Beehive™ | Double | Single | Single | Single | Single | Single | Double |
| Installed Height | 1.470 | 1.470 | 1.475 | 1.500 | 1.500 | 1.550 | 1.600 | 1.600 | 1.600 |
| O.D. of Outer | .943/1.105 | .943/1.105 | 1.171 | .953 | 1.437 | 1.159 | 1.355 | 1.355 | 1.384 |
| I.D. of Outer | .580/.742 | .580/.742 | .875 | .697 | 1.073 | .836 | 1.011 | 1.000 | 1.060 |
| I.D. of Inner | N/A | N/A | .615 | N/A | N/A | N/A | N/A | N/A | .804 |
| Spring Rate | 324 | 324 | 296 | 130 | 269 | 240 | 219 | 280 | 230 |
| Damper | No | No | No | No | Yes | No | No | No | No |
| SPRING HEIGHT (INCHES) | | | | | SPRING LOADS (LBS.) | | | | |
| 2.300 | | | | | | | | | |
| 2.250 | | | | | | | | | |
| 2.200 | | | | | | | | | |
| 2.150 | | | | | | | | | |
| 2.100 | | | | | | | | | |
| 2.050 | | | | | | | | | |
| 2.000 | | | | | | | | | |
| 1.950 | | | | | | | | | |
| 1.900 | | | | | | | | | |
| 1.850 | | | | | | | | | |
| 1.800 | | | | | | | | | |
| 1.750 | | | | | | | | | |
| 1.700 | | | | | | | | | |
| 1.650 | | | | | | | 50 | 34 | 105 |
| 1.600 | | | | | | 63 | 61 | 48 | 117 |
| 1.550 | 64 | 64 | | 48 | 100 | 75 | 72 | 62 | 128 |
| 1.500 | 80 | 80 | 23 | 58 | 113 | 87 | 82 | 76 | 140 |
| 1.450 | 96 | 96 | 38 | 62 | 127 | 99 | 93 | 90 | 151 |
| 1.400 | 113 | 113 | 53 | 69 | 140 | 111 | 104 | 104 | 163 |
| 1.350 | 129 | 129 | 67 | 77 | 154 | 123 | 115 | 118 | 174 |
| 1.300 | 145 | 145 | 82 | 84 | 167 | 135 | 126 | 132 | 186 |
| 1.250 | 161 | 161 | 97 | 91 | 181 | 147 | 137 | 146 | 197 |
| 1.200 | 177 | 177 | 112 | 98 | 194 | 159 | 148 | 160 | 209 |
| 1.150 | 194 | 194 | 127 | 105 | 207 | 171 | 158 | | 220 |
| 1.100 | 210 | 210 | 141 | 110 | 221 | 183 | 169 | | 232 |
| 1.050 | 226 | 226 | 156 | 120 | 234 | 195 | | | 243 |
| 1.000 | 242 | 242 | 171 | 127 | 248 | 207 | | | |
| 0.950 | | | 186 | | | | | | |
| 0.900 | | | 201 | | | | | | |
| 0.850 | | | | | | | | | |
| Maximum Coil Bind Height | .900 | .900 | .858 | .928 | .950 | .917 | 1.054 | 1.125 | 1.000 |
| Ti. Ret. (Std. Weight) | 798 | 798 | 760 | | 730 | | | | 730 |
| Ti. Ret. (Light Weight) | | | | | | | | | |
| Steel Ret. (Std. Weight) | 799 | 799 | 778 | | 740 743 744 | | | | 740 743 744 |
| Tool Steel Ret. (Light Weight) | | | | | 1730 | | | | 1730 |
| Seat .570 Guide Diameter | | | | | | | | | |
| Seat .630 Guide Diameter | | | | | | | | | |
| Spring Cup (O.D. Locator) | | | | | 4704 | | | | |
| Shims | | | | | 4754 | | 4754 | 4754 | 4754 |



| PART # | 26113 | 26125 | 974 | 901 | 26981 | 26995 | 26986 | 980 | 981 |
|--------------------------------|-------------|-------------|--------|-------------|----------------------------|-------------|-------------|---------|---------|
| # of Springs | Beehive™ | Beehive™ | Single | Single | Beehive™ | Beehive™ | Beehive™ | Single | Single |
| Installed Height | 1.640 | 1.640 | 1.650 | 1.650 | 1.700 | 1.700 | 1.700 | 1.700 | 1.700 |
| O.D. of Outer | .959/1.061 | 1.013/1.101 | .937 | 1.494 | 1.065/1.240 | 1.065/1.415 | 1.065/1.415 | 1.230 | 1.254 |
| I.D. of Outer | .636/.738 | .650/.738 | .697 | 1.080 | .650/.825 | .650/1.000 | .650/1.000 | .876 | .880 |
| I.D. of Inner | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Spring Rate | 191 | 258 | 96 | 330 | 347 | 280 | 280 | 308 | 373 |
| Damper | No | No | No | Yes | No | No | No | Yes | Yes |
| SPRING HEIGHT (INCHES) | | | | | SPRING LOADS (LBS.) | | | | |
| 2.300 | | | | | | | | | |
| 2.250 | | | | | | | | | |
| 2.200 | | | | | | | | | |
| 2.150 | | | | | | | | | |
| 2.100 | | | | | | | | | |
| 2.050 | | | | | | | | | |
| 2.000 | | | | | | | | | |
| 1.950 | | | | | | | | | |
| 1.900 | | | | | | | | | |
| 1.850 | | | | | | | 95 | | |
| 1.800 | | | | | | | 109 | | |
| 1.750 | | | | | 93 | 123 | 123 | 77 | 87 |
| 1.700 | | 104 | 22 | 88 | 110 | 137 | 137 | 92 | 105 |
| 1.650 | 78 | 117 | 27 | 104 | 127 | 151 | 151 | 107 | 123 |
| 1.600 | 88 | 130 | 32 | 121 | 145 | 165 | 165 | 123 | 142 |
| 1.550 | 97 | 143 | 37 | 137 | 162 | 179 | 179 | 138 | 160 |
| 1.500 | 107 | 156 | 41 | 154 | 179 | 193 | 193 | 153 | 178 |
| 1.450 | 116 | 169 | 46 | 170 | 197 | 207 | 207 | 169 | 197 |
| 1.400 | 126 | 182 | 51 | 187 | 214 | 221 | 221 | 184 | 215 |
| 1.350 | 135 | 194 | 56 | 203 | 231 | 235 | 235 | 200 | 233 |
| 1.300 | 145 | 207 | 61 | 220 | 249 | 249 | 249 | 215 | 252 |
| 1.250 | 154 | 220 | 65 | 236 | 266 | 263 | 263 | 230 | 273 |
| 1.200 | 164 | 233 | 70 | 253 | 283 | 277 | 277 | | 294 |
| 1.150 | 174 | 246 | 75 | | 301 | 291 | 291 | | |
| 1.100 | 183 | 259 | 80 | | | 305 | 305 | | |
| 1.050 | 193 | 272 | 85 | | | 320 | | | |
| 1.000 | | 285 | 89 | | | | | | |
| 0.950 | | | | | | | | | |
| 0.900 | | | | | | | | | |
| 0.850 | | | | | | | | | |
| Maximum Coil Bind Height | 1.010 | .970 | .920 | 1.100 | 1.115 | 1.060 | 1.060 | 1.150 | 1.150 |
| Ti. Ret. (Std. Weight) | | | | 730 | | | | 728 | 728 |
| Ti. Ret. (Light Weight) | 791 702 763 | 702 763 | | | 788 | 788 | 788 | | |
| Steel Ret. (Std. Weight) | 792 710 | 710 | | 740 743 744 | 787 795 | 787 795 | 787 795 | 742 750 | 742 750 |
| Tool Steel Ret. (Light Weight) | 1723 1763 | 1723 1763 | | 1730 | 1787 1795 | 1787 1795 | 1787 1795 | 1750 | 1750 |
| Seat .570 Guide Diameter | | | | | 4693 | 4694 | 4694 | | |
| Seat .630 Guide Diameter | | | | | | | | | |
| Spring Cup (O.D. Locator) | | | | 4769 | | | | | |
| Shims | | | | 4754 | 4753 | 4755 | 4755 | 4753 | 4753 |

| | 983 | 903 | 970 | 942 | 994 | 995 | 916 | 973 | 982 | PART # |
|--|----------------------------|--------|--------|---------|--------|--------|--------|--------|-------------|--------------------------------|
| | Single | Single | Single | Single | Double | Double | Double | Single | Space Saver | # of Springs |
| | 1.700 | 1.700 | 1.700 | 1.700 | 1.700 | 1.700 | 1.700 | 1.750 | 1.750 | Installed Height |
| | 1.260 | 1.400 | 1.406 | 1.437 | 1.437 | 1.437 | 1.567 | .970 | 1.250/1.454 | O.D. of Outer |
| | .836 | 1.015 | 1.020 | 1.027 | 1.073 | 1.073 | 1.166 | .700 | .866/1.070 | I.D. of Outer |
| | N/A | N/A | N/A | N/A | .697 | .697 | .896 | N/A | N/A | I.D. of Inner |
| | 410 | 293 | 251 | 339 | 367 | 402 | 392 | 134 | 362 | Spring Rate |
| | No | No | No | Yes | Yes | Yes | No | No | No | Damper |
| | SPRING LOADS (LBS.) | | | | | | | | | SPRING HEIGHT (INCHES) |
| | | | | | | | | | | 2.300 |
| | | | | | | | | | | 2.250 |
| | | | | | | | | | | 2.200 |
| | | | | | | | | | | 2.150 |
| | | | | | | | | | | 2.100 |
| | | | | | | | | | | 2.050 |
| | | | | | | | | | | 2.000 |
| | | | | | | | | | | 1.950 |
| | | | | | | | | | | 1.900 |
| | | | | | | | | | | 1.850 |
| | | | | | | | | 39 | 82 | 1.800 |
| | 85 | 65 | 67 | 98 | 84 | 95 | 180 | 46 | 100 | 1.750 |
| | 105 | 80 | 80 | 115 | 102 | 115 | 200 | 53 | 118 | 1.700 |
| | 126 | 95 | 92 | 132 | 120 | 135 | 220 | 59 | 136 | 1.650 |
| | 146 | 109 | 105 | 149 | 139 | 155 | 239 | 66 | 154 | 1.600 |
| | 167 | 124 | 118 | 165 | 157 | 175 | 259 | 73 | 172 | 1.550 |
| | 187 | 139 | 130 | 182 | 175 | 195 | 278 | 80 | 191 | 1.500 |
| | 208 | 153 | 143 | 199 | 194 | 216 | 298 | 86 | 209 | 1.450 |
| | 228 | 168 | 155 | 216 | 212 | 236 | 318 | 93 | 227 | 1.400 |
| | 249 | 182 | 168 | 233 | 230 | 256 | 337 | 100 | 245 | 1.350 |
| | 269 | 197 | 180 | 250 | 249 | 276 | 357 | 106 | 263 | 1.300 |
| | 290 | 212 | 193 | 267 | 267 | 296 | 376 | 113 | 281 | 1.250 |
| | 310 | 226 | | 284 | 286 | 316 | 396 | 120 | 299 | 1.200 |
| | | | | | 303 | 336 | 416 | 126 | | 1.150 |
| | | | | | 321 | 356 | 435 | 133 | | 1.100 |
| | | | | | | | 455 | | | 1.050 |
| | | | | | | | 474 | | | 1.000 |
| | | | | | | | 494 | | | 0.950 |
| | | | | | | | | | | 0.900 |
| | | | | | | | | | | 0.850 |
| | 1.150 | 1.125 | 1.203 | 1.125 | 1.065 | 1.020 | .900 | 1.040 | 1.135 | Maximum Coil Bind Height |
| | | | | 730 | 730 | 730 | 731 | | 730 | Ti. Ret. (Std. Weight) |
| | | | | | | | 720 | | | Ti. Ret. (Light Weight) |
| | 751 | | | 768 747 | 740 | 740 | 741 | | 743 740 | Steel Ret. (Std. Weight) |
| | | | | 1730 | 1730 | 1730 | 1731 | | 1730 | Tool Steel Ret. (Light Weight) |
| | | | | | | | | | | Seat .570 Guide Diameter |
| | | | | | | | | | | Seat .630 Guide Diameter |
| | | | | 4704 | 4704 | | 4700 | | 4704 | Spring Cup (O.D. Locator) |
| | | 4754 | | 4754 | 4754 | 4754 | 4757 | | 4754 | Shims |



| PART # | 941 | 984 | 986 | 985 | 987 | 920 | 26921 | 26975 ¹ | 937 | 7228 |
|--------------------------------|--------|-------------|--------|--------|--------|--------|-----------|--------------------|--------------|-----------------|
| # of Springs | Single | Single | Double | Double | Double | Single | Double | Single | Single Inner | Conical |
| Installed Height | 1.750 | 1.750 | 1.750 | 1.750 | 1.800 | 1.750 | 1.770 | 1.780 | 1.800 | 1.800 |
| O.D. of Outer | 1.269 | 1.430 | 1.430 | 1.430 | 1.430 | 1.509 | 1.320 | 1.320 | 1.015 | 1.030/1.286 |
| I.D. of Outer | .871 | 1.070 | 1.070 | 1.070 | 1.070 | 1.125 | .895 | .920 | .731 | .662/.918 |
| I.D. of Inner | N/A | N/A | .697 | .700 | .697 | N/A | .655 | N/A | N/A | N/A |
| Spring Rate | 454 | 200 | 322 | 366 | 370 | 251 | 408 | 356 | 156 | 440 |
| Damper | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No |
| SPRING HEIGHT (INCHES) | | | | | | | | | | |
| SPRING LOADS (LBS.) | | | | | | | | | | |
| 2.300 | | | | | | | | | | |
| 2.250 | | | | | | | | | | |
| 2.200 | | | | | | | | | | |
| 2.150 | | | | | | | | | | |
| 2.100 | | | | | | | | | | |
| 2.050 | | | | | | | | | | |
| 2.000 | | | | | | | | | | |
| 1.950 | | | | | | | | | | |
| 1.900 | | | | | | | | | | |
| 1.850 | | 85 | 103 | | 104 | | | | 46 | 114 |
| 1.800 | 107 | 95 | 117 | 146 | 121 | 124 | 123 | 96 | 54 | 136 |
| 1.750 | 130 | 105 | 132 | 165 | 140 | 137 | 143 | 114 | 62 | 158 |
| 1.700 | 153 | 115 | 147 | 181 | 156 | 149 | 164 | 132 | 69 | 180 |
| 1.650 | 175 | 125 | 163 | 199 | 174 | 162 | 184 | 150 | 77 | 202 |
| 1.600 | 198 | 135 | 179 | 217 | 193 | 174 | 204 | 168 | 85 | 224 |
| 1.550 | 221 | 145 | 196 | 236 | 211 | 187 | 225 | 186 | 93 | 246 |
| 1.500 | 244 | 155 | 212 | 254 | 230 | 199 | 245 | 204 | 101 | 267 |
| 1.450 | 266 | 165 | 228 | 272 | 249 | 212 | 265 | 222 | 108 | 289 |
| 1.400 | 289 | 175 | 244 | 291 | 268 | 224 | 286 | 239 | 116 | 311 |
| 1.350 | 312 | 185 | 261 | 309 | 286 | 237 | 306 | 257 | 124 | 333 |
| 1.300 | 334 | 195 | 277 | 327 | 305 | 250 | 327 | 275 | 132 | 355 |
| 1.250 | 358 | 205 | 293 | 346 | 324 | 262 | 347 | 293 | 139 | 377 |
| 1.200 | 381 | 215 | 310 | 364 | 343 | | 367 | 311 | 147 | 399 |
| 1.150 | 403 | | | | | | 388 | 329 | 155 | 421 |
| 1.100 | | | | | | | 408 | | | |
| 1.050 | | | | | | | | | | |
| 1.000 | | | | | | | | | | |
| 0.950 | | | | | | | | | | |
| 0.900 | | | | | | | | | | |
| 0.850 | | | | | | | | | | |
| Maximum Coil Bind Height | 1.100 | 1.150 | 1.150 | 1.150 | 1.150 | 1.175 | 1.040 | 1.100 | 1.100 | 1.125 |
| Ti. Ret. (Std. Weight) | 728 | 730 | 730 | 730 | 730 | 732 | | 779 | | |
| Ti. Ret. (Light Weight) | | | | | | 721 | 754 | | | 772 762 788 |
| Steel Ret. (Std. Weight) | 750 | 740 743 744 | 740 | 740 | 740 | 741 | | | | 774 783 761 787 |
| Tool Steel Ret. (Light Weight) | 1750 | 1730 | 1730 | 1730 | 1730 | 1732 | 1754 | 1777 1779 | | 1772 1787 |
| Seat .570 Guide Diameter | | | | 4770 | | | 4682 4731 | | | 4677 |
| Seat .630 Guide Diameter | | | | | | | | | | |
| Spring Cup (O.D. Locator) | | 4704 | 4704 | 4704 | 4704 | 4704 | 4709 | 4709 | 4709 | |
| Shims | 4753 | 4754 | 4754 | 4754 | 4754 | 4755 | 4753 | 4753 | | 4753 |

¹ Works with GM 604 circle track crate engines

| 26915 | 26918 | 26056 | 961 | 972 | 926 | 914 | 917 | 26925 | PART # |
|----------------------------|------------------------|-------------|--------|----------------|--------|--------|-----------|---------|--------------------------------|
| Beehive™ | Beehive™ | Beehive™ | Single | Single | Single | Double | Double | Double | # of Springs |
| 1.800 | 1.800 | 1.800 | 1.800 | 1.800 | 1.800 | 1.800 | 1.800 | 1.810 | Installed Height |
| 1.055/1.290 | 1.075/1.310 | 1.185/1.454 | 1.390 | 1.460 | 1.476 | 1.489 | 1.565 | 1.320 | O.D. of Outer |
| .650/.885 | .650/.885 | .731/1.000 | .990 | 1.060 | 1.062 | 1.105 | 1.136 | .958 | I.D. of Outer |
| N/A | N/A | N/A | N/A | N/A | N/A | .819 | .824 | .680 | I.D. of Inner |
| 313 | 372 | 400 | 313 | 308 | 415 | 367 | 566 | 400 | Spring Rate |
| No | No | No | Yes | Yes | Yes | No | No | No | Damper |
| SPRING LOADS (LBS.) | | | | | | | | | SPRING HEIGHT (INCHES) |
| | | | | | | | | | 2.300 |
| | | | | | | | | | 2.250 |
| | | | | | | | | | 2.200 |
| | | | | | | | | | 2.150 |
| | | | | | | | | | 2.100 |
| | | | | | | | | | 2.050 |
| | | | | | | | | | 2.000 |
| | | | | | | | | | 1.950 |
| | | 120 | | | | | | | 1.900 |
| 89 | 106 | 140 | 61 | 109 | 88 | 147 | 172 | 125 | 1.850 |
| 105 | 125 | 160 | 77 | 124 | 109 | 165 | 200 | 145 | 1.800 |
| 121 | 144 | 180 | 93 | 139 | 129 | 183 | 228 | 165 | 1.750 |
| 136 | 162 | 200 | 108 | 155 | 150 | 202 | 257 | 185 | 1.700 |
| 152 | 181 | 220 | 124 | 170 | 171 | 220 | 285 | 205 | 1.650 |
| 168 | 199 | 240 | 140 | 185 | 192 | 238 | 313 | 225 | 1.600 |
| 183 | 218 | 260 | 155 | 201 | 213 | 257 | 341 | 245 | 1.550 |
| 199 | 237 | 280 | 171 | 216 | 234 | 275 | 370 | 265 | 1.500 |
| 215 | 255 | 300 | 187 | 231 | 255 | 293 | 398 | 285 | 1.450 |
| 230 | 274 | 320 | 202 | 247 | 276 | 312 | 426 | 305 | 1.400 |
| 246 | 293 | 340 | 218 | 262 | 296 | 330 | 455 | 325 | 1.350 |
| 262 | 311 | 360 | 234 | 277 | 317 | 349 | 483 | 345 | 1.300 |
| 277 | 330 | 380 | | 293 | 338 | 367 | 511 | 365 | 1.250 |
| 293 | 348 | 400 | | | 359 | 385 | 539 | 385 | 1.200 |
| | 367 | 420 | | | | 404 | 568 | 405 | 1.150 |
| | | | | | | | 596 | | 1.100 |
| | | | | | | | | | 1.050 |
| | | | | | | | | | 1.000 |
| | | | | | | | | | 0.950 |
| | | | | | | | | | 0.900 |
| | | | | | | | | | 0.850 |
| 1.100 | 1.100 | 1.100 | 1.260 | 1.195 | 1.140 | 1.100 | 1.050 | 1.070 | Maximum Coil Bind Height |
| | | 785 | | 730 | 730 | 731 | 731 | 717 | Ti. Ret. (Std. Weight) |
| 772 762 788 | 772 762 788 | | | | | 720 | 720 | | Ti. Ret. (Light Weight) |
| 774 783 761 787 | 774 783 761 787 795 | 703 705 | | 740 743 744 | 740 | 741 | 741 | 713 714 | Steel Ret. (Std. Weight) |
| 1772 1787 | 1772 1787 1795 | 1756 | | 1730 | 1730 | 1731 | 1731 | 1717 | Tool Steel Ret. (Light Weight) |
| 4705 | 4705 | 4696 | | | | 4776 | 4785 4759 | 4682 | Seat .570 Guide Diameter |
| | | 4697 | | | | 4777 | | | Seat .630 Guide Diameter |
| | 4709 | 4704 | | 4704 | 4704 | 4704 | 4700 | 4709 | Spring Cup (O.D. Locator) |
| 4753 | 4753 | 4757 | | 4755 | 4755 | 4755 | 4757 | 4753 | Shims |



| PART # | 26926 | 26526 | 910 | 978 | 977 | 928 | 929 | 26120 | 7256 | 7230 |
|--------------------------------|-----------|-----------|--------|--------|--------|----------------------------|--------|-------------|-------------|-------------|
| # of Springs | Double | Double | Single | Double | Double | Double | Double | Beehive™ | Conical | Conical |
| Installed Height | 1.835 | 1.835 | 1.850 | 1.850 | 1.850 | 1.850 | 1.850 | 1.880 | 1.900 | 1.900 |
| O.D. of Outer | 1.320 | 1.320 | 1.354 | 1.460 | 1.460 | 1.550 | 1.553 | 1.059/1.444 | 1.060/1.390 | 1.060/1.332 |
| I.D. of Outer | .920 | .920 | .930 | 1.060 | 1.060 | 1.150 | 1.140 | .650/1.000 | .660/.990 | .660/.932 |
| I.D. of Inner | .654 | .654 | N/A | .697 | .700 | .795 | .740 | N/A | N/A | N/A |
| Spring Rate | 505 | 505 | 458 | 403 | 441 | 354 | 439 | 370 | 486 | 519 |
| Damper | No | No | Yes | Yes | Yes | Yes | Yes | No | No | No |
| SPRING HEIGHT (INCHES) | | | | | | SPRING LOADS (LBS.) | | | | |
| 2.300 | | | | | | | | | | |
| 2.250 | | | | | | | | | | |
| 2.200 | | | | | | | | | | |
| 2.150 | | | | | | | | | | |
| 2.100 | | | | | | | | | | |
| 2.050 | | | | | | | | | | |
| 2.000 | | | | | | | | | | |
| 1.950 | | | | | | | 114 | | 136 | 119 |
| 1.900 | | | 71 | 107 | 133 | 153 | 136 | 148 | 160 | 145 |
| 1.850 | 121 | 121 | 94 | 127 | 155 | 171 | 158 | 166 | 184 | 171 |
| 1.800 | 146 | 146 | 117 | 147 | 177 | 188 | 180 | 185 | 209 | 197 |
| 1.750 | 171 | 171 | 140 | 167 | 199 | 206 | 202 | 203 | 233 | 223 |
| 1.700 | 197 | 197 | 163 | 187 | 222 | 224 | 224 | 222 | 257 | 249 |
| 1.650 | 222 | 222 | 186 | 208 | 244 | 242 | 246 | 240 | 281 | 275 |
| 1.600 | 247 | 247 | 209 | 228 | 266 | 259 | 268 | 259 | 306 | 301 |
| 1.550 | 272 | 272 | 231 | 248 | 288 | 277 | 290 | 277 | 330 | 327 |
| 1.500 | 298 | 298 | 254 | 268 | 310 | 295 | 312 | 296 | 354 | 353 |
| 1.450 | 323 | 323 | 277 | 288 | 332 | 312 | 334 | 314 | 378 | 379 |
| 1.400 | 348 | 348 | 300 | 308 | 354 | 330 | 356 | 333 | 403 | 405 |
| 1.350 | 373 | 373 | 323 | 329 | 376 | 348 | 378 | 351 | 427 | 431 |
| 1.300 | 399 | 399 | | 349 | 398 | 365 | 399 | 370 | 451 | 457 |
| 1.250 | 424 | 424 | | 369 | 420 | 383 | 421 | 388 | 475 | 483 |
| 1.200 | 449 | 449 | | | | | 443 | | 500 | 509 |
| 1.150 | 465 | 465 | | | | | | | | |
| 1.100 | | | | | | | | | | |
| 1.050 | | | | | | | | | | |
| 1.000 | | | | | | | | | | |
| 0.950 | | | | | | | | | | |
| 0.900 | | | | | | | | | | |
| 0.850 | | | | | | | | | | |
| Maximum Coil Bind Height | 1.100 | 1.100 | 1.280 | 1.195 | 1.195 | 1.160 | 1.160 | 1.230 | 1.160 | 1.175 |
| Ti. Ret. (Std. Weight) | 779 | 779 | | 730 | 730 | 732 | 732 | | | |
| Ti. Ret. (Light Weight) | | | | | | 721 | 721 | 794 | 788 772 762 | 788 772 762 |
| Steel Ret. (Std. Weight) | | | | 740 | 740 | 741 | 741 | 795 | 787 774 761 | 787 774 761 |
| Tool Steel Ret. (Light Weight) | 1777 1779 | 1777 1779 | | 1730 | 1730 | 1732 | 1732 | 1795 | 1772 | 1772 |
| Seat .570 Guide Diameter | 4682 4731 | 4682 | | 4770 | | 4776 | 4781 | 4696 | 4670 4667 | 4677 |
| Seat .630 Guide Diameter | | | | | | 4777 | 4780 | 4697 | 4697 | |
| Spring Cup (O.D. Locator) | 4709 | 4709 | | 4704 | 4704 | 4700 | 4700 | 4698 | | |
| Shims | 4753 | 4753 | | 4755 | 4755 | 4757 | 4757 | 4754 | 4754 | 4753 |



| PART # | 999 | 26094 | 943 | 998 | 26055 | 912 | 939 | 927 | 919 |
|--------------------------------|--------|--------|--------|--------|----------------------------|--------|-----------|--------|--------|
| # of Springs | Double | Double | Double | Double | Beehive™ | Single | Double | Double | Double |
| Installed Height | 1.900 | 1.900 | 1.900 | 1.900 | 1.925 | 1.950 | 1.950 | 1.950 | 1.950 |
| O.D. of Outer | 1.551 | 1.564 | 1.565 | 1.638 | 1.204/1.585 | .896 | 1.539 | 1.551 | 1.555 |
| I.D. of Outer | 1.094 | 1.127 | 1.127 | 1.167 | .721/1.102 | .590 | 1.125 | 1.117 | 1.117 |
| I.D. of Inner | .712 | .742 | .804 | .759 | N/A | N/A | .697 | .721 | .803 |
| Spring Rate | 633 | 454 | 551 | 677 | 400 | 240 | 469 | 499 | 550 |
| Damper | Yes | Yes | No | Yes | No | No | Yes | Yes | No |
| SPRING HEIGHT (INCHES) | | | | | SPRING LOADS (LBS.) | | | | |
| 2.300 | | | | | | | | | |
| 2.250 | | | | | | | | | |
| 2.200 | | | | | | | | | |
| 2.150 | | | | | | | | | |
| 2.100 | | | | | | | | | |
| 2.050 | | | | | | | | | |
| 2.000 | | | | | 120 | 38 | 115 | 176 | 166 |
| 1.950 | 183 | 156 | 212 | 216 | 140 | 50 | 138 | 201 | 194 |
| 1.900 | 215 | 178 | 240 | 250 | 160 | 62 | 161 | 226 | 221 |
| 1.850 | 246 | 200 | 268 | 284 | 180 | 74 | 185 | 251 | 249 |
| 1.800 | 278 | 223 | 295 | 318 | 200 | 86 | 208 | 276 | 276 |
| 1.750 | 310 | 245 | 323 | 352 | 220 | 98 | 232 | 301 | 304 |
| 1.700 | 341 | 268 | 350 | 385 | 240 | 110 | 255 | 326 | 331 |
| 1.650 | 373 | 290 | 378 | 419 | 260 | 122 | 279 | 351 | 359 |
| 1.600 | 405 | 313 | 405 | 453 | 280 | 134 | 302 | 376 | 386 |
| 1.550 | 436 | 335 | 433 | 487 | 300 | 146 | 325 | 401 | 414 |
| 1.500 | 468 | 358 | 460 | 521 | 320 | 158 | 349 | 426 | 441 |
| 1.450 | 499 | 380 | 488 | 555 | 340 | 170 | 372 | 451 | 469 |
| 1.400 | 531 | 403 | 516 | 588 | 360 | 182 | 396 | 475 | 496 |
| 1.350 | 563 | 425 | 543 | 622 | 380 | | 419 | 500 | 524 |
| 1.300 | 594 | 447 | 571 | 656 | 400 | | 443 | 525 | 551 |
| 1.250 | 626 | 470 | 598 | 690 | 420 | | 466 | 550 | 579 |
| 1.200 | 658 | 492 | 626 | 724 | | | | | 606 |
| 1.150 | 690 | | | 758 | | | | | 634 |
| 1.100 | 722 | | | | | | | | |
| 1.050 | | | | | | | | | |
| 1.000 | | | | | | | | | |
| 0.950 | | | | | | | | | |
| 0.900 | | | | | | | | | |
| 0.850 | | | | | | | | | |
| Maximum Coil Bind Height | 1.090 | 1.200 | 1.160 | 1.090 | 1.225 | 1.360 | 1.225 | 1.175 | 1.100 |
| Ti. Ret. (Std. Weight) | 732 | 732 | 731 | 733 | | 753 | | 732 | 731 |
| Ti. Ret. (Light Weight) | 721 | 721 | 720 | | 785 | | | 721 | 720 |
| Steel Ret. (Std. Weight) | | 749 | 749 | | 703 705 | | 741 | | 741 |
| Tool Steel Ret. (Light Weight) | 1732 | 1732 | 1731 | | 1756 | | | 1732 | 1731 |
| Seat .570 Guide Diameter | 4781 | 4772 | 4785 | 4774 | 4640 | | 4770 4771 | 4778 | 4785 |
| Seat .630 Guide Diameter | 4782 | 4773 | 4777 | 4775 | 4697 | | 4783 | 4780 | |
| Spring Cup (O.D. Locator) | 4700 | 4700 | 4700 | 4702 | 4702 | | 4700 | 4700 | 4700 |
| Shims | 4757 | 4757 | 4757 | 4756 | 4757 | | 4757 | 4757 | 4757 |

| 933 | 935 | 944 | 951 | 991 | 26095 | 26097 | 932 | 26089 | PART # |
|----------------------------|--------|--------|--------|--------|-------------|--------|--------|--------|--------------------------------|
| Double | Double | Double | Double | Double | Beehive™ | Double | Double | Double | # of Springs |
| 1.950 | 1.950 | 1.950 | 1.950 | 1.950 | 2.000 | 2.000 | 2.000 | 2.000 | Installed Height |
| 1.563 | 1.565 | 1.585 | 1.635 | 1.650 | 1.186/1.590 | 1.551 | 1.557 | 1.565 | O.D. of Outer |
| 1.128 | 1.131 | 1.111 | 1.161 | 1.180 | .721/1.125 | 1.117 | 1.143 | 1.127 | I.D. of Outer |
| .719 | .747 | .787 | .836 | .772 | N/A | .721 | .749 | .803 | I.D. of Inner |
| 494 | 473 | 743 | 640 | 640 | 300 | 502 | 452 | 500 | Spring Rate |
| Yes | Yes | No | No | Yes | No | Yes | Yes | No | Damper |
| SPRING LOADS (LBS.) | | | | | | | | | SPRING HEIGHT (INCHES) |
| | | | | | | | | | 2.300 |
| | | | | | | | | | 2.250 |
| | | | | | | | | | 2.200 |
| | | | | | | | | | 2.150 |
| | | | | | | | | | 2.100 |
| | | | | | 135 | 170 | 174 | 205 | 2.050 |
| 146 | 179 | 153 | 198 | 182 | 150 | 195 | 196 | 230 | 2.000 |
| 171 | 203 | 190 | 230 | 214 | 165 | 220 | 219 | 255 | 1.950 |
| 196 | 227 | 227 | 262 | 246 | 180 | 245 | 242 | 280 | 1.900 |
| 220 | 250 | 264 | 294 | 278 | 195 | 270 | 264 | 305 | 1.850 |
| 245 | 274 | 301 | 326 | 310 | 210 | 295 | 287 | 330 | 1.800 |
| 270 | 298 | 339 | 358 | 342 | 225 | 321 | 309 | 355 | 1.750 |
| 295 | 321 | 376 | 390 | 374 | 240 | 346 | 332 | 380 | 1.700 |
| 319 | 345 | 413 | 422 | 406 | 255 | 371 | 355 | 405 | 1.650 |
| 344 | 369 | 450 | 454 | 438 | 270 | 396 | 377 | 430 | 1.600 |
| 369 | 392 | 487 | 486 | 470 | 285 | 421 | 400 | 455 | 1.550 |
| 393 | 416 | 524 | 518 | 502 | 300 | 446 | 422 | 480 | 1.500 |
| 418 | 440 | 562 | 550 | 534 | 315 | 471 | 445 | 505 | 1.450 |
| 443 | 463 | 599 | 582 | 566 | 330 | 496 | 468 | 530 | 1.400 |
| 467 | 487 | 636 | 614 | 598 | 345 | 522 | 490 | 555 | 1.350 |
| 492 | 510 | 673 | 646 | 630 | 360 | 546 | 513 | 580 | 1.300 |
| 517 | 534 | 710 | 678 | 662 | 375 | 572 | 535 | | 1.250 |
| | | 747 | 710 | 694 | 390 | 597 | 558 | | 1.200 |
| | | 784 | 742 | | 405 | | 581 | | 1.150 |
| | | | | | | | | | 1.100 |
| | | | | | | | | | 1.050 |
| | | | | | | | | | 1.000 |
| | | | | | | | | | 0.950 |
| | | | | | | | | | 0.900 |
| | | | | | | | | | 0.850 |
| 1.200 | 1.180 | 1.100 | 1.100 | 1.125 | 1.130 | 1.135 | 1.160 | 1.230 | Maximum Coil Bind Height |
| 732 | 724 | 731 | 736 | 733 | | 732 | 738 | 731 | Ti. Ret. (Std. Weight) |
| 721 | | 720 | | | 785 | 721 | | 720 | Ti. Ret. (Light Weight) |
| 741 | 748 | | | | 703 705 | | 748 | | Steel Ret. (Std. Weight) |
| 1732 | 1732 | 1731 | | | 1756 | 1732 | 1732 | 1731 | Tool Steel Ret. (Light Weight) |
| 4781 | 4772 | 4776 | 4714 | 4774 | 4689 4711 | 4781 | 4772 | 4776 | Seat .570 Guide Diameter |
| 4782 | 4773 | 4777 | | 4775 | | 4782 | 4773 | 4777 | Seat .630 Guide Diameter |
| 4700 | 4700 | 4702 | 4702 | 4702 | 4702 | 4700 | 4700 | 4700 | Spring Cup (O.D. Locator) |
| 4757 | 4757 | 4757 | 4756 | 4756 | 4757 | 4757 | 4757 | 4757 | Shims |



| PART # | 955 | 996 | 959 | 946 | 7245 | 26115 | 26099 |
|--------------------------------|--------|--------|--------|----------------------------|--------------|--------|--------|
| # of Springs | Double | Double | Double | Triple | Dual Conical | Double | Double |
| Installed Height | 2.000 | 2.000 | 2.000 | 2.000 | 2.050 | 2.050 | 2.050 |
| O.D. of Outer | 1.565 | 1.638 | 1.660 | 1.660 | 1.442/1.657 | 1.560 | 1.640 |
| I.D. of Outer | 1.127 | 1.167 | 1.186 | 1.196 | 1.010/1.225 | 1.114 | 1.167 |
| I.D. of Inner | .803 | .757 | .859 | .863/.627 | .646/.861 | .709 | .759 |
| Spring Rate | 526 | 637 | 580 | 689 | 600 | 544 | 563 |
| Damper | No | Yes | No | No | No | Yes | Yes |
| SPRING HEIGHT (INCHES) | | | | SPRING LOADS (LBS.) | | | |
| 2.300 | | | | | | | |
| 2.250 | | | | | | | |
| 2.200 | | | | | | | |
| 2.150 | | | | | | | |
| 2.100 | | | | | 90 | 198 | 222 |
| 2.050 | 214 | 243 | 207 | 250 | 120 | 225 | 250 |
| 2.000 | 240 | 275 | 236 | 285 | 150 | 255 | 278 |
| 1.950 | 266 | 307 | 265 | 319 | 180 | 283 | 306 |
| 1.900 | 293 | 338 | 294 | 353 | 210 | 310 | 334 |
| 1.850 | 319 | 370 | 323 | 387 | 240 | 337 | 363 |
| 1.800 | 345 | 402 | 352 | 422 | 270 | 364 | 391 |
| 1.750 | 371 | 434 | 381 | 456 | 300 | 391 | 419 |
| 1.700 | 398 | 466 | 410 | 491 | 330 | 418 | 447 |
| 1.650 | 424 | 498 | 439 | 525 | 360 | 446 | 475 |
| 1.600 | 450 | 529 | 468 | 559 | 390 | 473 | 503 |
| 1.550 | 477 | 561 | 497 | 594 | 420 | 500 | 532 |
| 1.500 | 503 | 593 | 526 | 628 | 450 | 527 | 560 |
| 1.450 | 529 | 625 | 555 | 663 | 480 | 554 | 588 |
| 1.400 | 555 | 657 | 584 | 697 | 510 | 582 | 616 |
| 1.350 | 582 | 689 | 613 | 732 | 540 | 609 | 644 |
| 1.300 | 608 | 721 | 642 | 766 | 570 | 633 | 672 |
| 1.250 | | 752 | 671 | 800 | 600 | 663 | 700 |
| 1.200 | | 784 | 700 | 835 | 630 | | |
| 1.150 | | 816 | 729 | 869 | | | |
| 1.100 | | | | | | | |
| 1.050 | | | | | | | |
| 1.000 | | | | | | | |
| 0.950 | | | | | | | |
| 0.900 | | | | | | | |
| 0.850 | | | | | | | |
| Maximum Coil Bind Height | 1.230 | 1.100 | 1.130 | 1.130 | 1.115 | 1.165 | 1.184 |
| Ti. Ret. (Std. Weight) | 731 | 733 | 739 | 739 735 | | 732 | 733 |
| Ti. Ret. (Light Weight) | 720 | | | 722 | 716 | | |
| Steel Ret. (Std. Weight) | 749 | | | | | 748 | |
| Tool Steel Ret. (Light Weight) | 1731 | | | | 1738 | 1732 | |
| Seat .570 Guide Diameter | 4776 | 4774 | 4786 | | 4669 | 4781 | 4774 |
| Seat .630 Guide Diameter | 4777 | 4775 | | | | 4782 | 4775 |
| Spring Cup (O.D. Locator) | 4700 | 4702 | 4702 | 4702 | | 4700 | 4702 |
| Shims | 4757 | 4756 | 4786 | 4756 | 4756 | 4757 | 4757 |

| 947 | 26956 | 948 | 26082 | 26547 | 26955 | 26028 | PART # | |
|---------------------|--------|-----------|-----------|--------|--------|-----------|--------------------------------|--|
| Triple | Double | Triple | Triple | Double | Double | Triple | # of Springs | |
| 2.050 | 2.100 | 2.100 | 2.100 | 2.150 | 2.175 | 2.200 | Installed Height | |
| 1.660 | 1.520 | 1.660 | 1.683 | 1.550 | 1.520 | 1.686 | O.D. of Outer | |
| 1.196 | 1.042 | 1.196 | 1.196 | 1.106 | 1.042 | 1.203 | I.D. of Outer | |
| .863/.627 | .711 | .863/.627 | .863/.627 | .784 | .711 | .864/.624 | I.D. of Inner | |
| 681 | 800 | 687 | 761 | 583 | 835 | 712 | Spring Rate | |
| No | No | No | No | No | No | No | Damper | |
| SPRING LOADS (LBS.) | | | | | | | SPRING HEIGHT (INCHES) | |
| | | | | | | | 2.300 | |
| | 205 | | | | 382 | 310 | 2.250 | |
| | 245 | | | 256 | 424 | 342 | 2.200 | |
| | 285 | 298 | 344 | 285 | 466 | 382 | 2.150 | |
| 270 | 325 | 332 | 382 | 314 | 508 | 419 | 2.100 | |
| 304 | 365 | 366 | 420 | 343 | 549 | 455 | 2.050 | |
| 338 | 405 | 401 | 458 | 372 | 591 | 492 | 2.000 | |
| 372 | 445 | 435 | 496 | 402 | 633 | 528 | 1.950 | |
| 406 | 485 | 469 | 534 | 431 | 675 | 564 | 1.900 | |
| 440 | 525 | 504 | 572 | 460 | 716 | 601 | 1.850 | |
| 474 | 565 | 538 | 610 | 489 | 758 | 637 | 1.800 | |
| 508 | 605 | 572 | 648 | 518 | 800 | 674 | 1.750 | |
| 542 | 645 | 606 | 686 | 547 | 842 | 710 | 1.700 | |
| 576 | 685 | 641 | 724 | 577 | 883 | 746 | 1.650 | |
| 610 | 725 | 675 | 763 | 606 | 925 | 783 | 1.600 | |
| 644 | 765 | 709 | 801 | 635 | 967 | 819 | 1.550 | |
| 678 | 805 | 744 | 839 | 664 | 1009 | 856 | 1.500 | |
| 712 | 845 | 778 | 877 | 693 | 1050 | 892 | 1.450 | |
| 746 | 885 | 812 | 915 | 722 | 1092 | 928 | 1.400 | |
| 781 | 925 | 847 | 953 | 752 | 1134 | 965 | 1.350 | |
| 815 | 965 | 881 | 991 | 781 | 1176 | 1001 | 1.300 | |
| 849 | 1005 | 915 | 1029 | 810 | 1217 | 1038 | 1.250 | |
| 883 | 1045 | 950 | 1067 | 839 | 1259 | 1054 | 1.200 | |
| 917 | | | 1105 | | | | 1.150 | |
| | | | | | | | 1.100 | |
| | | | | | | | 1.050 | |
| | | | | | | | 1.000 | |
| | | | | | | | 0.950 | |
| | | | | | | | 0.900 | |
| | | | | | | | 0.850 | |
| 1.145 | 1.130 | 1.130 | 1.130 | 1.190 | 1.130 | 1.161 | Maximum Coil Bind Height | |
| 739 735 | 718 | 739 735 | 739 735 | 732 | 718 | 739 735 | Ti. Ret. (Std. Weight) | |
| 722 | | 722 | 722 | 721 | | 722 | Ti. Ret. (Light Weight) | |
| | | | | | | | Steel Ret. (Std. Weight) | |
| | 1718 | | | 1732 | 1718 | | Tool Steel Ret. (Light Weight) | |
| 4786 | 4781 | 4786 | 4786 | 4642 | 4781 | 4786 | Seat .570 Guide Diameter | |
| | 4782 | | | 4643 | 4782 | | Seat .630 Guide Diameter | |
| 4708 | 4769 | 4708 | 4708 | | 4769 | 4708 | Spring Cup (O.D. Locator) | |
| 4756 | 4755 | 4756 | 4756 | 4757 | 4755 | 4756 | Shims | |



#740-16

COMPONENTS VALVE SPRINGS

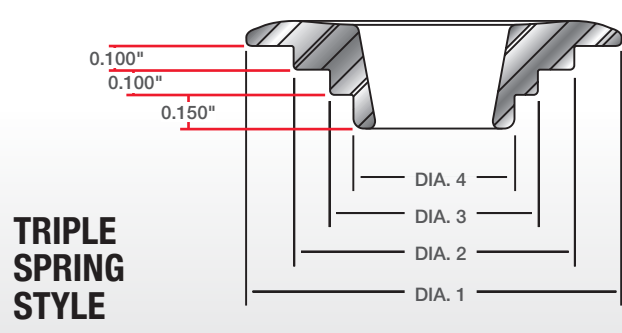
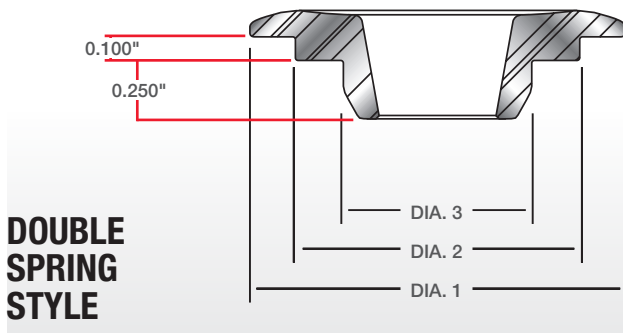
STEEL RETAINERS

Valve springs with larger diameters require retainers to handle the higher pressures developed by the springs. COMP Cams® steel retainers are precision machined from chromemoly steel and finished in black oxide. These precision retainers are specifically designed for positive location when combined with COMP Cams® high-quality valve springs. For superior strength and ultimate stability, both 7° and 10° retainers and valve locks are available. Refer to the spring application chart on pages 297-307 for correct retainer part numbers for each COMP Cams® valve spring.

| DESCRIPTION | ANGLE | VALVE STEM DIA. | VALVE SPRING DIA. | DIA. 1 | DIA. 2 | DIA. 3 | DIA. 4 | PART # | TOOL STEEL PART # | TITANIUM PART # |
|---|-------|-----------------|-------------------|--------|--------|--------|--------|---------------|-------------------|-----------------|
| Ford 4.6L W/ 4 Valve Head & #26123 Beehive™ | 7° | 7mm | .943" | .900" | .570" | — | — | 799-32 | — | 798-32 |
| Ford 4.6L W/ 3 Valve Head & #26113/#26125 Beehive™ | 7° | 6mm | .959" | .930" | .630" | — | — | 710-24 | — | 702-24 |
| Ford 4.6L W/ 2 Valve Head & #26113 Beehive™ | 7° | 7mm | .959" | .930" | .630" | — | — | 792-16 | 1723-16 | 791-16 |
| GM 6.6L Duramax W/ #26113/#26125 Beehive™ | 7° | 7mm | .959"-1.013" | .930" | .630" | — | — | 701-32 | — | — |
| Ford 3.8L/4.2L | 7° | Stock | Stock | .930" | .640" | — | — | 786-12 | — | — |
| Chrysler Hemi 5.7L W/ #26915/#26918 Beehive™ | 7° | Stock | 1.055" | 1.000" | .640" | — | — | 761-16 | — | 762-16 |
| GM Gen III STD "NHRA" Stocker | 7° | Stock | 1.215" | 1.030" | .610" | — | — | 783-16 | — | — |
| GM Gen III W/ #26915/#26918 Beehive™ | 7° | 8mm | 1.055" | 1.030" | .640" | — | — | 774-16 | 1772-16 | 772-16 |
| #26915/#26918 in Non Gen III Engine | 7° | 11/32" | 1.055" | 1.030" | .640" | — | — | 787-16 | 1787-16 | 788-16 |
| Honda/Acura B18 w/ DOHC | 7° | 5.5mm | Stock | 1.103" | .868" | — | — | 778-16 | — | 760-16 |
| Chevrolet V6 & Small Block, Buick V6 | 7° | 11/32" | 1.250" | 1.230" | .870" | .650" | — | 742-16 | — | — |
| Steel Retainer for 26925 in LS | 7° | 8mm | 1.320" | 1.200" | .945" | .675" | — | 713-16 | 1717-16 | 717-16 |
| Steel Retainer for 26925 in Non LS | 7° | 11/32" | 1.320" | 1.200" | .945" | .675" | — | 714-16 | — | — |
| GM Gen III w/ 1.430"-1.460" O.D. Spring | 7° | Stock | 1.430"-1.460" | 1.300" | 1.070" | .690" | — | 775-16 | — | 776-16 |
| Steel Retainer w/ 1.430"-1.460" O.D. Spring | 7° | 11/32" | 1.437"-1.500" | 1.400" | 1.030" | .690" | — | 768-16 | — | — |
| Chevy, Small Block Ford, Olds, Pontiac | 7° | 11/32" | 1.437"-1.500" | 1.400" | 1.060" | .690" | — | 743-16 | — | — |
| Big Block Chevy, Chrysler, Big Block Ford | 7° | 3/8" | 1.437"-1.500" | 1.400" | 1.060" | .690" | — | 744-16 | — | — |
| 7° Version of #741 (11/32") | 7° | 11/32" | 1.500"-1.550" | 1.485" | 1.115" | .690" | — | 782-16 | — | — |
| 7° Version of #741 (3/8") | 7° | 3/8" | 1.500"-1.550" | 1.485" | 1.115" | .690" | — | 780-16 | — | — |
| Steel Retainer for #26120 Beehive™ | 10° | All | 1.095" | 1.050" | .645" | — | — | 795-16 | 1795-16 | 794-16 |
| Steel Retainer for #26095 Beehive™ | 10° | All | 1.185" | 1.150" | .725" | — | — | 703-16 | — | 785-16 |
| Steel Retainer for #26095 Beehive™ +.050" over #703 | 10° | All | 1.185" | 1.150" | .725" | — | — | 705-16 | 1756-16 | 785-16 |
| Steel Retainer for #983 Ovate Wire Spring | 10° | All | 1.250" | 1.240" | .820" | — | — | 751-16 | — | — |
| Super Lock™ Retainer | 10° | All | 1.250" | 1.240" | .870" | .735" | — | 750-16 | 1750-16 | 728-16 |
| Super Lock™ Retainer | 10° | All | 1.437"-1.500" | 1.400" | 1.050" | .690" | — | 747-16 | — | 730-16 |
| Super Lock™ Retainer | 10° | All | 1.437"-1.500" | 1.400" | 1.060" | .690" | — | 740-16 | 1730-16 | 730-16 |
| Super Lock™ Retainer | 10° | All | 1.500"-1.550" | 1.485" | 1.095" | .710" | — | 748-16 | 1732-16 | 732-16 |
| Super Lock™ Retainer | 10° | All | 1.500"-1.550" | 1.485" | 1.115" | .690" | — | 741-16 | 1732-16 | 732-16 |
| Super Lock™ Retainer for Triple Springs | 10° | All | 1.500"-1.550" | 1.500" | 1.120" | .830" | .640" | 746-16 | — | — |
| Super Lock™ Retainer | 10° | All | 1.500"-1.550" | 1.485" | 1.125" | .745" | — | 749-16 | — | 727 |
| Buick 350-455 Steel Retainer | 11° | 11/32" | 1.225"-1.250" | 1.200" | .860" | .600" | — | 712-16 | — | — |

Note: Refer to spring application chart for correct retainers for each part number COMP Cams® spring.

Also available in singles (-1) and bulk (-100)





#1732-16

COMPONENTS VALVE SPRINGS

LIGHTWEIGHT TOOL STEEL RETAINERS

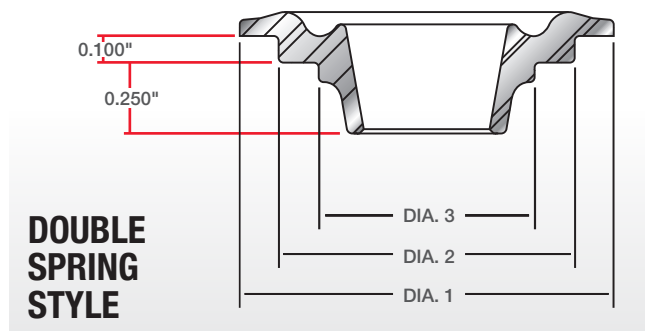
COMP Cams® Lightweight Tool Steel Retainers provide the best of all valve train benefits: light weight, along with exceptional strength and wear characteristics. Approximately 33% lighter than conventional chromemoly steel retainers and only 2-4 grams heavier than titanium (depending upon application), they are made from high-grade tool steel, making them able to withstand even the most demanding race applications.

- CNC-machined for consistent quality
- Developed using latest FEA and CAD software
- Spintron®-tested to extreme RPM to prove strength is equivalent to titanium and stronger than chromemoly steel
- Designed for both 7° and 10° angles

| DESCRIPTION | ANGLE | VALVE STEM DIA. | VALVE SPRING DIA. | DIA. 1 | DIA. 2 | DIA. 3 | DIA. 4 | PART # | STEEL PART # | TITANIUM PART # |
|---|-------|-----------------|-------------------|--------|--------|--------|--------|----------------|--------------|-----------------|
| Tool Steel Retainer +.100 for #7228 & #7230 Conical Valve Springs | 7° | 8mm | .930" | .650" | — | — | — | 1774-16 | — | — |
| Tool Steel Retainer for #26125 Spring in Ford Coyote | 7° | 6mm | 1.013" | .910" | .640" | — | — | 1763-32 | — | 763-16 |
| Tool Steel Retainer | 7° | 11/32" | 1.055" | .948" | .640" | — | — | 1787-16 | 787-16 | 788-16 |
| Tool Steel Retainer for #26056 Spring | 7° | 7mm | 1.185" | 1.050" | .725" | .340" | — | 1757-16 | 705-16 | — |
| Tool Steel Version of #754 Retainer | 7° | 8mm | 1.250" | 1.235" | .860" | .610" | — | 1754-16 | — | 754-16 |
| Tool Steel Version of #772 Retainer | 7° | 8mm | 1.290" | .948" | .654" | — | — | 1772-16 | 774-16 | 772-16 |
| Tool Steel Retainer for #26926 Springs | 7° | 8mm | 1.290" | 1.190" | .910" | .645" | — | 1779-16 | — | 779-16 |
| Tool Steel Retainer for #26926 in non LS Applications | 7° | 11/32" | 1.290" | 1.190" | .910" | .645" | — | 1777-16 | — | — |
| Tool Steel Retainer for #26926 in Dodge V10 | 7° | 8mm | 1.290" | 1.190" | .910" | .645" | — | 1737-16 | — | — |
| Tool Steel Retainer for #26925 Springs | 7° | 8mm | 1.320" | 1.200" | .945" | .675" | — | 1717-16 | 713-16 | 717-16 |
| Tool Steel Retainer for #7245 Dual Conical Spring | 7° | 11/32" | 1.442" | 1.320" | 1.005" | .630" | — | 1738-16 | — | 716-16 |
| Tool Steel Retainer for #7245 Dual Conical Spring | 7° | 3/8" | 1.442" | 1.320" | 1.005" | .630" | — | 1739-16 | — | — |
| Tool Steel Retainer | 10° | All | 1.095" | .960" | .640" | — | — | 1795-16 | 795-16 | 794-16 |
| Tool Steel Retainer for #26056 Spring | 10° | All | 1.185" | 1.150" | .730" | — | — | 1756-16 | 705-16 | — |
| Tool Steel Retainer | 10° | All | 1.250" | 1.140" | .870" | .735" | — | 1750-16 | 750-16 | 728-16 |
| Tool Steel Retainer for #26955, #26956, #26957 Springs | 10° | All | 1.437"-1.500" | 1.375" | 1.035" | .710" | — | 1718-16 | — | 718-16 |
| Tool Steel Retainer | 10° | All | 1.437"-1.500" | 1.375" | 1.065" | .700" | — | 1730-16 | 740-16 | 730-16 |
| Tool Steel Retainer | 10° | All | 1.500"-1.550" | 1.387" | 1.100" | .800" | — | 1731-16 | — | 731-16 |
| Tool Steel Retainer | 10° | All | 1.500"-1.550" | 1.450" | 1.100" | .710" | — | 1732-16 | 748-16 | 732-16 |

Note: Refer to spring application chart for correct retainers for each part number COMP Cams® spring.

Also available in singles (-1)



HAVE QUESTIONS?
WE CAN HELP YOU

Just Call Our
Toll Free Tech Line

CAMHELP®
800.999.0853

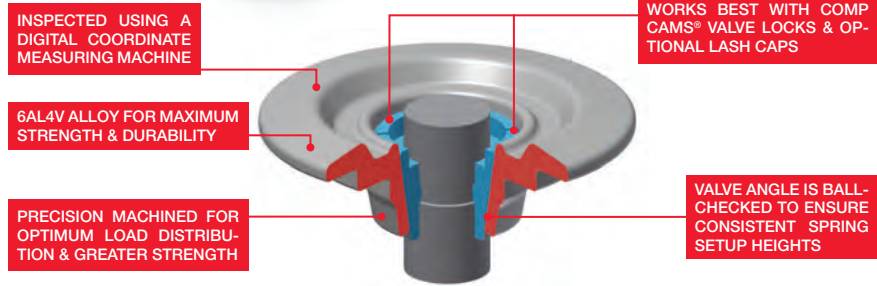
TITANIUM RETAINERS

Upgrading to COMP Cams® titanium valve spring retainers will often allow you to gain speed and power because titanium retainers are lighter and as strong as than most steel ones. Additionally, our Super Lock™ titanium design gives you confidence; no longer will you be preoccupied with splitting a retainer and tearing up an engine when turning 10,000 RPM.

COMP Cams® titanium retainers are designed for maximum stiffness and minimal warpage. The 6AL4V alloy is heat-treated and processed to a stringent tolerance that makes it extremely strong. Other manufacturers purchase titanium from metal brokers and produce “cheap” retainers, but COMP Cams® titanium retainers will not deform. From a standing idle to the most extreme RPM, our titanium retainers perform flawlessly and without compromise.



- Better material consistency
- Superior grain structure
- Bullet proof durability
- Designed for both 7° & 10° lock angles



| DESCRIPTION | ANGLE | VALVE STEM DIA. | VALVE SPRING DIA. | DIA. 1 | DIA. 2 | DIA. 3 | DIA. 4 | PART # | STEEL PART # | TOOL STEEL PART # |
|--|-------|-----------------|-------------------|--------|--------|--------|--------|---------------|--------------|-------------------|
| Honda D16Z6 (VTEC) w/ SOHC | 8° | Stock | .825" | .825" | .590" | .375" | — | 753-16 | — | — |
| Ford 4.6L w/ 4 Valve Head & #26123 Beehive™ | 7° | 7mm | .943" | .900" | .570" | — | — | 798-32 | 799-32 | — |
| Ford 4.6L w/ 3 Valve Head & #26113 Beehive™ | 7° | 6mm | .959" | .930" | .630" | — | — | 702-24 | 710-24 | — |
| Ford 4.6L w/ 2 Valve Head & #26113 Beehive™ | 7° | 7mm | .959" | .930" | .630" | — | — | 791-16 | 792-16 | — |
| Titanium Retainer for #26125 Spring in Ford Coyote | 7° | 6mm | 1.013" | .960" | .640" | — | — | 763-16 | — | 1763-16 |
| Chrysler Hemi 5.7L W/ #26915/#26918 | 7° | Stock | 1.055" | 1.000" | .640" | — | — | 762-16 | 761-16 | — |
| GM Gen III W/ #26915 or #26918 | 7° | 8mm | 1.055" | 1.030" | .645" | — | — | 772-16 | 774-16 | 1772-16 |
| #26915/#26918 in Non Gen III Engine | 7° | 11/32" | 1.055" | 1.030" | .640" | — | — | 788-16 | 787-16 | 1787-16 |
| Honda/Acura B18C (VTEC) W/ DOHC | 7° | 5.5mm | 1.103" | 1.103" | .868" | — | — | 760-16 | 778-16 | — |
| Titanium Retainer for #26921 Spring | 7° | 8mm | 1.250" | 1.235" | .860" | .610" | — | 754-16 | — | 1754-16 |
| Titanium Retainer for #26925 Spring | 7° | 8mm | 1.320" | 1.250" | .945" | .675" | — | 717-16 | 713-16 | 1717-16 |
| Titanium Retainer for #26926 Spring | 7° | 8mm | 1.320" | 1.190" | .910" | .645" | — | 779-16 | — | 1779-16 |
| GM Gen III w/ 1.430"-1.460" O.D. Spring | 7° | 8mm | 1.430"-1.460" | 1.300" | 1.070" | .690" | — | 776-16 | 775-16 | — |
| Titanium Retainer for #7245 Dual Conical Spring | 7° | 11/32" | 1.442" | 1.320" | 1.005" | .630" | — | 716-16 | — | 1738-16 |
| Titanium Retainer for #7245 Dual Conical Spring | 8° | 11/32" | 1.442" | 1.320" | 1.005" | .630" | — | 715-16 | — | — |
| Titanium Retainer for #26120 Beehive™ | 10° | All | 1.300" | 1.050" | .640" | — | — | 794-16 | 795-16 | 1795-16 |
| Titanium Retainer for #26095 Beehive™ | 10° | All | 1.185" | 1.150" | .725" | — | — | 785-16 | 703-16 | — |
| Titanium Retainer for Single Spring | 10° | All | 1.250" | 1.240" | .870" | .735" | — | 728-16 | 750-16 | 1750-16 |
| Titanium Retainer for #26955, #26956, #26957 Springs | 10° | All | 1.437"-1.500" | 1.375" | 1.035" | .710" | — | 718-16 | — | 1718-16 |
| Titanium Retainer for Double Spring | 10° | All | 1.437"-1.500" | 1.439" | 1.065" | .700" | — | 730-16 | 740-16 | 1730-16 |
| Titanium Retainer for Double Spring | 10° | All | 1.500"-1.550" | 1.437" | 1.100" | .800" | — | 731-16 | — | 1731-16 |
| Titanium Retainer for Double Lightweight | 10° | All | 1.500"-1.550" | 1.437" | 1.107" | .707" | — | 721-16 | — | 1732-16 |
| Titanium Retainer for Triple Lightweight | 10° | All | 1.625" | 1.437" | 1.177" | .868" | .635" | 722-16 | — | — |
| Titanium Retainer for Double Lightweight | 10° | All | 1.500"-1.550" | 1.437" | 1.098" | .798" | — | 720-16 | — | 1731-16 |
| Titanium Retainer for #26091 Spring | 10° | All | 1.625" | 1.450" | 1.170" | .840" | — | 784-16 | — | — |
| Titanium Retainer for Double Spring | 10° | All | 1.500"-1.550" | 1.500" | 1.110" | .710" | — | 732-16 | 748-16 | 1732-16 |
| Titanium Retainer for Double Spring | 10° | All | 1.500"-1.550" | 1.500" | 1.120" | .730" | — | 738-16 | — | 1732-16 |
| Titanium Retainer for Double Spring | 10° | All | 1.500"-1.550" | 1.500" | 1.120" | .745" | — | 727-16 | 749-16 | — |
| Titanium Retainer for Double Spring | 10° | All | 1.500"-1.550" | 1.500" | 1.140" | .730" | — | 729-16 | — | — |
| Titanium Retainer for Triple Spring | 10° | All | 1.500"-1.550" | 1.500" | 1.135" | .835" | .635" | 736-16 | — | — |
| Titanium Retainer for Double Spring | 10° | All | 1.625" | 1.500" | 1.180" | .765" | — | 733-16 | — | — |
| Titanium Retainer for Triple Spring | 10° | All | 1.625" | 1.500" | 1.180" | .870" | .635" | 739-16 | — | — |
| Triple + .050" over #739 | 10° | All | 1.625" | 1.500" | 1.180" | .870" | .635" | 735-16 | — | — |

Note: Refer to spring application chart for correct retainers for each part number COMP Cams® spring.

Also available in singles (-1)



VALVE LASH CAPS

Because today's racing engines run at higher RPM levels with harsh cam profiles, the tip of the valve stem must withstand a tremendous amount of pounding. These engines always run just on the brink of one of the most severe conditions that exists – valve float. The best solution to this problem is the COMP Cams® Valve Lash Caps. These lash caps are precision machined and ground perfectly flat to maintain accuracy of valve train adjustment.

- Ultimate in strength and reliability
- Fit valve stems well and are easily removed
- Special version for short tipped Chrysler Hemi valves
- Necessary for titanium valves

| DESCRIPTION | VALVE STEM DIAMETER | OVERALL HEAD HEIGHT | THICKNESS | PART # |
|----------------------|---------------------|---------------------|-----------|---------------|
| 426 Hemi (Short Cap) | 5/16" | .190" | .080" | 619-16 |
| Hardened Lash Cap | 5/16" | .230" | .080" | 620-16 |
| Hardened Lash Cap | 11/32" | .210" | .080" | 621-16 |
| Hardened Lash Cap | 3/8" | .190" | .080" | 622-16 |

Note: Dash -1 indicates one piece, dash -8 indicates a set of eight, dash -16 indicates a set of sixteen.



VALVE LOCKS – 7°

Most people believe that the tang inside a valve lock holds the retainer and valve spring in place while the engine is running, but this isn't the case. The cross-section of material in the tang is not strong enough to withstand open spring loads of 1000 lbs. or more. The sole purpose of the tang is to temporarily locate the lock, retainer and spring relative to the valve until the taper of the retainer can nest around the outside surface of the lock. This creates a "collet" effect that binds the two together. The more spring force exerted on the retainer (as the valve opens), the more force applied by the "collet" effect to keep the retainer and lock in place.

With the emergence of valve sizes other than the standard 5/16", 11/32" and 3/8", it is important to make sure the valve locks match the valve size. There should always be a small gap between the two halves of the lock when they are properly positioned on the valve stem. If the two halves fit together without a gap, they are too large. If the locks fit tight to the stem and leave a gap between the middle of the lock and the O.D. of the stem, the locks are too small.

Our line of stock replacement 7° valve locks for stock engine rebuilds are recommended only for street applications with lighter valve spring loads and are stamped and hardened for superior wear resistance. Also available are machined 7° locks and titanium Super 7° Locks for some applications. They offer the same valve spring location accuracy as our Super Locks™ without the need to change to 10° retainers.

| DESCRIPTION | LOCK ANGLE | VALVE STEM SIZE | PART # |
|--|------------|-----------------|---------------|
| STEEL STREET LOCKS – 7° | | | |
| Hardened Steel, Single Groove | 7° | 5/16" | 600-16 |
| Hardened Steel, Single Groove | 7° | 11/32" | 601-16 |
| Hardened Steel, Single Groove | 7° | 3/8" | 603-16 |
| Hardened Steel, Chrysler, 2 Groove | 7° | 3/8" | 602-16 |
| Hardened Steel, Chrysler, 4 Groove | 7° | 3/8" | 604-16 |
| Hardened Steel, Chrysler, 2 & 4 Groove | 7° | 3/8" | 606-16 |
| Hardened Steel, Ford 351C, 4 Groove | 7° | 11/32" | 605-16 |

Note: For 4 cylinder use -8 suffix, for 6 cylinder use -12 suffix

| DESCRIPTION | LOCK ANGLE | VALVE STEM SIZE | PART # |
|---|------------|-----------------|---------------|
| MACHINED STEEL RACE LOCKS – 7° | | | |
| Machined Steel, Single Groove | 7° | 5/16" | 628-16 |
| Machined Steel, Single Groove | 7° | 11/32" | 648-16 |
| Machined Steel, Single Groove | 7° | 3/8" | 641-16 |
| Machined Steel, Single Groove GM Gen III/LS1/LS2/LS6 | 7° | 8mm | 623-16 |
| Machined Steel, Single Groove Honda B & D Series | 7° | 5.5mm | 629-16 |

Also available in singles (-1) and bulk (-100)

Note: For 6 cylinder use -12 suffix

| DESCRIPTION | LOCK ANGLE | VALVE STEM SIZE | PART # |
|--------------------------------------|------------|-----------------|---------------|
| TITANIUM VALVE – SUPER 7 (8°) | | | |
| Titanium Super 7 ¹ | 8° | 11/32" | 636-16 |

¹ These locks require specific retainers and do not work with standard 7° or 10° retainers



SUPER LOCKS™ – 10°

- Wider angle (10°) locks better distribute increasing valve spring loads over the retainer than typical 7° locks (see diagram below), reducing the chance of “pull-through” failure
- Precision-machined rather than stamped for accuracy
- Super-tough, fatigue resistant alloy material
- Inside tang-to-taper relationship held tightly for repeatable valve spring installed heights
- Available in ± .050" installed height versions
- Any Super Lock™ fits any COMP Cams® 10° retainer, just choose the correct lock for your valve size and application
- Super Locks™ are recommended in all race applications

| DESCRIPTION | LOCK ANGLE | VALVE STEM SIZE | PART # |
|--------------------------------------|------------|-----------------|---------------------------|
| w/ Lash Cap Recess | 10° | .308"/5/16" | 610-16 |
| w/ Lash Cap Recess | 10° | .310" | 618-16 |
| w/ Lash Cap Recess | 10° | 11/32" | 611-16 |
| w/ Lash Cap Recess | 10° | 3/8" | 612-16 |
| -.050 Inst. Ht. w/ Lash Cap Recess | 10° | 11/32" | 630-16 |
| -.050 Inst. Ht. w/ Lash Cap Recess | 10° | 3/8" | 609-16 |
| w/o Lash Cap Recess | 10° | .310" | 617-16 |
| w/o Lash Cap Recess | 10° | 11/32" | 613-16 |
| +.050" Inst. Ht. W/O Lash Cap Recess | 10° | 11/32" | 614-16 |
| +.050" Inst. Ht. W/O Lash Cap Recess | 10° | 3/8" | 616-16 |
| Chrysler 2 Groove | 10° | 3/8" | 625-16 |
| Chrysler 4 Groove | 10° | 3/8" | 626-16 |
| Chrysler 2 & 4 Groove | 10° | 3/8" | 627-16¹ |
| LS1/LS6 Bead Lock | 10° | 8mm | 632-16 |
| Ford 4 Groove | 10° | 11/32" | 624-16 |

Also available in singles (-1) and bulk (-100)

Note: For 4 cylinder use -8 suffix, for 6 cylinder use -12 suffix.

¹ 8 pair #625 2 groove and 8 pair #626 4 groove

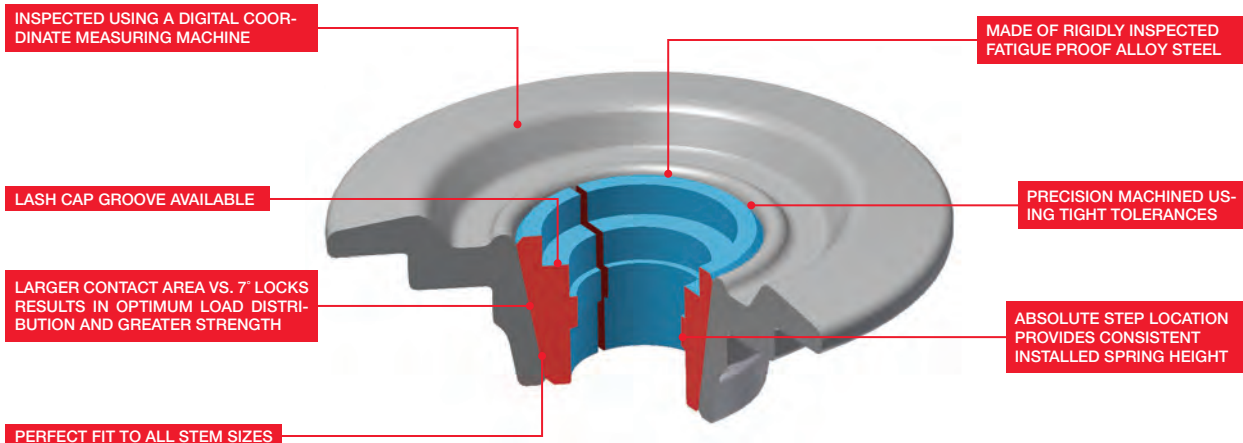
TITANIUM SUPER LOCKS™ – 10°



#638

| DESCRIPTION | LOCK ANGLE | VALVE STEM SIZE | PART # |
|--------------------|------------|-----------------|---------------|
| W/ Lash Cap Recess | 10° | 5/16" | 637-16 |
| W/ Lash Cap Recess | 10° | 11/32" | 638-16 |

Note: For 4 cylinder use -8 suffix, for 6 cylinder use -12 suffix.





VALVE SPRING LOCATORS

The older style standard shims will not hold up to the extreme spring pressures and high RPM found in racing engines being built today. COMP Cams® offers a simple but effective solution to this problem – a thin, hardened steel alloy seat which will not only protect the head and shim but also locate and hold the spring in place. Previously, this part has been available only in a cup form with the retaining portion being on the outside of the part. This required that the head be machined a great deal to accept this cup so COMP® now offers an I.D. locator with the locating shoulder on the inside, as well as the spring cup. Many sizes are available to locate from the inside or outside diameter.

| DESCRIPTION | LOCATOR | | SPRING I.D. | LOCATOR THICKNESS | PART # |
|-----------------------------|---------|-------|-------------|-------------------|----------------------------|
| | O.D. | I.D. | | | |
| SPRING I.D. LOCATORS | | | | | |
| Spring I.D. Locator | 1.080" | .440" | .730" | .045" | 4673-32 |
| Spring I.D. Locator | 1.100" | .470" | .720" | .060" | 4688-16 |
| Spring I.D. Locator | 1.270" | .520" | .650" | .060" | 4862-16 |
| Spring I.D. Locator | 1.285" | .532" | .880" | .040" | 4685-16 |
| Spring I.D. Locator | 1.285" | .532" | .880" | .135" | 4684-16 |
| Spring I.D. Locator | 1.285" | .805" | .880" | .040" | 4679-16 |
| Spring I.D. Locator | 1.285" | .805" | .880" | .135" | 4678-16 |
| Spring I.D. Locator | 1.300" | .505" | .910" | .040" | 4680-16 |
| Spring I.D. Locator | 1.300" | .510" | .875" | .060" | 4861-16 |
| Spring I.D. Locator | 1.300" | .520" | .640" | .060" | 4695-16 |
| Spring I.D. Locator | 1.300" | .520" | .670" | .060" | 4873-16 |
| Spring I.D. Locator | 1.300" | .520" | .875" | .060" | 4872-16 |
| Spring I.D. Locator | 1.300" | .530" | .910" | .060" | 4676-16 |
| Spring I.D. Locator | 1.300" | .570" | .650" | .060" | 4682-16 |
| Spring I.D. Locator | 1.300" | .570" | .800" | .060" | 4693-16¹ |
| Spring I.D. Locator | 1.300" | .570" | .840" | .060" | 4863-16 |
| Spring I.D. Locator | 1.300" | .570" | .875" | .060" | 4705-16² |
| Spring I.D. Locator | 1.300" | .570" | .910" | .060" | 4677-16 |
| Spring I.D. Locator | 1.300" | .805" | .880" | .205" | 4683-16 |
| Spring I.D. Locator | 1.340" | .570" | .650" | .100" | 4731-16 |
| Spring I.D. Locator | 1.350" | .515" | .875" | .050" | 4868-16 |
| Spring I.D. Locator | 1.350" | .515" | .875" | .150" | 4869-16 |
| Spring I.D. Locator | 1.400" | .520" | .690" | .060" | 4712-16 |
| Spring I.D. Locator | 1.420" | .530" | .980" | .060" | 4667-16 |
| Spring I.D. Locator | 1.420" | .570" | .980" | .060" | 4670-16 |
| Spring I.D. Locator | 1.450" | .570" | .990" | .060" | 4694-16³ |
| Spring I.D. Locator | 1.500" | .570" | .735" | .060" | 4784-16 |
| Spring I.D. Locator | 1.500" | .585" | .690" | .060" | 4770-16 |
| Spring I.D. Locator | 1.510" | .570" | .970" | .060" | 4696-16⁴ |
| Spring I.D. Locator | 1.510" | .630" | .970" | .060" | 4697-16⁴ |
| Spring I.D. Locator | 1.540" | .520" | .775" | .060" | 4641-16 |
| Spring I.D. Locator | 1.540" | .570" | .775" | .060" | 4642-16 |
| Spring I.D. Locator | 1.540" | .640" | .690" | .060" | 4783-16 |
| Spring I.D. Locator | 1.540" | .640" | .715" | .060" | 4782-16 |

Also available in singles (-1) and bulk (-100)

| DESCRIPTION | LOCATOR | | SPRING I.D. | LOCATOR THICKNESS | PART # |
|---------------------------------|---------|-------|-------------|-------------------|----------------------------|
| | O.D. | I.D. | | | |
| SPRING I.D. LOCATORS | | | | | |
| Spring I.D. Locator | 1.540" | .640" | .730" | .060" | 4780-16 |
| Spring I.D. Locator | 1.540" | .640" | .750" | .060" | 4773-16 |
| Spring I.D. Locator | 1.540" | .640" | .765" | .060" | 4775-16 |
| Spring I.D. Locator | 1.540" | .640" | .775" | .060" | 4643-16 |
| Spring I.D. Locator | 1.540" | .640" | .790" | .060" | 4777-16 |
| Spring I.D. Locator | 1.550" | .570" | .810" | .040" | 4759-16 |
| Spring I.D. Locator | 1.550" | .570" | .690" | .060" | 4771-16 |
| Spring I.D. Locator | 1.550" | .570" | .715" | .060" | 4781-16 |
| Spring I.D. Locator | 1.550" | .570" | .730" | .060" | 4778-16 |
| Spring I.D. Locator | 1.550" | .570" | .750" | .060" | 4772-16 |
| Spring I.D. Locator | 1.550" | .570" | .750" | .060" | 4691-16 |
| Spring I.D. Locator | 1.550" | .570" | .790" | .060" | 4776-16 |
| Spring I.D. Locator | 1.550" | .570" | .810" | .060" | 4785-16 |
| Spring I.D. Locator | 1.565" | .535" | 1.125" | .100" | 4713-16 |
| Spring I.D. Locator | 1.550" | .570" | 1.100" | .060" | 4711-16 |
| Spring I.D. Locator | 1.590" | .570" | 1.130" | .120" | 4689-16 |
| Spring I.D. Locator | 1.600" | .570" | .840" | .060" | 4714-16 |
| Spring I.D. Locator | 1.600" | .570" | 1.097" | .060" | 4640-16⁵ |
| Spring I.D. Locator | 1.625" | .570" | .765" | .060" | 4774-16 |
| Spring I.D. Locator | 1.635" | .570" | .870" | .060" | 4786-16 |
| Spring I.D. Locator | 1.655" | .570" | .630" | .060" | 4860-16 |
| Spring I.D. Locator | 1.660" | .530" | .845" | .060" | 4668-16 |
| Spring I.D. Locator | 1.660" | .570" | .845" | .060" | 4669-16 |
| Spring I.D. Locator | 1.253" | .780" | .878" | .120" | 4690-16 |
| SPRING O.D. LOCATOR CUPS | | | | | |
| Spring Cup | 1.455" | .570" | 1.335" | .060" | 4709-16 |
| Spring Cup | 1.570" | .640" | 1.475" | .060" | 4704-16 |
| Spring Cup | 1.635" | .640" | 1.515" | .060" | 4769-16 |
| Spring Cup | 1.670" | .640" | 1.565" | .060" | 4700-16 |
| Spring Cup | 1.730" | .640" | 1.650" | .060" | 4702-16 |
| Spring Cup | 1.780" | .640" | 1.690" | .060" | 4708-16 |
| Spring Cup | 1.830" | .640" | 1.740" | .060" | 4706-16 |

Also available in singles (-1) and bulk (-100)

¹ Designed for #26981 Beehive™ Springs

² Designed for #26915 & #26918 Beehive™ Springs

³ Designed for #26986 & #26995 Beehive™ Springs

⁴ Designed for #26120 Beehive™ Springs

⁵ Designed for #26055 Beehive™ Springs



VALVE SPRING SHIMS AND KITS

- Equalize installed height of valve spring
- Engineered from the highest quality shim stock
- Heat-treated to withstand radical camshaft lobes
- Available in three different thicknesses to help achieve proper valve spring height
- Shim kits contain (16) pieces of each thickness listed

| O.D. | I.D. | THICKNESS | PART # |
|-----------|-------------|---------------------|----------------|
| 1.250" | .814" | .015" | 4736-16 |
| 1.250" | .814" | .030" | 4742-16 |
| 1.250" | .814" | .060" | 4748-16 |
| 1.300" | .520" | .015" | 4717-16 |
| 1.300" | .520" | .030" | 4763-16 |
| 1.300" | .520" | .060" | 4788-16 |
| 1.437" | .645" | .015" | 4737-16 |
| 1.437" | .645" | .030" | 4743-16 |
| 1.437" | .645" | .060" | 4749-16 |
| 1.480" | .765" | .015" | 4738-16 |
| 1.480" | .765" | .030" | 4744-16 |
| 1.480" | .765" | .060" | 4750-16 |
| 1.500" | .645" | .015" | 4739-16 |
| 1.500" | .645" | .030" | 4745-16 |
| 1.500" | .645" | .060" | 4751-16 |
| 1.640" | .635" | .015" | 4740-16 |
| 1.640" | .635" | .030" | 4746-16 |
| 1.640" | .650" | .060" | 4752-16 |
| SHIM KITS | | | |
| 1.250" | .814" | .015", .030", .060" | 4753 |
| 1.300" | .520" | .015", .030", .060" | 4608 |
| 1.437" | .645" | .015", .030", .060" | 4754 |
| 1.480" | .765" | .015", .030", .060" | 4755 |
| 1.500" | .645" | .015", .030", .060" | 4757 |
| 1.640" | .635"-.650" | .015", .030", .060" | 4756 |

Also available in singles (-1) and bulk (-100)

BIG BLOCK CHEVROLET SEAT SPACERS

Late model Big Block Chevrolet engines are originally equipped with exhaust valve rotators. Until now, the only way to make up for the rotator was to stack .300" of shims under the spring. This was not only sloppy, but they also didn't fit well. These seat spacers offered by COMP Cams® will locate the spring with an outside step so the spring cannot "walk" around on the head.



#4779-8

| DESCRIPTION | O.D. | SPRING O.D. | SPRING I.D. | THICKNESS | PART # |
|--|--------|-------------|-------------|-----------|---------------|
| Chevrolet Big Block Exhaust Rotator Eliminator | 1.732" | 1.568" | 0.623" | .300" | 4779-8 |
| Chevrolet Big Block Exhaust Rotator Eliminator for #26120 Beehive™ | 1.732" | 1.468" | 0.630" | .300" | 4698-8 |

Individual shims available in singles (-1) and bulk (-100)

VALVE SPRING ACCESSORIES



VALVE TRAIN ASSEMBLY SPRAY

See page 235 for details



VALVE SPRING HEIGHT MICROMETERS

See page 339 for details



VALVE SPRING COMPRESSORS

See page 338 for details

SPRING SEAT AND GUIDE CUTTERS/ARBORS

These tools from COMP Cams® will allow machining of the cylinder head to the proper size for your spring. Each cutter requires the use of an arbor/pilot, which is available in three different sizes. These arbors/pilots will also work with the valve guide cutters used for shortening the guide for a high lift cam or installing a COMP Cams® PTFE seal for oil control.

- Seat cutters available in many sizes from 1.320"-1.810" O.D.
- Valve guide cutters available to cut guide to .446", .494", .500", .530" or .625"
- Arbors/pilots available for 5/16", 11/32" and 3/8" diameters



| DESCRIPTION | CUTS GUIDE O.D. | PART # |
|---|-----------------|-------------|
| SPRING SEAT CUTTERS | | |
| 1.320" Spring Seat Cutter, To Install Larger Springs & Hardened Spring Seat on GM Vortec Head | .630" | 4716 |
| 1.340" Spring Seat Cutter | .500" | 4671 |
| 1.340" Spring Seat Cutter | .560" | 4672 |
| 1.350" Spring Seat Cutter, To Install Single Springs On GM Vortec Head W/O Hardened Spring Seat | .775" | 4721 |
| 1.440" Spring Seat Cutter | .560" | 4733 |
| 1.440" Spring Seat Cutter | .630" | 4718 |
| 1.550" Spring Seat Cutter | .630" | 4719 |
| 1.580" Spring Seat Cutter | .560" | 4735 |
| 1.580" Spring Cup Cutter | .630" | 4720 |
| 1.680" Spring Seat Cutter | .560" | 4741 |
| 1.680" Spring Cup Cutter | .630" | 4722 |
| 1.740" Spring Cup Cutter | .630" | 4724 |
| 1.810" Spring Cup Cutter, Use W/ #26028 and #26030 Race Springs | .630" | 4723 |
| VALVE GUIDE CUTTERS | | |
| Valve Guide Cutter | .425" | 4703 |
| Valve Guide Cutter | .446" | 4727 |
| Valve Guide Cutter | .494" | 4725 |
| Valve Guide Cutter | .500" | 4715 |
| Valve Guide Cutter | .530" | 4726 |
| Valve Guide Cutter | .625" | 4728 |
| Stud Boss Cutter | N/A | 4729 |
| ARBOR/PILOTS | | |
| 5/16" Arbor/Pilot for Seat & Guide Cutters | N/A | 4730 |
| 11/32" Arbor/Pilot for Seat & Guide Cutters | N/A | 4732 |
| 3/8" Arbor/Pilot for Seat & Guide Cutters | N/A | 4734 |

VALVE STEM OIL SEALS

COMP Cams® offers a complete line of valve stem oil seals, from the stock GM o-ring to the positive-stop PTFE seal. These seals are a must to keep unwanted oil from entering the combustion chamber through the clearance in the valve guides. The o-ring seals use the standard retainer and oil splash shield. The umbrella seal is normally used when a larger-than-stock diameter spring is used, and in the case of a double spring, the positive-stop PTFE seal is used. Smaller diameter Viton seals are also available for triple spring applications. Both the o-ring and the umbrella seals require no machining, but when using the PTFE seal it is necessary to disassemble the heads and machine the top of the guide with a special cutter, which can also be found on this page.



| DESCRIPTION | VALVE STEM O.D. | GUIDE O.D. | SEAL O.D. | PART # |
|---|-----------------|------------|-----------|---------------|
| O-Ring | 11/32" | Stock | .400" | 501-16 |
| Umbrella | 11/32" | Stock | .750" | 502-16 |
| Umbrella | 3/8" | Stock | .900" | 504-16 |
| Positive Stop PTFE | 5/16" | .500" | .600" | 513-16 |
| Positive Stop PTFE | 5/16" | .530" | .630" | 500-16 |
| Positive Stop PTFE | 11/32" | .500" | .600" | 510-16 |
| Positive Stop PTFE | 11/32" | .530" | .630" | 503-16 |
| Positive Stop PTFE | 3/8" | .500" | .600" | 512-16 |
| Positive Stop PTFE | 3/8" | .530" | .630" | 505-16 |
| Steel Jacketed Viton Seal for LS1, #26921-KIT | 8mm | .500" | .600" | 511-16 |
| Metal Body Viton Seal | 5/16" | .530" | .675" | 516-16 |
| Metal Body Viton Seal | 11/32" | .530" | .675" | 529-16 |
| Metal Body Viton Seal | 3/8" | .500" | .625" | 514-16 |
| Metal Body Viton Seal | 3/8" | .530" | .675" | 515-16 |
| Black Viton Valve Seal (Small O.D. for Triple Spring) | 5/16" | .425" | .565" | 530-16 |
| Black Viton Valve Seal (Small O.D. for Triple Spring) | 11/32" | .494" | .610" | 506-16 |
| Metal Body Viton Seal For Use with Triple Spring | 5/16" | .500" | .545" | 519-16 |
| Metal Body Viton Seal For Use with Triple Spring | 5/16" | .530" | .575" | 520-16 |
| Metal Body Viton Seal For Use with Triple Spring | 11/32" | .500" | .545" | 517-16 |
| Metal Body Viton Seal For Use with Triple Spring | 11/32" | .530" | .575" | 518-16 |
| Metal Body Viton Seal For Use with Triple Spring | 3/8" | .500" | .545" | 521-16 |
| Metal Body Viton Seal For Use with Triple Spring | 3/8" | .530" | .575" | 522-16 |

Note: For 4 cylinder use - 8 suffix, for 6 cylinder use -12 suffix.

SPORTSMAN VALVES

COMP Cams® Sportsman Valves are available in a variety of materials, diameters and stem lengths for street and competition engines. The stainless steel valves are made from 21-4N forged steel alloy with 50 HRC minimum hard tips (eliminating lash caps); these valves deliver tremendous performance and durability. The hard chrome-plated 11/32" stems utilize proprietary oil retention surfacing. For extremely high revving LS applications, COMP® engineers developed titanium valves. Weighing 35% less than stainless steel, titanium valves are a must for race applications where valve float is not an option. For high temperature and high boost applications, valves constructed from Inconel superalloy are also available.



| DESCRIPTION | INTAKE/ EXHAUST | HEAD DIAMETER | OVERALL LENGTH | LOCK GROOVE | STEM SIZE | MATERIAL | PART # |
|------------------------|--------------------|------------------|-------------------|----------------|--------------|-----------------|---------------|
| Chevrolet 265-400 | Intake | 1.940" | 4.911" | Single | 11/32" | Stainless Steel | 6006-8 |
| Chevrolet 265-400 | Intake | 1.940" | 5.011" | Single | 11/32" | Stainless Steel | 6014-8 |
| Chevrolet 265-400 | Intake | 2.020" | 4.911" | Single | 11/32" | Stainless Steel | 6004-8 |
| Chevrolet 265-400 | Intake | 2.020" | 5.011" | Single | 11/32" | Stainless Steel | 6001-8 |
| Chevrolet 265-400 | Intake | 2.020" | 5.111" | Single | 11/32" | Stainless Steel | 6009-8 |
| Chevrolet 265-400 | Intake | 2.055" | 5.011" | Single | 11/32" | Stainless Steel | 6018-8 |
| Chevrolet 265-400 | Intake | 2.080" | 4.911" | Single | 11/32" | Stainless Steel | 6013-8 |
| Chevrolet 265-400 | Intake | 2.080" | 5.011" | Single | 11/32" | Stainless Steel | 6003-8 |
| Chevrolet 265-400 | Intake | 2.080" | 5.111" | Single | 11/32" | Stainless Steel | 6007-8 |
| Chevrolet 265-400 | Exhaust | 1.500" | 4.911" | Single | 11/32" | Stainless Steel | 6016-8 |
| Chevrolet 265-400 | Exhaust | 1.600" | 4.911" | Single | 11/32" | Stainless Steel | 6011-8 |
| Chevrolet 265-400 | Exhaust | 1.600" | 5.011" | Single | 11/32" | Stainless Steel | 6002-8 |
| Chevrolet 265-400 | Exhaust | 1.600" | 5.111" | Single | 11/32" | Stainless Steel | 6012-8 |
| Chevrolet 396-454 | Intake | 2.250" | 5.468" | Single | 11/32"* | Stainless Steel | 6022-8 |
| Chevrolet 396-454 | Intake | 2.300" | 5.468" | Single | 11/32"* | Stainless Steel | 6021-8 |
| Chevrolet 396-454 | Exhaust | 1.880" | 5.454" | Single | 11/32"* | Stainless Steel | 6023-8 |
| GM Gen III LS1/LS2/LS6 | Intake | 2.020" | 4.900" | Single | 8mm | Stainless Steel | 6039-8 |
| GM Gen III LS1/LS2/LS6 | Intake | 2.040" | 5.450" | Single | 8mm | Stainless Steel | 6052-8 |
| GM Gen III LS1/LS2/LS6 | Intake | 2.055" | 4.900" | Single | 8mm | Stainless Steel | 6046-8 |
| GM Gen III LS1/LS2/LS6 | Intake | 2.080" | 4.900" | Single | 8mm | Stainless Steel | 6047-8 |
| GM Gen III LS1/LS2/LS6 | Intake | 2.080" | 5.450" | Single | 8mm | Stainless Steel | 6051-8 |
| GM Gen III LS1/LS2/LS6 | Exhaust | 1.570" | 4.930" | Single | 8mm | Stainless Steel | 6048-8 |
| GM Gen III LS1/LS2/LS6 | Exhaust | 1.570" | 5.450" | Single | 8mm | Stainless Steel | 6054-8 |
| GM Gen III LS1/LS2/LS6 | Exhaust | 1.600" | 4.930" | Single | 8mm | Stainless Steel | 6049-8 |
| GM Gen III LS1/LS2/LS6 | Exhaust | 1.600" | 5.450" | Single | 8mm | Stainless Steel | 6053-8 |
| GM Gen IV LS7 | Intake | 2.200" | 5.550" | Bead Lock | 8mm | Stainless Steel | 6062-8 |
| GM Gen IV LS7 | Intake | 2.200" | 5.565" | Bead Lock | 8mm | Titanium | 6064-8 |
| GM Gen IV LS7 | Intake | 2.250" | 5.695" | Bead Lock | 5/16" | Titanium | 6068-8 |
| GM Gen IV LS7 | Exhaust | 1.615" | 5.685" | Bead Lock | 8mm | Titanium | 6069-8 |
| GM Gen IV LS7 | Exhaust | 1.615" | 5.590" | Bead Lock | 8mm | Stainless Steel | 6063-8 |
| GM Gen IV LS7 | Exhaust | 1.615" | 5.590" | Bead Lock | 8mm | Inconel | 6067-8 |
| GM Gen IV LS7 | Exhaust | 1.615" | 5.595" | Bead Lock | 8mm | Titanium | 6066-8 |

* Big Block Chevrolet factory valve stem size is 3/8", however all COMP Cams® Big Block Chevy valves listed feature 11/32" valve stem diameter for increased flow and less weight

TIMING TECH

Advancing or retarding a camshaft moves the engine's torque band around the RPM scale by moving the valve events further ahead or behind the movement of the piston. Typically, a racer will experiment with advancing or retarding a cam from "straight up" to determine what works best for his or her engine. COMP Cams® camshafts are ground to provide maximum performance and are designed to be installed to the specifications listed on the cam spec card that ships with each camshaft we sell.

HOW IS IT MEASURED?

A cam with a 107° intake lobe centerline will actually be centered at 103° ATDC when installed 4° advanced.

Most COMP® camshafts have a certain amount of advance ground in. "Ground-in advance" can also be found by subtracting the intake lobe centerline from the lobe separation.

WHAT DOES IT DO?

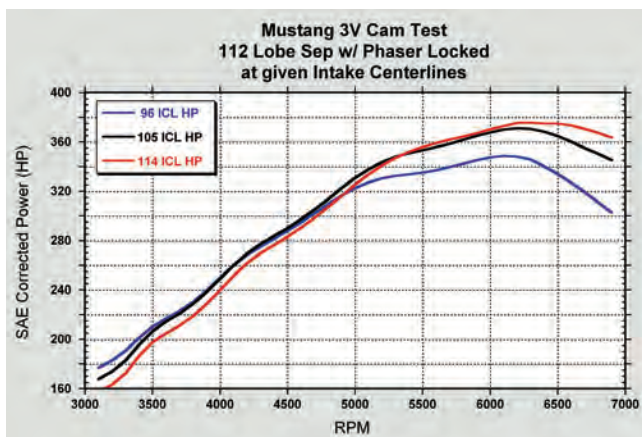
Advance improves low-end power and response. Retard allows more time for cylinder filling, therefore creating more power at high RPM. For a general summary of the effects of camshaft timing, refer to the following tables:

ADVANCE

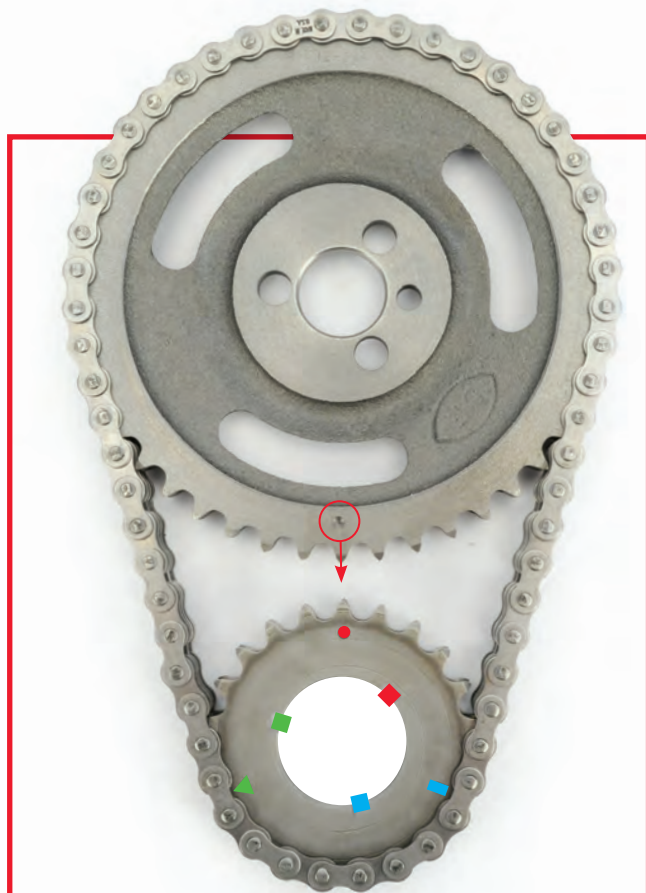
- Earlier Intake Closing Creates More Cylinder Pressure At Lower RPM
- Earlier Exhaust Opening Creates Less Pumping Losses
- Builds More Low-End Torque & Throttle Response
- Decreases Piston-To-Intake-Valve Clearance
- Increases Piston-To-Exhaust-Valve Clearance

RETARD

- Later Intake Closing Delays Maximum Cylinder Pressure
- Later Exhaust Opening Allows For Longer Power Stroke
- Builds More High-End Power
- Increases Piston-To-Intake-Valve Clearance
- Decreases Piston-To-Exhaust-Valve Clearance



This chart shows the results of a dyno test performed on a 4.6L 3 Valve Ford engine. The cam set tested featured a 112° lobe separation. The test illustrates how changing the intake centerlines affects horsepower at different RPM ranges.



To install your camshaft "straight up," make sure to align the dot on the cam gear directly above the dot on the crank gear. At this position your camshaft's intake centerline should be the same as the lobe separation. If you want to advance your camshaft 4° you would align the dot on the camshaft gear directly above the triangle on the crank gear. The crankshaft would also need to be moved to the keyway to the right of the triangle. At this position your intake centerline should be 4° less than the lobe separation of your camshaft. To retard the cam, you would use the same process but align the cam dot to the rectangle rather than the triangle. This will make your intake centerline 4° more than the lobe separation.

Many COMP Cams® camshafts have a certain amount of advance already ground into them – check your spec card to verify. If the cam already has advance you should install it with the dots on the cam and crank gear together or "dot-to-dot."

TECH TIP

Always remember that once you have the camshaft in place, you must turn the crankshaft one full turn. The distributor can then be installed to the #1 cylinder. At this point, the marks on the cam gear and crank gear should be in the twelve o'clock position.

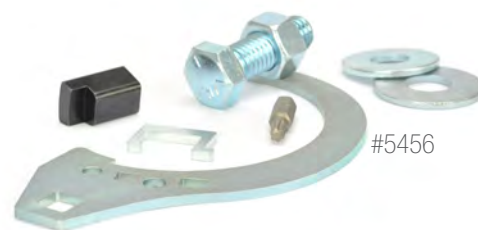
CAM PHASER LIMITER KITS (Patent 8,291,876 B2)

Cam phasers are specially designed, computer-controlled cam gears that automatically optimize camshaft timing based on the current engine RPM and are currently used in all 2008+ Chrysler 5.7-6.4L VVT (Variable Valve Timing), 2005+ Ford Modular 3V, 2011+ Ford 5.0L DOHC Modular 4V V8 Ti-VCT (Variable Cam Timing) and 2007+ GM Gen IV VVT engines. Engine oil is pressure-fed to the phasers through passageways in the cylinder heads and cams. The engine computers control solenoids that adjust this oil flow into and out of the phasers' control chambers, creating the ability to retard the cams.

While this technology provides fuel efficiency and the ability to always be in the best position for maximum power, regardless of engine RPM, it does present some limitations when it comes to performance cams. With such a wide range of valve timing movement, there is very little piston to valve clearance, which limits you to small cam profiles with little overlap.

The COMP Cams® Cam Phaser Limiter Kits for the Chrysler Hemi, Ford Modular 3V and GM Gen IV VVT engines restrict the range of cam timing movement (14° for Chrysler, 20° for Ford and 22° for GM), thus providing the necessary valve clearance for serious performance cams with tighter lobe separations – all while utilizing the benefits of VVT technology. The Cam Phaser Limiters for the 2011+ Ford 5.0L 4V Ti-VCT engine limit the cam phasing to 25 crank degrees (12.5 cam degrees) while the cam phaser locks for that same engine allow fully adjustable locking over the OEM phaser range (50°).

The resulting upper-RPM gains from using COMP Cams® Cam Phaser Limiters or Locks are some of the largest we've ever seen from a camshaft swap without sacrificing any bottom end or mid-range performance.



#5456



#5761

| MAKE | DESCRIPTION | PART # |
|---|--|--------|
| Chrysler | Chrysler Hemi Phaser Lock Kit | 5760 |
| | Chrysler Hemi Phaser Limiter Kit | 5761 |
| Ford | 4.6L/5.4L Modular 3V Ford 2005+ Cam Phaser Limiter Kit | 5449 |
| | 4.6L/5.4L Modular 3V Ford 2005+ Cam Phaser Limiter Tool | 5446 |
| | 4.6L/5.4L Modular 3V Ford 2005+ Cam Phaser Limiter Spring Compressor | 5447 |
| | 4.6L/5.4L Modular 3V Ford 2005+ Cam Phaser Limiter | 5448 |
| | 5.0L DOHC Modular 4V V8 Ford 2011-14 Adjustable Phaser Locks | 5492 |
| | 5.0L DOHC Modular 4V V8 Ford 2011-14 Adjustable Phaser Limiters | 5493 |
| GM LS | GM Gen IV 2007-08/LT1 2014+ VVT Cam Phaser Limiter Kit | 5456 |
| | GM Gen IV 2007-08/LT1 2014+ VVT Cam Phaser Limiter Tool | 5454 |
| | GM Gen IV 2007-08/LT1 2014+ VVT Cam Phaser Limiter Spring Lock Tool | 5455 |
| | GM Gen IV 2007-08/LT1 2014+ VVT Cam Phaser Limiter Plug | 5457 |
| | GM Gen IV 2009-Present VVT Cam Phaser Limiter Kit | 5460 |
| | GM Gen IV 2009-Present VVT Cam Phaser Limiter Tool | 5454 |
| | GM Gen IV 2009-Present VVT Cam Phaser Limiter Spring Lock Tool | 5455 |
| | GM Gen IV 2009-Present VVT Cam Phaser Limiter Plug | 5459 |
| | GM LT4 2015-Present VVT Cam Phaser Limiter Kit | 5450 |
| | GM LT4 2015-Present VVT Cam Phaser Limiter Tool | 5451 |
| GM LT4 2015-Present VVT Cam Phaser Limiter Plug | 5457 | |



#5448

FORD 2V/4V MODULAR ADJUSTABLE TIMING SET

This timing set boasts robust adjustment clamping without concern for loosening, along with a bulletproof steel design featuring wear-resistant, plasma nitride gear hardening on the gear teeth. Meanwhile, a perfect cam sensor signal is trigger-tested to over 10,000 RPM and is compatible with any OEM or aftermarket engine control system. An all-new Allen wrench adjustment design allows for precise adjustment (+/- 6 degrees) to advance and retard on each bank.

| DESCRIPTION | PART # |
|--|--------|
| Ford 2V/4V Modular Adjustable Timing Set ¹ – Pair | 10254 |

¹ Will not fit Shelby GT500 5.4L or Coyote engines



#10254



#3200

HIGH ENERGY™ TIMING SETS

- Exceed all original equipment timing chain specifications
- Premium quality link belt type timing chain for exceptional durability; chain available separately
- Precision, cast iron camshaft and crank gear sprockets
- Ideal for stock replacement and mild performance applications

| MAKE | DESCRIPTION | TIMING SET PART # | CHAIN ONLY PART # |
|------------|--|-------------------|-------------------|
| AMC | V6, 199-258, 1964-97 | 3219 | 3319 |
| | V8, 290-401, 1969-81 | 3218 | 3318 |
| Buick | Buick, Olds, Pontiac V6, 198-231, 1962-77 | 3215 | 3315 |
| | Buick, Olds, Pontiac V6, 183-252, 1977-Up | 3226 | 3326 |
| | V8, 350, 1968-80 | 3215 | 3315 |
| | V8, 400-455, 1967-76 | 3217 | 3317 |
| Chevrolet | V6 60° 173 | 3201 | 3301 |
| | V6 90°, 200, 229, 262, 1978-Present | 3200 | 3300 |
| | V6 90°, 262 (4.3L), 1992-Present w/ Balance Shaft | 3202 | 3300 |
| | V8 265-400, 1955-91 (Except w/ Factory Roller Cam) | 3200 | 3300 |
| | V8 350 LT1 1995-Up | 3207 | 3307 |
| Chrysler | V8 396-454, 1965-91 & Early Style Roller 502 Gen V | 3210 | 3310 |
| | 6 Cyl. 170-225, 1960-87 | 3205 | 3305 |
| | V8 273-360, 1956-88 | 3203 | 3303 |
| | V8 383-440 (Single-Bolt Gear), 1956-79 | 3204 | 3304 |
| Ford | V6 144-200, 1960-83 | 3223 | 3323 |
| | V6 171 (2600-2800), 1972-80 | 3236 | — |
| | V8 289-351W & Boss 302, Pre-1972 | 3220 ¹ | 3320 |
| | V8 302-351W, 1972-Up | 3230 ² | 3330 |
| | V8 351C, 351M, 400M, 1970-82 | 3221 | 3321 |
| | V8 352-428, 1964-74 | 3208 | 3308 |
| Oldsmobile | V8 429-460, 1968-71 | 3222 ¹ | 3322 |
| | V8 260-455, 1965-83 | 3213 | 3313 |
| Pontiac | V8 265-455, 1955-81 | 3212 | 3312 |

¹ Accommodates one-piece fuel pump eccentric

² Accommodates two-piece fuel pump eccentric



#2100

MAGNUM DOUBLE ROW TIMING SETS

- Induction hardened cast iron camshaft gear & billet steel crank sprocket
- Features 3 keyway crank sprocket for 4-degree incremental adjustability, 4-degree maximum advance/retard
- Heavy-duty, heat-treated double row timing chain; chain available separately
- Ideal for mild street performance

| MAKE | DESCRIPTION | TIMING SET PART # | CHAIN ONLY PART # |
|------------|---|-------------------|-------------------|
| AMC | V8 290-401, 1969-81 | 2118 | 2041 |
| Cadillac | 368, 425, 472, 500 V8, 1968-84 | 2139 ¹ | N/A |
| Chevrolet | V6 90°, 200, 229, 262, 1978-86 | 2100 | 2001 |
| | V6 (4.3L) 262, 1987-92 w/ Factory Roller Cam | 2136 | 2001 |
| | V8 & 90° V6, V8 305-350 1987-90 w/ Factory Roller Cam | 2136 | 2001 |
| | V8 265-400, 1955-91 (Except w/ Factory Roller Cam) | 2100 | 2001 |
| | V8 396-454, 1965-91 | 2110 | 2023 |
| Chrysler | V8 273-360, 1956-88 | 2103 | 2007 |
| | V8 383-440 (Single-Bolt Gear), 1956-79 | 2104 | 2009 |
| | V8 426 Hemi, 383-440 (Three-Bolt Gear) 1960-73 | 2109 | 2009 |
| Ford | V8 255, 289, 302 & Boss 302, 1965-88 | 2120 ² | 2002 |
| | V8 5.0L 302 H.O., 1980 through 3/21/84 | 2131 | 2002 |
| | V8 5.0L, 302, 351W 3/22/84 through 1992 | 2138 ³ | 2002 |
| | V8 351W, 351W 1969-84 | 2135 ³ | 2002 |
| | V8 351C, 351M, 400M, 1970-82 | 2121 | 2015 |
| | V8 352-428, 1964-74 | 2108 | 2015 |
| Oldsmobile | V8 429-460, 1968-71 | 2122 ² | 2009 |
| | V8 429-460, 1972-87 | 2130 ² | 2009 |
| | 429-460 w/ 9 Keyway Crank Gear | 2134 ⁴ | 2024 |
| | V8 260-455, 1965-83 | 2113 | 2015 |
| Pontiac | V8 326-455, 1955-81 | 2112 | 2025 |

¹ Uses a single roller timing chain, not double roller

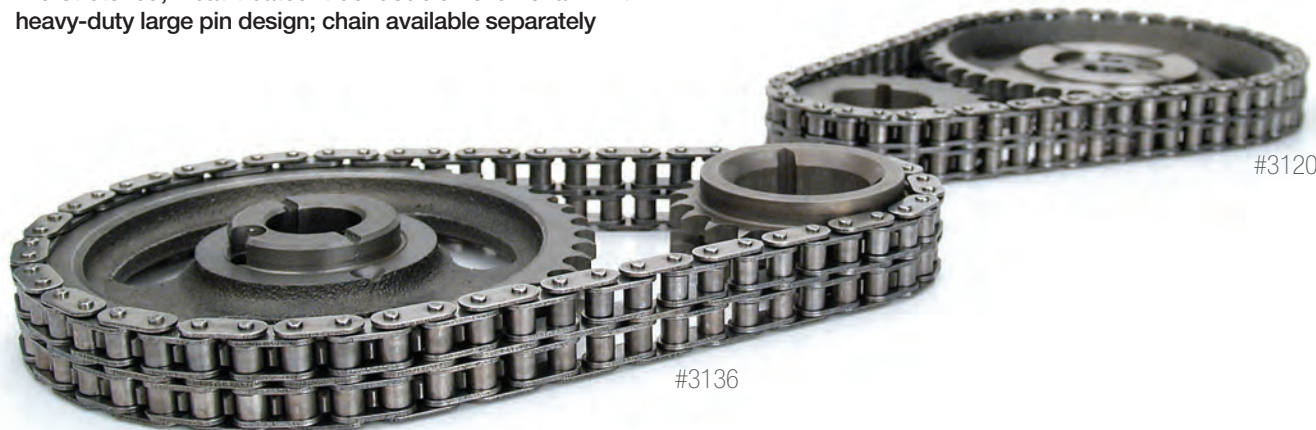
² Accommodates one-piece fuel pump eccentric

³ Accommodates two-piece fuel pump eccentric

⁴ Uses a link belt type timing chain, not double roller

HI-TECH™ ROLLER RACE TIMING SETS

- Cast iron camshaft gear and induction hardened billet steel crank sprocket
- Features 3 keyway crank sprocket for 4-degree incremental adjustability, 4-degree maximum advance/retard
- Pre-stretched, heat-treated true double roller chain with heavy-duty large pin design; chain available separately
- Dynamically balanced and quality checked for run-out tolerances
- Ideal for all street performance and race applications



| MAKE | DESCRIPTION | TIMING SET PART # | CHAIN ONLY PART # |
|---|---|----------------------|-------------------|
| AMC | V6 199-258, 1964-86 | 3127 | 3033 |
| | V8 290-401, 1969-81 | 3118 | 3032 |
| Buick | Buick, Olds, Pontiac V6, 183-252, 1977-Up | 3129 | 3036 |
| | Buick, Olds, Pontiac V6, 198-231, 1962-77 | 3128 | 3036 |
| | V8 350, 1968-80 | 3128 | 3036 |
| Chevrolet | V6 90°, 200, 229, 262, 1978-86 | 3100 | 3030 |
| | V8 4.3L V6 262, 1987-92 w/ Factory Roller Cam | 3136 | 3030 |
| | V8 265-400, 1955-91 (Except w/ Factory Roller Cam) | 3100 | 3030 |
| | V8 265-400 True Roller Race Set .005" Undersized for Align Bored Blocks | 3100-5 ¹ | 3037 |
| | V8 265-400 True Roller Race Set .010" Undersized for Align Bored Blocks | 3100-10 ¹ | 3037 |
| | V8 305-350, 1987-92, w/ Factory Roller Cam (Non-LT1) | 3136 | 3030 |
| | V8 348, 409, 1958-65 | 3101 | 3033 |
| | V8 396-454, 1965-96 | 3110 | 3034 |
| | V8 396-454 True Roller Race Set .005" Undersized for Align Bored Blocks | 3110-5 ¹ | 3038 |
| V8 396-454 True Roller Race Set .010" Undersized for Align Bored Blocks | 3110-10 ¹ | 3038 | |
| Chrysler | V8 273-360, 1956-88 | 3103 | 3035 |
| | V8 383-440 (Single-Bolt Gear), 1956-79 | 3104 | 3034 |
| | V8 426 Hemi, 383-440 (Three-Bolt Gear), 1960-73 | 3125 | 3034 |
| Ford | V8 255, 289, 302 & Boss 302, 1965-88 | 3120 ² | 3030 |
| | V8 5.0L H.O. 302, 1980 thru 3/21/84 | 3131 | 3030 |
| | V8 5.0L 302, 351W from 3/22/84 thru 1992 | 3138 ³ | 3030 |
| | V8 351W, 351W H.O. 1969-84 | 3135 ³ | 3030 |
| | V8 351C, 351M, 400M, 1970-82 | 3121 | 3033 |
| | V8 V8, 352-428, 1963-76 | 3108 | 3033 |
| | V8 429-460, 1968-71 | 3122 ² | 3034 |
| V8 429-460, 1972-87 | 3130 ² | 3034 | |
| Oldsmobile | V8 260-455, 1965-83 | 3113 | 3033 |
| Pontiac | V8 326-455, 1955-82 | 3112 | 3031 |

¹ Undersized for align bored blocks

² Can be used on late model engines but requires one-piece fuel pump eccentric

³ Accommodates two-piece fuel pump eccentric



ADJUSTABLE TIMING SETS

- Include durable, induction hardened steel billet gears
- Feature infinitely adjustable camshaft sprocket, 6-degree maximum advance/retard
- 3 Keyway crank sprocket for additional 4-degree incremental adjustability
- Pre-stretched, heat-treated double roller chain with heavy-duty large pin design; chain available separately
- Torrington roller thrust bearing for reduced friction
- Ideal for all street performance and race applications



KEYWAY ADJUSTABLE BILLET TIMING SETS

- Induction hardened and precision machined, steel billet gears for bullet proof durability
- Features 9 keyway crank sprocket for 2-degree incremental adjustability, 8-degree maximum advance/retard
- Pre-stretched, heat-treated double roller chain w/ heavy-duty large pin design
- Includes Torrington roller thrust bearing for reduced friction
- Ideal for all street performance and race applications

| MAKE | DESCRIPTION | TIMING SET PART # | CHAIN ONLY PART # |
|--|--|------------------------|-------------------|
| Chevrolet | V8 265-400 Adjustable Timing Set w/ Thrust Bearing | 3100KT | 3037 |
| | V8 265-400 Adjustable Timing Set w/ Thrust Bearing .005" Undersized | 3100KT-5 | 3037 |
| | V8 265-400 Adjustable Timing Set w/ Thrust Bearing .010" Undersized | 3100KT-10 | 3037 |
| | V8 SBC/Olds Rocket Block, Raised Cam | 3146KT | 3046 |
| | V8 396-454 Adjustable Timing Set w/ Thrust Bearing | 3110KT | 3038 |
| | V8 396-454 Adjustable Timing Set w/ Thrust Bearing .005" Undersized | 3110KT-5 | 3038 |
| | V8 396-454 Adjustable Timing Set w/ Thrust Bearing .010" Undersized | 3110KT-10 | 3038 |
| V8 454-502, Gen VI Adjustable Timing Set | 3149KT ^{1, 5, 6} | 3049 | |
| GM LS | LS Single Chain Hex Adjust Type for 3 Bolt Cam, 1 Pole Reluctor (24x) | 3158KT ² | — |
| | LS Single Chain Hex Adjust Type for 3 Bolt Cam, 4 Pole Reluctor (58x) | 3172KT | — |
| | LS7 Single Chain Hex Adjust Type for 3 Bolt Cam, 4 Pole Reluctor (58x) | 3167KT | — |
| Chrysler | V8 383-440 Three-Bolt Adjustable Timing Set | 3125KT | 3038 |
| Ford | V8 5.0L, 302, 351W Adjustable Timing Set | 3135KT | 3037 |
| | V8 390-428 Adjustable Timing Set | 3108KT | 3008 |
| | V8 429-460 Adjustable Timing Set | 3121KT ³ | 3038 |
| Oldsmobile | V8 400-455 Adjustable Timing Set | 3113KT ^{4, 5} | 3008 |
| | V8 Rocket Block, Raised Cam | 3146KT | 3046 |
| ACCESSORIES | | | |
| — | Replacement Bushings for Adjustable Timing Sets | 9005 | — |

¹ Single roller chain design for clearance

² Sold as complete matched sets only

³ Includes one-piece fuel pump eccentric

⁴ Not to be used where open spring pressures exceed 500 lbs

⁵ Bearing NOT included or required

⁶ Can NOT be used with factory fuel injection

| MAKE | DESCRIPTION | TIMING SET PART # | CHAIN ONLY PART # |
|-----------|---|----------------------|-------------------|
| Chevrolet | V8 265-400 | 7100 | 3030 |
| | V8 265-400 .005" Undersized for Align Bored Blocks | 7100-5 ¹ | 3030 |
| | V8 265-400 .010" Undersized for Align Bored Blocks | 7100-10 ¹ | 3030 |
| | V8 305-350 w/ Factory Roller Cam | 7136 | 3030 |
| | V8 396-454 | 7110 | 3034 |
| | V8 396-454 .005" Undersized for Align Bored Blocks | 7110-5 ¹ | 3034 |
| | V8 396-454 .010" Undersized for Align Bored Blocks | 7110-10 ¹ | 3034 |
| | V8 454-502 Gen VI 1996-02 | 7101 | 3034 |
| GM LS | LS (58x) Single Chain 9 Keyway (Single-Bolt Gear, 4 Pole Reluctor) | 7107 | 9303 |
| | Gen III LS2 (Early Model w/ 24 Tooth Reluctor Only) | 7102 | 3031 |
| | LS2 (Single-Bolt) | 7105 | 3031 |
| | LS3 (58x) 9 Keyway (Three-Bolt Gear, 4 Pole Reluctor) | 7106 | 3031 |
| | LS3 (58x) 9 Keyway (Three-Bolt Gear, 4 Pole Reluctor), .005" Undersized | 7106-5 | 3031 |
| Chrysler | V8 273-360 (Single-Bolt) | 7103 | 3035 |
| | V8 383-440 (Single-Bolt) | 7104 | 3034 |
| | V8 426 Hemi, 383-440 (Three-Bolt Gear), 1960-73 | 7125 | 3034 |
| | V8 5.7L, 6.1L Hemi, 2005-08 (Torrington Thrust Bearing NOT Included) | 7114 | 3040 |
| Ford | V8 289-351 W, 1965-88 | 7138 | 3030 |
| | V8 1965-88, .005" Undersized | 7138-5 ¹ | 3030 |
| | V8 1965-88, .010" Undersized | 7138-10 ¹ | 3030 |
| | V8 352-428 | 7108 | 3033 |
| | V8 429-460 | 7122 ² | 3034 |
| Pontiac | V8 326-455 | 7112 | 3031 |
| | V8 326-455 .005" Undersized | 7112-5 ¹ | 3031 |

¹ Undersized for align bored blocks

² Must be used with one-piece fuel pump eccentricT

ULTIMATE ADJUSTABLE BILLET TIMING SETS

- High-strength billet gears & seamless roller chain deliver years of service
- 2-Degree incremental adjustability, 6-degree maximum advance/retard
- Unique design yields precise camshaft timing and durability
- Includes Torrington roller thrust bearing for reduced friction and custom adjusting tool
- Ideal for all street performance and race applications



#8100

| MAKE | DESCRIPTION | PART # | CHAIN ONLY PART # |
|-----------|--|-------------------------|-------------------|
| Chevrolet | V6 90°, 200, 229, 262, 1978-86 | 8100 | 3030 |
| | V8 265-400, 1955-91 (Except w/ Factory Roller Cam) | 8100 | 3030 |
| | V8 SBC/Olds Rocket Block, Raised Cam Blocks | 8146 | 3031 |
| | V8 396-454, 1965-96 | 8110 | 3034 |
| Ford | V8 5.0L 302, 351W from 3/22/84 thru 1992 | 8138¹ | 3030 |
| | V8 5.0L 302, 351W | 8131² | 3030 |
| | V8 429, Boss 429-460 | 8122² | 3034 |

¹ Accommodates two-piece fuel pump eccentric² Accommodates one-piece fuel pump eccentric

GM LS TIMING SETS FOR RHS®/LSX™ RAISED CAM BLOCKS

- Engineered for use with cam blocks raised .388" above stock, which includes the popular RHS® LS Race Block
- Premium chain with unmatched strength and durability for extreme race applications
- Available in a wide variety of options, including 3 keyway, 9 keyway or Hex Adjust; 1 or 4 pole reluctors; and 1- or 3-bolt cam cores



| DESCRIPTION | PART # |
|---|---------------|
| LS Single Chain Hex Adjust Type for 3-Bolt Cam, 1 Pole Reluctor (24x) | 9158KT |
| LS Single Chain Hex Adjust Type for 3-Bolt Cam, 4 Pole Reluctor (58x) | 9172KT |
| LS Single Chain 3 Keyway for 1-Bolt Cam, 4 Pole Reluctor (58x) | 9673T3 |
| LS Single Chain 3 Keyway for 3-Bolt Cam, 1 Pole Reluctor (24x) | 9658T3 |
| LS Single Chain 3 Keyway for 3-Bolt Cam, 4 Pole Reluctor (58x) | 9672T3 |
| LS Single Chain 9 Keyway for 1-Bolt Cam, 4 Pole Reluctor (58x) | 9673T9 |
| LS Single Chain 9 Keyway for 3-Bolt Cam, 1 Pole Reluctor (24x) | 9658T9 |
| LS Single Chain 9 Keyway for 3-Bolt Cam, 4 Pole Reluctor (58x) | 9672T9 |
| LS Double Chain Hex Adjust Type for 3-Bolt Cam, 1 Pole Reluctor (24x) | 3173KT |
| LS Double Chain 3 Keyway for 3-Bolt Cam, 1 Pole Reluctor (24x) | 3154 |
| LS7 Single Chain Hex Adjust Type for 3-Bolt Cam, 4-Pole Reluctor (58x), One-Piece Oil Cog w/ Gear | 9167KT |
| LS7 Single Chain 3 Keyway for 3-Bolt Cam, 4-Pole Reluctor (58x) | 9667T3 |
| ACCESSORIES | |
| LS Replacement Single Chain | 9302 |
| LS Replacement Double Chain | 9132 |

SPRINT CAR FRONT DRIVE KIT FOR LS ENGINES

The COMP Cams® Sprint Car Front Drive Kit for LS Engines bolts to RHS® LS Race, other aftermarket and GM LS blocks with no modifications necessary. It is the first and only fully engineered, bolt-on assembly that provides a proper and reliable solution for cam thrust bearings, distributor/magneto, oil pump, water pump, camshaft/crank sensors and gear drive. Designed and proven for racing duty, the unique piece also features oil passages that provide oiling directly to gears and bearings.

| DESCRIPTION | PART # |
|--|-------------|
| LS Sprint Car Front Drive Kit for RHS® | 5490 |
| LS Sprint Car Front Drive Kit for GM | 5491 |



#5490

*All necessary hardware included.

GEAR DRIVES

- Precision-machined, heat-treated billet steel gears for timing accuracy & durability
- Unique design virtually eliminates timing movement throughout the RPM range
- Complete ready-to-install kit is ideal for street performance applications that desire whining blower sound

| MAKE | DESCRIPTION | PART # |
|--------------------|--|---------------------------|
| Chevrolet | Small Block Gear Drive System | 4100¹ |
| | V8 305, 350 w/ Factory Roller Cam Gear Drive System | 4136^{1,2} |
| | Big Block Gear Drive System | 4110 |
| Ford | Small Block Gear Drive System | 4120 |
| ACCESSORIES | | |
| - | Replacement Brass Washer for #4100 Gear Drive System | 4100BW |
| - | Replacement Brass Washer for #4110 Gear Drive System | 4110BW |

¹ OE Roller Blocks must counter sync bolts

² Not for use in LT1 engines

GEAR SETS

- Precision-hobbed and crown-shaved aluminum, steel and fiber gears
- Quality tested for strict tolerances and timing accuracy

| MAKE | DESCRIPTION | PART # |
|-------------------------|---|-------------------------|
| Chevrolet | Chevrolet/GMC 4 & 6 Cyl. 153, 194, 230, 250, 292, 1962-88 (Aluminum Cam Gear) | 3211¹ |
| | Chevrolet/GMC 4 & 6 Cyl. 153, 194, 230, 250, 292, 1962-88 (Fiber Cam Gear) | 3161¹ |
| Ford | V6 240-300, 1965-91 (Steel Gears) | 3224 |
| | V6 2800cc | 3236 |
| International Harvester | V8 304-392 (Steel Cam Gear) | 3225 |
| Pontiac | 4 Cyl., 151c.i. Iron Duke (Fiber Cam Gear) | 3252 |

¹ Fine tooth gear

GM LS GEAR DRIVE TIMING SETS

These gear drive timing sets are specifically designed for LS engines used in racing, street, marine and extreme applications. They provide the most accurate valve timing possible by eliminating chain flutter and backlash. They bolt on without modification, maintaining the stock oil pump and timing cover for all LS-based engines except dry sump models¹. Designed for three-bolt cams and work with all 24x and 58x LS engines. Based on the award-winning COMP Cams® LS Sprint Car Gear Drive, these are the world's only gear drives for LS engines.

| DESCRIPTION | PART # |
|---|-------------|
| GM LS Gear Drive Timing Set for RHS® (Raised Cam Block) | 5494 |
| LS Gear Drive Timing Set for GM (Standard Block) | 5495 |

¹ Dry sump engines (LS7, LS9, etc.) require an external oil pump.

FRONT DRIVE DISTRIBUTOR KITS FOR GM LS ENGINES

Kits allow an LS to be converted from a computer-controlled management system and fuel injection to a standard distributor and a carb with either a belt-driven or electronic fuel pump.

- Enable use of a standard distributor ignition
- Allow timing of adjustment & ability to change mechanical advance curve
- Include all components needed for conversion to distributor-style ignition

| DESCRIPTION | CONVERSION ONLY PART # | COMPLETE KIT PART # |
|---|------------------------|---------------------|
| GM LS Front Drive Kits for RHS® Aluminum Race Block | 5480 | 5482 |
| GM LS Front Drive Kits for Standard Block | 5481 | 5483 |



*Waterpump not pictured but included.

MAGNUM BELT DRIVE SYSTEMS

- Absorb crankshaft harmonics to guard against valve train instability
- Infinitely adjustable camshaft sprocket for absolute timing accuracy
- High-strength belt for increased durability over any chain or gear drive
- Ideal for all street performance and budget-minded race applications



#6100



#6507

HI-TECH™ BELT DRIVE SYSTEMS

- Extreme application belt for high RPM and high compression durability
- Infinitely adjustable Vernier sprocket for absolute timing accuracy
- Unique belt idler system to reduce flap throughout RPM range
- Designed to absorb crankshaft harmonics to guard against performance-robbing valve train instability
- Utilizes a unique camshaft thrust adjustment system without shims
- Includes double lip seals for long life and maximum crankcase vacuum
- Different diameter idlers available for racers with align bored blocks
- Ideal for serious street performance and race applications

| DESCRIPTION | PART # |
|---|---------------------|
| Chevrolet Small Block Dry System | 6100 ¹ |
| ACCESSORIES | |
| Replacement Belt for #5100 | 5000B |
| Crank Spacer .010" Thick for #5100 | 5100CR ¹ |
| Replacement Cam Button for #5100 | 211 |
| Replacement Belt for #6100 (72-Tooth) | 6100B |
| Seal Kit for #6100 | 6100SP |
| Upper Replacement Gear for #6100 | 6100UG-1 |
| Upper Replacement Oil Seal for #6100 | 6100US |
| Lower Replacement Oil Seal for #6100 | 6100LS |
| Cam Gear Bolt (LH Thread) for #6100 | 6100LHB |
| Retainer Washer (Cam Gear) for #6100 | 6100RW |
| Bronze Shim for #6100 (Upper Gear to Cam Adapter) | 6100BS |
| Bronze Shim for #6100 (Cam Adapter to Block) | 6100BSC |

¹ Fitment to the World Products Motown Block requires extensive machining to the block, oil galley plugs and cover

| DESCRIPTION | PART # |
|--|--------|
| Chevrolet Small Block w/ Idler | 6500 |
| Chevrolet Small Block w/ Idler, Big Block Crank Snout | 6502 |
| Chevrolet Small Block, Olds Rocket, Raised Cam | 6504 |
| Chevrolet Small Block, Olds Rocket, Raised Cam Big Block Crank Snout | 6506 |
| Chevrolet Small Block Xtreme Duty Hi-Tech™ Belt Drive Features a 1.250" Thick Belt for Extreme Cylinder Pressure | 6507 |
| Chevrolet Big Block Belt Drive, Standard Cam Location | 6200 |
| Chevrolet Big Block Belt Drive, .400" Raised Cam | 6300 |

| ACCESSORIES | |
|--|------------------------|
| Timing Belt – 81-Tooth for #6200 | 6200TB2 |
| Belt Tensioner – Standard for #6200 | 6200BTS |
| Belt Tensioner – Oversized for #6200 | 6200BTO |
| Upper Cam Seal for #6200 & #6300 (2.770" O.D.) | 6200CS-1 |
| Upper Cam Seal for #6200 & #6300 (2.845" O.D.) | 6200CS2-1 |
| Lower Crank Seal for #6200 | 6200CRS-1 |
| Bolt Kit for #6200 & #6300 | 6200BK |
| Main Plate Gasket for #6200 | 6200TG |
| Upper Seal Retainer O-Ring | 6200RO |
| High Vacuum Seal Kit | 6200VS |
| High Vacuum Cam Seal | 6200VCS |
| High Vacuum Crank Seal | 6200VCRS |
| Belt Drive Distributor Mount Kit & Pulley Adapter Hub (Fits #6200 & #6300) | 6200EDSK |
| Chevrolet 396-454 Roller Thrust Bearing for #6200 & #6300 | 3110TB |
| Replacement Belt for #6300 (85-Teeth) | 6300B |
| Replacement Belt for #6500 | 6500B-1 |
| Upper Seal for #6500, #6502, #6504 & #6506 | 6500US-1 |
| Lower Seal for #6500, #6504 & #6507 | 6500LS-1 |
| Lower Seal for #6502 & #6506 | 6502LS-1 |
| Std. Idler Assy. for All #6500 Series Chevy Drives (1.312" O.D.) | 6500IDS-1 ¹ |
| O.S. Idler Assy. for All #6500 Series Chevy Drives (1.375" O.D.) | 6500IDA-1 ¹ |
| O.S. Idler Assy. for All #6500 Series Chevy Drives (1.437" O.D.) | 6500IDB-1 ¹ |
| Replacement Idler Bearing | 6500IB-1 |
| Distributor Bracket for #6500, #6502, #6504 & #6506 | 6500EDSK |
| Upper Seal for #6500, #6502, #6504, #6506, & #6507 | 6500US-1 |
| Replacement Belt for #6504 & #6506 (75-Teeth) | 6504B-1 |
| Replacement Belt for #6507 (74-Teeth) | 6507B |

¹ Includes bearings and snap ring

CHEVROLET STEEL TIMING COVER WITH THRUST PLATE

This steel Small Block Chevrolet timing cover features a welded thrust plate tab for use with a cam button. It allows adjustment for correct end play without additional modifications and includes gaskets, seal and bolts and has a black powder coated finish.

| DESCRIPTION | PART # |
|---|--------|
| Chevrolet 265-400 Steel Timing Cover w/ Welded Thrust Plate | 208 |



CHEVROLET TWO-PIECE BILLET ALUMINUM TIMING COVERS

- Eliminates timing cover flex which causes erratic ignition timing
- Allow cam to be replaced without disturbing oil pan seal
- Simple endplay adjustment with dial indicator access hole
- Integrated timing pointer simplifies ignition timing checks
- Compatible with all water pumps and most gear drives

| DESCRIPTION | PART # |
|--|------------------|
| Chevrolet Small Block & 90° V6 | 210 ¹ |
| Chevrolet Big Block Timing Cover | 212 ¹ |
| Chevrolet Gen VI Big Block Timing Cover (Allows Use Of Early Style Camshafts & Double Row Timing Sets) | 217 |
| ACCESSORIES | |
| Replacement Button for #210 & #212 Covers | 211 |
| Replacement Hardware for #210 | 213 |
| Replacement Hardware for #212 | 214 |
| Timing Cover Gasket for #217 | 218 |

¹ Includes bolts, washers, roller button gaskets, etc.



CHEVROLET THREE-PIECE BILLET ALUMINUM TIMING COVERS

The COMP Cams® Three-Piece Billet Aluminum Timing Covers for Small and Big Block Chevrolet engines allow access to camshaft timing adjustments without having to remove the harmonic damper or disturb the oil pan seal. Designed to be lightweight yet rigid, these billet covers offer convenience and performance in one easy-to-install package.

| DESCRIPTION | PART # |
|--|--------|
| Chevrolet Small Block & 90° V6 Three-Piece Cover | 310 |
| Chevrolet Big Block Three-Piece Cover | 312 |

Note: Three-piece covers use the same replacement hardware kits as our current two-piece covers.



GM LS FRONT COVERS

The COMP Cams® LS Front Covers for street/strip applications fit all LS1, -2, -3, -6 or LS7 engines, OEM and aftermarket, including the RHS® LS Race Block. The LS Covers feature provisions for timing pointer, OEM camshaft sensor and any regular BBC crank trigger. Available for either standard snout (LS1/6) or long snout (LS7) crankshafts, the covers easily fit double roller timing chains and high pressure/volume oil pumps. Both covers come with gasket and crank seal; no modifications needed.

| DESCRIPTION | PART # |
|----------------------------------|--------|
| LS Front Cover (LS1, -2, -3, -6) | 5496 |
| LS Front Cover (LS7) | 5497 |





#3100TB-1

THRUST BEARINGS & WEAR PLATES

- Wear plates are moly coated
- Eliminates wear at front of block
- Unique designs help set proper cam thrust clearance



#202

THRUST BUTTONS

- Rides between the front of the timing gear and the back of the timing cover
- Can be shimmed for proper endplay
- Solid nylon and roller thrust bearing styles available

| MAKE | DESCRIPTION | BEARING THICKNESS | PART # |
|------------|--|-------------------|-----------------------|
| Chevrolet | V8 265-400 Wear Plate | .030" | 201 ¹ |
| | V8 396-454 Wear Plate | .030" | 203 ¹ |
| | V8 265-400 Roller Thrust Bearing | .142" | 3110TB-1 ¹ |
| | V8 396-454 Roller Thrust Bearing | .142" | 3110TB ¹ |
| GM LS | GM LS 3-Bolt Bronze Cam Thrust Plate/Retaining Plate Kit | N/A | 5463-KIT |
| | Factory GM LS Bronze Thrust Plate Kit | N/A | 5400TP-KIT |
| Chrysler | V8 383-440 Hemi Wear Plate | .030" | 203 ¹ |
| Ford | V8 289-351W Thrust Plate & Bearings OEM Replacement for Cam Plate Single Bearing | .142" | 3120TB |
| | V8 289-351W H.P. Thrust Plate & Bearings, Machining Required | .142" | 3135TB ² |
| | V8 390-428 Thrust Plate & Bearings | .142" | 3108TB ¹ |
| | V8 351C, 429-460 Thrust Plate & Bearings | .142" | 3122TB ¹ |
| Oldsmobile | V8 All 1964-84 Except Diesel | .400" | 224 |
| | V8 Camshaft Spacer (Required w/ 224) | .041" | 225 |

¹ Minor machining required when used with OEM type timing set

² Requires tooling

| MAKE | DESCRIPTION | LENGTH | PART # |
|--------------------|--|--------|--------|
| Buick | V6 1977 1/2-87 Roller Button | .660" | 269 |
| Chevrolet | V8 265-400, 90° V6 Nylon Thrust Button | .810" | 202 |
| | V8 265-400 Roller Button | .795" | 200 |
| | V8 396-454 Nylon Thrust Button | .945" | 205 |
| | V8 396-454 Roller Nylon Thrust Button For Part #2110 | .945" | 261 |
| | V8 396-454 Roller Button | .945" | 207 |
| Chrysler | V8 Hemi Roller Buttons | .715" | 204 |
| | V8 Hemi, 383-440 Nylon Thrust Button | .735" | 206 |
| ACCESSORIES | | | |
| - | Replacement Button for #210 & #212 Covers, Replacement Button for #5100 Belt Drive | .680" | 211 |



DEGREE BUSHINGS

- Color coded for easy identification
- Accurately positions cam
- Requires a 13/32" drill set
- Fit Small & Big Block Chevrolets, Big Block & 426 HEMI Chrysler



CAM LOCK PLATES

- Prevent cam bolts from backing out at any RPM or load
- Feature bendable locking tabs & special high-strength bolts



CAMSHAFT BOLTS

- Designed to prevent breakage
- Rated at 170,000psi

| DESCRIPTION | BUSHINGS | PART # |
|---|----------|--------|
| Cam Degree Bushing Set (Includes 0°, 2°, 4°, 6°, 8°) | All | 4760 |
| Cam Degree Bushing 5 Pack – Black | 0° | 47600 |
| Cam Degree Bushing 5 Pack – Silver | 2° | 47602 |
| Cam Degree Bushing 5 Pack – Copper | 4° | 47604 |
| Cam Degree Bushing 5 Pack – Gold | 6° | 47606 |
| Cam Degree Bushing 5 Pack – Dark Grey | 8° | 47608 |
| ACCESSORIES | | |
| Replacement Hex-Shaped Bushings for Adjustable Timing Set | - | 9005 |

| MAKE | DESCRIPTION | PART # |
|-----------|--|--------|
| Chevrolet | V8 Lock Plate w/ Bolts | 4605 |
| GM LS | Gen III/IV LS 3-Bolt Style Lock Plate w/ Bolts | 5461 |

| MAKE | DESCRIPTION | SIZE | LENGTH | PART # |
|-----------|---------------------------|-------|--------|--------|
| Chevrolet | V8 & 90° V6 Cam Bolts | 5/16" | .750" | 4611-3 |
| GM LS | L92 Cam Installation Bolt | M16 | 1.50" | 5458 |
| Ford | V8 260-351W Cam Bolts | 3/8" | 1.50" | 4612-1 |
| | V8 351C Cam Bolts | 3/8" | 2.00" | 4613-1 |
| | V8 352-427 Cam Bolts | 7/16" | 1.75" | 4615-1 |
| | V8 429-460 Cam Bolts | 3/8" | 1.50" | 4614-1 |

COMPOSITE COATED CAM BEARING

- Retain engine oil on surface under extreme heat & pressure
- Fluoropolymer coating is a lubricant itself, which is excellent protection in the event of momentary oil starvation, such as during start-up

| DESCRIPTION | PART # |
|--|-------------|
| Composite Coated 2.124" Big Block Camshaft Bearing | 3521 |



#3521

ROLLER CAM BEARINGS

- Decrease friction and control oil closely
- Steel jacketed and encapsulated for ease of installation

| DESCRIPTION | JOURNALS 1-4 | JOURNAL 5 | PART # |
|---|----------------|----------------|-------------------|
| 351 SVO Journal Diameter | 3500RCB 2.165" | 3501RCB 1.968" | 351RCB-KIT |
| 350 Chevrolet/360 Chrysler Journal Diameter | 3501RCB 1.968" | 3502RCB 1.968" | 350RCB-KIT |



#350RCB-KIT

UNIVERSAL CAM BEARING INSTALLATION KIT

- Cleanly and precisely installs or removes cam bearings in any engine block
- Ranges from 1.125" to 2.690" journal diameter
- Kit includes five expanding neoprene-covered mandrels, a centering cone, extension rod and fitted plastic case

| DESCRIPTION | PART # |
|--|-------------|
| Universal Cam Bearing Installation Kit | 5312 |



#5312

BEARING SPACER

These bearing spacers allow 350 Chevrolet crankshafts to be installed into 400 Chevrolet blocks. Absolutely no machine work is required for installation; simply snap them in and install standard 350 bearings. You save the cost of buying thicker, more expensive bearings.

| DESCRIPTION | PART # |
|---------------------------------|-------------|
| Chevrolet V8 Bearing Spacer Set | 5620 |



#5620

ENGINE FINISHING KITS

Small parts are often forgotten until the final stages of engine assembly. COMP Cams® Engine Finishing Kits include those often missing parts like woodruff keys, cylinder head alignment dowels, cam bolts, cam eccentrics (SB Ford) and timing cover and oil pump dowel pins that are so crucial to properly assembling your engine.

| MAKE | DESCRIPTION | PART # |
|-----------|--|------------|
| AMC | 6 Cyl. 199-258 4.0L Finishing Kit | 239 |
| Chevrolet | V8 265-400 Engine Finishing Kit | 233 |
| | V8 LT1 Engine Finishing Kit | 242 |
| | V8 396-454 Engine Finishing Kit | 234 |
| GM | LS Engine Plug Kit | 251 |
| Chrysler | V8 1964-05 V8 273-360 Engine Finishing Kit | 241 |

Note: Kit contents may vary by application, call for specific kit contents before ordering.



#233

| MAKE | DESCRIPTION | PART # |
|---------|---|------------|
| Ford | V8 5.0L Engine Finishing Kit | 243 |
| | V8 5.0L, 302, 351W Engine Finishing Kit | 235 |
| | V8 FE 1958-1976 Engine Finishing Kit | 244 |
| | V8 FF 1968-1987 Engine Finishing Kit | 245 |
| | V8 FF 1988-1997 Engine Finishing Kit | 247 |
| Pontiac | V8 Engine Hardware Finishing Kit | 238 |

DIE CAST ALUMINUM VALVE COVERS

Manufactured and packaged in the U.S.A., this line of powder coated die cast aluminum valve covers provides a sleek, high-performance look combined with rigid durability and unmatched reliability. They are perimeter bolt style and include two chrome breathers with laser etched logos, two black rubber grommets and installed baffles which are welded in place to ensure no oil enters the breathers. The breathers are present on both valve covers to allow for proper crankcase ventilation. In addition, these covers are tall enough to provide the necessary clearance to accommodate aftermarket valve trains. Gaskets are NOT included.

BILLET VALVE COVERS FOR GM LS ENGINES

These Billet Valve Covers for GM LS Engines feature OE-style gaskets and hardware for superior sealing, a -16AN oil fill port for easy filling, a breather location for dry-sump oiling systems and internal baffling for an optional 3/8" breather/vent line. The valve covers also have provisions for valve spring oil squirters to help cool valve springs and increase their life in endurance racing applications. A bright black anodized finish and stainless steel ARP fasteners offer a clean appearance.

These work on all GM LS center bolt cylinder heads, engines with tall or shaft mount rocker arms and endurance applications requiring extra spring oiling.

ENGINE COIL COVERS FOR FORD 5.0L COYOTE ENGINES

- Die cast aluminum offers rigid durability & unmatched reliability required for performance applications
- Black-wrinkle powder coated for a sleek, high-performance look that resists corrosion
- Fits Mustang, truck & 5.0 Coyote crate engine applications, as well as aftermarket valve train



#282



| MAKE | DESCRIPTION | PART # |
|--------------------|---|---------------|
| Chevrolet | V8 265-400 Aluminum Valve Covers | 280 |
| | V8 396-454 Aluminum Valve Covers | 281 |
| Ford | V8 221-302-351W Aluminum Valve Covers | 282 |
| ACCESSORIES | | |
| - | SBC Valve Cover Adapter Kit for GM LS Engines | NG4011 |
| - | Replacement Breather For #280, #281, & #282 | 284 |



#291

| DESCRIPTION | PART # |
|---|-------------------|
| Billet Valve Covers for GM LS Engines | 291 |
| ACCESSORIES | |
| Vertical Mounting Kit for LS3 Coils | 290-KIT |
| Horizontal Mounting Kit for XR-1A Coils | 290-XR-KIT |

*Coil mounting provisions are available using COMP Cams® brackets, sold separately.



#288

| DESCRIPTION | PART # |
|---|------------|
| Engine Coil Covers for Ford 5.0L Coyote Engines | 288 |



#54021

BILLET GM LS BELT TENSIONER

The GM LS engines with the factory spring loaded belt tensioners become prone to throwing belts when used in performance applications and with aftermarket balancers. This bolt-on Billet LS Belt Tensioner is a fully adjustable solution for controlling potentially damaging resonance and maintaining desired belt tension.

| DESCRIPTION | PART # |
|--|----------------------------|
| Billet GM LS1, -2, -3, -6 & -7 Adjustable Belt Tensioner w/ Idler Pully Passenger Cars | 54021^{1,2} |

¹ Will not work in truck engines

² If used with 2010+ Camaros, belt must be changed

VACUUM CANISTERS

A vacuum reserve canister captures an extra shot of vacuum from your engine for your power brakes. The COMP Cams® Vacuum Canisters are for cars equipped with big cams and power brakes. COMP Cams® Electric Pump Kit ensures your vacuum stays between 18" and 20".

- Canisters double vacuum volume for power brakes
- Recommended for vehicles with 14" of vacuum or less
- Electric vacuum pump requires 12V negative ground system
- Pump only operates when vacuum drops below 18"

| DESCRIPTION | PART # |
|--|-------------|
| Electric Vacuum Pump Kit | 5500 |
| Vacuum Canister – Black Powder Coated Aluminum | 5200 |
| Vacuum Canister – Zinc Plated & Polished | 5201 |



OIL RESTRICTORS

When building a high performance engine with a solid or solid roller cam, it is necessary to meter the amount of oil going through the lifters and up to the rocker arms. Too much oil to the top will starve the main and rod bearings and cause engine failure. These oil restrictors are simple and easy-to-use parts.

| DESCRIPTION | PART # |
|--|-------------|
| V8 Chevrolet Screw-In Type Oil Restrictors – .055" Orifice, Pair | 4917 |



LIFTER VALLEY STANDPIPE

It is common practice in engine building to plug the oil drain holes in Small Block Chevrolet engines with standpipes. Usually these are made of pipe and threaded into the holes. COMP Cams® offers a custom extruded aluminum version with an internal hex for installation. It is simple, inexpensive and much easier to use.

| DESCRIPTION | PART # |
|------------------------------------|-------------|
| Lifter Valley Standpipe – Set of 8 | 4932 |



FUEL PUMP PUSHRODS

When a high pressure fuel pump is run with a steel roller cam core, the stock fuel pump pushrod is not compatible with the steel core. You can damage an expensive roller cam as a result of wear at the fuel pump lobe. COMP Cams® offers several fuel pump pushrods for various applications.

Note: Bronze tip fuel pump must be used when using a high volume or high pressure fuel pump.

| DESCRIPTION | PART # |
|--|-------------------------|
| Lightweight Tubing w/ Bronze Tip for Steel Cams | 4607 |
| Steel Rod w/ Roller Tip (Not for BBC) | 4609 |
| Lightweight Tubing w/ Steel Tip for Cast Iron Cam | 4616 |
| Chrysler Hemi w/ Steel Tip | 4626¹ |
| Chrysler Hemi w/ Bronze Tip | 4646 |
| Oldsmobile Rocket Block w/ Bronze Tip for Steel Cams | 4620 |



¹ For use with cast flat tappet cams only, 3.220" in length.



GATOR BRAND™ HOSE CLAMPS

Gator Brand™ Hose Clamps are produced using a continuous stainless steel band with extruded, asymmetrical threads for reliable performance. The edges of the band are rolled to prevent any sharp edges from damaging the hose. This is especially important on silicone hoses that have a soft, vulnerable cover.

An asymmetrical (offset) gear box is employed to reduce clamp twist when tightening. The gear box housing is designed to remain stationary as the clamp is tightened to prevent movement over the hose. The combination of the asymmetrical gear box and the extruded threads provides an even clamping force over the surface of the hose that ensures proper sealing with minimal torque. Gator Brand™ Clamps hold up under 3.7 ft./lbs. (5nm) torque; conventional clamps strip and fail at this torque.

Gator Brand™ Clamps cover a size range of 5/16" (8mm) to 5.000" (120mm) and can be installed using a flat blade screwdriver, metric socket wrench or the Gator Brand™ Flexible Clamp Tool for maximum torque potential.

- Constructed of continuous stainless steel band with extruded, asymmetrical threads
- Asymmetrical (offset) gear box employed to reduce clamp twist when tightening
- Combination of asymmetrical gear box and extruded threads provides even clamping force over surface of hose
- Hold up under 3.7 ft./lbs. (5nm) torque
- Cover size range of 5/16" (8mm) to 5.000" (120mm)

| SIZE RANGE (INCHES) | SIZE RANGE (MM) | SAE COMPARABLE SIZE | PART # |
|---|-----------------|---------------------|----------------|
| .3125"-.500" | 8-12 | 2 | G3758 |
| .3125"-.625" | 8-16 | 3 | G398 |
| .500"-.875" | 12-20 | 6 | G3912 |
| .625"-1.000" | 16-25 | 8 | G31216 |
| .750"-1.250" | 20-32 | 10-12 | G31220 |
| 1.000"-1.625" | 25-40 | 16 | G31225 |
| 1.1875"-1.750" | 30-45 | 20 | G31230 |
| 1.250"-2.000" | 32-50 | 24 | G31232 |
| 1.625"-2.375" | 40-60 | 28 | G31240 |
| 2.000"-2.750" | 50-70 | 32-36 | G31250 |
| 2.375"-3.125" | 60-80 | 40 | G31260 |
| 3.125"-4.000" | 80-100 | 52-56 | G31280 |
| 4.375"-5.000" | 100-120 | 64 | G312100 |
| ACCESSORIES | | | |
| Gator Brand™ Flex Tool w/ 6 & 7 Sockets | N/A | N/A | GFT-1 |

Note: Add -100, -500 or -1000 for bulk purchases.



#4793

CRANKSHAFT SOCKETS

- Specially designed 1/2" drive socket allows rotation of engine assembly
- Knurled retaining nut holds degree wheel in place
- Can be loosened while on crank snout so that wheel can be turned independent of the engine when finding TDC

| MAKE | DESCRIPTION | PART # |
|-----------------|--|-------------|
| Buick & Pontiac | All V8 – 1.385" ID w/ 3/16" & 1/4" Keyways (Will Not Fit Buick 455) | 4798 |
| Chevrolet | Small Block, 90° V6 & GM 4 Cylinder 1.255" ID w/ 3/16" Keyway | 4793 |
| | Big Block – 1.610" ID w/ 3/16" Keyway | 4797 |
| GM LS | Gen III/IV LS-Type | 4914 |
| Chrysler | All V8 (Also Fits Some Blowers) – 1.542" ID w/ a 3/16" & (2) 1/4" Keyways 180° Apart | 4799 |
| | Hemi 5.7/6.4L | 4945 |
| Ford | 4.6L Ford 1.255" ID w/ 3/16" Keyway | 4793 |
| | All V8 – 1.385" ID w/ 3/16" & 1/4" Keyways (Will Not Fit Buick 455) | 4798 |

SPORTSMAN DEGREE WHEELS

- Multiple sized degree wheels provide precision & accuracy
- Size allows for use on the engine stand or with the engine still in the vehicle
- Can be bolted onto most harmonic balancers or used with a COMP® crankshaft socket
- Easy to read and clean



#4787

| DESCRIPTION | PART # |
|-----------------------------|-------------|
| 7.5" Sportsman Degree Wheel | 4787 |
| 9" Sportsman Degree Wheel | 4790 |
| Replacement Pointer | 4794 |

PROFESSIONAL DEGREE WHEEL

This giant 16" diameter Pro Degree Wheel is machined from a 1/4" thick aluminum plate, red anodized and precision engraved. The open design allows degree bushing changes while the wheel is still on the engine. This extreme precision tool is found in most NASCAR shops and is a must for any professional racer or engine builder.

- 1" Center hole allows wheel to work with COMP Cams® crankshaft sockets

| DESCRIPTION | PART # |
|----------------------|-------------|
| 16" Pro Degree Wheel | 4791 |

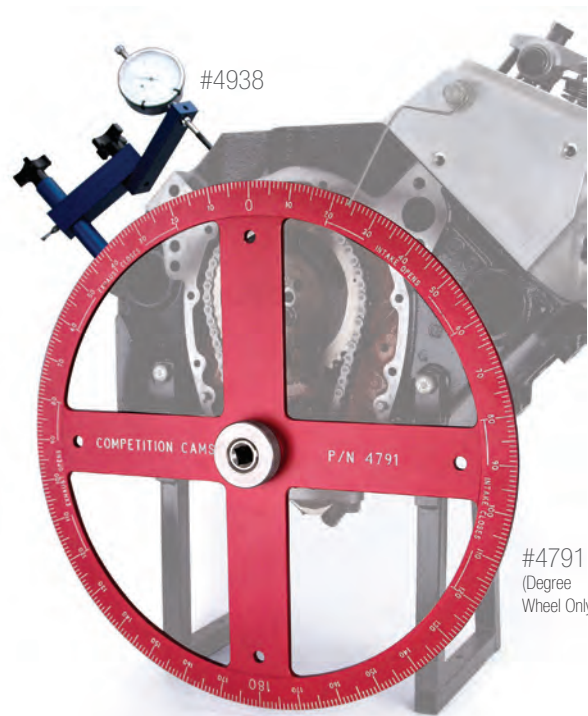
PRO CAMSHAFT DEGREE KITS

(Cylinder Heads Off Engine)

This kit contains everything needed for camshaft degreeing when the cylinder heads are OFF of the engine, including the COMP Cams® 16" Pro Degree Wheel.

KITS INCLUDES THE FOLLOWING:

- 16" Pro Degree Wheel – #4791
- Heads Off Degreeing Fixture – #4901
- 0-1" Travel Dial Indicator – #4909
- 5" Dial Indicator Extension – #4912
- Plate Style TDC Stop – #4933
- Wire Degree Wheel Pointer – #4794
- One Crankshaft Socket



#4938

#4791
(Degree Wheel Only)

| MAKE | DESCRIPTION | PART # |
|----------------------|---|-------------|
| Chevrolet | Chevrolet Small Block, 90° V6 & GM 4 Cylinder Kit | 4938 |
| | Chevrolet Big Block Kit | 4939 |
| Chrysler | All Chrysler V8 Kit | 4941 |
| Ford, Buick, Pontiac | All Ford, Buick & Pontiac V8 Kit | 4940 |

CAMSHAFT DEGREE KITS

(Cylinder Heads On Engine)

- Complete kit with necessary components to degree a cam
- Available for most popular engines
- Ships in a foam-lined plastic carrying/storage case

KITS INCLUDE THE FOLLOWING:

- 9" Degree Wheel – #4790
- Cam Checking Fixture – #4902
- 0-1" Travel Dial Indicator – 4909
- Wire Degree Wheel Pointer – #4794
- (2) Lightweight Checking Springs – #4758
- Crankshaft Socket – #4793 (Ford Only)
- Cam Degree DVD – #190DVD (Universal Only)
- TDC Piston Stop – Application Specific
- Cam Degreeing Instruction Booklet – Application Specific

CAMSHAFT DEGREE KITS

(Cylinder Heads Off Engine)

This kit contains everything needed for camshaft degreeing when the cylinder heads are OFF of the engine.

KITS INCLUDES THE FOLLOWING:

- 9" Degree Wheel – #4790
- Heads Off Degreeing Fixture – #4901
- 0-1" Travel Dial Indicator – #4909
- 5" Dial Indicator Extension – #4912
- Plate Style TDC Stop – #4933
- Wire Degree Wheel Pointer – #4794
- Crankshaft Socket – Application Specific

CHECKING SPRINGS

- Low tension checking springs can be installed by hand in place of valve springs
- Simplify measuring piston-to-valve clearance, rocker ratio, cam degreeing, etc.
- Set of two springs is enough for one cylinder

| DESCRIPTION | FREE LENGTH | I.D. | O.D. | PART # |
|--------------------------------------|-------------|-------|-------|---------------|
| Low Tension Checking Spring – Single | 3.000" | .725" | .850" | 4758-1 |
| Low Tension Checking Springs – Pair | 3.000" | .725" | .850" | 4758-2 |



#4796

| DESCRIPTION | PART # |
|------------------------------------|-------------|
| Universal Cam Degree Kit | 4796 |
| Ford 5.0L 4V Coyote Cam Degree Kit | 4943 |

Note: We recommend the use of our crankshaft sockets with any degree kit.



#4934

| MAKE | DESCRIPTION | PART # |
|----------------------|---|-------------------------|
| Chevrolet | Small Block, 90° V6 & GM 4 Cylinder Kit | 4934 |
| | Big Block Kit | 4935 |
| GM LS | Gen III/VI LS-Type Kit | 4942 |
| Chrysler | All V8 Kit | 4937 |
| | Hemi 5.7/6.1L Kit | 4944¹ |
| Ford, Buick, Pontiac | All V8 Kit | 4936 |

¹ Also works with cylinder heads ON engine



#4758

TWO-IN-ONE PROFESSIONAL CRANKSHAFT NUT ASSEMBLIES

- Two-piece assembly allows you to turn engine in either direction using a large diameter socket
- Heavy-duty, heat-treated and convenient
- Secure method of attachment for harmonic dampers, etc.
- Available in three applications



| DESCRIPTION | PART # |
|-----------------------|--------|
| Chevrolet Small Block | 320 |
| Chevrolet Big Block | 322 |
| Ford | 324 |

TOP DEAD CENTER STOPS

- Positively stop piston in order to find Top Dead Center (TDC)
- Bolt-style screws into spark plug hole while plate-type bolts across any cylinder bore when heads are off
- Now fits GM Gen III/IV LS engines



| DESCRIPTION | PART # |
|---|--------|
| Deck Plate-Style – Heads Off (Universal) | 4933 |
| 14mm Bolt-Style – Heads On (Most Engines) | 4795 |
| 18mm Bolt-Style – Heads On (Big Block Ford) | 4792 |

CAMSHAFT LOBE CENTER MARKING TOOL SET

With this tool, the user marks the cam lobe with a type of marking fluid (e.g. dry erase marker or dychem), installs the cam, and then places the tool in the lifter bore. Next, the cam will be turned over to mark a line around the cam lobe. The cam is then removed, the distance from the edge of the lobe is measured and finally, shims are changed to achieve the correct lobe to lifter alignment.

- Three sizes for most common lifter bore diameters – .842", .875" and .904"
- Aluminum construction
- Has ¼"-20 thread for bolt in the top



| DESCRIPTION | PART # |
|---------------------------------------|--------|
| Camshaft Lobe Center Marking Tool Set | 5022 |

CAM CHECKING TOOLS

This innovative tool actually slides down into the lifter bore and rides on top of the camshaft in order to measure lobe lift and base circle runout. Each tool includes two followers: one for flat tappet cams and one for rollers. Two models are available, and each is double ended.

- Built-in o-ring holds tool firmly in the lifter bore while 1" travel dial indicator (not included) reads cam lift to .001"
- Two models available – one for GM (.842" dia.) and Ford (.875" dia.) and another for Chrysler (.904" dia.) and Top Fuel (1.0" dia.) lifter bores



| DESCRIPTION | PART # |
|---------------------------------------|--------|
| GM & Ford Cam Checking Tool | 4925 |
| Chrysler & Top Fuel Cam Checking Tool | 4926 |
| Optional 0-1" Travel Dial Indicator | 4909 |

Note: Dial indicator sold separately.

CAM CHECKING FIXTURE*(Cylinder Heads On Engine)*

This tool screws into any 1/4"-20 or 6mm valve cover bolt hole and with the use of a dial indicator (not included), allows you to measure cam lift at the rocker arm, pushrod or lifter. This multi-functional tool can also be used to check rocker ratio, piston-to-valve clearance and even crankshaft end play.

| DESCRIPTION | PART # |
|--|-------------|
| Cam Checking Fixture – w/ Cylinder Heads On Engine | 4902 |
| Optional 0-1" Travel Dial Indicator | 4909 |

Note: Dial indicator sold separately.

**CAM CHECKING FIXTURE***(Cylinder Heads Off Engine)*

This fixture was designed to maintain proper geometry while holding a dial indicator (not included) and 5" extension (included) precisely over the lifters. This professional quality tool is much easier to use and more precise than using a magnetic indicator base when degreasing a cam.

| DESCRIPTION | PART # |
|---|-------------|
| Cam Checking Fixture for 1/2" and 7/16" Threads | 4901 |
| Cam Checking Fixture for 1/2" Head Studs | 4915 |
| Optional 0-1" Travel Dial Indicator | 4909 |

Note: Dial indicator sold separately.

**LIFTER BORE GROOVING TOOL**

Developed by one of the top NASCAR engine builders, this innovative tool precisely grooves the lifter bore to ensure that pressure-fed oil is directly injected into the contact area between the lifter and camshaft. This increased oiling significantly reduces wear on the camshaft and lifters and decreases the risk of premature failure during break-in. This machining operation to the block is quick, easy and inexpensive and serves as the best insurance for a new camshaft.

- Complete with grooving tool, cutter and handle
- Carbide cutter available separately
- Engine must be disassembled to use this tool – cuts groove from .009" to .012"

| DESCRIPTION | PART # |
|--|-------------|
| .842" Dia. Grooving Tool (Std. Chevrolet Dia.) | 5003 |
| .874" Dia. Grooving Tool (Std. Ford Dia.) | 5005 |
| .904" Dia. Grooving Tool (Std. Chrysler Dia.) | 5007 |
| Kit Including .842", .874" & .904" Dia. Tools | 5010 |
| Kit Including .842" & .874" Dia. Tools | 5011 |

REPLACEMENT PARTS

| | |
|----------------------------------|-----------------|
| Carbide Insert for Grooving Tool | 5004I |
| Replacement Bolt for Insert | 5004BOLT |



CAMSHAFT INSTALLATION HANDLES

These simple, yet effective handles provide good leverage and a non-slip grip when installing or removing a cam. These tools save time, pinched fingers and nicked cam bearings. COMP Cams® carries two styles – one for Chevrolet specific engines and a universal kit.

- Universal handle includes five interchangeable adapters that fit most domestic V6 and V8 engines, including Chevrolet, Ford and Chrysler
- Chevrolet specific handle includes necessary hardware that stores inside hex-design handle
- Chevrolet specific handle fits Small and Big Blocks

| DESCRIPTION | PART # |
|--|-------------|
| Universal Camshaft Installation Handle | 5311 |
| Chevrolet Camshaft Installation Handle w/ Hardware | 4919 |



PUSHROD ASSEMBLY TOOL

This simple tool makes assembling pushrod kits so easy that anyone can do it. Simply cut the tubing in a lathe, counter bore the ends with the proper tool and use the assembly tool to press the ends in place, without the risk of splitting or bending the pushrod. Anyone who has ever used the block of wood and hammer technique will truly appreciate this innovative tool.

| DESCRIPTION | PART # |
|-----------------------|-------------|
| Pushrod Assembly Tool | 4913 |

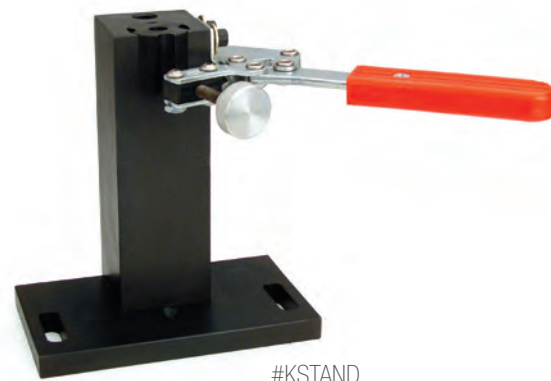


PUSHROD HOLDER (STABILIZER)

This tool is used to safely hold the pushrod while cutting to the desired length. The holder may be placed in a drill press for more secure and accurate cuts and also stabilizes the pushrod to control flex while cutting. The holder has a revolver that will accept 5/16", 3/8" and 7/16" pushrods. It also has a threaded hole located on top of the tool that can be used as a stop for quick, same-length cuts.

Desired cutting speed is 200 RPM or less.

| DESCRIPTION | PART # |
|-----------------------------|---------------|
| Pushrod Holder (Stabilizer) | KSTAND |



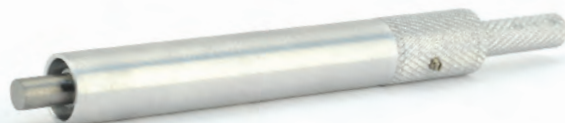
PRO VALVE LOCK REMOVAL & INSTALLATION TOOLS

Don't risk your fingers when removing or installing valve locks. Our magnetic tool is definitely the best way to perform this delicate task. Several styles are available to cover most automotive and motorcycle applications.

TO INSTALL LOCKS: Compress valve spring, place valve locks on magnetic stem, push body of tool over the locks and position them on the valve stem, release valve spring.

TO REMOVE LOCKS: Use the magnetic stem to pluck off the valve locks once the spring is compressed.

| DESCRIPTION | PART # |
|--|-------------|
| Pro Valve Lock Tool – 5mm, 5.5mm & 6mm Locks | 5307 |
| Pro Valve Lock Tool – 7mm, 8mm & 5/16" Locks | 5308 |
| Pro Valve Lock Tool – 11/32" Locks | 5309 |
| Pro Valve Lock Tool – 3/8" Locks | 5310 |



#5307

SEAL SETTERS

If you're tired of sacrificing your time, your tools and your knuckles by trying to install PTFE seals on valve stems, then you need these COMP Cams® Seal Setters. This is a two-part tool comprised of bullet-nose sleeve (.100" wall) and hand piece.

| DESCRIPTION | PART # |
|--------------------|-------------|
| 11/32" Seal Setter | 5630 |
| 3/8" Seal Setter | 5631 |
| 5/16" Seal Setter | 5632 |
| 8mm Seal Setter | 5633 |



#5630

VALVE SEAL INSTALLATION TOOL

- CNC-machined aluminum valve sealer makes installing PTFE seals on valve stems easy
- Works with .500" and .530" PTFE seals
- Prevents seal distortion or gouging during installation
- Anodized for durability

| DESCRIPTION | PART # |
|------------------------------|-------------|
| Valve Seal Installation Tool | 5334 |

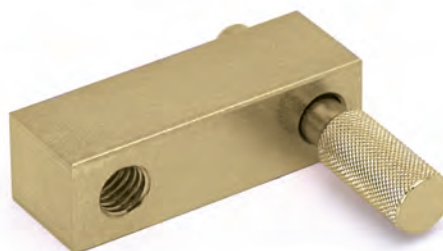


#5334

ROCKER STUD PULLER & TAP GUIDE

- Provides convenient method to remove pressed-in rocker studs
- Simply slide tool over two side-by-side studs and crank down on retaining nut to force out the stud
- Use the tool with the supplied arbor to ensure proper alignment when tapping the stud boss for screw-in studs

| DESCRIPTION | PART # |
|--------------------------------|-------------|
| Rocker Stud Puller & Tap Guide | 5306 |



#5306

LS ROCKER TRUNNION INSTALL TOOL

The LS Rocker Trunnion Install Tool was designed to simplify the trunnion upgrade process of today, and it is compatible with all stock LS rocker geometry. The tool can be used with an arbor press, bench vise and c-clamp and features cylindrical steel construction that is plated for corrosion resistance. The tool also comes with a centering die to ensure consistent bearing placement and includes an embedded magnet for one-handed assembly.

| DESCRIPTION | PART # |
|--|--------------------|
| LS Rocker Trunnion Install Tool | 54702-TL |
| LS Rocker Trunnion Install Tool&Trunnion Kit | 13702TL-KIT |



ENGINE OIL PUMP PRIMERS

- Allow the oil pump to be primed and the engine pre-lubed prior to initial start-up
- Eliminates the chance of a “dry start” and thus avoids premature engine damage
- Primers drop in place of distributor and, with the use of a drill, spin the oil pump to supply oil to critical engine components
- Both models feature a top alignment collar, and Chevrolet model includes a bushing to pressurize the upper valve train

| DESCRIPTION | PART # |
|------------------------------------|-------------|
| Chevrolet V8 Oil Pump Primer | 4921 |
| Ford 260-351W 1/4" Oil Pump Primer | 4922 |



VALVE TRAIN ORGANIZER TRAYS

These COMP Cams® Valve Train Organizer Trays are perfect for novice or pro engine builders alike. These durable polymer trays neatly store your valve train components while assembling or rebuilding your engine. Organizers are labeled on the front and rear to help keep track of your part location for reassembly. Each tray has built-in handles to make easy work of moving parts around your shop or garage.

| DESCRIPTION | PART # |
|-----------------------------|-------------|
| Valve Spring Organizer Tray | 5327 |
| Rocker Arm Organizer Tray | 5329 |



LIFTER CASE

- Constructed of chemically resistant, cleanable polymer
- 8 9/16" long, 2 7/16" wide and 2 1/4" tall

| DESCRIPTION | PART # |
|-------------|-------------|
| Lifter Case | 5305 |

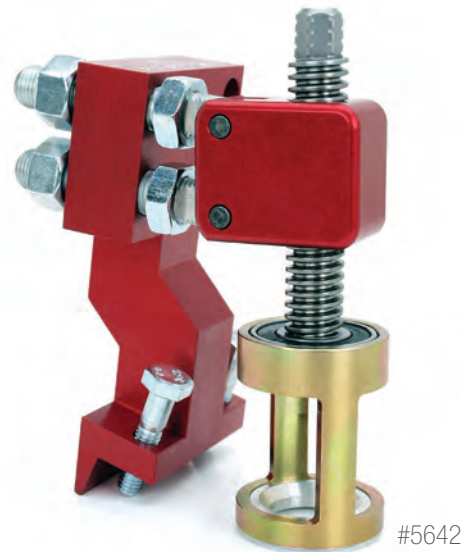


ADJUSTABLE VALVE SPRING REMOVERS

- Engineered from billet aluminum with heavy-duty construction to handle even the heaviest spring pressures
- Fully adjustable for different valve angles
- Screw mechanism maintains position to easily remove/install valve locks

| DESCRIPTION | PART # |
|--|-------------------------|
| Adjustable Valve Spring Remover – SBC LS1/LS6 | 5642 |
| Adjustable Valve Spring Remover – SBC w/ Jesel/T&D Rockers | 5640 |
| Adjustable Valve Spring Remover – BBC w/ Jesel/T&D Rockers | 5643¹ |
| Adjustable Valve Spring Remover – 7/16" Stud Mount Rockers | 5645 |
| Spring Remover Kit for Big Chief Heads | 5644 |

¹ Also works in SBC w/ splayed valve heads, SB2 w/ Jesel/T&D rockers and SBF w/ Jesel/T&D rockers



#5642

VALVE SPRING COMPRESSORS

Built from an exclusive design valve spring removal tools are engineered specifically to work with all GM Gen III/IV LS-type or Small Block Chevy and Small Block Ford engines. The easy-to-use custom design enables the removal of one or two valve springs at a time without the hassle of removing the rocker stand or any of the other installed rockers. The tool works both with cylinder heads installed on an engine in a vehicle or with the cylinder heads off. The simple design facilitates easy usage in vehicles where other tools are incapable of reaching the tight spaces.

| DESCRIPTION | PART # |
|--|-------------|
| GM LS Valve Spring Compressor | 5462 |
| Small Block Chevrolet/Small Block Ford Valve Spring Compressor | 5337 |



#5462

HEAVY-DUTY MANUAL VALVE SPRING COMPRESSOR

Our super-duty compressor is constructed of a welded steel box-tubing frame and an over-center type clamping device that can compress any valve spring up to 750 psi. The compressor arm slides up and down for adjustment and utilizes a locking pin for speed and ease of use. A base is offered to hold the unit upright in order to use the compressor in conjunction with a mini spring tester.

| DESCRIPTION | PART # |
|---|-------------|
| Heavy-Duty Manual Valve Spring Compressor | 5333 |

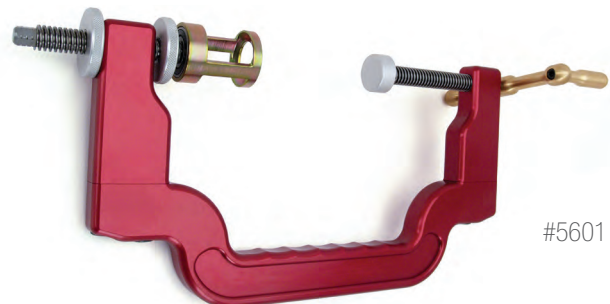


#5333

VALVE SPRING COMPRESSOR

The proprietary wave beam design of this 2000 Valve Spring Compressor provides ultra rigidity in a lightweight package. This heads off spring compressor features a dual adjustable design that allows for perfect positioning and easy access to valves and springs. The spring cage has a small 1" inside diameter flange that works perfectly with most popular valve springs.

| DESCRIPTION | PART # |
|------------------------------|-------------|
| 2000 Valve Spring Compressor | 5601 |



#5601

SHAFT MOUNT VALVE SPRING COMPRESSORS

If you've ever tried to remove high pressure valve springs with shaft mounted rocker arms while the cylinder heads are still on the engine, you know what a chore it can be. These valve spring compressors are designed to facilitate valve spring removal on heads with shaft mounted rockers.

| MAKE | DESCRIPTION | PART # |
|-----------|--|--------|
| Chevrolet | Small Block & 90° V6 Tool | 5321 |
| | Big Block Tool | 5322 |
| | Dart Big Chief Pivot Shaft (Use w/ BBC Tool) | 5325 |
| Chrysler | V8 318-360, W2 & 3.3 V6 Tool | 5323 |
| | V8 383-440 & B1 Tools | 5324 |



#5321

VALVE SPRING HEIGHT MICROMETERS

- Quickest, easiest, most accurate way to measure valve spring installed height
- Install just like a valve spring, then tool is expanded until it fully seats valve, locks and retainer
- Simulated installation allows ultra precise readings like a micrometer and is accurate to .001"

| DESCRIPTION | PART # |
|--|--------|
| .600"--.950" Range Height Micrometer (for Small Diameter Beehive™ Springs) | 4950 |
| 1.400"-1.800" Range Height Micrometer | 4928 |
| 1.600"-2.200" Range Height Micrometer | 4929 |
| 1.600"-2.200" Range Height Micrometer (for Beehive™ Springs) | 4930 |



#4930

#4929

#4950

ADJUSTABLE ON HEAD VALVE SPRING TESTER

A great way to check spring pressure on an assembled engine, this billet aluminum tool fits onto your rocker arm for quick pressure checks.

- Adjustable to use with almost any rocker length
- Measures pressures up to 600 lbs.

| DESCRIPTION | PART # |
|--|--------|
| Adjustable On Head Valve Spring Tester | 5639 |



#5639

MINI VALVE SPRING TESTER

- Designed to be a portable and low cost alternative to bench top style spring testing
- 0-1000 lb. tester scaled in 20 lb. increments
- Can be placed in a vise, used with an arbor press or used in a drill press (w/ flange)

| DESCRIPTION | PART # |
|--------------------------------------|--------|
| 1-1000 lbs. Mini Valve Spring Tester | 5314 |
| Drill Press Flange | 5315 |
| Calibrated Test Spring | 5316 |



#5314

#5316

PRO HEAD CC KIT

Our kits provide everything you need to properly cc cylinder head combustion chambers, intake and exhaust runners, intake manifolds or cylinders. All kits contain a precision glass buret with integral petcock, a stand & clamp assembly, a flat plexiglass plate to cover the combustion chamber and instructions on how to properly cc cylinder heads.

Note: Burets and kits must be shipped by air service

- Precision glass burets are compatible with alcohol, parts washer fluid or virtually any liquid you may need to measure
- Scales are marked off in .2cc increments and reads the amount poured, eliminating any math involved

| DESCRIPTION | PART # |
|--------------------------------------|-------------|
| 100cc x .2cc Pro Head CC Kit | 4974 |
| 250cc x 1cc Pro Head CC Kit | 4970 |
| Replacement 100cc x .2cc Glass Buret | 4991 |
| Replacement Stand & Clamp Assembly | 4992 |
| Replacement Plexiglass Sealing Plate | 4993 |

Note: Cylinder head and holders not included.

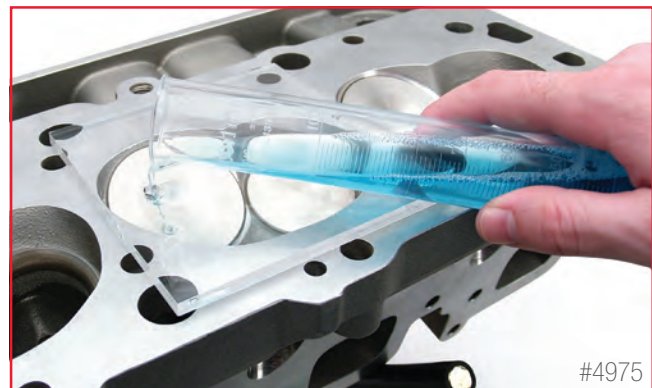


ECONOMY HEAD CC KIT

If you only occasionally need to cc cylinder heads, the Economy Head CC Kit is for you. It uses a 100cc graduated flask that measures in 1cc increments, so you can get accurate results without the expense of a buret. This kit also includes a combustion chamber sealing plate and instructions on how to cc cylinder heads.

| DESCRIPTION | PART # |
|---|-------------|
| 100cc x 1cc Economy Head CC Kit | 4975 |
| Replacement 100cc x 1cc Graduated Flask | 4994 |
| Replacement Plexiglass Sealing Plate | 4993 |

Note: Cylinder head and holders not included.



V-STYLE HEAD HOLDERS

- Perfect for whenever you perform any type of cylinder head modifications or maintenance
- Stands create the ability to put the heads in any position and rotate as necessary
- Handy for holding cams and crankshafts
- Two versions available – cast aluminum and welded steel

| DESCRIPTION | PART # |
|--------------------------------------|-------------|
| V-Style Aluminum Head Holders (Pair) | 5331 |
| V-Style Steel Head Holders (Pair) | 5332 |

Note: Cylinder head not included.



PROFESSIONAL TWO-IN-ONE HARMONIC BALANCER PULLER/ INSTALLATION TOOL

- Features a hardened threaded shaft with an alloy nut combined with a roller thrust bearing puller plate
- Includes bolts: 1/2"-20, 3/4"-16, 5/8"-18 and 7/16"-20
- Kit fits GM, Ford and Chrysler crankshafts
- Black oxide finished with storage box

| DESCRIPTION | PART # |
|---|------------|
| Two-In-One Harmonic Balancer Puller/Installation Tool | 300 |



UNIVERSAL HARMONIC BALANCER INSTALLATION TOOL

- Kit fits all domestic and most foreign engine applications
- Utilizes thrust bearing to gently ease the harmonic balancer onto the crank snout
- Eight interchangeable adapters include: 7/16", 1/2", 9/16", 5/8", 3/4", 12mm, 14mm and 16mm

| DESCRIPTION | PART # |
|--|-------------|
| Universal Harmonic Balancer Installation Kit | 4920 |
| Thrust Bearing | 5670 |
| 7/16"-20 Adapter | 5674 |

Note: Other replacement parts available, call for part numbers or visit www.compcams.com.



CRANK GEAR INSTALLATION TOOL

The only way to ensure proper installation of the lower timing gear without fear of damage is to press it on with equal distribution of force over the entire surface of the gear. By using the COMP Cams® Crank Gear Installation Tool used in conjunction with the COMP® Part #4920 Harmonic Balancer Installer, equal and constant pressure is applied, and the chance of gear damage is minimized.

| DESCRIPTION | PART # |
|------------------------------|-------------|
| Crank Gear Installation Tool | 4789 |



CONNECTING ROD BALANCER

This innovative fixture was designed to match-weigh a set of Small Block Chevrolet large journal connecting rods without the use of a scale. What this tool actually does is compare two rods at a time to show which one is heavier.

- Allows material to be removed from heavier rods until weight is balanced
- Fixture will hold rods from either the big or small end so both rotating and reciprocating weights can be balanced

| DESCRIPTION | PART # |
|-------------------------|-------------|
| Connecting Rod Balancer | 4999 |



ROD BOLT STRETCH GAUGE

This Rod Bolt Stretch Gauge features robust billet aluminum construction with a durable black anodized coating. Spherical points ensure precise, repeatable readings, and they adjust for both length and right- or left-side configurations. The tool measures from 0-1.0" in increments of .0005" on an easy-to-read dial indicator. An additional tension spring offers firm clamping for consistent and correct measurements.

| DESCRIPTION | PART # |
|------------------------|-----------|
| Rod Bolt Stretch Gauge | POW101300 |



#POW101300

VALVE LASH ADJUSTMENT TORQUE WRENCH

The Valve Lash Adjustment Torque Wrench is a combination precision torque wrench and valve adjustment tool. This exceptional tool simplifies making precise valve lash settings by properly torquing adjuster nuts every time.

- One tool works for all "shaft" style rocker arms
- Accepts any standard 3/8" drive socket (not included)
- Comes with 1/8", 5/32" and 3/16" hex keys

| DESCRIPTION | PART # |
|-------------------------------------|--------|
| Valve Lash Adjustment Torque Wrench | 5600 |



#5600

EZ VALVE LASH WRENCH

You no longer need three hands to adjust valves – you just need the right tool. The COMP Cams® EZ Valve Lash Wrench makes valve adjustment easier and quicker than ever.

- Constructed of 17-4 stainless steel
- Heat-treated and electropolished to satin finish
- Offer sizes for most popular polylock & set screw combinations

| DESCRIPTION | PART # |
|--|--------|
| 1/2" Wrench w/ 3/16" T-Handle – Fits T&D and COMP® Rockers | 5304 |

| REPLACEMENT PARTS | |
|-------------------|------|
| 1/8" T-Handle | 5658 |
| 5/32" T-Handle | 5661 |
| 3/16" T-Handle | 5659 |
| 7/32" T-Handle | 5660 |



#5304



SCAN THE QR CODE
 to watch a video on properly
 setting valve lash.



DUAL FEELER GAUGE HANDLE

This Dual Feeler Gauge Handle holds two sets of feeler gauges on the same handle and is ideal for intake and exhaust or go, no-go gauges. This gauge handle will accept various styles of 1/2" wide feeler gauges depending on your application.

| DESCRIPTION | PART # |
|--------------------------|--------|
| Dual Feeler Gauge Handle | 5602 |

Note: Feeler gauges not included.



#5602

REMOTE STARTER SWITCH

How many times have you been working on an engine and needed someone to sit inside the car and bump the starter over, or worse yet, been showered with sparks when you used a screwdriver across the starter solenoid? With this push-button Remote Starter Switch you can turn the engine over from under the hood, all by yourself. Just think how handy this will be the next time you adjust your valves.

| DESCRIPTION | PART # |
|-----------------------|--------|
| Remote Starter Switch | 5635 |



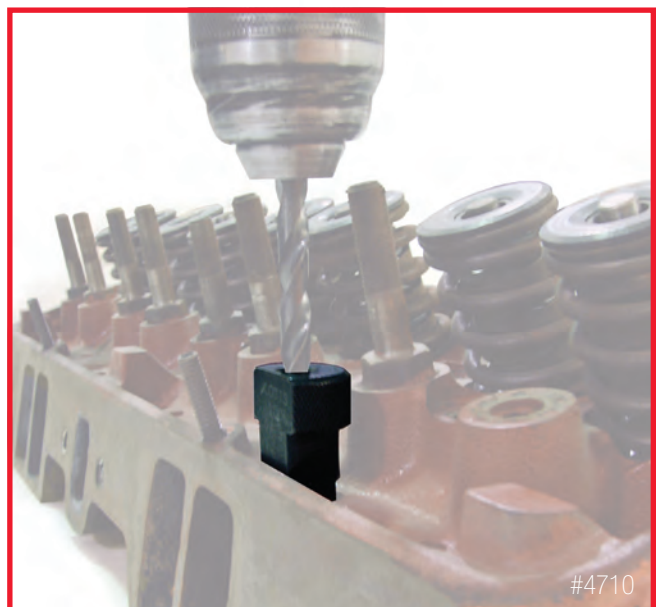
#5635

LOUIS TOOL

When switching factory Small Block Chevrolet heads over to 1.6 ratio rockers, the pushrod will rub on the bottom of the pushrod slot in the head. Long time cylinder head man Louis Cox designed this tool to simplify the modification needed in this situation. The tool allows use of hand drill and 5/16" drill bit to elongate the pushrod slot in the precise location and size necessary.

| DESCRIPTION | PART # |
|-------------|--------|
| Louis Tool | 4710 |

Note: Tool is designed to wear so a new one should be purchased for each set of heads.



#4710

DIAL INDICATORS & EXTENSIONS

- 0-1" Travel by .001" jeweled dial indicator is compatible with all COMP® products that require the use of a dial indicator
- Feature include lug back, 3/8" shaft, 0-100 dial face and revolution counter
- Two length extensions available

| DESCRIPTION | PART # |
|----------------------------|--------|
| 0-1" Travel Dial Indicator | 4909 |
| 5" Tip Extension | 4912 |
| 6" Tip Extension | 4911 |

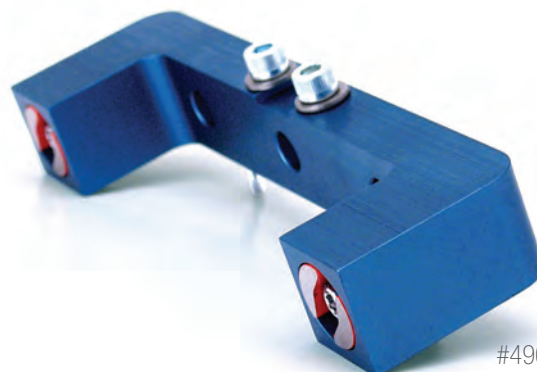


#4909

MAGNETIC DECK CHECKER

To calculate true compression ratio, it's necessary to measure the distance between the deck surface of the block and the piston deck. Our machined aluminum deck checker incorporates magnets to hold itself firmly to the block for simple and accurate measurements. Mount a dial indicator (not included) in the center for deck height, or mount one indicator in each end to check piston rock.

| DESCRIPTION | PART # |
|-------------------------------------|--------|
| Magnetic Deck Checker | 4900 |
| Optional 0-1" Travel Dial Indicator | 4909 |



#4900

DIAL INDICATOR MAGNETIC BASE

Mount a dial indicator to this base or mount it to the extension rod for a longer reach.

| DESCRIPTION | PART # |
|--------------------------------------|--------|
| Compact Dial Indicator Magnetic Base | 4907 |
| Optional 0-1" Travel Dial Indicator | 4909 |

Note: Dial indicator sold separately.



#4907

TELESCOPING GAUGE SET

- Used to measure slots, grooves, recesses, cylinders, etc.
- Especially useful for measuring valve spring installed height
- Each set contains (6) gauges that cover a total range of 5/16" to 6", all enclosed in a storage pouch

| DESCRIPTION | PART # |
|--|-------------|
| Telescoping Gauge Set – 5/16"-6" Range | 5320 |

Note: Connecting rod not included.



#5320

DIAL BORE GAUGE COMBO

Our two most popular sets are available in one great combo. Only one tool is needed to measure rod bores, main bearings and cylinder bores – now at a cost that everyone can afford. And setting the bore gauge to zero with a master or micrometer allows you to see the difference in the bore that you are measuring so a precise measurement can be performed.

KIT INCLUDES THE FOLLOWING:

- Standard 2-6" bore gauge setup
- Special adapter and anvil/shim kit for the 1.4" – 2.4" set
- Supplied with a .0005" precision dial indicator

| DESCRIPTION | PART # |
|-----------------------|-------------|
| Dial Bore Gauge Combo | 5605 |



#5605

6" DIAL CALIPERS

Calipers are the handiest precision measuring tool available. The COMP Cams® 6" Dial Calipers can measure inside dimensions and outside dimensions or depth to .001" or .0005" accuracy over their entire 6" range.

- Rigid stainless steel body
- 0-100 Revolution dial
- Smooth thumb rollers
- Protective fitted case

| DESCRIPTION | PART # |
|------------------------------|-------------|
| 0-6" .001" Dial Calipers | 4908 |
| 0-6" .0005" Digital Calipers | 5634 |



#4908



ProRacing Sim® offers a complete line of affordable and accurate computer software simulations. These programs were carefully designed to be easy-to-navigate for beginning automotive enthusiasts, yet robust enough to help the professional engine builder or racer find a winning edge. All software products incorporate a custom user interface designed for popular Windows 98/Me/Vista/Win7/Win8/Win10 (32 & 64 bit) applications.

DESKTOP DRAG5™

Rather than making trial runs at the track to determine the best setup up for your hot rod, motorcycle or dragster, why not save money and time by doing it all on your Windows-equipped PC? DeskTop Drag5™ is an inexpensive, yet highly-accurate 1/4- and 1/8-mile drag race simulation that allows you to analyze the winning potential of your vehicle by selecting various parts from built-in menus – or by entering your own custom specs. With this advanced software you can model virtually any vehicle's design, weight, frontal area, aero drag, wheelbase, tires and even driving style.

- Features advanced graphics that display ET, mph, engine and clutch (trans input shaft) RPM, acceleration, aero drag, tire slip, etc.
- Unique “zoom-in” feature allows you to analyze starting line or top-end performance
- Design, build and drag test cars, motorcycles, dragsters – front- or rear-wheel drive
- Uses an advanced Windows interface with easy-to-use DirectClick™ Menus
- Pop-up TimeSlip™ provides a detailed performance overview



#186401

| DESCRIPTION | PART # |
|-------------------------|--------|
| DeskTop Drag5™ Software | 186401 |

DRAGSIM5™

In the past, finding the optimal chassis, driveline, gear ratios and other characteristics for desired street or drag strip performance was an expensive process characterized by trial-and-error – but not anymore. With DragSim5™ you can assemble and test the performance of any vehicle imaginable on a 1/8 or 1/4-mile strip. A pop-up TimeSlip™ provides an easy-to-read visual summary of overall vehicle performance. Also included is the sophisticated Traction Calculator™ that optimizes tire/track modeling and improves overall simulation accuracy.

- Build and test any domestic or sport compact vehicle on your PC; accurately determines speeds for front or rear-wheel drive vehicles
- Analyze engine RPM, clutch RPM, acceleration, tire slip, ET, aero drag and so much more
- Determines the best components for street cars, motorcycles or dragsters
- Patented Traction Calculator™ improves simulation modeling and accuracy
- Pop-up TimeSlip™ gives an instant performance overview



#181601

| DESCRIPTION | PART # |
|--------------------|--------|
| DragSim5™ Software | 181601 |

DESKTOP FASTLAP5™

Using the latest in performance simulation technology, DeskTop FastLap5™ analyzes the handling capability of any vehicle on any closed-course, asphalt track. This top-of-the-line software can perform a comprehensive turn-by-turn analysis of any vehicle provide you with the best chassis and vehicle setup. It can also run an extensive simulation and display lap times and full vehicle “telemetry” to within a small percentage of true track-test data. Once you choose your setup combination, DeskTop FastLap5™ will take your vehicle through a “hot lap” with instant results.

- Accurately design, build and simulate any vehicle on any closed-course asphalt track in just a few seconds
- Tests weight, wheelbase, center of gravity, aerodynamics, shifting and braking points, tires, gear ratios, suspension and power curves
- Features include DirectClick™ menus, QuickAccess™ buttons, precision data display with reticule, 160-page color users’ manual and more
- Choose from over 40 built-in tracks or model your own with help from the fully-graphic Track Editor™ application
- Custom user interface displays vehicle specs and track-testing results

| DESCRIPTION | PART # |
|----------------------------|--------|
| DeskTop FastLap5™ Software | 186301 |



#186301

FASTLAPSIM5™

Building a well-suited vehicle for road racing competition is a never-ending search for the perfect combination of suspension design, tires, gear ratios, braking points, steering path and a hundred other variables. Thanks to FastLapSim5™, you can accurately simulate the complex interaction of forces, speeds, and accelerations generated by stock, high-performance, or all-out race vehicles. This advanced software also features the Pro Tools™ Kit, which includes such enhanced features as DataZones™, real time data display, spring/damper calculator, ProData™ Display and ProPrinting™.

- Advanced road racing software accurately determines best possible elapsed time for road course, ovals or autocrosses
- Pick from 40+ of the world’s most well-known tracks or design any closed course using the innovative, built-in TrackEditor™
- Determines optimum driving path, shifting and braking points, aerodynamics, throttle positions, gear ratios and much more
- Software includes cutting-edge Pro Tools™ Kit that extends the functionality of many program features
- Easy-to-use interface allows comparison between as many as four vehicles at once – anything from road racers to street racers to NASCAR

| DESCRIPTION | PART # |
|----------------------|--------|
| FastLapSim™ Software | 181701 |



#181701

CAMQUEST™

CAMSHAFT SELECTION SOFTWARE

HOW TO GET YOUR FREE COPY

1. GO TO WWW.CAMQUEST.COM.
2. FILL OUT THE ONLINE REGISTRATION FORM.
3. You will then be able to input your information and begin receiving recommendations for absolutely **FREE** in a live, web-based interface.



DESKTOP DYN05™

Capable of testing any 1-12 cylinder, 4-cycle engine, this innovative software features a custom interface that includes easy-to-use Direct-Click™ menus that allow you to select from a wide variety of parts – or enter custom specs. DeskTop Dyno5™ also includes several calculators to aid you with detailed engine analysis, including a CamMath QuickCalculator™, Induction-Flow Calculator and an Air Flow Pressure-Drop Calculator.

- Detailed graphs display projected HP, torque, VE, engine pressures and more
- Quicklterator™ automated testing tool helps find optimum component combinations for virtually any engine application
- Includes combustion chamber modeling, improved accuracy and new component choices to put you within 5% of real dyno data
- Displays results at every 500 RPM ranging from 1,000 to 14,500 RPM

| DESCRIPTION | PART # |
|-------------------------|---------------|
| DeskTop Dyno5™ Software | 186011 |



#186011

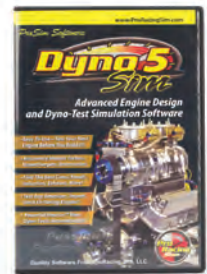
DYNOSIM5™

Now you can dyno test your next engine project BEFORE you even build it. The DynoSim5™ software can accurately simulate any 4-cycle engine – including turbo, supercharged, nitrous and alternative fuel applications. Features include hundreds of new engines, advanced modeling, expanded results graphs and tables, comprehensive printouts, automatic updating over the web, and more. As a supplement to DynoSim5™, we now offer CamDisk8™ that will automatically install additional cam files to the cam library created when you installed DynoSim5™. With this additional disk, you will have access to over 6,000 camshafts that you can search, load and test in any simulated engine.

- Features combustion & ignition curve modeling, advanced rocker ratio mathematics, multiple graphs and data displays, & a higher degree of accuracy
- Incorporates new Quicklterator™ and ProLterator™ technologies that help find the best component combinations for optimal power
- Also includes unique Pro Tools™ Kit that enhances functionality

*CamDisk8™ requires previous installation of DynoSim5™ and is compatible with DynoSim5™ only. CamDisk8™ is sold separately from DynoSim5™.

| DESCRIPTION | PART # |
|--------------------|---------------|
| DynoSim5™ Software | 181501 |
| CamDisk8 | 180908 |



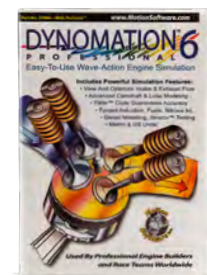
#181501

DYNAMATION6™ WAVE ACTION ENGINE SIMULATION

For the competitive engine builder, time is money. Thanks to the Dynomation6™ Wave Action Engine Simulation, you can reduce the cost and time of engine development, while maintaining your competitive edge. By letting you peer inside a running engine, this advanced engine simulation reveals live pressure waves and mass flow in cylinders and engine passages. While Dynomation6™ will accurately display how much power your engines makes, it will also show you where and how this power is achieved.

- 3D cutaway engine shows mass flow, port velocities and pressures – synchronized to the crank-angle data displayed in Dynomation-6™
- Fully analyzes induction runner lengths, port taper angles, port areas, cylinder head flow variations and cam timing
- Examines camshaft lift, duration, centerline and lobe separation angles

| DESCRIPTION | PART # |
|---|---------------|
| Dynomation6™ Wave Action Engine Simulation Software | 181811 |



#181811

THE PROPER PROCEDURE TO INSTALL AND DEGREE A CAMSHAFT DVD

This DVD takes you through the various stages of camshaft installation and the degreasing process, completely explaining each step. Whether you're a first time builder or a professional, you'll refer back to this DVD again and again.

| DESCRIPTION | PART # |
|---|--------|
| The Proper Procedure to Install and Degree A Camshaft DVD | 190DVD |



#190DVD

DOOR SLAMMERS: THE CHASSIS BOOK

This is the bible for door slammer tuning and building. If you own or are building a drag race car with doors, you need this book. It contains a wealth of knowledge not available from any other source. Hundreds of photographs and drawings help explain many of the technical aspects of tuning and operating your race car.

| DESCRIPTION | PART # |
|---------------------------------|--------|
| Door Slammers: The Chassis Book | 158 |



#158

DECALS

| DESCRIPTION | PART # |
|-----------------------|-----------|
| 6" Decal | 113 |
| 12" Contingency Decal | 110 |
| 24" Decal | 257 |
| 12" Lifter Decal | 115 |
| 12" Belt Drive Decal | 149 |
| Shop Door Decal | 197 |
| 3 Decal Card | COMP3-101 |
| Multi Logo Decal Card | COMP3-103 |



BANNER

| DESCRIPTION | PART # |
|----------------|--------|
| 3' x 8' Banner | 308 |



#308

FENDER COVER

Made of heavy-duty padded vinyl, this fender cover has a non-skid backing to protect your car's finish. It resists acid and grease and is easily washable with mild solvents or detergents. Black with full color COMP Cams® logo.

| DESCRIPTION | PART # |
|--------------|--------|
| Fender Cover | C603 |



#C603



HATS

Stylish twill or mesh baseball-style hats and the COMP Cams® Beanie feature full color embroidered logos on the front and “compcams.com” on the adjustable back strap. These low profile hats are both comfortable and great looking.

The newest addition to the COMP® hat line is the “Since ‘76” fitted hat. Designed in the popular flexfit style, this hat is one size fits most and features a white front with a silver and black COMP Cams® logo in the lower left and a black brim with white stitching. The back is constructed of breathable mesh, with “compcams.com” embroidered in white. Meanwhile, the right side of the hat includes the phrase “Winning Horsepower Since 76.”

| DESCRIPTION | PART # |
|--------------------------------|-------------|
| Camo Hat | C638 |
| Black Hat | C639 |
| Gray & Black Trucker Style Hat | C663 |

| DESCRIPTION | PART # |
|------------------------------|--------------|
| Black & White Retro Logo Hat | C1021 |
| “Since ‘76” Fitted Hat | C642 |
| Beanie | C641 |

LOGO T-SHIRTS

The perfect choice for any race or street event or even for working in your shop, these t-shirts are our most popular sellers. First is the classic black t-shirt that has a small COMP® logo on the left chest and full logo on the back. Next is the “Horsepower To The People” t-shirt that celebrates the automotive legacy by featuring a distressed COMP® logo on the left front chest, while the back displays the phrase “Horsepower To The People” surrounding the iconic COMP Cams® emblem, along with the American flag in the shape of the United States.

| DESCRIPTION | PART # |
|-------------------------------------|--------------|
| Logo T-Shirt (Small-3X) | C1020 |
| Horsepower To The People (Small-3X) | C1043 |

* When ordering, add "-size" to the end of the part number



#C1043



#C1020

PIN-UP T-SHIRT

This all-black shirt includes a retro COMP Cams® logo in white with red trim on the front, with the words “Legendary Performance” appearing just above and below the vintage insignia. The back features the same logo and is flanked by an illustration of a blonde pin-up model posed on a camshaft. The shirt is made from Gildan Ultra Cotton, meaning it will never shrink, and the all-black design won’t show dirt or grease. Available in sizes Small – 5XL.



#C1038

| DESCRIPTION | PART # |
|----------------|--------------|
| Pin-Up T-Shirt | C1038 |

* When ordering, add "-size" to the end of the part number

WINGS T-SHIRT

Want to stand out from the crowd? Try the COMP Cams® Wings T-Shirt, which features cool, custom wings graphics and COMP Cams® labeling on the front and back. The charcoal gray Gildan Ultra Cotton tee is pre-shrunk and available in sizes Small through XXXL. It displays a trendy, retro look that celebrates COMP Cams® more than three decades of successful valve train component development and race winning ways.



#C1023

| DESCRIPTION | PART # |
|---------------|--------------|
| Wings T-Shirt | C1023 |

* When ordering, add "-size" to the end of the part number

LONG SLEEVE T-SHIRT

With subtle, two tone gray graphics, this shirt features a unique COMP Cams® logo design with pinstriping on the front and a graphic featuring Chevy, Ford and Mopar cams on the back. This black, Gildan Ultra Cotton t-shirt won't shrink and is perfect for everyday wear, to work in the shop or at the track. Buy yours today! Available in sizes S-XXXL.



#C1032

| DESCRIPTION | PART # |
|---------------------|--------------|
| Long Sleeve T-Shirt | C1032 |

* When ordering, add "-size" to the end of the part number

DRI MESH POLOS

These dri mesh polos provide the driest moisture wicking protection available to keep you cool, regardless of the weather. These shirts are made from 100% double poly mesh that stands up to repeated washings without fading and require no ironing. They look great straight out of the suitcase – an important feature for traveling racers and performance enthusiasts. Available in sizes Small - XXL.

| DESCRIPTION | PART # |
|-------------|--------------|
| Black Polo | C1015 |
| Gray Polo | C1016 |

* When ordering, add "-size" to the end of the part number



KIDS' T-SHIRTS

COMP Cams® offers two different tees for young children. For infants and toddlers, there is the onesie available in 6 month, 12 month and 18 month sizes. For older children, we offer the youth tee that is available in sizes XS (2-4), S (6-8) and M (10-12). Each shirt features screen printed logos and graphics.

| DESCRIPTION | PART # |
|---------------|--------------|
| Onesie | C1034 |
| Youth T-Shirt | C1028 |

* When ordering, add "-size" to the end of the part number



OUTERWEAR

COMP® sweatshirts are made of a 50/50 cotton/poly blend and are available in sizes M-XXXL. The crewneck sweatshirt features an embroidered COMP Cams® logo on the left chest while the hooded sweatshirt has a unique, two tone gray COMP® logo in the center chest.

Our high-quality jacket is made from a durable Teklon nylon outer shell and backed by a lightweight fleece inner lining. Available in sizes Small through XXXL, the COMP Cams® Race Track Jacket features an embroidered COMP Cams® logo on the front left chest. The adjustable cuffs and elastic waist provide hours of comfortable use and the interior pockets are handy to carry personal items.

| DESCRIPTION | PART # |
|---------------------|--------------|
| Crewneck Sweatshirt | C1017 |
| Hooded Sweatshirt | C1018 |
| Nylon Race Jacket | C1022 |

* When ordering, add "-size" to the end of the part number



APRON

This handy three pocket apron is rugged and durable and is perfect for working on your race or street vehicle. Available in black with the COMP Cams® logo on the middle chest, these are one size fits all. Available separately is our logo patch.

| DESCRIPTION | PART # |
|--------------------|-------------|
| Three Pocket Apron | C604 |
| Logo Patch | C801 |



General Policies

Technical and sales personnel are available from 7:00 a.m. to 8:00 p.m. CT, Monday through Friday and Saturday 9 a.m. to 4 p.m. CT. COMP Cams® is closed on Sundays and legal holidays.

Prior to contacting us for technical assistance, it is helpful to obtain a copy of the cam recommendation form from our website. The information requested in this form will help us to recommend the best possible part for your application.

Technical assistance and advice is available through a variety of sources:

Phone: 901-795-2400

Toll Free CAM HELP® Line: 1-800-999-0853

Website: www.compcams.com

Email: camhelp@compcams.com

Twitter: @CPGTech

24-Hour Fax: 901-366-1807

Please note that our CAM HELP® line sometimes receives a large volume of calls. Our heaviest call volume is between 10:00 a.m. and 2:00 p.m. CT. If you experience an undue delay, please try calling during lower volume hours. Email tech questions are normally answered in less than 24 hours.

Goods Damaged in Shipment

All shipments are insured; therefore claims for damage must be made with the freight company. Do not return the merchandise to us unless prior arrangements have been made.

Merchandise Returns

In order to provide better customer service, we require prior approval before a customer returns merchandise for warranty or for other reasons. To obtain an RMA, contact us by one of the means listed above. All merchandise returned to us should be sent freight prepaid and insured, and delivered to the address listed above. Items returned for credit must be in perfect condition.

You must also include inside the package: your name, address, phone number, fax and/or other contact information, along with an explanation of the problem and work to be done. This contact information is important because it allows us to get in touch with you concerning your parts.



Scan the QR Code to register for your COMP Cams® Product Warranty.

Limited Warranty And Limited Lifetime Warranty

Competition Cams, Inc. warrants that its products are free from defects in material and workmanship for a period of **One Year** from the date of purchase. On certain products, there is a Limited Lifetime Warranty. These **Limited Warranties** cover only the original purchaser. Only certain select products that are clearly marked are covered by the **Limited Lifetime Warranty**; all other products carry our **One Year Limited Warranty**.

Competition Cams, Inc.'s obligation under both warranties is limited to the repair or replacement of its product. To make a warranty claim, the part must be returned directly to Competition Cams, Inc. at the address listed below with a valid Return Merchant Authorization Number (RMA), freight prepaid. Items covered under warranty will be returned to you freight collect. To obtain an RMA, call 800-999-0853 to report your issue. When you call the technician, he will also attempt to troubleshoot your issue.

It is the responsibility of the installer to ensure that all of the components are correct before installation. We assume no liability for any errors made in tolerances, component selection or installation.

THERE IS ABSOLUTELY NO WARRANTY ON THE FOLLOWING:

- A) Any part(s) that have not been adequately or properly lubricated;
- B) Any parts used in racing applications or subject to excessive wear;
- C) Any product used in marine applications, unless that product is specifically listed as a marine product;
- D) Any product that has been physically altered, modified, improperly installed or not maintained;
- E) Any product used in an improper application, abused or not used in conjunction with the proper parts.

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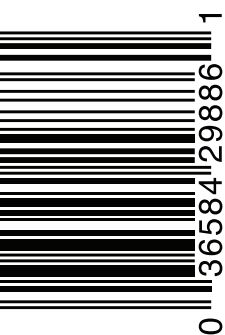
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