# PERFORMANCE CATALOG





### Contents

#### CAMSHAFTS

Straub Tech's Custom Cams 3
Semi-Custom Hydraulic
Roller Profiles

#### DISTRIBUTORS

Distributor Gears1	12
Coated Cast Gears1	13
Distributor Gear Checking Fixture1	14

#### LIFTERS

Hydraulic Roller Lifters15
OEM Drop In Lifters15
Street Hydraulic Performance Series16
Pro Series Hydraulic18
Hi RPM Series Hydraulic19
Solid Roller Lifters22
Horizontal Tie Bar Series22
Sportsman Series23
Sportsman Pro23
Ultra Pro Series24
Black Mamba Series26
Black Mamba Lite27
Top Fuel and Top Alcohol Solid Roller
Lifters29
Morel Keyway Lifters
182

#### MAYHEM

VEPR 18° SBC Double Hump Head .	31
Shaft Rockers for Mayhem	32

#### VALVES

Stainless Steel Super-Loy Valves	5
Valves	6

#### **CAM BEARINGS**

Roller Cam Bearings	37
Coated Cam Bearings	
55MM Cam Bearings	37

#### VALVETRAIN

Bronze Valve Guides	.38
Camshaft Thrust plates	.38
Straub Tech One Piece Pushrods	.39
Pushrods Length Checking Tool	.40
Rocker Arms	.41
Polylocks For Stud Girdles	.41
Shaft Rockers	.42
Stud Girdles	.42

#### VALVETRAIN (CONT)

Rocker Arm Studs	43
Guideplates	44
Cam Buttons	44
Cam Lock Plates	44
Aluminum Cam Buttons	44
Valve Springs	45
Valve Springs Retainers Steel	46
Valve Springs Retainers Titanium	46
Valve Locks	47
Lash Caps	48
Valve Seals	
Spring ID and OD Locators	50
Valve Spring Shims	51
Hardened Valve Spring Shims	
Rollmaster Timing Sets	52
GOLD SERIES	

#### **ROTATING ASSEMBLIES**

Rotating Assemblies	55
Crankshafts	55
H-Beam Connecting Rods	57

#### PISTONS

Straub Tech Pistons	
Straub Piston Rings	61
Flame Hoops	63

#### **BLOCK COMPONENTS**

Straub Tech Block Components	64
Billet Timing Pointers	65
Lifter Valley Vents	65
Oil Restrictors	66
ORB Plugs O-Ring Seal Port Fitting	66
Intermediate Shafts	66
Romac Harmonic Balancers	67
Balancers	67

#### **GASKETS AND SEALS**

Straub Tech Performance Gaskets71
SBC Bulk Oil Pan Front
and Rear Seals72
Cam Change Kits
(Timing Cover/Front seal/
Water Pump)72
BBC Performance Gaskets73
Ford Performance Gaskets75

Intake Gaskets	75
Rear Main Seals	75
Timing Gaskets	75
Brass Freeze Plug Kits	76

#### **ENGINE FASTENERS**

Engine Fasteners	77
Harmonic Damper Bolts	77
Harmonic Balancer Bolt	77
Front Cover Bolts	77
Front Cover Studs	78
Intake Bolt Sets	78
Oil Pan Stud Kits	78
Oil Pan Bolt Sets	79
Main Bolt Kit	79
Pipe Plugs	79
Flywheel Bolts and Adapters	80

#### **STRAUB TECH TOOLS**

Straub Tech Tools	81
Valve Spring Seat Cutters	81
AN Wrench	81
Valve Spring Testers	81
Valve Lapping Tool	82
Valve Seal Removal Tool	82
Valve Guide Machining Tools	82
Valve Spring Height Mic	82
Valve Spring Compressors	82
Stud Mount Spring Compressor	82
Plug Wire Crimp and Cutting Fixture.	83
Wire Loom Kit	83
Distributor Gear Checking Fixture	83

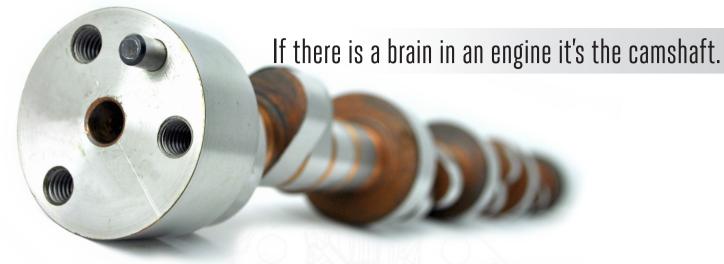
#### **FUEL COMPONENTS**

Holley Carb Inlet kits	84
Fuel Pump Pushrod	84
Fuel Nut	85
Carburetor Billet Throttle Brackets	85
Bulk Hose	85

#### SWAG

Straub Tech Swag	
Limited Warranty	
WARRANTY PROVISIONS:	
CAM WARRANTY PROVISIONS:	88





#### **Straub Tech's Custom Cams**

If there is a "brain" in an engine it would be the camshaft, anatomically speaking.

It does not matter what compression you have, how big or small your heads are, what size your valves and intake are, or even your fuel delivery package and exhaust system, IF you do not have the right camshaft to pull it all together you're probably leaving a lot on the table.

Chris Straub, the founder of Straub Technologies has spent the last 20+ years pursuing the art of cam design. Straub Tech is continually striving for real world performance by utilizing computer software, considering airflow data, applying kinematics, calculating first, second, third order mathematical derivatives and using all of the available technology to provide an optimum camshaft profile.

All of today's technology is being considered here at Straub Technologies to maximize the mechanical components within "THE COMBINATION" of any given engine.

First, what is your intended application? Is it a naturally aspirated, boosted or nitrous engine combination, using carbureted or EFI fuel delivery, and what type of fuel? A Straub custom camshaft design looks at the entire combination in order to optimize the airflow through the given engine. We also consider vehicle weight, engine size, cylinder head airflow, valve sizes, calculated compression, transmission, converter (if applicable), final gear, tire diameter and customer's desired RPM range. These are specifics you will not get from a "one size fits all" off-the-shelf camshaft.

Whether it's for hydraulic roller or solid roller lobe profile, Straub Technologies can design a cam that will breathe more power and performance into any new or existing combination.

All Straub Technology roller camshafts are made from USA cores, using billet steel or selective austempered ductile iron, featuring options like Everwear distributor gears, revised firing orders, various cam journal diameters and cam bearing types.

Call us today for a free consultation, it's step one to the best dollar you can spend on your engine...

## It's all in the Cam!

Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.

#### Call 423 391 7774 or e-mail info@straubtechnologies.com for a cam quote.

#### Custom Round Lobe Cam Core

Application
GM LS Hyd Roller and Solid Roller Applications
GM SBC and BBC Hyd Roller on 55MM Core
GM SBC and BBC Solid Roller on 55MM Core
Ford, Pontiac, Chrysler, Olds, Caddy, Buick, AMC Solid Roller On OEM SIZE Cores
GM Firing Order 4/7 Swap for GM SBC and BBC
GM LS Firing Order 4/7 & 2/3 "Double Swap" for GM SBC and BBC
OPTION: Billet Core with pressed on Everwear Cast Gear Option
OPTION: Measure Custom Profile Cam using Cam Doctor Software
OPTION: Drill and Tap Cam Face for 2nd Dowel Pin
OPTION: Drill and Tap Cam Face for Fuel Pump drive
OPTION: Machine Oil Groove on Rear Journal for BBC (Pre-1969)
OPTION: Step Face "Bull Nose" Core for Late Model SBC and BBC (using Cam Retainer Plate)
OPTION: Custom Billet Round Lobe Cam Core
CUSTOM: Design and make CAD of lobe profile
CUSTOM: Design and make 2 or more camshaft lobes
Billet Core 50MM Option
Billet Core 60MM Option
Billet Core 70MM Option
Gun Drill Core





### **Custom Cam Order Form**

Name	Email		Phone Number
Application Info:			
Brand of Engine: 🛛	Chevy 🗅 Ford 🗅 Mopar 🖵	l Pontiac 🛛 Olds 🗔 He	olden 🗅 Caddy 🗅 Buick 🗅 Other
Engine Type: 🗅 I-4	□ I-6 □ V-6 □ V-8 □ V-10 □	V-12 Engine Family _	Cam Type: 🗅 HF 🗅 HR 🗅 SF 🗅 SF
Check One: 🗅 Street	🗅 Street/Strip 🗅 Strip Only 🗅 Pull Tru	ck 🗅 Mud Bog 🗅 Circle Track	🗅 Marine Pleasure 🗅 Marine Circle 🗅 Marine Drag
Power Adders: 🗅 No	one DNOS If so how much_	🛛 Turbo, if s	o what boost
Blower If so what boo	ost If boosted multi stage	□ Yes or □ No If booste	ed do you have: 🗅 chiller 🗅 water injection 🗅 both
Fuel Type: 🛛 Gas	f so what minimum octane wil	l be run	Ethonal Methanol Diesel
<b>Operating Range:</b> D	esired RPM for max HP	Desire	ed RPM for max torque
Trans Type: 🗅 Fixed e	gear ratio 🛛 Auto If auto sta	all rpm 🗅 Ma	anual If so number of gears
Tire Size	Rear Gear	Ratio	Prop Pitch
Engine:			
Bore	Stroke	Rod Length	Piston To Deck
Compression	Piston Type 🗆	🛾 Dish 🖵 Flat 🗖 Dome	Cylinder head type 🛛 Cast Iron 📮 Aluminum
Cylinder head	Flow Number		
			me Exh. Runner Volume
			Ratio Int Exh
Lifter size: 🗅 .842" 🗅	.875" 🗆 .903" 🗅 .936" 🗅 1.00"	' 🗖 1.062" 📮 Other:	
Carb Size	Injector #		_ Intake Type 🛛 Single 🖵 Dual 🖓 Tunnel Ram
Exhaust:			
Header primary Size _	Collector Size	If mar	ine what brand exhaust manifolds
If marine wet exhaust	where does water enter exhau	ust from riser	inches
Notes:		B	
			Sudaport



### **Semi-Custom Hydraulic Roller Profiles**

#### Our STRAUB "GTA" SERIES = Greater Torque Area

The "GTA" Series of Street Performance Cams from Straub Technologies will boost the power output from your Detroit V8 like no other hydraulic roller cam can! The sexy staccato sound and greater torque area of these semi custom ground Straub Camshafts are proven worldwide by our many HP crazy customers. Our cams have been engineered to optimally feed the demand of your hotrod, based on CID and known cylinder head characteristics. Cubic Inches and desired rpm range sets the demands of the engine. The cylinder head efficiency based on its flow characteristics will deliver the air and fuel metrics. Since there are a plethora of OEM and Aftermarket heads with different flow rates these days, a camshaft profile must be based on what the heads can supply. The STRAUB "GTA" SERIES of street performance hydraulic rollers makes this easy. You select your engine combination and cylinder head specifications, we supply the camshaft! Straub takes the guessing out of camshaft selection. These cams all but guarantee the hotrodder the performance he or she is after with any American Detroit V-8.

# Most Semi-Custom Camshafts are ground to order. Please allow 10 Business days for shipment. Feel free to call or email to check availability.

SBC Hydraulic RollerCam can be ordered as a Retro Fit or Late Model Stepped Face. Note when ordering.Part No.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested LiftSBC280-286-9.544/.500280/286221/22710960006504/5372Best performance with up to 3.48 Stroke with Dart/Pro Header/Pro Comp heads or a head with a 68% I/E ratio.Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.Part No.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested LifteeSBC280-294-8.544/.544280/294221/23510960006504/5372Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratio use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.Part No.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested Lift eratio.Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratio use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.Part No.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested Lift SBC280-296-12S44/.570280/296221/23511263004602/4789Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.Part No.Lift w 1.6Adv. Dur050 Dur.											
Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lift       SBC280-286-9     .544/.500     280/286     221/227     109     6000     6504/5372       Best performance with up to 3.48 Stroke with Dart/Pro Header/Pro Comp heads or a head with a 68% I/E ratio.     Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.        Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lift end of 0.00       SBC280-294-8     .544/.544     280/294     .21/235     109     6000     6504/5372       Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratio use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.     Suggested Lift end of 0.00       Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lift end of 0.00       Best performance with up to a 250 shot of nitrous. Needs minimum of 2400 stall.     109     6000     6504/5372       Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lift end of 0.00       SBC280-296-12     .544/.570     <											
SBC280-286-9   .544/.500   280/286   221/227   109   6000   6504/5372     Best performance with up to 3.48 Stroke with Dart/Pro Header/Pro Comp heads or a head with a 68% I/E ratio.   Can use with up to 3.48 Stroke with Dart/Pro Header/Pro Comp heads or a head with a 68% I/E ratio.   Can use with up to 3.250 shot of nitrous. Needs minimum of 2400 stall.     Part No.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max HP RPM   Suggested Lifter     SBC280-294-8   .544/.544   280/294   221/235   109   6000   6504/5372     Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratio use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.   Suggested Lifter     Part No.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max HP RPM   Suggested Lifter     Best performance with up to a 250 shot of nitrous. Needs minimum of 2400 stall.   .544/.570   280/296   221/235   112   6300   4602/4789     Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.   .544/.570   280/296   221/235   112   6300   4602/4789	Cam can be ordered as a Retro Fit or Late Model Stepped Face. Note when ordering.										
Best performance with up to 3.48 Stroke with Dart/Pro Header/Pro Comp heads or a head with a 68% I/E ratio.     Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.     Part No.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max HP RPM   Suggested Lifter     SBC280-294-8   .544/.544   280/294   221/235   109   6000   6504/5372     Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratio.   Needs minimum of 2400 stall.     Part No.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max HP RPM   Suggested Lifter     Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratio.   Suggested Lifter     Best performance with up to a 250 shot of nitrous. Needs minimum of 2400 stall.   Suggested Lifter     Part No.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max HP RPM   Suggested Lifter     SBC280-296-12   .544/.570   280/296   .21/235   .112   6300   4602/4789   .22/24789     Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max	ter										
Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.Part No.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested LifterSBC280-294-8.544/.544280/294221/23510960006504/5372Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratus with up to a 250 shot of nitrous. Needs minimum of 2400 stall.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested LifterPart No.Lift w 1.6Adv. Dur050 Dur.LSAMax HP RPMSuggested LifterSBC280-296-12.544/.570280/296221/23511263004602/4789Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.Straub/Dart/heads or a head with a 68% I/E ratio.Sec380 stall.											
Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lifter       SBC280-294-8     .544/.544     280/294     221/235     109     6000     6504/5372       Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratus with up to a 250 shot of nitrous. Needs minimum of 2400 stall.     Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lifter       SBC280-296-12     .544/.570     280/296     221/235     112     6300     4602/4789       Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.     Suggested Lifter											
SBC280-294-8     .544/.544     280/294     221/235     109     6000     6504/5372       Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratus with up to a 250 shot of nitrous. Needs minimum of 2400 stall.     Description     Max HP RPM     Suggested Life       Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Life       SBC280-296-12     .544/.570     280/296     221/235     112     6300     4602/4789       Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.     Needs minimum 2800 stall											
Best performance with up to 3.48 Stroke with GM Vortec/Double Humps/Brodix Dragonslayer heads or a head with a 63% I/E ratus with up to a 250 shot of nitrous. Needs minimum of 2400 stall.     Part No.   Lift w 1.6   Adv. Dur.   .050 Dur.   LSA   Max HP RPM   Suggested Lift SBC280-296-12     SBC280-296-12   .544/.570   280/296   221/235   112   6300   4602/4789     Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.   Needs minimum	er										
use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.       Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Lift w 1.6       SBC280-296-12     .544/.570     280/296     221/235     112     6300     4602/4789       Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.     Needs minimum 2800 stall.											
SBC280-296-12     .544/.570     280/296     221/235     112     6300     4602/4789       Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio.     Needs minimum 2800 stall.	tio. Can										
Best performance with up to 3.48 Stroke with a BLOWER and Straub/Dart/heads or a head with a 68% I/E ratio. Needs minimum 2800 stall.	fter										
2800 stall.											
Part No. Lift w 1.6 Adv. Dur. 050 Dur. USA Max HP RPM Suggested Li	n of										
	fter										
<b>SBC282-280-8</b> .525/.510* 282/280 223/221 108 6000 6504/5372											
Best performance in high elevation above 5000 ft with up to 3.48 Stroke with AFR heads or a head with a 75% I/E ratio. Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall. *Note run 1.6/1.5 Rockers											
Part No.     Lift w 1.6     Adv. Dur.     .050 Dur.     LSA     Max HP RPM     Suggested Li	fter										
<b>SBC282-286-8</b> .525/.500 282/286 223/227 108 6000 6504/5372											
Best performance with up to 3.48 Stroke with Profiler/ProMaxx heads or a head with a 70% I/E ratio.											
Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.											

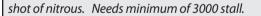
SBC280-296-12	.544/.570	280/296	221/235		112		6300	5300 4602/4789			
Best performance with 2800 stall.	up to 3.48 Stroke	e with a BLOWE	R and Straub/D	art/h	neads or a l	head w	rith a 68% I/E ro	atio.	Needs minimum of		
Part No.	Lift w 1.6	Adv. Dur.	.050 Dur.	Dur. LSA			Max HP RPM	Λ	Suggested Lifter		
SBC282-280-8	.525/.510*	282/280	223/221		108		6000		6504/5372		
Best performance in hig to a 250 shot of nitrous			•			ds or a	head with a 7	5% I/	E ratio. Can use with u		
Part No.	Lift w 1.6	Adv. Dur.	Dur						Suggested Lifter		
SBC282-286-8	.525/.500	282/286	223/227		108		6000		6504/5372		
Best performance with	up to 3.48 Stroke	e with Profiler/P	roMaxx heads o	or a h	ead with a	ı 70% l,	/E ratio.		-		
Can use with up to a 25	50 shot of nitrous	5. Needs minim	um of 2400 stal	11.							
Part No.	Lift w 1.6	Adv. Dur.	.050 Dur.	LS	A	Max	HP RPM	5	Suggested Lifter		
SBC282-296-8	.525/.548	282/296	223/233	108	3	6400		5	372		
Best performance with with up to a 250 shot o				80′s, a	and Track 1	heads	or a head witl	h a 6.	3% I/E ratio. Can use		
SBC284-288-10	.527/.521*	284/288	225/229	110	)	6400		6	504/5372		
Best performance 3.48 of 2400 stall. *Note rur			l with a 75% I/E	ratic	o. Can use	with up	o to a 250 shot	of ni	trous. Needs minimur		
SBC288-294-8	.555/.544	288/294	229/235	108	3	6500			5372/4602		
Best performance with	up to 3.75 Stroke	e with Dart/Edel	lbrock heads or	a he	ad with a 7	70% I/E	ratio.				
Can use with up to a 2	250 shot of nitro	us. Needs min	imum of 2400	stall							
SBC288-300-8	.555/.536	288/300	229/241	108	3	6200	1	5	372/4602		
Best performance with Can use with up to a 25					er, 180's, ai	nd Trac	k 1 heads or a	head	l with a 63% l/E ratio.		
SBC292-294-9	.584/.544	292/295	233/235	109	9	6200	1	5	372/4602		
Best performance with a 250 shot of nitrous. 1			n AFR195/210/2	220/2	27 heads o	or a hea	ad with a 75%	I/E ra	itio. Can use with up to		
SBC292-299-9	.584/.550	292/299	233/240	109	9	6200		5	372/4602		
Best performance with 67% I/E ratio. Can use							, Edelbrock 21	Os he	ads or a head with a		
SBC292-302-12	.584/.564	292/302	233/243	112	2	6400		4	602		
Best performance with BLOWER. Need to run 3	•					or a hee	ad with a 75%	I/E ra	itio and using a		
SBC296-296-9	.580/.580	296/296	237/237	109	)	6500		5	372/4602		
Best performance with Heavy wall pushrods.			5/210/220/2271	head	s or a head	l with c	175% I/E ratio.	Reco	ommend running 3/8″		
SBC296-299-8	.580/.550	296/299	237/240	108	3	6300	0		372/4602		
Best performance with 250 shot of nitrous. Ne						a head	d with a 75% l/	E rat	io. Can use with up to		
SBC296-302-8	.584/.565	296/302	237/243	108	3	6500		5	372/4602		
Best performance with Can use with up to a 25	•				, Straub 20	0, Dari	200's heads o	r a he	ead with a 67% I/E ratio		

Part No.	Lift w 1.6	Adv. Dur.	.050 Dur.	LSA	Max HP RPM	Suggested Lifter
SBC282-296-8	.525/.548	282/296	223/233	108	6400	5372
Best performance with u with up to a 250 shot of a				80's, and Track 1	heads or a head with	a 63% I/E ratio. Can use
SBC284-288-10	.527/.521*	284/288	225/229	110	6400	6504/5372
Best performance 3.48 S of 2400 stall. *Note run		heads or a head	d with a 75% I/E	ratio. Can use	with up to a 250 shot (	of nitrous. Needs minimum
SBC288-294-8	.555/.544	288/294	229/235	108	6500	5372/4602
Best performance with u	ıp to 3.75 Stroke	e with Dart/Ede	lbrock heads or	a head with a 🛛	70% I/E ratio.	
Can use with up to a 25	50 shot of nitro	us. Needs mir	nimum of 2400	stall.		
SBC288-300-8	.555/.536	288/300	229/241	108	6200	5372/4602
Best performance with u Can use with up to a 250					nd Track 1 heads or a l	head with a 63% I/E ratio.
SBC292-294-9	.584/.544	292/295	233/235	109	6200	5372/4602
Best performance with u a 250 shot of nitrous. No			h AFR195/210/2	220/227 heads o	or a head with a 75% l	/E ratio. Can use with up to
SBC292-299-9	.584/.550	292/299	233/240	109	6200	5372/4602
Best performance with u 67% I/E ratio. Can use w						s heads or a head with a
SBC292-302-12	.584/.564	292/302	233/243	112	6400	4602
Best performance with u BLOWER. Need to run 3/					or a head with a 75% l	/E ratio and using a
SBC296-296-9	.580/.580	296/296	237/237	109	6500	5372/4602
Best performance with u Heavy wall pushrods. N			5/210/220/227	heads or a head	l with a 75% l/E ratio.	Recommend running 3/8″
SBC296-299-8	.580/.550	296/299	237/240	108	6300	5372/4602
Best performance with u 250 shot of nitrous. Nee					a head with a 75% I/I	Eratio. Can use with up to a
SBC296-302-8	.584/.565	296/302	237/243	108	6500	5372/4602
Best performance with u Can use with up to a 250	•				10, Dart 200's heads or	a head with a 67% I/E ratio.

#### **BBC Hydraulic Roller** Cam can be ordered as a Retro Fit or Late Model Stepped Face. Note when ordering. Part No. Lift w 1.6 Adv. Dur. .050 Dur. LSA **Max HP RPM Suggested Lifter** BBC267-285-9 .552/.481 267/285 209/222 109 5400 HT2279/5374 Designed for best performance upgrade to 1990 to 1993 454SS Pickup Trucks with stock stroke and stock heads. Recommend running 3/8" wall pushrods. Can use OEM rockers and will clear stock valve guide height. Needs minimum of 2400 stall. Can run headers or stock manifolds. Headers add an additional 20HP/27#/ft BBC280-280-9 .578/.578 280/280 221/221 109 5800 5374 Best performance with up to 4.00" Stroke with AFR265/290 heads or a head with a 75% I/E ratio. Recommend running 3/8" wall pushrods. Recommend running Straub Rockers 13750I and 13750E for correct geometry. Needs minimum of 2400 stall.

BBC280-284-12	.578/.	559	280/2	84	221/2	225	112		5200		5374/4	603
Best performance with 70% I/E ratio. Recomm Install straight up												
BBC280-286-8	.578/.	530	280/2	86	221/2	227	108		6000		5374	
Best performance with Recommend running S											-	3/8″wall pushrods.
BBC280-294-9	.578/.	578	280/2	95	221/2	235	109		6000		5374	
Best performance with I/E ratio. Recommend r correct geometry. Need	running	3/8″wall p	oushroo	ds. Recom	nmend	running St	raub Ro	ockei	rs 13750l and	d 13750l	E on the B	Prodix Heads for
BBC284-284-12		.559/.559	)	284/284		225/225	7	112	2	5200		5374
Best performance with ( Recommend running 3/												
BBC288-288-9		.600/.600	)	288/288		229/229		109	)	6400		5374
Best performance with pushrods. Recommend												
BBC288-294-7		.600/.559	)	288/294		229/235		107	7	6000		5374
Best performance with pushrods. Recomment												
BBC288-294-9		.600/.559	)	288/294		229/235		109	)	6300		5374
Best performance with pushrods. Recommend												
BBC288-300-9		.600/.570	)	288/300		229/241		109	)	6200		5374
Best performance with ratio. Recommend run geometry. Needs minir Will run all vacuum ass	ning 3/a num of	8″wall pus 2400 stall.	hrods. Know	Recomme n as the O	end run Id Scho	ning Strau ool Cam, be	ıb Rock est choi	ers 1 ce fo	3750I and 13	3750E or	n the Brod	lix Heads for correc
BBC288-302-7		.600/.600	)	288/302		229/243		107	7	6200		5374
Best performance with ratio. Recommend run geometry. Needs minir manifolds with stroker	ning 3/a num of	8″wall pus 2400 stall.	hrods. Know	Recomme n as the Sl	end run eeper, l	ning Strau best choice	b Rock for GN	ers 1 1 Am	3750l and 13 erican Muscl	3750E or	n the Brod	lix Heads for correc
BBC300-302-9		.603/.600	)*	300/302		241/243		109	)	6700		4603
Best performance with pushrods. Recomment with cars with aftermal	d runnii	ng Straub I	Rockers	: 13755l ai	nd 1375	50E for cori	rect geo	omet	ry. Needs mi			-
BBC302-302-7		.600/.600	)	302/302		243/243		107	7	6500		5374/4603
Best performance with running 3/8″wall pushr stall. Proven combinat	rods. Re	ecomment	d runni	ng Straub	Rocker	s 13750l ai						
BBC302-302-9		.600/.600	)	302/302		243/243		109	)	6700		5374/4603
Best performance with 3/8″wall pushrods. Rec Proven combination fo	comme	nd running	g Strau	b Rockers	13750I							

SB Ford Hydraulic Roller									
SBF280-280-12	.544/.544	280/280	221/221	112	6800	5327			
Best performance with up to 3 Recommend running 3/8″ pus					a 75% or higher l	/E ratio.			
SBF280-280-9	.544/.544	280/280	221/221	109	6500	5323			
Best performance with up to 3 pushrods. Needs minimum of			85/205 heads or	any head with a 7	75% or higher I/E	ratio. Can use 5/16			
SBF280-294-12	.544/.544	280/294	221/235	112	6800	5327			
Best performance with up to 3.25 Stroke in a Turbo Build using AFR185/205 heads or any head with a 75% or higher I/E ratio. Recommend running 3/8" pushrods. Needs minimum of 2800 stall. Use on 306-331 CID									
SBF280-286-9	.544/.500	280/286	221/227	109	6500	5323			
Best performance with up to 3	.25 Stroke with De	art/Pro Header/Pi	ro Comp heads or	a head with a 68	% I/E ratio.				
Can use with up to a 250 shot	of nitrous. Needs	minimum of 240	0 stall.						
SBF280-294-8	.544/.544	280/294	221/235	109	6500	5323			
Best performance with up to 3.25 Stroke with Brodix ST 5.0 heads or a head with a 63% I/E ratio. Can use with up to a 250 shot of nitrous. Needs minimum of 2400 stall.									
SBF288-294-8	.555/.544	288/294	229/235	108	6500	5323			
Best performance with up to 3.25 Stroke with Edelbrock heads or a head with a 70% I/E ratio.									
Can use with up to a 250 shot	of nitrous. Needs	minimum of 240	0 stall.						
SBF292-294-9	.584/.544	292/295	233/235	109	6200	5323/5327			
Best performance with up to 3 Needs minimum of 3000 stall.	.750″ with AFR20	5/220 heads or a	head with a 75%	I/E ratio. Can use	with up to a 250	shot of nitrous.			
SBF292-299-9	.584/.550	292/299	233/240	109	6600	5323/5327			
Best performance with up to 3 to a 250 shot of nitrous. Need			/Edelbrock 210s l	heads or a head w	vith a 67% I/E rati	o. Can use with up			
SBF296-296-9	.580/.580	296/296	237/237	109	6500	5323/5327			
Best performance with up to 3 pushrods. Needs minimum of		AFR205/220 head	ds or a head with	a 75% I/E ratio. R	ecommend runn	ing 3/8″ Heavy wal			
SBF296-302-8	.584/.565	296/302	237/243	108	6500	5323/5327			
Best performance with up to 3 shot of nitrous. Needs minimu		ProMaxx 180/Da	rt 200's heads or a	a head with a 67%	6 I/E ratio. Can us	e with up to a 250			





Production run start at 10 camshaft per part number. Call 423-391-7774 for quote Warning: all eem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.



#### **Straub Tech High Performance Parts**

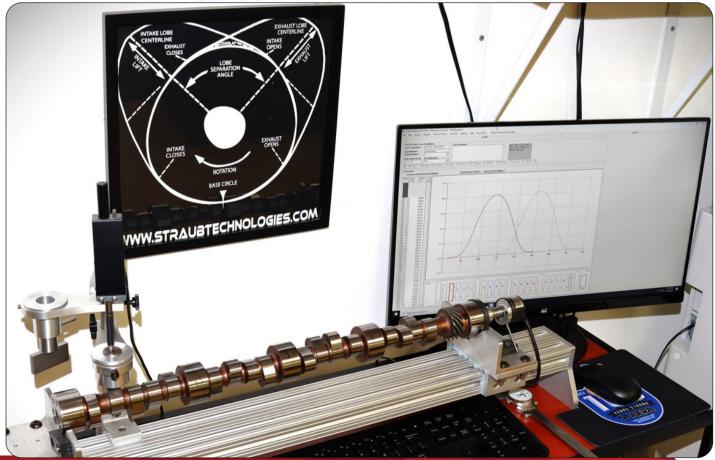
With over 30 years of experience in the Performance Industry, Straub Technologies has built relationships with many of the top aftermarket companies.

Chris Straub has spent his years developing relationships with some of the industry's legends. These relationships have produced unique business alliances that allow Straub Technologies to offer its customers the best in product, tech support, and price. From custom machined parts to volume deals on national brands, to closeout deals from the OEM giants, Straub Technologies has become the Source that can supply.

Straub Tech is in touch with the latest trends in motorsports because of its relationship with top engine builders, professional race teams, and industry owners. Technical support through the network on engine parts is unparalleled. We are able to answer your technical questions or find out what you need to know. Tech is part of who we are.

Straub Tech is the source when you need parts. Our extensive network of vendors gives us access to over 200M in parts on any given day. Can't find something....let us do it. You are in another country, we ship worldwide by UPS, EMO, or USPS. We will get you what you want.

We want to earn your business and once you have become a customer you will see why we have become the Source for so many companies and racers.



#### For custom cams please call us at 423 391-7774, or email at cstraub@straubtechnologies.com

Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all een fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.



### **Distributor Gears**

#### **AMPCO45 Bronze**

100% USA made these gears are the ultimate in wear resistant distributor gears. These gears are held to OEM tolerance to ensure proper engagement with camshaft gears. AMPCO45 material can be used with cast iron, austemper steel, and tool steel cam cores.

Oversized distributor gears allow for correct gear meshing by insuring proper depth. A BRONZE GEAR CAN BE USED ON ANY CORE.



Part No.	Description		
100-3932	Chevy MSD/Holley/Mallory/Crane .501 with		
	+.300" Nose		
100-3294	Chevy V-8 .491" Shaft +.003"		
100-3096	Chevy V-8 .491 Shaft		
100-3339	Chevy MSD .501" Shaft		
100-3408	Chevy MSD .501" Shaft +.006"		
100-3840	Chevy MSD .501" Shaft +.012"		
100-3961	Chevy V-8 .491" Shaft +.012"		
100-4021	Chevy MSD .501" Shaft +.015"		
100-4042	Chevy MSD .501" Shaft +.003"		
100-4043	Chevy MSD .501″ Shaft +.009″		
100-4732	Chevy MSD/Holley/Mallory/Crane .501" .017"		
	Oversized		
100-5540	Chevy MSD/Holley/Mallory/Crane .501".020"		
	Oversized		
100-6572	Chevy MSD/Holley/Mallory/Crane .501".021"		
	Oversized		
100-6334	Chevy MSD/Holley/Mallory/Crane .501".025"		
	Oversized		
100-6335	Chevy MSD/Holley/Mallory/Crane .501".030"		
	Oversized		
100-6337	Chevy OEM .491".025" Oversized		
100-6338	Chevy OEM .491".030" Oversized		
100-6339	Chevy OEM .491".035" Oversized		
100-6383	Chevy MSD/Holley/Mallory/Crane .501".045"		
	Oversized		

Part No.	Description	
100-6384	Chevy MSD/Holley/Mallory/Crane .501" .050" Oversized	
100-6385	Chevy MSD/Holley/Mallory/Crane .501" .055" Oversized	
100-6501	Chevy SB/BB with HEX Drive Oil Pump MSD/ Holley/Mallory/Crane .500/.501" RH Std	
130-4040	SB Chrysler .499 to .501″	
140-4015	BB Chrysler .499 to .500"	
140-4061	SB Chrysler .500/.501" .006" Oversized RH	
140-4062	SB Chrysler .500/.501" .012" Oversized RH	
140-4745	BB Chrysler .484/.485" RH	
140-4746	BB Chrysler .484/.485" LH	
200-3841	SB Ford 302/351W .501"	
200-3842	Ford 351C/429-460 .501	
200-3980	SB Ford 302/351W .530"	
200-3984	Ford 351C/429-460 .530	
200-4532	Ford I-6 24-300CID .529/.530" RH Std	
200-4761	Ford I-6 24-300CID .530/.531" RH Std	
200-5089	Ford 351C/429/460 MSD .501 RH Std	
200-5110	Ford 351C/429/460 MSD .466/.467" RH Std	
201-4628	AMC V-8 .490 to .491	
206-4012	Pontiac V-8 All .500/.501"LH Std	
206-4013	Pontiac V-8 All .490/.491" LH Std	



#### **Coated Cast Gears**

Straub Tech ANTI Wear Coated cast distributor gears are 100% USA made. These gears are designed for use with all cam cores including Billet. In OEM testing, our gears showed a high resistance to wear on steel camshaft cores. These gears feature wear resistant properties that prevent premature wear under high RPM and high valve spring pressures associated with performance cams. Also available in over sizes for more consistent ignition timing.

CAN BE USED ON **ANY** CORE **INCLUDING** BILLET CORES.



Part No.	Description	
100-4004	Chevy MSD .501" Shaft	
100-4027	Chevy MSD .501" Shaft +.006"	
100-4030	Chevy OEM Late Model .428/.429" Cast LH	
100-4026	Chevy V-8 .491 Shaft	
100-4631	Chevy I-4/I-6 Inline Engines .490/.491" Cast LH	
100-4709	Chevy MSD/Holley/Mallory/Crane .500/.501" Cast LH	
100-4938	Chevy OEM Late Model .428/.429" Cast Reverse Rotation	
100-5187	Chevy MSD .501" Shaft +.003"	
100-5188	Chevy MSD .501" Shaft +.009"	
100-5189	Chevy MSD .501" Shaft +.012"	
100-5220	Chevy MSD .501" Shaft +.015"	
100-5543	Chevy MSD/Holley/Mallory/Crane .500/.501020" Cast RH	
100-5544	Chevy MSD/Holley/Mallory/Crane .500/.501025" Cast RH	
100-5545	Chevy MSD/Holley/Mallory/Crane .500/.501030" Cast RH	
100-6030	Chevy OEM .490/.491" Cast Reverse Rotation	
200-4039	Ford 302-351W .466/.467" Cast RH Std	
200-4630	SB Ford 302/351W .501"	
200-4172	Ford 312 Y Block .466/.467" Cast RH Std	
200-5089	Ford 351C/429-460 .501	
200-5145	Ford Flat Head V-8 '49-'53 .467/.468" Cast Std	
200-5214	Ford 302-351W .500/.501" +.003" Cast RH Std	
200-5215	FORD 302/351W .501 to .502 Shaft +.006"	
200-5216	FORD 302/351W .501 to .502 Shaft +.009"	
200-5217	Ford 302-351W .500/.501" +.012" Cast RH Std	



## Coated Cast Gears (Continued)

Part No.	Description	
200-6006	Ford 351C/FE/429-460 .530/.531 Cast Std	
200-6212	Ford 302-351W .490/.491 Cast RH Std	
200-6211	Ford 351C/FE/429-460 .490/.491 Cast Std	
200-6011	Ford FE .466/.467" Coated Cast Std	
240-300	Ford 6 Cylinder Distributor Gear For Oe Distributor Compatible With Cast And Billet Cam Cores	
201-4186	AMC V-8 .490 to .491	
201-4742	AMC All V-8 Std 1.000/1.0005" Cast Std	
202-4082	BUICK V-8 .500 to .501	
202-4217	Buick V-8 and Nail Head 425 .490/.491 Cast Std	
202-4120	Buick V-6 Turbo .490/491" Cast Std	
202-5207	Buick V-6 14 Tooth .490/.491 Cast Std	
203-4922	Holden V-8 308 CID .484"/.485" Cast Std	
205-4927	International V-8 304-392 CID .490/.491" Cast Std	
206-6378	Pontiac V-8 All .500/.501 LH Std	



### **Distributor Gear Checking Fixture**

Straub Tech offers a checking fixture for distributor gear to cam gear engagement. This clearance is critical for proper ignition timing. The use of this fixture will ensure you have OEM Blueprint spec engagement which will give you improved ignition timing which results in more power. Developed in the 90's for the highest forms of circle track racing, these checking fixtures are a must for highly competitive classes. *These tools can be RENTED or PURCHASED from Straub Technologies*.



Part No.	Description
500-3500	Chevrolet Distributor Gear Checking Fixture SBC/BBC/V-6
500-3510	Ford Distributor Gear Checking Fixture Ford SB 302, 351W, 351C, BBF 460
500-8599	Distributor Setup Tool, 3-in-1, for Oil Pump Shaft Length/Slip Collar Position/Oil Pump Primer, Chevy, Each



### **Hydraulic Roller Lifters**

Morel first entered the racing lifters market in 1992. The plant is 100,000 square feet and has in-house heat treating with a full Metallurgical lab. The oven is a hermetically sealed unit using different gases for controlling the heat treatment quality. There are over 100 pieces of specialty equipment in the plant for making lifters and gears.

The plant was started by Ed Morel's uncle over 60 years ago. Ed has worked there over 30 years and bought the company 20 years ago. Ed is a graduate mechanical engineer. The plant manager is also a graduate mechanical engineer. Our designer is an engineer with 35 years of tool and die, plumbing, electrical, electronic, programming and hydraulic experience.

I am also a graduate mechanical engineer. I spent 20 years



with General Motors in the Pontiac Division, with the last 15 years heading up Ponitac Motorsports Engineering. I left Pontiac in 1986 and started Callies Crankshaft and sold it in 1994. I helped Joe Lunati build his company and sell it to Holley Corporation. Then, I started building performance cam cores with Camshaft Machine Company. We developed the three-pieces cam core using the Everwear Gear(tm), eliminating the cam gear to distributor wear issue.

Ed and I started getting serious about the lifter business in 1994. We developed lifter programs for Street Performance lifters through Professional Racing lifters. We continue development on new or current products every day. The business has grown to the point that I left Camshaft Machine in 2009 to concentrate with Morel to continue to bring innovative products to the racers.

*IMPORTANT: FOR HYDRAULIC LIFTERS TO FUNCTION CORRECTLY YOU MUST USE AN OIL WITH A CENTISTOKE RATING BELOW 15 AT 100C. IF NOT THE LIFTER MAY NOT FUNCTION CORRECTLY.* 

### **OEM Drop In Lifters**

Straub Tech's OEM suppliers allow us to sell UAW certified hydraulic roller lifters used for production vehicles in current and past applications. The following OEM Replacement lifters are also available in tray quantities.

Part No.	Application
HT2148	OEM SBC 87-98, LS 1997-2016
HT0735	OEM GM 604 Circle Track Crate Engines
HT2104	OEM Ford PowerStroke Diesels 6.0, 6.4, 7.3 GM 6.2 and 6.5 Diesels AMC Hummer





### **Street Hydraulic Performance Series**

The Street Performance hydraulic lifters are made from a cold formed body with a clipped axle and have 6500RPM capability. These lifters have .120" plunger travel and have an 80% fill rate with the test oil. The lifter wheels in this series are .700" diameter. *Recommended Spring Pressures: 100-180lbs Seat, 280-380lbs Open Pressure* 



#### Chevy - SB + LS - Hyd Street - Limited Travel

From the exterior, it is difficult to tell the difference between the 7790 Limited Travel lifter and similar lifters, like 7717, which are not Limited Travel. Therefore, the 7790 has a plated retaining clip, as a visual clue.

The retaining clip on the 7717 is not plated.



Make	Engine		BodyD	RollD	Pair#	Set#
Chevrolet	Small Block	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5371	5372
		RACE ONLY LIMITED TRAVEL HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	7796	7797
		RACE ONLY LIMITED TRAVEL HYD ROLLER (OEM DROP-IN)	0.842	0.700	7789	7790
		STREET PERFORMANCE HYD ROLLER (OEM DROP-IN)	0.842	0.700	7716	7717
		NOTE: .360" MAX LOBE LIFT & 1.445" MIN BASE CIRCLE ON OEM	DROP IN			
	LS	Use OEM lifter trays	0.842	0.700	7716	7717
		Tie Bar Fits 5 head bolt pattern	0.842	0.700	5289	5290
		LS RACE ONLY Limited Travel OEM Drop In	0.842	0.700	7789	7790
		RECOMMEND MAX CAM LIFT .360" MIN BC 1.445"				
		LS/LT Tie Bar RACE ONLY Limited Travel	0.842	0.700	7798	7799
		LS DOD Replacement NEW Design for LS/LT	0.842	0.700	7820	NA
		NOTE: Set has 8 DOD and 8 STD lifters				
		LT DOD Replacement Lifters NEW Design All 16 DOD	0.842	0.700	7728	7729
	Big Block	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5373	5374
		BBC .842D T/B STREET PERF HYD LIMITED TRAVEL (RACE ONLY)	0.842	0.700	7800	7801
	348-409	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5338	5339
		CHEVY .842D T/B STREET PERF HYD LIMITED TRAVEL (RACE ONLY)348-409 CU. IN V-8	0.842	0.700	7806	7807
АМС	304-401	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.903	0.700	6075	6076
		AMC .903D T/B STREET PERF HYD LIMITED TRAVEL (RACE ONLY) 304-401 CU IN V-8	0.903	0.700	7802	7803

Cadillac	425-472-500	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5330	5331
Buick	401-425-455	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5332	5333
	350 V-8	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5385	5386
	Turbo V6	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5392	5393
Oldsmobile	400-403-425-	May need to clearance OEM Intake Manifolds	0.842	0.700	5334	5335
	455	OLDS .842D T/B STREET PERF HYD LIMITED TRAVEL (RACE ONLY)	0.842	0.700	7804	7805
Holden	V8	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	5336	5337
Pontiac	400-421-428-	Oil band is in OEM location	0.842	0.700	5883	5884
	455	PONT .842D T/B STREET PERF HYD LIMITED TRAVEL (RACE ONLY) PONT 400-421-428-455 CU IN	0.842	0.700	7808	7809
Ford	SB Wind/Clev	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.875	0.700	5322	5323
		Limited Travel	0.875	0.700	5326	5327
	BB 429-460	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.875	0.700	5324	5325
	& FE	Limited Travel	0.875	0.700	5328	5329
Mopar	Mopar A	Fits Magnum Engines & Early LA Series Blocks	0.903	0.700	5320	5321
	Mopar B	Big Block	0.903	0.700	5318	5319
		MOPAR B .903D T/B STREET PERF HYD LIMITED TRAVEL (RACE ONLY)	0.903	0.700	7812	7813
	Mopar SB	MOPAR SB .903D STREET PERF HYD LIMITED TRAVEL (RACE ONLY) FITS MAGNUM ENGS AND EARLY LA SERIES BLOCKS	0.903	0.700	7810	7811
Chrysler	Viper V-10	STREET PERFORMANCE HYD ROLLER (TIE BAR PAIRS)	0.842	0.700	6437	6438



Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.



## **Pro Series Hydraulic**

These Performance hydraulic lifters are made from a billet body with a clipped axle and have 7000 RPM capability. The Pro Series have the larger .750" Diameter wheel with the full .120" of hydraulic plunger travel and an 80% fill with the factory test oil.



#### Recommended Spring Pressures: 100-220lbs Seat, 280-550lbs Open

**HLT** – The Limited Travel Lifters, also known as our HLT Series, is a clipped axle lifter with a minimal .015" to .030" of total plunger travel. Often used in sanctioned racing bodies requiring a Hydraulic lifter, but wanting to extend RPM range and performance. Due to short plunger travel and aggressive cam lobe profiles, there is some valve train noise that can typically be associated with this series of hydraulic. *Recommended Spring Pressures: 100-295lbs Seat, 295-750lbs Open Pressure* 

Make	Engine		BodyD	RollD	Pair#	Set#
Chevrolet	Crearly Dia als	Pro Series Hydraulic (Tie Bar Pairs)	0.842	0.750	4215	4602
	Small Block	Limited Travel	0.842	0.750	4792	4789
		Use OEM lifter trays	0.842	0.750	5912	4708
	LS	Limited Travel - Use OEM lifter trays	0.842	0.750	5913	4793
		Tie Bar - Fits 5 & 6 head bolt pattern	0.842	0.750	5205	5206
		Limited Travel - Tie Bar - Fits 5 & 6 head bolt pattern	0.842	0.750	5849	5850
	Die Die ek	Pro Series Hydraulic (Tie Bar Pairs)	0.842	0.750	4538	4603
	Big Block	Limited Travel	0.842	0.750	4794	4795
	348-409	Pro Series Hydraulic (Tie Bar Pairs)	0.842	0.750	6086	6087
Pontiac	400-421-428-455	Oil band is in OEM location	0.842	0.750	6397	6398



## **Hi RPM Series Hydraulic**

Morel's top of the line Hydraulic Roller, easily identified via the Polished Billet Body, clipped axle and open wheel, as seen in the photo.

These lifters have a 7000+ RPM capability with .120" plunger travel and an 80% fill rate with the test oil. The Hi-RPM hydraulic series utilizes a larger .750" sized roller wheel within the .842" & .875" diameter body.

The .903" diameter body lifter utilizes an .810" sized roller wheel with direct pressurized oil to the needles.

*Recommended Spring Pressures: Up to-220lbs Seat, Up to-650lbs Open Pressure* 



Make	Engine		BodyD	RollD	Pair#	Set#
		Hi RPM Series Hydraulic (Tie Bar Pairs)	0.842	0.750	5042	5044
	Small Block	Pressurized Oiling	0.903	0.810	5467	5468
		Tie Bar - Fits 5 & 6 head bolt pattern	0.842	0.750	5293	5294
Chevrolet	LS	Limited Travel - Tie Bar - Fits 5 & 6 head bolt pattern	0.842	0.750	7259	7260
Cnevrolet		Pressurized Oiling - Tie Bar - Fits 5 & 6 head bolt pattern	0.903	0.810	5471	5472
		Hi RPM Series Hydraulic (Tie Bar Pairs)	0.842	0.750	5043	5045
	Big Block	Limited Travel	0.842	0.750	7529	7530
		Pressurized Oiling	0.903	0.810	5469	5470
Pontiac	400-421-428-455	Oil band is in OEM location	0.842	0.750	6452	6451
		Hi RPM Series Hydraulic (Tie Bar Pairs)	0.875	0.750	5879	5879
	SB Wind/Clev	Limited Travel	0.875	0.750	7261	7262
Ford		Pressurized Oiling	0.903	0.810	6082	6083
		Hi RPM Series Hydraulic (Tie Bar Pairs)	0.875	0.750	5890	5891
	BB 429-460 & FE	Pressurized Oiling	0.903	0.810	6084	6085
	Manar	Fits Magnum Engines & Early LA Series Blocks	0.903	0.810	6071	6072
Chavelar	Mopar A	Limited Travel - Magnum Engines & Early LA Series Blocks	0.903	0.810	7357	7358
Chrysler	Manar	Hi RPM Series Hydraulic (Tie Bar Pairs)	0.903	0.810	6073	6074
	Mopar B	Limited Travel	0.903	0.810	7359	7360

## Installing and Adjusting Morel Hydraulic Lifters:

- 1. Do not wash in any solvent. Wipe the parts off with a lint free towel.
- 2. Use 10W30 oil and lube the O.D. of the body and wheel.
- 3. Make sure the lifter-to-bore clearance on cast iron blocks is: .0015" .0017".
  - On aluminum blocks that oil the lifter (LS Series), the clearance is: .0014" .0016".
  - Both of these measurements are at 70 Deg F.
  - The aluminum block will have a higher rate of expansion and that is why the clearance is tighter.

## Adjusting the Zero-lash setting of the Lifter:

- 1. I always like using the firing order to set the valves. Put the engine on #1 cylinder.
- 2. What we want is the int. and ex. to be on the base circle of the camshaft.
- **3.** Adjust the rocker until the push rod just starts to get tight while taking the pushrod and rolling it between your thumb and finger. Once you feel drag, this is what we call Zero-lash.
- 4. You are now ready to tighten down on the adjuster using the following method:
  - a. It is important to know the thread pitch, in threads per inch, of the adjuster nut, because one complete turn of the nut will move a distance of one complete thread. Therefore, verify the thread pitch of the adjuster nut, because racing rocker manufacturers use different nut sizes and thread pitches.
  - b. If your adjuster nut is 7/16 x 20 threads per inch, then divide 1 inch by 20 threads per inch. One complete turn down on a 7/16 by 20 adjuster nut will move .050".
  - c. Next, divide .050'' divide by 4 to calculate the distance for a quarter-turn of the adjuster nut (.050'' / 4 = .0125'').
  - d. For a 3/8 x 24 adjuster nut, the calculations are:
    - 1'' / 24 TPI = .042'' per full turn and .042'' / 4 = .0105'' per quarter-turn.
  - e. Use the chart below to determine how many quarter-turns to tighten the adjuster nut after Zero-lash:
    - Cast Iron block and Cast Iron Head = .020" .025"
    - Cast Iron block and Aluminum Head = .030" .035"
    - Aluminum block and Aluminum Head = .045" .050"
- 5. Repeat these adjustments for each cylinder running through the firing order.

©Copyright 2017 John Callies, Inc. All Rights Reserved.



## Adjusting Hydraulic Limited Travel (HLT) Lifters (REVISED) FOR RACE USE ONLY

These parts may require instructions and information not provided in this document. If you do not understand something, find a skilled automotive technician or engine machinist to assist you. We make a large variety of hydraulic lifters, please visit our website to be sure the correct lifters have been selected for your build. Instructions for these limited travel set numbers: 4789, 4795, 5327, 5329, 5850, 6402, 7530, 7790, 7797, 7803, 7805, 7807, 7809, 7811, 7813.

- 1. Do not wash in any solvent. Wipe parts with a lint free cloth.
- 2. Use 10W30 engine oil to lube O.D. of body and wheel. You can submerge them in a container of clean new engine oil.
- 3. Check O.D. of lifter-to-I.D. of lifter bore clearance. There is an Excel spreadsheet available for download on the John Callies, Inc. website that you can use to make your recording easier. Clearance on cast iron blocks is .0015"- .0017". Clearance on aluminum blocks is .0014"-.0016". Carefully note the decimal place, not thousandths, these are ten-thousandths. This clearance is measured at 70°F.

Aluminum blocks, having a higher rate of expansion, is the reason for less clearance.

Hydraulic Limited Travel Lifters are recommended only for race engines for classes limited to "hydraulic" lifters.

The amount of plunger travel is approximately .030".

We recommend setting be made while the lifter is all the way down (on the base circle of camshaft), adjust the rocker arm until the plunger in the lifter has "bottomed out" with a "feeler" gauge between the rocker arm and the valve. These are cold (70°F) setting instructions, so if you are using aluminum block and aluminum heads this minimum feeler gauge is .004", and the maximum gauge is .008". If you have iron block and aluminum heads the minimum gauge is .006", and the maximum gauge is .010". If you have iron block and iron heads, minimum gauge is .008", and the maximum gauge is .012".

Make sure to note, this is how far the plunger comes up from being at the lowest point of its travel, NOT clearance at the top of its travel.

This will be a challenge with non-adjustable valve trains, especially if there are any machining inconsistencies in the block or heads. With the selected pushrod length and rocker arms torqued to the correct spec and with the lifter on the base circle, make sure you attain the same *values as above*.

© Copyright 2023, John Callies, Inc., and Morel Products. All Rights Reserved.



## **Solid Roller Lifters**

Morel Motorsports first entered the racing lifter market in 1992, having been an OEM Supplier for now over 80 years. The 100,000 square foot plant is located in Cleveland Ohio USA. The engineering department has a full metallurgical lab onsite. A robust production facility houses over 100 pieces of specialty manufacturing equipment, including hermetically sealed heat treat ovens, which use different gases to control the heat treatment quality.

Morel's solid roller lifter first debuted in the Buick V-6 Indy Engine program. Today Morel's solid roller lifters are used in NASCAR, WoO, NHRA, Drag Week, and other multiple forms of professional and sportsman racing engines. The complete Morel solid roller line up runs from tie bar pairs to the ultimate keyway style lifters. From the .750" diameter wheels, to the huge .920" diameter wheel in the Top Fuel, Morel's solid roller lifters are housed in lifter bodies from .842" diameter to 1.00" diameter.



### **Solid Roller Lifters**

#### **Horizontal Tie Bar Series**

The Horizontal Mechanical lifters are made from a billet body with a clipped axle and have 7000 RPM capability. These lifters are limited to lobe lifts of no more than .375". They have a .750" diameter roller wheel.

Recommended Spring Pressure 150-275lbs Seat Pressure 400-700lbs Open Pressure

Make	Engine	BodyD	RollD	Pair#	Set#
Chevrolet	Small Block	0.842	0.750	4036	4601
	Big Block	0.842	0.750	4676	4677





## **Sportsman Series**

The Standard Mechanical lifters are made from a billet body with a clipped axle and have 7500 RPM capability. These lifters (4601, 4604, 5452, 4677, 4606, 4713, 5411, 4719, 4726, 4723& 4730) have a .750" diameter roller wheel.

Recommended Spring Pressure 150-275lbs Seat Pressure 400-700lbs Open Pressure

Make	Engine		BodyD	RollD	Pair#	Set#
Chevrolet	Small Block		0.842	0.750	4588	4604
	LS	Use OEM lifter trays	0.842	0.750	5911	4737
		T/B Fits 5 head bolt pattern	0.842	0.750	5451	5452
	Big Block		0.842	0.750	4591	4606
Ford	SB Windsor		0.875	0.750	4712	4713
	SB Cleveland		0.875	0.750	5412	5411
	BB 429-460		0.875	0.750	4718	4719
	FE		0.875	0.750	4725	4726
Chrysler	Mopar A		0.903	0.750	4722	4723
	Mopar B		0.903	0.750	4729	4730

#### **Sportsman Pro**

Just like the Sportsman Solid Roller lifters, the Sportsman Pro at made from a billet body, .750" wheel diameter, and clipped axle an have 7500 RPM capability. Additional features include EDM oilin circuit to needle bearings for direct lubrication to axle assembl reduction in mass of lifter, machined to accept all reduced base circl cams, and modified oiling groove to feed hole for positive oil flow t rockers. These lifters give the engine builder a very budget friend lifter for the street strip solid roller engine in GM, Ford, and Chrysle applications.

Recommended Spring Pressure 150-275lbs Seat Pressure 400-700lk Open Pressure

Make	Engine	BodyD	RollD	Pair#	Set#
Chevrolet	Small Block	0.842	0.750	6590	6591
	Big Block	0.842	0.750	6592	6593
	LS	0.842	0.750	7831	7832
Ford	SB 302-351W Cleveland 400M	0.875	0.750	7698	7699
	BB 460 and FE Ford 352-428	0.875	0.750	7702	7703

### Sportsman Pro Oil Flow Diagram

The milled notch allows oil flow

on small base circle cams.







#### **Ultra Pro Series**

The Ultra Pro (U/P) Mechanical lifters are made from a billet body with a clipped axle and have 8000 + RPM capability. Additional features include EDM oiling circuit to needle bearings for direct lubrication to axle assembly, reduction in mass of lifter, machined to accept all reduced base circle cams, and modified oiling groove to feed hole for positive oil flow to rockers. The .842" & .875" diameter lifters in this series have a .750" diameter roller wheel. The .903" diameter lifters have a .810" diameter roller wheel and the .936" diameter lifters have a .850" diameter wheel.

Recommended Spring Pressure 250-350lbs Seat Pressure 600-850lbs Open Pressure

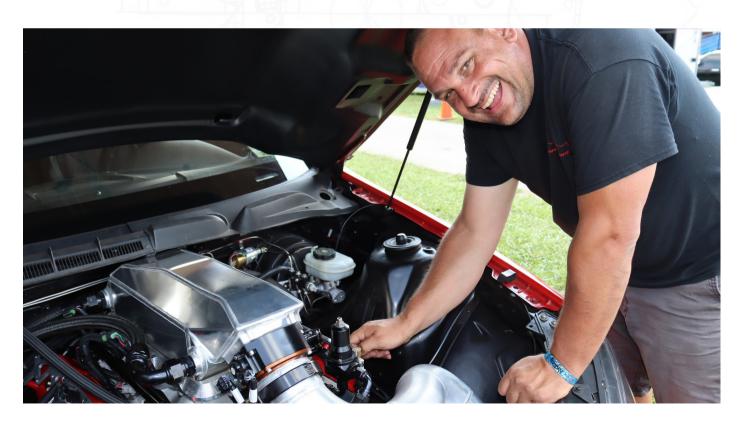
Make	Engine		BodyD	RollD	Pair#	Set#
Chevrolet	Small Block	On Center	0.842	0.750	4842	4843
		.180" L&R INT Offset	0.842	0.750	4836L/37R	4838
		.180″ INT & EXH Offset	0.842	0.750	6189	6190
		.180" Double Left Offset	0.842	0.750	6640	6641
		.180" Left INT Offset	0.842	0.750	5920	4914
		On Center	0.875	0.750	5918	5919
		.180" L&R INT Offset	0.875	0.750	5909L/08R	5910
		On Center	0.903	0.810	4866	4867
		.180" L&R INT Offset	0.903	0.810	4870L/71R	4872
		.180" INT & EXH Offset	0.903	0.810	6191	6192
		.180" Left INT Offset	0.903	0.810	4870	4989
		On Center	0.936	0.850	4876	4877
		.180" L&R INT Offset	0.936	0.850	4880L/81R	4882
	LS	On Center - T/B	0.842	0.750	5424	5425
		On Center - T/B	0.903	0.810	5427	5428
		.180" Left INT Offset - T/B	0.903	0.810	5432	5457
		.180″ INT & EXH Offset - T/B	0.903	0.810	5430L/32R	6356



Production run start at 10 camshaft per part number. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.



	Big Block	On Center	0.842	0.750	4844	4845
		.180″ L&R INT Offset	0.842	0.750	4839L/40R	4841
		.180″ L&R INT Offset	0.875	0.750	7279L/80R	7281
		On Center	0.903	0.810	4868	4869
		.180″ L&R INT Offset	0.903	0.810	4873L/74R	4875
		.180″ Right INT Offset	0.903	0.810	6047	6048
		.180″ INT & EXH Offset	0.903	0.810	6360	6361
		On Center	0.936	0.850	4878	4879
		.180″ L&R INT Offset	0.936	0.850	4883L/84R	4885
Pontiac	400-421-428-455	On Center	0.842	0.750	7480	7481
Ford	SB Windsor	On Center	0.875	0.750	5435	5436
		.180″ Right INT Offset	0.875	0.750	5556	5557
		.180″ INT & EXH Offset	0.875	0.750	7145	7146
	SB Cleveland	On Center	0.875	0.750	5439	5440
	Small Block	On Center	0.903	0.810	5489	5490
		.180″ Right INT Offset	0.903	0.810	5487	5488
	BB 429-460	On Center	0.875	0.750	5455	5456
		On Center	0.903	0.810	5504	5505
		.180″ Right INT Offset	0.903	0.810	5507	5506
	FE	On Center	0.875	0.750	5453	5454





### **Black Mamba Series**

The Black Mamba Mechanical lifters are made from a billet body with a pinned axle and have 9000 + RPM capability. The Black Mamba's have an axle diameter of .470" with full time pressurized oiling. The Black Mamba series has Diamond-Like Coating (DLC) for less friction and wear durability. This series is recommended for all aluminum block applications that do not have lifter bore bushings. The Mamba Lite's body is polished to an RA finish to give it a mirror like finish to reduce friction. This series is recommended for any block material type. These lifters have a .750" diameter roller wheel. These lifters have a special break-in lube between the axle and roller wheel and should not be washed with solvent prior to installation.



These lifters also require a break-in period of 25-30 minutes varying the RPM from 1800-2200 RPM.

Recommended Spring Pressure 150-400lbs Seat Pressure 550-1000lbs Open Pressure

Make	Engine		BodyD	RollD	Pair#	Set#
Chevrolet	Small Block	On Center	0.842	0.750	6474	6475
		.150" L&R INT Offset	0.842	0.750	6476L/77R	6478
		.150″ INT & EXH Offset	0.842	0.750	6479	6480
		.150" Left INT Offset	0.842	0.750	6476	6481
		On Center	0.875	0.750	6700	6714
		.180" L&R INT Offset	0.875	0.750	6704L/05R	6706
		On Center	0.903	0.810	6650	6651
		.180" L&R INT Offset	0.903	0.810	6652L/53R	6654
		.180″ INT & EXH Offset	0.903	0.810	6655	6656
		.180" Left INT Offset	0.903	0.810	6652	6657
	LS	On Center	0.842	0.750	6482	6483
		.150" Left INT Offset	0.842	0.750	6484	6485
		.150″ INT & EXH Offset	0.842	0.750	6486	6487
		On Center	0.903	0.810	6658	6659
		.180" Left INT Offset	0.903	0.810	6660	6661
		.180″ Right INT Offset	0.903	0.810	7390	7391
	Big Block	On Center	0.842	0.750	6488	6489
		.150" L&R INT Offset	0.842	0.750	6490L/91R	6492
		.150″ INT & EXH Offset	0.842	0.750	6493	6494
		On Center	0.903	0.810	6662	6663
		.180″ L&R INT Offset	0.903	0.810	6664L/65R	6666
		.180″ Right INT Offset	0.903	0.810	6665	6667
		.180″ INT & EXH Offset	0.903	0.810	6668	6669
	348-409	On Center	0.842	0.750	6495	6496



Pontiac	400-421-428-455	On Center	0.842	0.750	6497	6498
		.150″ L&R INT Offset	7147L/48R	7149		
		On Center	0.903	0.810	6670	6671
Ford	SB WIndsor	On Center	0.875	0.750	6536	6537
		.150″ Right INT Offset	0.875	0.750	6540	6541
		.150″ INT & EXH Offset	0.875	0.750	6542	6543
		On Center	0.903	0.810	6672	6673
		.180″ Right INT Offset		0.810	6674	6675
		.180″ INT & EXH Offset	0.903	0.810	6676	6677
	SB Cleveland	On Center		0.750	6538	6539
	Big Block	On Center	0.875	0.750	6544	6545
		On Center	0.903	0.810	6678	6679
		.180″ Right INT Offset	0.903	0.810	6680	6681
	FE	On Center	0.875	0.750	6546	6547
		.180″ INT & EXH Offset	0.875		6767	6768
Chrysler	Mopar A	On Center	0.903	0.810	6682	6683
	Mopar B	On Center	0.903	0.810	6684	6685
		.180″ L&R INT Offset	0.903	0.810	6686L/87R	6688

#### **Black Mamba Lite**

The Mamba Lites Mechanical lifters are made from a billet body with a pinned axle and have 9000 + RPM capability. The Mamba's have an axle diameter of .470" with full time pressurized oiling. They have a highly polished body for less friction and wear durability. These lifters have a .750" diameter roller wheel. These lifters have a special break-in lube between the axle and roller wheel and should not be washed with solvent prior to installation. These lifters also require a breakin period of 25-30 minutes varying the RPM from 1800-2200 RPM. *Recommended Spring Pressure 150-400lbs Seat Pressure 550-1000lbs Open Pressure* 



Make	Engine		BodyD	RollD	Pair#	Set#
Chevrolet	Small Block	On Center	0.842	0.750	6689	6690
		.150" L&R INT Offset	0.842	0.750	6691L/92R	6693
		.150″ INT & EXH Offset	0.842	0.750	6694	6695
		.150" Left INT Offset	0.842	0.750	6696	6697
		On Center	0.875	0.750	6698	6699
		.180" L&R INT Offset	0.875	0.750	6701L/02R	6703
		On Center	0.903	0.810	6707	6708
		.180" L&R INT Offset	0.903	0.810	6709L/10R	6711
		.180" INT & EXH Offset	0.903	0.810	6712	6713
		.180" Left INT Offset	0.903	0.810	6709	6715

Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are turque to yield and are designed to be forqued one time. Reusing these fasteners can cause pre mature failure.

## Black Mamba Lite (Cont.)

Make	Engine		BodyD	RollD	Pair#	Set#
	LS	On Center	0.842	0.750	6716	6717
		.150" Left INT Offset	0.842	0.750	6718	6719
		.150″ INT & EXH Offset	0.842	0.750	6720	6721
		On Center	0.903	0.810	6722	6723
		.180" Left INT Offset	0.903	0.810	6724	6725
	Big Block	On Center	0.842	0.750	6726	6727
		.150″ L&R INT Offset	0.842	0.750	6728L/29R	6730
		.150″ INT & EXH Offset	0.842	0.750	6731	6732
		On Center	0.903	0.810	6733	6734
		.180″ L&R INT Offset	0.903	0.810	6735L/36R	6737
		.180″ Right INT Offset	0.903	0.810	6736	6738
		.180″ INT & EXH Offset	0.903	0.810	6739	6740
	348-409	On Center	0.842	0.750	6741	6742
Pontiac	400-421-428-455	On Center	0.842	0.750	6745	6746
		On Center	0.903	0.810	6743	6744
Ford	Small Block	On Center	0.875	0.750	6747	6748
		On Center	0.875	0.750	6749	6750
		.150″ Right INT Offset	0.875	0.750	6751	6752
		.150″ INT & EXH Offset	0.875	0.750	6753	6754
		On Center	0.903	0.810	6755	6756
		.180″ Right INT Offset	0.903	0.810	6757	6758
		.180″ INT & EXH Offset	0.903	0.810	6759	6760
	Big Block	On Center	0.875	0.750	6761	6762
		On Center	0.903	0.810	6769	6770
		.180″ Right INT Offset	0.903	0.810	6771	6772
	FE	On Center	0.875	0.750	6763	6764
		.180″ INT & EXH Offset	0.875	0.750	6765	6766
Chrysler	Mopar A	On Center	0.903	0.810	6773	6774
	Mopar B	On Center	0.903	0.810	6775	6776
		.180″ L&R INT Offset	0.903	0.810	6777L/78R	6779



### **Top Fuel and Top Alcohol Solid Roller Lifters**

The Top Fuel and Top Alcohol Mechanical lifters are made from a billet body with a pinned axle and have 9000 + RPM capability. This series of lifter have become the go to lifter for these engines. The Top Fuel and Top Alcohol body is polished to an RA finish to give it a mirror like finish to reduce friction. These lifter have NO PUSHROD OILING. These lifters have a .810 and a .920" diameter roller wheel.



Recommended Spring Pressure 250+ Seat Pressure 1000lbs+ Open Pressure

5446	5445	0.903	0.810	CHRY .903D T/B TOP ALCOHOL 2.000 BORE SPACE				
(NO PUSHROD OILING)								
6647     6646     0.903     0.810     CHRY .903D T/B (STOCK 426 HEMI BLOCK 1.800 BORE SPACE)								
(NO PUSHRO	D OILING)							
<b>4849 4551</b> 1.000 0.920 CHRY TOP FUEL 1.000 SINGLE ROLLER BOTH SIDES								
(NO PUSHROD OILING)								
			NUMP AS IN					





Set 5446 Set contains 8 pairs joined by Vertical Tie Bars O/C Pair 5445 Chry - Mech - Prof Racing





### **Morel Keyway Lifters**

Morel Keyway lifters were developed for the NASCAR teams over 2 decades ago. The DLC coated bodies are fitted with an indexed keyway pin that rides milled slot in a lifter bushing. This design provides precise cam/roller alignment and eliminates the added weight of tie bars or tall lifter bodies. Morel Keyway lifters are available in .936" body diameter and feature a robust .850" roller wheel diameter. Axle assemblies are available in needle bearing or the Mamba technology. The NASCAR lifters have removeable pushrod seats allowing for lash adjustment. Keyway lifters require special engine block machine work to install the keyway bushings. CNC Block Works located at Straub Technologies features a 4 Axis Rottler F69A for full block machining and installation of keyway lifters. Call for a Labor quote



Small Block	Chevy	15	$\cup$				
6563	6553	0.936	0.850	BLACK MAMBA SBC .936D KEYED P/O O/C DLC			
6564	6553/6555	0.936	0.850	BLACK MAMBA SBC .936D KEYED P/O (8 EX O/C, 8 .180 L & R INT O/S) DLC			
7815	7814	0.936	0.850	BLACK MAMBA SBC .936D KEYED P/O (ALL OFFSET LIFTERS)			
<b>Big Block C</b>	hevy						
6568	6567	0.936	0.850	BLACK MAMBA BBC .936D KEYED P/O O/C DLC			
6580	6567/6579	0.936	0.850	BLACK MAMBA BBC .936D KEYED P/O (8 EX O/C, 8 .180 L & R INT O/S) DLC			
Small Block	Ford						
NASCAR							
7755	7446	0.936	0.850	RO-7 .936D KEYWAY P/O NASCAR DLC COATED			
FULL TIME OILIN	IG FIXED SEAT U	JSE KEY 74	47				
7754	<b>7754 7753</b> 0.936 0.850 RO-7 .936D KEYWAY P/O NASCAR DLC COATED						
USES NEW AXLE	USES NEW AXLE CLIP AND NEW SEAT FOR CLIP						
7822	7821	0.936	0.850	NEW RO-7 .936D KEYWAY P/O NASCAR DLC COATED			
USES NEW AXLE	USES NEW AXLE CLIP AND NEW SEAT FOR CLIP, ADDED MATERIAL TO STRENGTHEN LEGS						







### **VEPR 18° SBC Double Hump Head**

Introducing, the VEPR 18° SBC "Double Hump" head! We have brought the "twin humps" legend back to its former glory as a bolt-on **SBC head capable of producing over 700hp, OFF THE SHELF!** 

The VEPR 18DH was designed to give the performance SBC guy a cylinder head option that will make the power of modern-day GM engines, **but do it with a gen-one Mouse!** 

The VEPR 18DH is designed to feed a wide range of SBC engine combinations throughout a given RPM range. The trend, over the last 10 years, has been big-cube small blocks. This head is perfect for 3.875" and 4" stroke SBC engine combinations and for the customer that wants a **650HP+ small block Chevy!** 

These heads, as-cast, are 237cc and come with a 2.165" intake valve and 1.6" exhaust valve inside the 70cc combustion chamber. The head is a 40/60 valve location and uses 23° valvetrain components. It requires a .150" offset, stud-mount rocker on the intake valves and an on-center rocker arm on the exhaust valves. The intake flange is factory GM spec at 5°, making these heads compatible with all GM intake manifolds. The exhaust side of the heads feature D-shaped exhaust ports and has dual bolt-patterns for the standard SBC header flange and the Stahl pattern as well. These heads use standard port locations.

Specifications:						
Valve Angle:	18°					
Flat Milling:	.0055″ per CC					
Intake Runner Volume:	237cc					
Combustion Chamber CC:	70cc as-cast					
Valve Spacing:	40/60					

Valve Stem Seal Size:	.560″ x .341
Intake Face Angle:	5°
Lifters:	Standard on-center
Rocker Arms:	Stud-mount w/.150" offset intake and std exhaust
Angle Milling:	.0065" per CC







## **VEPR 18° SBC Double Hump Head Specifications**



MAYHEM 18 DEG "VEPR CAST"					
LIFT	INTAKE	EXHAUST			
.200	140	116			
.300	204	152			
.400	258	194			
.500	297	219			
.600	318	231			
.700	322	242			
.800	330	247			
MAYHEM 18 DEG "VEPR CNC"					
LIFT	INTAKE	EXHAUST			
.200	136	120			
.300	206	156			
.400	261	198			
.500	297	222			
.600	324	232			
.700	336	247			
.800	345	264			
900	349				



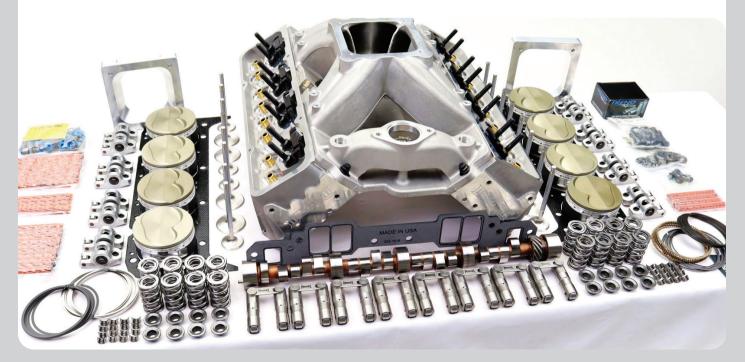
## **Shaft Rockers for Mayhem**

Part No.	Description	
350-2053	Shaft Rocker System for Mayhem 18 Degree Head Offset left and Right Intake Rockers, On Center Exhaust	1.6 Ratio
350-2055	Shaft Rocker System for Mayhem 18 Degree Head Offset left and Right Intake Rockers, On Center Exhaust	1.7 Ratio



Pushrod Holes:	Clearance for up to 3/8" diameter			
Exhaust Runner Volume:	80cc(Confirm this)			
Intake Valve Size:	2.150″ x .341″			
Exhaust Valve Size:	1.60″ x .341″			
Valve Guide Material:	Manganese Bronze			
Valve Seat Material:	Ductile Iron			
Spring Pocket Diameter:	1.550, can be cut to 1.625" no larger			
Head Weight:	(?)			
Cylinder Heads:				
Bare pair of as-cast heads w/ seats and guides installed:	350-1800			
Bare pair of porter's-casting w/no seats and guides:	350-1800P			

Components:	
Intake Manifold	350-1805
Intake Valve	151-2155
Exhaust Valve	150-1160
Head Studs	350-1838 (New) 234- 4727
Rocker Studs	100-2282
Guide Plates 5/16	350-2516 (New)
Guide Plates 3/8"	350-3516 (New)
Intake Gasket	352-1818
Header Gasket	354-9406
Valve Cover Gasket	357-1628
Rocker Arm Set 1.6	18600-16 (New)
Stud Girdle 7/16"	350-1876 (New)
Spark Plugs	NGK5671A-9 Alcohol/E85
NGK5671A-8 Race Gas	NGK5671A-6 Pump Gas

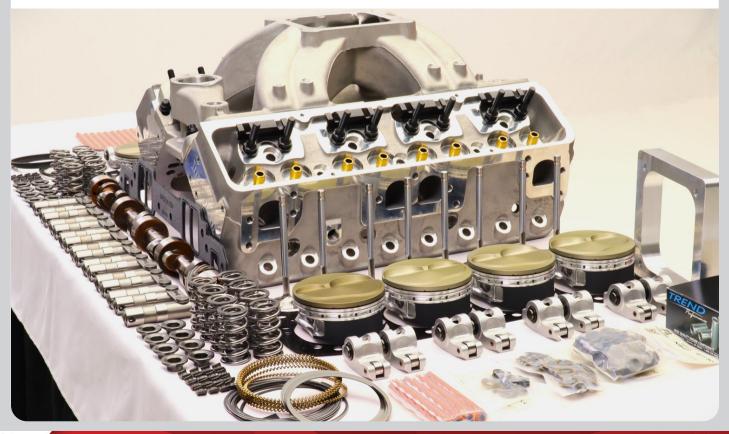






Complete Packages:				
Pump Gas Hydraulic Roller 650HP Build				
3.75 Stroke	383-8370			
3.875 Stroke	421-8380			
4.00 Stroke	434-8400			
Pump Gas Hydraulic Roller 700HP build				
3.75 Stroke	383-8371			
3.875 Stroke	421-8381			
4.00 Stroke	434-8401			
Pump Gas Solid Roller 675HP Build				
3.75 Stroke	383-8372			
3.875 Stroke	421-8382			

4.00 Stroke	434-8402			
Pump Gas Solid Roller 725HP Build				
3.75 Stroke	383-8373			
3.875 Stroke	421-8383			
4.00 Stroke	434-8403			
Compression Race Gas or E85 Solid Roller Build 750+				
3.75 Stroke	383-8374			
3.875 Stroke	421-8384			
4.00 Stroke	434-8404			





#### **Stainless Steel Super-Loy Valves**

Straub Tech Stainless valves are designed for high RPM engines using aggressive roller cams of today. Each valve is forged from 21-4N stainless and chemically quenched for increased tensile and yield strength. The forging is machined on CNC Lathes to exacting tolerances holding concentricity to .0002". Each valve is hard chromed to prevent premature wear in the valve guide. These valves can be used in both iron and manganese guides.



Part No.	Diameter	Length	Stem Dia.	Install Height	Tip Length	Angle/Radius
SB Chevy Valves						
Exhaust						
150-0909	1.500″	4.930″	.341"	Stock	.250″	12/.500
150-1313	1.590″	4.930″	.341″	Stock	.250″	12/.500
150-1160	1.600″	5.250″	.341" +.350 for Mayhem 18		.250″	12/500
150-11931	1.600″	5.010″	.341" +.100" Inconel		.250″	15/500
150-6779	1.500″	4.930″	.3415″	Stock	.250″	15 / .500
150-6786	1.600″	4.930″	.3415″	Stock	.250″	15 / .500
150-6782	1.600″	5.010″	.3415″	+.100"	.250″	15 / .500
150-6785	1.600″	5.010″	.3415″	+.100"	.250″	21 /.500
Intake						
151-1743	1.940″	4.930″	.341″	Stock	.250″	10/.375
151-2155	2.150″	5.250″	.341"+.350 for Mayhem 18		.250″	10/375
151-5331	2.000″	4.930″	.341″	Stock	.250″	10/.375
151-6121	1.940″	4.930″	.3415″	Stock	.250″	10/.375
151-6114	2.020″	4.930″	.3415″	Stock	.250″	10/.375
151-6126	2.020″	5.010″	.3415″	+.100"	.250″	10/.375
151-6128	2.055″	5.010″	.3415″	+.100″	.250″	10/.375
151-6130	2.080″	5.010″	.3415″	+.100″	.250″	10 / .375





## Valves

Part No.	Diameter	Length	Stem Dia.	Install Height	Tip Length	Angle/ Radius
LS1/LS2/LS	3/LS7					
Exhaust						
160-6350	1.570″	4.930″	8.0mm	Stock	.160″	25 / .375
160-6352	1.600″	4.930″	8.0mm	Stock	.160″	25 / .375
160-1100	1.600″	4.930″	8.0mm	Stock	.160″	24 / .500
		^			•	^
Intake						
161-1120	2.020″	4.930″	8.0mm	Stock	.160″	12 / .295
161-6301	2.020″	4.930″	8.0mm	Stock	.160″	10/.295
161-1121	2.041″	4.900″	8.0mm	Stock	.160″	12 / .295
161-6303	2.055″	4.900″	8.0mm	Stock	.160″	10/.295
161-1122	2.080″	4.900″	8.0mm	Stock	.160″	12 / .295
161-6305	2.080″	4.900″	8.0mm	Stock	.160″	10/.295
161-6318	2.165″	4.900″	8.0mm	Stock	.160″	10/.295
161-6319	2.180″	4.900″	8.0mm	Stock	.160″	10/.295
BBC						
Exhaust						
170-2404	1.880″	5.425″	.341	Stock	.250″	16 / .500
170-2405	1.880	5.450	.341	Stock	.250″	16 / .500
170-2412	1.900	5.450	.341	Stock	.250″	16 / .500
170-2410	1.880	5.540	.341	+.175″	.250″	16/.500
170-2408	1.900″	5.540	.341	+.175″	.250″	16/.500
170-2411	1.880	5.485	.341	+.100″	.250″	16/.500
Intake						
171-2421	2.190″	5.300″	.341″	Stock	.250″	12/375
171-2422	2.250	5.300	.341	Stock	.250″	12/375
171-2423	2.250	5.350	.341	+.100″	.250″	12/375
171-2424	2.250	5.500	.341	+.250	.250″	12/375
171-2425	2.300	5.350	.341	+.100	.250″	12/375
171-2427	2.300	5.500″	.341	+.250	.250″	12/375
171-2428	2.300	5.560	.341	+.300	.250″	12/375
171-2429	2.300	5.620″	.341	+.375	.250″	12/375
171-2430	2.325	5.620″	.341	+.375	.250″	12/375
171-2431	2.350	5.620″	.341	+.375	.250″	12/375





# **Roller Cam Bearings**

Our USA made Roller cam bearings are designed for 50/55/and 60 Roller cam cores. Cam bearings are sold as EACH not in sets.

Part No.	Cam Journal Size	Bearing OD	<b>Bearing Width</b>
100-5020	50MM	2.285″	.787″
100-5520	55MM	2.483″	.787″
100-5528	55MM	2.483″	1.102″
100-6012	60MM	2.677″	.472″
100-6020	60MM	2.677″	.787″





#### **55MM Cam Bearings**

Straub Tech Babbit Bearing made with 1 hole and a groove for better Control of Oil flow. The bearing is also designed to retro fit in the housing bore of a 50MM Roller bearing. Bearing OD 2.288"

2	Part No.	Description
5	GM-55-T1	55MM Cam bearings Coated 1 Set
	GM-55-1	55MM Cam bearings 1 set

# **High Performance Coated Cam Bearings**

The High-Performance all-round cam bearings offer more than double the fatigue strength of conventional bearings, withstand racing spring loads, and maintain the excellent surface characteristics of Babbitt.



Part No.	Block Type	Housing	Notes Bore	
DT-1T	Dart Little M/ SHP Blocks	2.00″	OD Groove with 3 Holes clocked at 120 degrees	
DT-1TR1	Dart Little M/ SHP Blocks	2.00″	OD Groove with 3 Holes clocked at 120 degrees / +.010" OD	
GMP-2T	Dart BB Iron Eagle	2.120″	OD Groove with 3 Holes clocked at 120 degrees	
GMP-12LT	Dart Big M Block	2.120″	OD Groove with 3 Holes clocked at 120 degrees	
GMP-3T	GM Bowtie Block	2.125″	OD Groove with 1 hole	
GMP-9T	GM LSX Block		OD Groove with 1 hole LSX GM Block Only	
RDCP-1T	Brodix/Rodeck	2.00″	OD Groove with 3 holes Clocked 120 degrees Rodeck Block	
SBF-1R1T	Dart Ford/SVO Block	2.204″	OD Groove with 3 Holes clocked at 120 degrees	

# STRAUB ECHNOLOGIES

#### **Bronze Valve Guides**

Our Bronze guides are made from Manganese Bronze alloy. They are fully machined in South America by one of the leading valvetrain component OE suppliers. Guides are sold each. Quantity discounts are available

Part No.	OA Length	Height Installed	Seal Size	OD Step/Guide	ID
900-5312	2.100″	.660″	.530″	.560"/ .502"	.342″
900-0350	2.125″	.660″	.530″	.560"/.502"	.342″
900-0355	2.125″	.660″	.530″	.560"/.507"*	.342″
900-0360	2.100″	.620″	.530″	.560"/.545"**	.342″
900-5547	2.350″	.620″	.530″	.560″/.502″	.342″
900-5629	2.125″	.625″	.530″	.560″/.502″	.342″
131-1806	2.200″	.630″	.530″	.560"/.502"	.316″
131-0384	2.100″	.700″	.530″	.560"/.502"	.316″

Part No.	OA Length	Height Installed	Seal Size	OD Step/Guide	ID
900-5006	2.375	NA.	502	NA /.502″	.342
900-5009	2.375	NA	.502	NA / .502″	.372″



\*Oversize body for worn out heads \*\*For Brodix heads



## 2000 and 2.300cc Ford Valvetrain

Ford 4 cylinder racing has been a part of Straub Tech since the beginnings. We have supplied multiple companies with cams and valvetrain for the these dominant powerplants of the circle tracks. Our Mechanical Adjuster Conversion kit comes with 100% USA made adjusters and sleeves to convert an 2.3 head to solid flat or solid roller application. These are sold as a full set of 8 for a complete engine

Our followers are made by the OEM supplier and feature a special heat treated foot area for greater endurance. These are 100% USA made

Part No.	Application
900-5228	Mechanical Adjuster Kit for 2300cc Ford Engines. Set of 8
140-8100	2300" Camshaft Follower. Set of 8

# **Camshaft Thrust plates**

Our thrust plates are designed to retain camshaft in OEM and aftermarket blocks. They come with all necessary hardware for mounting.

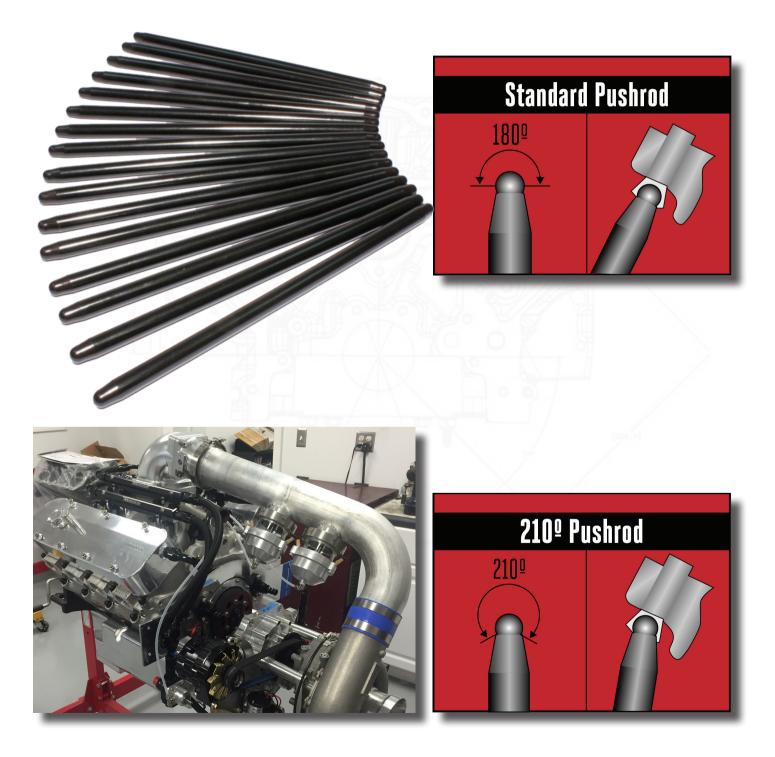
Part No.	Description
350-1053	GM Cam Retaining Plate for All late model SBC and BBC Engines. Comes with Hardware. Can be used on GM Mark 4 BBC blocks with block mods
302-7820	Fits all SB Ford 302-351W. Comes with countersunk hardware
346-9016P	LS Cam plate with oil retention grooves. Developed by RYRE to prevent premature wear on cam plate





#### **Straub Tech One Piece Pushrods**

Straub Tech one piece pushrods offer the performance engine builder what he needs, when he needs it. Pushrod length is critical for both engine performance and engine longevity, as it is the key component in valvetrain geometry.





# **Straub Tech One Piece Pushrods**

We offer a custom one piece pushrod program that features multiple diameters, wall thicknesses, and radius ends of 180 or 210 degrees. The 210 radius must be used with shaft rocker arms to avoid interference with adjuster cup. It can be used with stud rockers also. All pushrods are available in .050" increments in length.

All pushrods are manufactured here in the USA from seamless chrome moly tubing. We can supply from 1 pushrod to 1000 pushrods depending on your needs.

1					
Part No.	Diameter	Wall Thickness	Туре		
All 5/16" pushrods are available from 6" to 10" long in .050" increments.					
581-(Length)	5/16″	.083″	Guideplate compatible		
581S-(Length)	5/16″	.083″	210 Radius Shaft Rocker Guideplate compatible		
581R-(Length)	5/16″	.083″	.040 Oil Restrictor Guideplate compatible		
5116-(Length)	5/16″	.116″	210 Radius Guideplate compatible		
All 3/8" pushrods are	available from 7"	to 11″ long in .050″ in	crements.		
381-(Length)	3/8″	.083″	Guideplate compatible		
381S-(Length)	3/8″	.083″	210 Radius Shaft Rocker Guideplate compatible		
381R-(Length)	3/8″	.083″	.040 Oil Restrictor Guideplate compatible		
3121S-(Length)	3/8″	.120″	210 Radius Shaft Rocker Guideplate compatible		
3141S-(Length)	3/8″	.145″	210 Radius Shaft Rocker Guideplate compatible		
7/16" Pushrods are a	vailable from 7" to	0 12″ long in .050″ incr	ements		
791GP-(Length)	7/16″	.095″	Guideplate compatible		
791S-(Length)	7/16″	.095″	210 Radius Shaft Rocker NOT Guideplate compatible		
7121GP-(Length)	7/16″	.120″	Guideplate compatible		
7121S-(Length)	7/16″	.120″	210 Radius Shaft Rocker NOT Guideplate compatible		
7161GP-(Length)	7/16″	.165″	Guideplate compatible		
*Note all pushrods are	laser etched with l	ength and wall thicknes	SS		

## **Pushrods Length Checking Tool**

A must for getting your geometry right in your engine. 100% USA made, this adjustable pushrod is just what you need to obtain proper valvetrain geometry.

Part No.	Description
900-6195	One each of the 3 sizes.





# **Rocker Arms**

#### Aluminum Stud Mount Rockers

With the advancement of cylinder heads over the last 20 years, valvetrain geometry has changed dramatically. For most performance builds, a stud mount rocker serves the purpose and meets budget requirements. The issue is with most stud mount rocker designs, they were based on OEM heads with OEM valve lengths and camshaft lift profiles around .600". Modern day aftermarket heads used much longer valves and the average camshaft is in the .650" range. This changes the "Geometry" of the rocker needed to correctly give the engine the valvetrain geometry it requires. Enlisting long time rocker mfg Harland Sharp, Straub Technologies set out to design a rocker to work with in a range of longer valves and camshaft lifts to fit today's aftermarket heads. The results are



our line of 100% USA made aluminum rockers available in SBC, BBC, and Ford Cleveland. Applications will grow as cylinder mfg come to use for rocker design. These rockers come with a Limited Lifetime Warranty against body breakage.

Engine	Part No.	Cylinder Head Mfg	<b>Rocker Ratio</b>	Rocker Stud Size
SB Chevy	11600	23 Degree AFR/Brodix/Edelbrock	1.6 Ratio	7/16″
SB Chevy	11600R-150	VEPR 18 Double Hump Head Right Offset .150"	1.6 Ratio	7/16″
SB Chevy	11600L-150	VEPR 18 Double Hump Head Left Offset .150″	1.6 Ratio	7/16″
SB Chevy	18600	VEPR 18 Dbl Hump Head 4 Left/4 Right .150" Set 8 straight	1.6 Ratio	7/16″
BB Chevy	13750E	BBC Exhaust Ports AFR/Brodix/ProMaxx	1.7 Ratio	7/16″
BB Chevy	137501	BBC Intake Ports AFR/Brodix/ProMaxx	1.7 Ratio	7/16″
BB Chevy	137551	BBC Intake Ports AFR/Brodix/ProMaxx	1.8 Ratio	7/16″
SB Ford	86716	SB Ford AFR/DART/ProMaxx	1.6 Ratio	7/16″
351C Ford	371701	AFD Cleveland Ford Intake	1.7 Ratio	7/16″
351C Ford	351C Ford <b>37170E</b> AFD Cleveland Ford Exhaust		1.7 Ratio	7/16″
351C Ford	381701	CHI Cleveland Ford Intake	1.7 Ratio	7/16″
351C Ford	38170E	CHI Cleveland Ford Exhaust	1.7 Ratio	7/16″



# **Polylocks For Stud Girdles**

Our locks are 100% USA made. We use alloy steel the form 12 Point head on our locks. The diameter of the area for clamping is .750" and the area to go in the rocker for 7/16" is .600". The 3/8" lock has a .550" step at the bottom to fit some rocker arm manufactures plunge cut trunnions. Locks are finished with black oxide and come with set screws.

Part No.	Description
100-0038	12pt 2.100" for 3/8" Rocker Stud. Fits all V-8 engines
100-0716	12pt 2.100" for 7/16" Rocker Stud. Fits all V-8 engines
101-0716	12 pt 2.600" for 7/16" Rocker Stud. Fits BBC Intake



# **Shaft Rockers**

With a focus on rocker geometry, Straub Technologies has designed a shaft rocker system for BB Chevy and our VEPR LS3 12X aftermarket heads. Again, working with Harland Sharp, we are able to provide a 100% USA made shaft rocker system for an affordable price. This system was engineered for performance and endurance and has survived the torture of Drag Week in a 7 second ride. Each shaft rocker system comes complete with intake and exhaust rockers, shim kit, and adjusters compatible with tool steel tip pushrods.

System comes complete with intake and exhaust rockers, shim kit, and adjusters compatible with tool steel tip pushrods.



Engine	Part No.	Cylinder Head Mfg	Rocker Ratio
BB Chevy	23750	AFR/Dart/ProMaxx	1.7 /1.7 ratio
BB Chevy	23850	AFR/Dart/ProMaxx	1.8 /1.7 Split ratio
LS3	34617	Straub VEPR12X	1.7/1.7 Ratio
LS3	34618	Straub VEPR12X	1.8/1.8 Ratio
SBC	38170	Straub Mayhem 18DH Head	1.7/1.7 Ratio

#### **Shaft Rockers for Mayhem**

Part No.	Description	
350-2053	18 Degree Head Offset left and Right Intake Rockers, On Center Exhaust	1.6 Ratio
350-2055	18 Degree Head Offset left and Right Intake Rockers, On Center Exhaust	1.7 Ratio

# **Stud Girdles**

Stud girdle valvetrain stabilizers are a must have when using any aluminum cylinder head or iron cylinder heads running high Rpm's. Besides preventing bent or broken rocker arm studs, they also prevent power loss due to variation in valve lash, camshaft lift, camshaft duration and valve timing. Mfg in the USA.



Engine	Part No.	Cylinder Head Mfg
SB Chevy	64200	All Std stud location 23 Degree
SB Chevy	1109	All AFR Eliminator Heads
SB Chevy	1107	All 40/60 Valve Spacing Heads (Including Mayhem)
BB Chevy	1113	BBC OEM Heads
BB Chevy	1114	BBC AFR (V1), Bowtie, Dart and Merlin
BB Chevy	1115	BBC AFR (V2), ProMaxx, VEPR
SB Ford	1126	SB Ford AFR/VEPR
351C Ford	1135	Cleveland Ford OEM, AFD, BT, CHI, ProMaxx



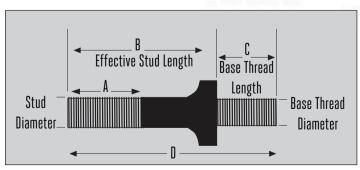
#### **Rocker Arm Studs**

Straub Tech offers the engine builder 2 levels of Studs. Our 1541 Alloy and our Chrome Moly 4140 Rocker studs. The 1541 Alloy is rated at 150K PSI, and works very well with flat tappet and mild hyd roller applications. It also offers the engine builder a quality stud at a 1970's Price. Our 4140 is rated at 180K PSI, and although not as pretty as the ABC competitor, it functions the same at an affordable price.



#### **Rocker Arm Studs**

Part No.	<b>Base Thread</b>	Base Thread Top Thread		В	С	D
1541 Studs						
100-2180	7/16-14	3/8-24	.875″	1.750″	.687″	2.4375″
100-2181	7/16-14	7/16-20	.875″	1.750″	.8125″	2.5625″
100-2182	7/16-14	7/16-20	1.0625	1.937″	.750″	2.6875″
4140 Studs						
100-2280	7/16-14	3/8-24	.875″	1.750″	.687″	2.4375″
100-2185	7/16-14	3/8-24	1.0625	1.937″	.750″	2.6875″
100-2282	7/16-14	7/16-20	1.0625	1.937″	.750″	2.6875″







## Guideplates

Straub Tech Guideplates are made from alloy steel and are stamped right here in the USA. Our case depth on heat treat ensures no premature wear of the part. All parts are finished in black oxide. Parts available in bulk. Packaged in sets of 8 pcs.

Part No.	Description	Application	Pushrod Size
350-1516	Flat	SBC OEM	5/16″
350-0038	Flat	SBC OEM	3/8″
350-2516	Stepped	SBC OEM	5/16″
350-1038	Stepped	SBC OEM	3/8″
350-3038	Flat (2pc)	SBC 23/18/Mayhem/SBF 20°	3/8″
302-1516	Flat	SBF OEM	5/16″
302-1038	Flat	SBF OEM	3/8″
351-1038	Flat	Cleveland	3/8″
454-0038	Stepped	BBC OEM	3/8″
454-0716	Stepped	BBC OEM	7/16″
454-6038	Stepped	BBC Gen 5/6 10mm	3/8″
460-0038	Flat	BB Ford 460	3/8″





## **Cam Buttons**

Straub Tech Roller Cam Buttons: 100% Machined in the USA, and are assembled with US made Torrington bearings.

Part No.	Application
101-830	SBC Early .830"
101-945	BBC All



# **Aluminum Cam Buttons**

Straub Tech Aluminum Cam Buttons are 100% Machined in the USA from 6061-T6. Each button has a tumbled natural finish.

Part No.	Application	
100-690	SBC Late model	
100-830	SBC Early model	
100-945	BBC All	
0400		



# **Cam Lock Plates**

Straub Tech SB and BBC Cam Lock Plate: Stamped from Alloy steel, heat treated and black oxided.

Part No.	Application
100-6000	Plate Only
100-6003	Plate and 150K Grade 8 Zinc Bolts
100-6516	150K Grade 8 Bolts Only





#### **Valve Springs**

Straub Tech valve springs have been track tested now for over 20 years. These coil combinations offer the best in performance and endurance for intended engine applications. We use only premium wire from the coil manufacturers for our select coil combinations. Racers demand endurance from parts and these springs, no matter what form of racing you are doing, will hold up under the intended application.



Part No.	OD/ID	Seat #	Inch Rate	Coil bind	Damper	Max lift	Application
Single Spring	J						
110-1205	OEM Ford PS	110#	280	1.100	No	.545/1.6	6.0/6.4 PS
110-1942	1.260/.870″	95#	320#	1.100″	No	.520 @ 1.700″	GM Vortec Heads
110-1943	1.260/.870″	110#	350#	1.100″	Yes	.545 @ 1.700″	HF and Mild HR
110-1574	1.260/.870″	135#	400#	1.100″	Yes	.600″@1.800″	SF and HR
110-1272	1.460/1.060″	120#	300#	1.200″	Yes	.600"@1.850"	HF and mild HR
110-1236	1.530/1.125″	135#	310#	1.220″	Yes	.600″@1.900″	SF and mild HR
Beehive							
110-1201	1.292/.880	135#	300	1.110	Beehive	.650/1.8	LS/SBC/SBF
110-1215	1.237/.825	110#	347	1.115	Beehive	.575/1.8	LS/SBC/SBF
<b>Dual Spring</b>							
110-1224	1.625/.85	295#	625	1.100	Yes	.800/2.0	Drag Race
110-1310	1.385/.995	160#	440	1.195	No	.600/1.85	Street/Circle Track
110-1590	1.550/.814	240#	550	1.150	No	.730/1.95	Street/Bracket
110-1822P*	1.290/.940	150#	405	1.080	No	.650/1.8	LS/SBC/SBF
110-1821	1.290/.650″	145#	355#	1.200″	No	.620″@ 1.800″	HR and mild SR
110-1822	1.290/.650″	155#	370#	1.200″	No	.650″@1.800″	HR and mild SR
110-1940	1.440/.700″	135#	315#	1.120″	Yes	.600″@1.800″	SF and HR
110-1274	1.460/.700″	150#	320#	1.120″	Yes	.650″@1.880″	SF, HR, mild SR
110-1410	1.540/.700″	210#	410#	1.240″	Yes	.670″@1.900	HR, SR
						.720″@2.000″	HR
110-1583	1.550/.730″	230#	525#	1.190	Yes	.720″ @ 1.950″	SR
110-1590	1.550/.730	240#	540#	1.190″	Yes	.720″ @ 1.950″	SR
110-1608	1.560/.750″	255#	590#	1.230″	Yes	.750″@2.000″	SR
*Polished coil	s for Endurance						



#### **Valve Springs Retainers Steel**

Straub Tech Steel Retainers are machined from Chrome Moly steel. Each retainer is precision cut for included lock angle. Retainers are available in 7 and 10 degree lock angles. All retainers are finished in black oxide.



#### **Valve Springs Retainers - Steel**

Part No.	Spring Size	Height	Degree	Stem Size	Dimensions ABC	Straub Springs
100-1257	1.250	STD	7	.341″	1.245 .865 .680	1943/1574/1821/1822
100-1258	1.250	+.050	7	.341″	1.245 .865 .680	1943/1574/1821/1822
100-1260	1.250″	+.050	10		1.260 .865 .640	1943/1574/1821/1822
100-1437	1.437/1.550	STD	7	.341″	1.440 1.050 .700	1940/1272
100-1440	1.437/1.550	STD	10	ALL	1.440 1.050 .700	1940/1272
100-1438	1.437/1.550	STD	7	.371″	1.440 1.050 .700	1940/1272
100-1441	1.437/1.500	STD	10	ALL	1.400 1.060 .690	1940/1272
100-1516	1.500/1.550	+.100	10	ALL	1.500 1.115 .690	1410/1583/1590
100-1505	1.550/1.625	+.100	10	ALL	1.500 1.105 .710	1610
100-1500	1.550/1625	+.100	10	ALL	1.500 1.120 .705	1410/1583/1590
100-1470	1.437/1.550	+.100	7	.341	1.440 1.050 .700	1940/1272

#### **Valve Springs Retainers Titanium**

Straub Tech Titanium Retainers are machined from 6AL-4V material here in the USA. Each retainer is precision cut for included lock angle. Retainers are available in 7 and 10 degree lock angles. All retainers are vibratory finished.



#### **6AL-4V Titanium Retainers**

Part No.	Spring Size	Height	Degree	Stem Size	Dimensions
105-1055	Beehive	STD	7	8mm	1.055
105-1220	1.290	STD	10	ANY	1.220/.945/.680
105-1221	1.290	STD	Super 7	8mm	1.220/.945/.680
105-1222	1.290	STD	7	8mm	1.220/.945/.680
105-1400	1.440-1.500	+.050″	10	Any	1.400/1.050/.690
105-1525	1.500-1.625	+.100″	10	Any	1.500/1.110/.715
105-1530	1.625	+.100″	10	Any	1.500/1.180/.765



## **Valve Locks**

Straub Tech Valve Locks are manufactured from Alloy steel here in the USA. Straub Tech locks have been used for almost 2 decades by performance cylinder head companies and valvetrain companies.

#### **Machined Valve Locks**

Part No.	Lock Type	Degree	Valve Size	Install Height	Lash Cap	Туре
100-7777	Radial Bead	7	7MM	Stock	NO	Stamped
100-7555	Square Bead	7	.341	Stock	NO	Stamped
100-7738	Square Bead	7	.371	Stock	NO	Stamped
100-7778	Radial Bead	7	8mm	Stock	NO	Stamped
100-7341	Square Bead	7	.341	Stock	NO	Machined
101-7341	Square Bead	7	.341	050″	NO	Machined
102-7341	Square Bead	7	.341	+.050″	NO	Machined
100-7311	Square Bead	7	.311	Stock	No	Machined
100-7008	Radial Bead	Super 7	8mm	Stock	NO	Machined
100-9008	Radial Bead	7	8mm	Stock	NO	Machined
100-7371	Square Bead	7	.371	Stock	NO	Machined
101-7371	Square Bead	7	.371	050″	NO	Machined
102-7371	Square Bead	7	.371	+.050″	NO	Machined
100-1311	Square Bead	10	.311	Stock	Yes	Machined
100-1315	Radial Bead	10	8mm	Stock	Yes	Machined
100-9010	Radial Bead	10	.341	Stock	Yes	Machined
100-1341	Square Bead	10	.341	Stock	Yes	Machined
101-1341	Square Bead	10	.341	050″	NO	Machined
102-1341	Square Bead	10	.341	+.050″	NO	Machined
100-1371	Square Bead	10	.371	Stock	Yes	Machined



#### **Stamped Steel Valve Locks**

Part No.	Lock Type	Degree	Valve Size	Lash Cap	Туре
103-7555	Square	7 Degree	.341	030	Stamped
104-4734	Multi Radial	7 Degree/Ford	.341	Stock	Stamped
105-7555	Square	7 Degree	.341	+.050	Stamped
106-7555	Square	7 Degree	.341	060	Stamped
106-7372	Square	7 Degree	.371	060	Stamped
103-7555	Square	7 Degree	.341	030	Stamped
104-4734	Multi Radial	7 Degree	.341	.341	Stamped
105-7555	Square	7 Degree	.341	+.050	Stamped
106-7555	Square	7 Degree	.341	060	Stamped
106-7372	Square	7 Degree	.371	060	Stamped



# STRAUB ECHNOLOGIES

#### **Lash Caps**

Straub Tech Lash Caps are 100% Machined from Chrome Moly Steel here in the USA. Each cap is machined on a CNC lathe for both ID and OD sizing to ensure proper tolerance fit. We then lap the face of the cap to ensure parralle fit with the rocker tip. Each cap then is EDM hole popped to provide lubrication between the valve tip and lash cap. Each cap is then vapor hone finished. Sold in sets of 16 or available for bulk quote.

Each cap is finished in REM Finished.

#### Lash Caps

Part No.	Description
100-5160	5/16" Stem
100-3150	8MM Stem*
100-1132	11/32" Stem
100-3710	3/8" Stem



# **Valve Seals**

Straub Tech valve seals compliment any valvetrain line, and are manufactured to OEM tolerance to ensure proper oil control in high performance engines. We recommend only Teflon and Viton for today's engines that produce power that was unheard of a decade ago. Sold in Sets of 16 and bulk packs of 100 and 400.

Part No.	Description
135-1611	Teflon Positive Seal .500" Guide x .341" Valve Stem
135-1711	Teflon Positive Seal .531" Guide x .341" Valve Stem
131-529V	Metal Clad Viton .531" Guide x .341" Valve Stem
131-233V	Viton Umbrella Seal .672" Guide x .341" Valve Stem



Part No.	Desc.	Valve Stem	Guide Dia.	Seal OD
131-107V	Metal Clad Viton	.341" Valve Stem	.500" Guide Dia.	.635 Seal OD
131-1805	Metal Clad Viton	.311/.315 Valve Stem	.500" Guide Dia.	.608 Seal OD
131-1906	Metal Clad Viton	.311/.315 Valve Stem	.502 Guide Dia. with 1.290 Dual Spring Seat	.650 Seal OD
131-270V	Umbrella Seal	. 371 Valve Stem OEM	.672" Guide Diameter	.830 Top / .900 Base
131-371V	Metal Clad Viton	.341 Valve Stem	.552" Guide Dia.	.678 Seal OD
131-375V	Metal Clad Viton	.371" Valve Stem	.531 Guide Dia.	.665 Seal OD
131-377V	Metal Clad Viton	.371" Valve Stem	.562 Guide Dia.	.675 Seal OD
131-476V	Metal Clad Viton	.311/.315 Valve Stem	.476" Guide Dia	.575 Seal OD
135-104V	Positive Poly Acrylic	.341" Valve Stem	.500" Guide Dia.	.625 Seal OD
135-108P	Positive Poly Acrylic	.341" Valve Stem	.532" Guide Dia.	.680" Seal OD
135-373V	Metal Clad Viton	.371" Valve Stem	.500" Guide Dia.	.625" Seal OD
138-802V	Metal Clad Viton	.311/.315" Valve Stem	.531 Guide Dia.	.680" Seal OD
138-804V	Metal Clad Viton	.311/.315" Valve Stem	.500 Guide Dia.	.625" Seal OD



#### Valve Seals (Continued)

Part No.	Size	Guide Dia.	Seal Dia.	Seal Type	Seal Material
131-476V	5/16″	.476	.575	POSITIVE	METAL CLAD FLUOROVITON
131-306V	5/16″	.485	.625	POSITIVE	FLUOROVITON
131-805	5/16″	.500	.608	POSITIVE	METAL CLAD FLUOROVITON
131-804V	5/16″	502	.625	POSITIVE	METAL CLAD FLUOROVITON
131-802V	5/16″	.531	.680	POSITIVE	METAL CLAD FLUOROVITON
131-133P	11/32″	NA	NA	O-RING	POLYACRYLIC
131-125V	11/32″	.485	.630	POSITIVE	METAL CLAD FLUOROVITON
131-1611	11/32″	.500	.610	POSITIVE	TEFLON
131-104V	11/32″	.500	.625	POSITIVE	FLUOROVITON
131-104P	11/32″	.500	.625	POSITIVE	POLYACRYLIC
131-107V	11/32″	.500	.635	POSITIVE	METAL CLAD FLUOROVITON
131-1711	11/32″	.531	.630	POSITIVE	TEFLON
131-529V	11/32″	.531	.675	POSITIVE	METAL CLAD FLUOROVITON
131-408P	11/32″	.531	.680	POSITIVE	POLYACRYLIC
131-371V	11/32″	.552	.678	POSITIVE	METAL CLAD FLUOROVITON
131-562V	11/32″	.562	.661	POSITIVE	METAL CLAD FLUOROVITON
131-305V	11/32″	.562	.700	POSITIVE	FLUOROVITON
131-304P	11/32″	.562	.700	POSITIVE	POLYACRYLIC
131-233V	11/32″	.672	.750	UMBRELLA	FLUOROVITON
131-232P	11/32″	.672	.750	UMBRELLA	POLYACRYLIC
131-1612	3/8″	.500	.600	POSITIVE	TEFLON
131-373V	3/8″	.500	.623	POSITIVE	METAL CLAD FLUOROVITON
131-1712	3/8″	.531	.630	POSITIVE	TEFLON
131-375V	3/8″	.531	.665	POSITIVE	METAL CLAD FLUOROVITON
131-377V	3/8″	.562	.675	POSITIVE	METAL CLAD FLUOROVITON
ALL SEALS SOL	D AS EACH				





# **Spring ID and OD Locators**

Straub Tech ID locators are manufactured from 4140 material and case hardened to a minimum of .010". Close tolerances are maintained to ensure proper spring location and long life. Even under extreme spring pressure conditions.

Straub Tech OD cups are manufactured from 4140 steel case hardened to a minimum of .010", ensuring proper spring location and long life needs. Even under extreme spring pressure conditions in today's high performance engines. ID Locators (.060" Thickness)

Straub Tech Rotator eliminators allows the use of modern day valve springs on OEM heads by eliminating the exhaust rotator. This .300" thick spring spacer allows the use of 1 spring on BBC intake and exhaust valves.



#### ID Locators (.060" Thickness)

Part No.	Spring OD	OD	ID	Shoulder OD
101-0240	1.300	1.29	.505	.650
101-0245	1.300	1.29	.565	.650
101-1480	1.500	1.480	.570	.690
101-1535	1.550	1.535	.570	.720
101-1537	1.550	1.535	.570	.740
101-1560	1.560	1.550	.570	.690
101-1578	1.580	1.570	.570	.830
101-1580	1.560	1.550	.570	.800
101-1620	1.625	1.620	.570	.760

#### OD Locators (.060" Thickness)

102-1443	1.440	1.550	.690	.140
102-1550	1.550	1.680	.635	.140
102-1551	1.550	1.680	.570	.140
102-1625	1.625	1.740	.635	.140
102-1650	1.650	1.740	.635	.140

For use on Chevrolet Big Block applications. Eliminates O.E. rotators on the exhaust valve while providing positive location of the valve spring

#### **BBC Rotator Eliminators**

Part No.	Spring OD	OD	ID	Shoulder Height
103-1550	Up to 1.570	1.730	.625	.300"Thick





#### **Valve Spring Shims**

#### **Hardened Valve Spring Shims**

Straub Tech shims are 100% USA made from high quality alloy steel and then heat treated. Our shims are available in 3 sizes, .015, .030, .060" and come in packets of 50 of 1 size or kits of 16 of each size. These will allow for correct install height when assembling performance cylinder heads.



Packs with 16 of Each Size

Part No.	Outer Dia	Inner Dia.	Thickness	Quantity of Each
800-4105-16	1.220	.876	.015/.030/.060	16
800-4203-16	1.248	.814	.015/.030/.060	16
800-4307-16*	1.290	.520	.015/.030/.060	16
800-4135-16	1.440	.645	.015/.030/.060	16
800-4153-16	1.500	.645	.015/.030/.060	16
800-4185-16	1.630	.645	.015/.030/.060	16
Bulk packs of 50				
Part No.	Outer Dia	Inner Dia.	Thickness	Quantity of Each
800-1105-50	1.220	.876	.015	50
800-3105-50	1.220	.876	.030	50
800-6105-50	1.220	.876	.060	50
800-1203-50	1.248	.814	.015	50
800-3203-50	1.248	.814	.030	50
800-6203-50	1.248	.814	.060	50
800-1307-50*	1.290	.520	.015	50
800-3307-50*	1.290	.520	.030	50
800-6307-50*	1.290	.520	.060	50
800-1306-50	1.440	.645	.015	50
800-3306-50	1.440	.645	.030	50
800-6306-50	1.440	.645	.060	50
801-1306-50	1.500	.645	.015	50
801-3306-50	1.500	.645	.030	50
801-6306-50	1.500	.645	.060	50
800-1601-50	1.630	.635	.015	50
800-3601-50	1.630	.635	.030	50
800-6601-50	1.630	.635	.060	50
*Will fit LS heads v	vith stock valv	e guide siz	ze.	











#### **Rollmaster Timing Sets**

Rollmaster timing sets have become an industry standard ever since they were first used in the US. All timing sets are produced using billet steel K1045 material for both the crank and camshaft sprockets. All Gold sets are nitride hardened and include a one-piece Torrington bearing with an lwis chain. Timing chain sets have 9 keyways which allows more adjustment for dialing in the cam. Crankshaft sprocket keyways are in 2-degree increments unless otherwise noted. The relationship from crank keyway to camshaft



sprocket timing is 2:1 meaning that the amount of advance or retard at the camshaft is in one-degree increments, IE 1, 2, 3 or 4 degrees. Multiple keyways are a solid fixture and do not tend to move or work loose like offset dowels, thus providing a positive locking of the cam timing to whatever position is desired. Rollmaster timing sets are light weight and stronger than any other timing set available, due to the weight savings of billet steel and use of CNC machinery. Gold sets are shipped with our proprietary IWIS premium grade one-piece full roller timing chain that was developed by Rollmaster's founder with IWIS. No other timing set manufacturer is supplied this chain. All Gold Series timing sets have a one-piece Torrington thrust bearing fitted to the cam sprocket and requires no additional machining for fitment to a block. Gold set's sprockets are both nitride for longevity under high spring loads.

#### Features:

- Proprietary IWIS Seamless Chain Exclusive to Rollmaster
- Nitride hardened for endurance under extreme loads
- Captive Torrington bearing on cam sprocket that requires on additional machining to block.
- Multi Keyway crank sprocket for quick indexing/phasing of engine.

"I have personally sold the Rollmaster line since 1996. This includes shipping stock orders of 100 to 200 sets to warehouses as we were only 3 direct accounts in the USA. I don't know the exact number, but when I say its in thousands you can bet on it, and I have had very few issues with the sets and can't think of 1 failure. I'm proud to offer this line in my product catalog."

#### Chris Straub, CEO of STI

#### **GOLD SERIES**

Make	Engine		Pair#	Chain Links	Crank Keyways	Part No.
Buick	403-455ci	w/Nitrided Sprockets	DR	64	9	CS7031
Chevrolet Big	Mark IV	w/Torrington Brg & Nitrided Sprockets	DR	66	9	CS2040
Block	Gen 6	w/Torrington Brg & Nitrided Sprockets	DR	66	9	CS2095



# **GOLD SERIES (Continued)**

Chevrolet LS		LS1 & LS6 - w/Torrington Brg	SR	60	9	CS1135
Series		LS1 & LS6 - w/Torrington Brg	DR	60	9	CS1136
	Gen III	LS1 w/Torrington Brg & Nitrided Sprockets	DR	60	9	CS1160
		LS2 w/Torrington Brg - One Trigger Sensor	SR	60	9	CS1180
	24x Crank	LS2 w/Torrington Brg - One Trigger Sensor	DR	60	9	CS1185
		LS2 w/T/Brg – One Trigg – Suit RHS Block Cam Raised .388"	DR	62	9	CS10000
		LS2 w/T Brg – Nitrided Sprockets - One Trigger Sensor	DR	60	9	CS10005
		LS2 w/T Brg – Nit Sprks – 1 Trig - RHS Block – Cam Raised .388″	DR	62	9	CS10035
		LS7 w/T Brg – 3 B – Multi Trigg – Long Oil Pump Drive for Dry Sump	SR	60	9	CS10010
	58x Crank	LS7 w/T Brg – 3B – Multi Trigg – RHS Block - Cam Raised .388″	DR	62	9	CS10015
		LS7 W/T Brg – Nit Sprks - 3B – Multi Trigg – RHS C Raised .388″	DR	62	9	CS10040
		LS7 w/Torrington Brg – 3 Bolt Early Series - Multi Trig Sens	SR	60	9	CS1190
		LS7 w/Torrington Brg – 3 Bolt Early Series - Multi Trig Sens	DR	60	9	CS1195
		L98 w/Torrington Single Bolt - Multi Trigger Sensors	SR	60	9	CS1197
		L98 w/Torrington Single Bolt - Multi Trigger Sensors	DR	60	9	CS1198
		L98 w/T/Brg – Nitrided Sprockets – 3 Bolt Early – Multi Trigg	DR	60	9	CS10020
		LS7 Cam Gear & Chain Only w/ Torrington Bearing-3 Bolt	SR	60	9	CS10075
	LSA	LSA Single Row - Must Use 3 bolt Cam	SR	60	9	CS10100
Chevrolet		w/Torrington Brg & Nitrided Sprockets	DR	58	9	CS1050
Small Block		w/Torrington Brg & Nitrided Sprockets - 1.6" Bore	DR	58	9	CS1116
	262-400ci	w/Torrington Brg & Nitrided Sprockets - 1.6" Bore	DR	60	9	CS1120
		w/Torrington Brg – Rocket Block W/ Raised Cam	DR	60	9	CS10070
Chrysler	273-392ci	Small Block; w/Nitrided Sprockets	DR	68	9	CS5010

# STRAUB ECHNOLOGIES

Chrysler Big Block	261 440-	Single Bolt Cam Sprocket; Nitrided Sprockets	DR	66	9	CS5110
	361-440ci	Single Bolt Cam Sprocket; w/Torr Brg & Nitrided Sprockets	Image: Section of the section of th	CS5150		
Ford Big	429-460ci	w/Torrington Brg & Nitrided Sprockets	DR	66	9	CS4020
Block	352-428ci	FE; including Cobra Jet; Nitrided Sprockets	DR	64	9	CS4050
Ford		w/Torrington Brg & Nitrided Sprockets	DR	64	9	CS3091
Cleveland		w/Torrington Brg & Nitrided Sprockets; Boss SVO	DR	64	9	CS3130
	302-351ci	w/ Torrington Brg, Thrust Plate & Nitrided Sprockets	DR	64	9	CS10060
		w/Torr Brg, Thrust Plate & Nitrided Sprockets; Boss SVO	DR	64	9	CS10065
Ford Windsor		w/Torrington Brg & Nitrided Sprockets; Pre EFI	DR	58	9	CS3031
	302-351ci	w/Torr Brg- Nitrided Sprks-Torr Brg Thrust Plate – Pre EFI	DR	58	9	CS10025
		w/Shim & Nitrided Sprockets; HO EFI	DR	58	9	CS3060
		w/Torrington Brg and Nitrided Sprockets; HO EFI	DR	58	9	CS3071
		w/Torr Brg- Nitrided Sprks-Torr Brg Thrust Plate – HO EFI	DR	58	9	CS10030
Pontiac	287-455ci	w/Nitrided Sprockets	DR	60	9	CS7051
VERNIER ADJU	STABLE					
Chevrolet Small Block	265-400ci	w/Torrington Brg & Nitrided Sprockets	DR	58	1	CS1230
Chevrolet LS Series	Gen III	LS1 w/Torrington Brg & Nitrided Sprockets	DR	60	1	CS1265
Chevrolet Big Block	396-454ci	w/Torrington Brg & Nitrided Sprockets	DR	66	1	CS2290
Chrysler Small Block	273-360ci	w/Nitrided Sprockets	DR	68	1	CS5200
Ford Cleveland	351-400M	w/Torrington Brg & Nitrided Sprkts Cleveland	DR	64	1	CS3201
Ford Modular	4.6-5.4Ltr	Boss Nitrided Sprockets	SR	44	1	CS3260
Ford Windsor	289-351W	w/Torrington Brg & Nitrided Sprkts; Pre EFI	DR	58	1	CS3240
VERNIER ADJU Chevrolet Small Block Chevrolet LS Series Chevrolet Big Block Chrysler Small Block Ford Cleveland Ford Modular	302- 351HO	w/Torrington Brg & Nitrided Sprkts; EFI	DR	58	1	CS3241



# **ROTATING ASSEMBLIES**

# 4340 Forged Performance Crankshafts

Straub Tech 4340 crankshafts will give you strength, reliability, and performance to meet the demands of your competition engine. We use premium non-twist forgings, machined to exact specifications. Cranks are heat treated and nitrided to insure strength and reliability. Journals are precision ground to industry specs to enable proper bearing tolerances. Straub Tech offers its customers the best crank available for the money without sacrificing reliability or performance.



- Premium Line Cranks
- · Counterweights leading edges radiused for reduced windage
- Large radius/filet on all journals
- Indexed oiling passages with large chamfer
- Lightening holes drilled in all throws

#### **Premium Competition Line of Crankshafts**

Includes all of the above with these additions.

- · Counterweight leading edge is shaped with large radius to reduce windage
- Counterweights have additional machining to reduce weight
- Lighten hole diameter increased for greater strength and weight reduction

#### **Premium Ultra-Comp Line of Crankshafts**

Includes all of the above with these additions.

- Counterweights have been pendulum cut to reduce center mass and move to outer leading edge. This reduces mass without sacrificing strength.
- Gun Drilled main journal for maximum reduction in weight.

Small Block	Small Block Chevy								
Part No.	Series	Stroke	Main Size	Min Rod	Weight	Seal Type	Balance		
350-3548	Premium	3.48″	350	5.700″	54	2 рс	Neutral		
350-3548LW	Competition	3.48″	350	5.700″	50	2 рс	Neutral		
350-3548UL	Ultra-Comp	3.48″	350	5.700″	45	2 рс	Neutral		
350-3550UL	Ultra-Comp	3.50″	350	5.700″	45	2 рс	Neutral		
350-3548L	Premium	3.48″	350	5.700″	54	1 рс	Neutral		
350-3575	Premium	3.75″	350	5.700″	54	2 рс	Neutral		
350-3575L	Premium	3.75″	350	5.700″	54	1 рс	Neutral		
350-3575LW	Competition	3.75″	350	5.700″	50	2 рс	Neutral		
350-3575UL	Ultra- Comp	3.75″	350	5.700″	45	2 рс	Neutral		
350-3580LW	Competition	3.80″	350	5.700″	54	2 рс	Neutral		
350-3587LW	Competition	3.875	350	6.00″	50	2 рс	Neutral		
400-4087LW	Competition	3.875	400	6.00″	50	2 рс	Neutral		
350-3540	Premium	4.00″	350	6.00″	54	2 рс	Neutral		
350-3540LW	Competition	4.00″	350	6.00″	50	2 рс	Neutral		
4000-4040LW	Competition	4.00″	400	6.00″	50	2 рс	Neutral		

# STRAUB LOGIES

LS Chevy with GM Reluctor Wheel						
Part No.	Series	Stroke	<b>Reluctor Wheel</b>	Min Rod	Weight	Balance
346-4024	Premium	4.00″	28 Tooth	6.125″	52	Neutral
346-4058	Premium	4.00″	58 Tooth	6.125″	52	Neutral
346-4124	Premium	4.125″	28 Tooth	6.125″	54	Neutral
346-4158	Premium	4.125″	58 Tooth	6.125″	54	Neutral
346-5362	Premium	3.622″	58 Tooth	6.125″	51″	Neutral
346-2362	Premium	3.622″	24 Tooth	6.125″	51″	Neutral

Big Block C	Big Block Chevy						
Part No.	Series	Stroke	Center CW	Min Rod	Weight	Seal Type	Balance
454-4540	Premium	4.00″	No	6.135″	69	2 рс	Neutral
454-4542	Premium	4.250″	No	6.385″	69	2 рс	Neutral
454-4525C	Premium	4.250″	Yes	6.385″	78	2 рс	Neutral
454-4525	Premium	4.250″	No	6.385″	69	1 рс	Neutral
454-4537C	Premium	4.375″	Yes	6.535″	78	2 рс	Neutral
454-4550C	Premium	4.500″	Yes	6.535″	78	2 рс	Neutral
454-4575C	Premium	4.750″	Yes	6.535″	78	2 рс	Neutral

Small Block Ford							
Part No.	Series	Stroke	Rod Pin	Main Size	Min Rod	Weight	Balance
302-3250	Premium	3.25″	2.100	302	5.315″	43	Neutral
302-3400	Premium	3.400″	2.100	302	5.400″	43	Neutral
351-3510W	Premium	4.00	2.100	351W	6.200″	58	Neutral
351-3510C	Premium	4.00	2.100	351C*	6.200″	58	Neutral
*This graph is fo	r aftermarket blo	cks based on the l	Nindcor platform	but using Clouds	and size mains		

\*This crank is for aftermarket blocks based on the Windsor platform but using Cleveland size mains.

Will not fit OEM Cleveland block.



Production run start at 10 camshaft per part number. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.



#### **H-Beam Connecting Rods**

Straub Tech H-Beam Connecting Rods are forged from 4340 steel. All of our rods are magnafluxed, heat treated, stress relieved, shot peened, and sonic tested to ensure they provide the strength required for high horsepower applications. All rods are produced on CNC machinery and are finished in the USA to ensure precise big end and pin end bore sizes.

We weight match all of our sets of rods to + or -1.5 grams to make balancing easier. Silicon bronze bushings are installed for use with floating pins. Bolt lube and torque specifications are included. Straub Tech only uses ARP's proprietary material, ARP2000 for bolts. These rods are rated 1100 horsepower in SBC, LS, and SBF, and 1200 horsepower in BBC applications.

ARP2000 Material: An exclusive, hybrid-alloy developed to deliver superior strength and better fatigue properties. While 8740 and

ARP2000 share similar characteristics – ARP2000 is capable of achieving clamp loads in the 215,000-220,00 PSI range. ARP2000 is used widely in short track and drag racing as an up-grade from 8740 chrome moly in both steel and aluminum rods. Stress corrosion and hydrogen embrittlement are typically not a problem, providing care is taken during installation.

Part No.	Rod Length	Journal Size	Pin Bore Size	Weight*	
Small Block Chev	у				
350-5700	5.700″	2.100″	.928″	646 gms	
350-6000	6.000″	2.100″	.928″	658 gms	
350-6125	6.125″	2.100″	.928″	662 gms	
350-6200	6.200″	2.100″	.928″	667 gms	
350-6250	6.250″	2.100″	.928″	673 gms	
Chevy LS					
346-6125	6.125″	2.100″	.928″	648 gms	
<b>Big Block Chevy</b>					
454-6135	6.135″	2.200″	.991″	790 gms	
454-6385	6.385″	2.200″	.991″	815 gms	
454-6535	6.535″	2.200″	.991″	821 gms	
454-6700	6.700″	2.200″	.991″	827 gms	
454-6800	6.800″	2.200″	.991″	830 gms	
Small Block Ford					
302-5401	5.400″	2.123″	.913″	604 gms	
302-5402	5.400″	2.100″	.928″	604 gms	
302-5403	5.400″	2.123″	.928″	604 gms	
351-6200	6.200″	2.100″	.928″	667 gms	
351-6250	6.250″	2.100″	.928″	673 gms	



# **Straub Tech Pistons**

Straub Technologies has always taught customers that it is a combination of parts that makes power. That is also true when it comes to our Mayhem SBC 18 Degree package. To ensure that our customers are getting the correct combination, we worked with a piston manufacturer to develop our own piston line to go with our cylinder heads.

Straub Tech went with a 2618 Alloy for its strength properties in high temperature applications. It resistance to fatigue cracking during detonation gives our customer another layer of protection. Each piston is T-6 heat treated which promotes hardness and yield strength in the 2618 alloy.

Our **Spherical Dish and Dome configurations** use technology developed in the highest form of racing. The Spherical Dish is a continuance of the combustion chamber design in the head. This promotes a more efficient burn in the chamber giving the customer more horsepower. The compression dome has minimal flame travel interference allowing the piston to optimize flame travel for more horsepower.

In the ring land and the skirt area we have focused on sealing up the engine and reducing wear for longer engine life. We have hard **anodized the top ring land** and the crown of the pistons. This reduces the chance





of micro-welding and provides thermal protection to the rings. We went with lateral gas ports to enhance ring sealing and not be acceptable to getting plugged like vertical gas ports. The *skirts are coated* with *Line2Line.* This process was developed by the OEM's and gives a more stabilized piston operation which is critical with large stroke engines and better ring sealing. This reduced wear again gives longer life to the engine.

The piston features 4130 steel pins that are retained by round wire locks. Every piston is designed to use a **1.2 / 1.2 / 3MM** ring pack for reduced ring drag and as a result more horsepower!! Pistons are sold in sets of 8 and come with pins and locks. Rings sold separately.

Dish Pistons for Pump Gas 10 to 1					
Part No.	Bore	Sizes	Comp Height	Dish CC	Pin Size
350-3177	4.00	030/040/060	1.250″	12cc	.927″
350-3178	4.125	STD/030/040/060	1.00″	12cc	.927″
350-3179	4.125	STD/030/040/060	1.062″	12cc	.927″
350-3180	4.125	STD/030/040/060	1.250″	12cc	.927″
<b>Dome Pistons</b>	for a minimum o	of 12 to 1			
350-3154	4.00	030/040/060	1.250″	2.3cc	.927″
350-3155	4.125	STD/030/040/060	1.00″	2.3cc	.927″
350-3173	4.125	STD/030/040/060	1.062″	2.3cc	.927″
350-3174	4.125	STD/030/040/060	1.250″	2.3cc	.927″





Part No.

350-3155

350-3155-030

350-3173

	350-3173-030	STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.155" Bore, 1.062" Comp, 2.3cc Dome, 1.2×1.2×3.0mm, 455gr + 117 gr TREND Pin (Each)
Description	350-3178	STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.125" Bore, 1.000" Comp, 12cc Dish, 1.2x1.2x3.0mm, 405gr + 117 gr TREND Pin (Each)
STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.125" Bore, 1.000' Comp, 2.3cc Dome, 1.2x1.2x3.0mm, 421gr + 117 gr TREND Pin (Each)	350-3178-030	STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.155' Bore, 1.000" Comp, 12cc Dish, 1.2x1.2x3.0mm, 415gr + 117 gr TREND Pin (Each)
STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.155" Bore, 1.000" Comp, 2.3cc Dome, 1.2×1.2×3.0mm, 431 gr + 117 gr TREND Pin (Each)	350-3179	STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.125" Bore, 1.062" Comp, 12cc Dish, 1.2×1.2x3.0mm, 441gr + 117 gr TREND Pin (Each)
STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.125" Bore, 1.062" Comp, 2.3cc Dome, 1.2x1.2x3.0mm, 445gr + 117 gr TREND Pin (Each)	350-3179-030	STRAUB "MAYHEM" SBC 18 DEGREE PISTON, 4.155" Bore, 1.062" Comp, 12cc Dish, 1.5×1.5×3.0mm, 450gr + 117 gr TREND Pin (Each)



Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are turque to yield and are designed to be forqued one time. Reusing these fasteners can cause pre mature failure.



# **Big Block Chevy 24 Degree Conventional Head Pistons**

Ring Pack 1/16-1/16-3/16\*\*

Part No.	Bore	Sizes	Comp Height	Dish CC	Pin Size	
454-3131L	4.500	STD/030/060/100	1.180″	-45cc	.990″	667gms
454-3244	4.500	STD/030/060/100	1.415	-27.5cc	.990″	746gms
454-3173	4.250	STD/060/100/125	1.313	-17.5cc	.990″	667gms
454-3174	4.500	STD/030/060/.100	1.313″	-17.5cc	.990″	748gms
454-3129*	4.600	STD/025	1.180″	-45cc	.990″	667gms
*Note Rng Pack	*Note Rng Pack 1/16-1.5mm-3/16"					







#### **Straub Piston Rings**

Today's modern day performance engines put high demands on piston rings like higher compression and higher heat extremes with the additions of power adders. Also OEM restrictions brought on by emissions and fuel efficiency have led the OEMs to thinner ring packs over the last 3 decades. This has driven the ring manufactures to steel rings over cast rings. Steel rings and thinner and stronger and will under the stress of a modern day performance engine.

Straub Tech has worked with a ring supplier to meet the demand of our customers....longevity, performance, and value. Straub Tech coated steel ring sets for our pistons are designed to be used in either NA engine or power adder applications.



#### Straub Tech Ring sets feature:

Top Rings	2nd Rings		Oil Ring	
1.2MM Gas Nitrided Steel	1.2MM Phosphate Coated	d Steel	3.0MM Chromed Steel	
Straub Tech rings offer the racer a multitude of Advantages and Benefits:				
Advantages	Installation Benefits		ts	
Higher Tensile Strength	File fit only. Must use ring Better Stress Resistance		Stress Resistance	
Higher Yield Strength	Reduced Ring Side wear		d Ring Side wear	
Greater Fatigue Life		Longer Service Life		
Lower Ring Mass		Superior Blow-By Control		
		Lower F	Friction	

For proper honing of cylinders for use with our rings we recommend Plateau Honing with a Bore Cross Hatch Angle of 35-40 Degrees

> Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.

# STRAUB LOGIES

122-3905	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 3.900″ Bore
122-3910	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 3.905" Bore
122-4005	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.000" Bore
122-4010	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.005" Bore
122-4035	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.030″ Bore
122-4045	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.040" Bore
122-4065	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.060" Bore
122-4075	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.070" Bore
122-4130	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.125" Bore
122-4155	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.155" Bore
122-4165	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.165" Bore
122-4185	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.185" Bore
122-4255	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.250" Bore
122-4285	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.280" Bore
122-4315	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.310" Bore
122-4355	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.350" Bore
122-4380	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.375" Bore
122-4445	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.440" Bore
122-4505	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.500" Bore
122-4535	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.530" Bore
122-4565	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.560" Bore
122-4605	Nitrided Top Ring, Phosphate 2nd Ring, Chrome Oil Ring 1.2 x 1.2 x 3mm 4.600" Bore
ALL SETS ARE FILE	FIT ONLY



#### **Flame Hoops**

For decades we have had o-ringed blocks and used wire as a method of sealing high pressure combustion engines that are either boosted or have extreme amounts of cylinder pressure. The wire along with the copper gasket has worked well, but as power has increased so has the need for something better. A round wire is not good for sealing extreme pressures, so we now have Flame Hoops.

A "Flame Hoop" helps secure the block to the cylinder head with a fixed diameter ring of steel. A registration groove is machined into the cylinder head is machined to



accommodate the installation of the Flame Hoop. The block is then machined for a receiver groove to accept the Flame Hoop. This seals off any chance of combustion gases escaping the cylinder.

Hoops should be installed using proper equipment. We use Rottler CNC equipment to install all Flame Hoops. Block work is done on F69A and heads are done on EM69HP. Call Straub Tech for a price on installing Flame Hoops in your Block.

Part No.	Engine Application	Dimensions
900-0001	Ford Coyote Engine	3.907 x 3.827 x .080"
900-0101	BB Ford	4.870 x 4.790 x .080"
900-0201	SB Ford	4.350 x 4.270 x .080"
900-0301	BB Chevy	4.810 x 4.730 x .080"
900-0401	Pontiac, Buick, Ford FE	4.590 x 4.510 x .080"
900-0501	SB Chevy, LS, LT	4.370 x 4.290 x .080"
900-0601	SB Chevy with 4.500" bore space	4.470 x 4.390 x .080"
900-0701	SB Chevy with 4.600" bore space	4.570 x 4.490 x .080"
900-0801	All 5" Bore spacing blocks	4.970 x 4.890 x .080"
900-0901	All 5.300" Bore spacing blocks	5.270 x 5.190 x .080"
590-0059	All 5.9 Cummins 12/24V	4.550 x .080"
670-0067	All 6.4 / 6.7 Power Stroke	4.200 x .080"
600-0060	<b>600-0060</b> All 6.0 Power Stroke 4.000 x .080"	
730-0073	All 7.3 Power Stroke	4.250 x .080"
660-0066	All 6.6 Duramax	4.200 x .080"





## **Straub Tech Block Components**

Straub Tech offers a wide range of products needed to finish off any performance build.

#### **Timing Covers**

SBC		
350-4934	SBC Heavy Duty Steel Timing Cover. Can be used with Roller Button	
200-6040	SBC Aluminum Front Cover. Can be used with roller button. Hardware included.	
BBC		
200-8422	BBC Mark 4 Aluminum Front Cover. Can be used with roller button. Hardware included.	
454-2485	BBC Gen5/6 Aluminum Front Cover. Can be used with roller button.	
	Hardware included.	
SB Ford Windsor		
302-6600	SBF Universal Front Cover. Can be used for all variations of SB Ford Windsor Covers. For Fuel Pump Block Off order 302-6592 for late model use.	
302-6592	Block off plate for SB Ford Timing cover when not using mechanical fuel pump.	
BB Ford 460		
460-0000	BB Ford Aluminum Timing Cover assembly	







#### **Block Finishing Kits**

All the small parts like dowels and keyways an engine needs for finishing.

		a key ways an engine needs for ministing.
SBC	350-3500Kit	Master Finishing Kit: All Dowel pins, oil filter adapter and bolts, extra long dowels, Crank keyways
ВВС	454-4541	Master Finishing Kit: BBC All Block Dowels,oil filter adapter with bolts, extra long dowels for engine to trans, crank keyways, cam bolts
Pontiac All V-8	455-4551	Finishing kit with dowels, keys, and bolts
SB Ford 302-351W	302-3021	Finishing Kit 302-351W 1986-2000 4 Head Dowels, TC Dowels, Cam bolt, Cam bolt washer, CAm thrust plate bolts, Cam ecentric, Cam sprocket Dowel, cam tray bolts
Ford 351C, 351M 400	351-3511	Finishing Kit with head dowels, cam eccentric.
Ford FE 332-428	390-3901	Finishing Kit with head dowels, cam eccentric.
Ford 429-460	460-4601	Finishing Kit with head dowels, cam eccentric.
Mopar B 361-440	440-4401	Finishing kit with dowels, cam bolt, cam washer, woodruff key
Mopar A 340-360	360-3601	Finishing kit with dowels, cam bolt, cam washer, woodruff key







# **Billet Timing Pointers**

Straub Tech Pointers are made from 6061 Aluminum right here in the USA. They are designed to fit a specific damper size and give the engine builder the ability to define true TDC. All pointers include stainless hardware.

Part No.	Description	Damper Size
200-6125	CHEVROLET SMALL BLOCK	6 1/8″
200-6250	CHEVROLET SMALL BLOCK	6 1/4″
200-6375	CHEVROLET SMALL BLOCK	6 3/8″
200-6750	CHEVROLET SMALL BLOCK	6 3/4″
200-7250	CHEVROLET SMALL BLOCK	7 1/4″
200-8000	CHEVROLET SMALL BLOCK	8″
210-6250	CHEVROLET BIG BLOCK	6 1/4″
210-7000	CHEVROLET BIG BLOCK	7″
210-7250	CHEVROLET BIG BLOCK	7 1/4″
210-8000	CHEVROLET BIG BLOCK	8″
230-6207	FORD SMALL BLOCK 302-351	6 1/4 to 6.700″

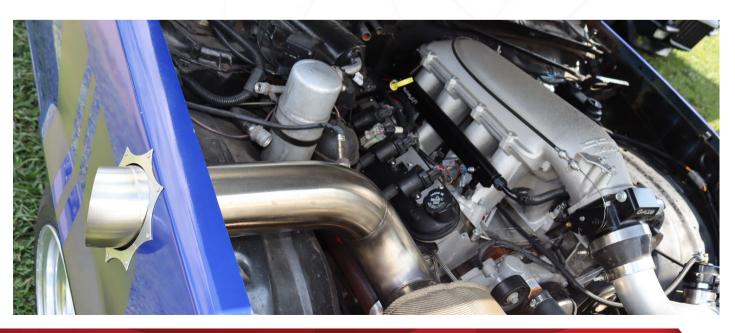




#### **Lifter Valley Vents**

Straub Tech Chevy valley events keep HP robbing oil from flowing down on to the crankshaft and aerating the oil in high rpm engines. Our vents are machined with a hex on the end for easy installation.

Part No.	Description
100-0350	Lifter Valley Vents Set of 8



Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.



# **Oil Restrictors**

Straub Tech Oil Restrictors are designed to keep oil in the lower half of the engine. Our restrictors are available in .070" passages, and are designed for OEM GM blocks and GM Performance and Aftermarket blocks

Part No.	Description
100-1070	SB/BB Chevy OEM Block Aluminum with 2
	O-rings
100-2070	SB/BB Bowtie, Dart, and Merlin. Stainless
	Steel with 2 O-rings



# **ORB Plugs O-Ring Seal Port Fitting**

Part No.	Description				
454-0006	This Plug kit with O-ring plugs fits all Dart Big M blocks post 2019 that are machined for O-ring style plugs.				
Kit includes QTY (1)	Kit includes QTY (1) 7/8" and QTY (5) 1/2" Plugs.				
<b>Bulk Numbers</b>					
875-6408	7/8" O-ring ORB Plug for Dart Blocks	Steel Zinc			
500-6405	1/2" O ring ORB Plug for Dart Blocks	Steel Zinc			
562-6406	9/16" O-ring ORB Plug for Dart Blocks	Steel Zinc			



## **Intermediate Shafts**

Straub Tech Oil Pump Intermediate Shafts are made of high-quality steel for extended reliability. The steel sleeve is pinned to maintain correct alignment between the oil pump and the shaft.



#### **Intermediate Shafts**

Part No.	Application	Description	
701-1055	SBC Intermediate Shaft	SBC HD Intermediate Shaft Fits all SBC	
701-1077	077 BBC Intermediate Shaft BBC HD Intermediate Shaft Fits all BBC		
701-1068	SB Ford 260-302 SBF Intermediate Shaft Fits all oil pumps		
701-1083	SB Ford 351W	SBF Intermediate Shaft Fits all oil pumps	



#### **Romac Harmonic Balancers**

All Romac Harmonic Balancers are SFI 18.1 spec approved. Most are 360 degreed with a fully encapsulated outer ring via a shoulder at the rear and a serviceable circlip mounted at the front of the outer ring. All Romac Balancers are serial marked and fully serviceable and need no special bonding with the elastomer. Each balancer is witness marked from the factory to allow for inspection. All balancers are machined in Australia using the latest in CNC turning centers and high strength alloy's of steel and aluminum and are assembled with a locking ring. Balancers are available in the following types:

- Standard: Steel/Steel balancers are machined out of K1045 steel
- Lightweight: Alloy/Steel balancers are machined from 2011 Aluminum Bar T6 and K1045 steel
- Ultralight: Alloy/Alloy balancers are machined from 2011 Aluminum Bar T6 and 2017A Aluminium Hollow T4510
- Blower: 4340 Steel/Steel balancers are machined from 4340 steel and K1045 Steel and feature a Dual Keyway
- The Standard series should be used for performance applications up to 8500 rpm. The Lightweight, Ultralight, and blower are rated for max effort applications with a max of 10,000 rpm. All applications are fully rebuildable.

Make	Engine		Weight	Pair#	Part No.
AMC	V8 401ci	C/W; 4 Bolt	11lb 7oz	Red Series	0288
		C/W; 4 Bolt	8lb 3oz	Gold Series	A0288SA
		Neutral Balance; 4 Bolt	9lb 14oz	Red Series	0289
		Neutral Balance; 4 Bolt	6lb 10oz	Gold Series	A0289SA
Buick Big Block	V8 403-455ci	C/W; 6 Bolt	9lb 3oz	Red Series	0243
		C/W; 6 Bolt		Gold Series	A0243SA
Chevrolet	V8 262-400ci	Neutral Balance; 3 Bolt	9lb 15oz	Red Series	0202
Small Block		Neutral Balance; 3 Bolt	3lb 1oz	Gold Series	A0202AA
		Neutral Balance; 3 Bolt	5lb 15oz	Gold Series	A0202SA
		Neutral Balance; 3 or 6 Bolt	5lbs 15oz	Gold Series	A0202SA/B
		Neutral Balance; 3 Bolt; Does not accept Factory Pulleys	6lb 13oz	Red Series	0206
		Neutral Balance; 3 Bolt; Does not accept Factory Pulleys	4lb	Gold Series	A0206SA
		Neutral Balance; 3 Bolt; Does not accept Factory Pulleys	3lb 5oz	Gold Series	A0206AA
		Alloy Spacer – Use on all 0206 will now accept Factory Pulleys			02065
		Blown; 6 Bolt; suit pro charger & Paxton Blowers	6lb 5oz	Gold series	A0337SA/B
	V8 400ci	C/W; 3 Bolt	11lbs	Red Series	0205
		C/W; 6 Bolt	11lb	Gold Series	0205/B
		C/W; 3 Bolt	6lb 15oz	Gold Series	A0205SA
		C/W 6 Bolt; Large Seal	6lb 15oz	Gold Series	A0205SA/B

#### Balancers

Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all een fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.

# STRAUB ECHNOLOGIES

Chevrolet Big	V8 427-502ci	Neutral Balance; 3 Bolt	10lb 2oz	Red Series	0207
Block		Neutral Balance; 3 Bolt		Gold Series	A0207AA
		Neutral Balance; 3 Bolt	6lb 15oz	Gold Series	A0207SA
		Neutral Balance; 6 Bolt	10lb 2oz	Gold Series	0207/B
		Neutral Balance; 6 Bolt	6lb 15oz	Gold Series	A0207SA/B
		C/W; 3 Bolt	10lb 2oz	Red Series	0208
		C/W; 3 Bolt	11lb 4oz	Gold Series	A0208SA
		C/W; 6 Bolt	11lb 4oz	Gold Series	0208/B
		C/W; 6 Bolt	7lb 3oz	Gold Series	A0208SA/B
		Blown; 6 Bolt; suit pro charger & Paxton Blowers	6lb 5oz	Gold Series	A0338SA/B
Chevrolet LS Series	V8 427-502ci	GM LSA 2009-2014,Cadillac VTS-V & Camaro –ZL1	13lb 11oz	Gold Series	A0349SA
		Gen 5 Camaro; 2010-2015 ; 25% Underdriven	5lb 11oz	Gold Series	A0351SA
	V8 Gen 111	LS1 Neutral; 3 Bolt; Deep Dish Inner; Serpentine Outer	7lb 1oz	Gold Series	A0285SA
		LS1 Neutral; 3 Bolt; 25% Under Driven; Serpentine Outer	5lb 14oz	Gold Series	A0285SA/U
		LS1 Corvette; 3 Bolt; Neutral; Shallow Dish inner; Serp Outer	7lb 1oz	Gold Series	A0286SA
		L98 & L76; 6.0 & 6.2ltr; 8 Rib		Gold Series	A0331SA
		L98 & L76; 6.0 & 6.2ltr; 8 Rib; 25% Under Driven		Gold Series	A0332SA
		L98 & L76; 6.0 & 6.2ltr; 8 Rib; 5% Over Driven; for S/Charged		Gold Series	A0333SA
		1997 – 2013 C5 & C6 Corvette; 25% Under Driven	5lb 5oz	Gold Series	A0354SA
		1998 – 2002 Fbody; 2004 – 2006 GTO 25% Under Driven	5lb 4oz	Gold Series	A0353SA
Chrysler Small Block	V8 340ci	Neutral Balance; 6 Bolt	9lb 3oz	Red Series	0218
Diver		Neutral Balance; 6 Bolt	4lb 6oz	Gold Series	A0218AA
		Neutral Balance; 6 Bolt		Gold Series	0218C/W/B
		Neutral Balance; 6 Bolt	5lb 8oz	Gold Series	A0218SA
	V8 360ci	C/W; 6 Bolt	10lb 7oz	Red Series	0218C/W
		C/W; 6 Bolt	5lb 2oz	Gold Series	A0218SA/C/W



Chrysler Big	V8 440ci	Even Bolt Pattern; 6 Bolt	9lb 9oz	Red Series	0214
Block		Even Bolt Pattern; 6 Bolt		Gold Series	0214/B
		Even Bolt Pattern; 6 Bolt	3lb 6oz	Gold Series	A0214AA
		Even Bolt Pattern; 6 Bolt	5lb15oz	Gold Series	A0214SA
		Odd Bolt Pattern; 6 Bolt	9lb 9oz	Red Series	0215
		Odd Bolt Pattern; 6 Bolt	3lb 6oz	Gold Series	A0215AA
		Odd Bolt Pattern; 6 Bolt	5lb 15oz	Gold Series	A0215SA
Ford Big Block	V8 352-428ci	FE; Neutral Balance; 3 Bolt	8lb 3oz	Red Series	0219
		FE; Neutral Balance; 3 Bolt	5lb10oz	Gold Series	A0219SA
		FE; Neutral Balance; 3 Bolt	3lb 1oz	Gold Series	A0219AA
	V8 427ci	FE, Factory Replica; Neutral; 3 Bolt	12lb 2oz	Red Series	0250
		FE, Factory Replica; Neutral; 3 Bolt	6lb.15oz	Gold Series	A0250SA
	V8 429-460ci	Neutral Balance; 4 Bolt	9lb 6oz	Red Series	0213
		Neutral Balance; 4 Bolt	5lb 8oz	Gold Series	A0213SA
		Neutral Balance; 4 Bolt	3lb 8oz	Gold Series	A0213AA
		Neutral Balance; 6 Bolt	9lb 6oz	Gold Series	0213/B
		Neutral Balance; 6 Bolt	5lb 8oz	Gold Series	A0213SA/B
Ford Cleveland	V8 302-351ci	C/W External; 4 Bolt	12lb 2oz	Red Series	0203
		C/W External; 4 Bolt	8lb 4oz	Gold Series	A0203SA
		C/W External: 4 or 6 Bolt	8lb 4oz	Gold Series	A0203SA/B
		Neutral Balance; 4 Bolt	8lb 12oz	Red Series	0204
		Neutral Balance; 4 Bolt	7lb 1oz	Gold Series	A0204SA
		Neutral Balance; 4 Bolt	3lb 16oz	Gold Series	A204AA
		Neutral Balance; 4 Bolt		Gold Series	A0204SA/B
Ford Modular USA	V8 5.4l	Neutral Balance; 8 Groove Serpentine; 3 Bolt	4lb 14oz	Red Series	0245
		Neutral Balance; 8 Groove Serpentine; 3 Bolt		Gold Series	A0245SA
		Neutral Balance; 8 Groove Serpentine; 3 Bolt		Gold Series	A0245AA
	V8 4.6l	Neutral Balance; 6 Groove Serpentine; 3 Bolt	4lb 14oz	Red Series	0246
		Neutral Balance; 6 Groove Serpentine; 3 Bolt		Gold Series	A0246SA
		Neutral Balance; 6 Groove Serpentine; 3 Bolt		Gold Series	A0246AA
		Found In 2005-2010 Mustang GT	6lb 7oz	Gold Series	A0347SA
	V8 5.4l & 5.8l	Modular 2007-2012;2013-2014 & Shelby GT500	10lb 12oz	Gold Series	A0348SA
	V8	Mustang & Cobra; Serpentine 8 Groove;	5lb 2oz	Gold Series	A0355SA
Ford Coyote	V8	5.0 ltr; 6.780" as found in 2011 and Mustang GT	9lb 2oz	Gold Series	A0350SA

# STRAUB ECHNOLOGIES

Ford Windsor	V8 289-351ci	C/W, 3 & 4 Bolt; Flat on Front Face	10lb 15oz	Red Series	0209/28
		C/W, 3 & 4 Bolt Pattern; Flat on Front Face	6lb 15oz	Gold Series	A0209SA/28
		C/W; 6 Bolt Pattern; Flat on Front Face	10lb 15oz	Gold Series	0209/28/B
		C/W; 6 Bolt Pattern; Flat on Front Face	6lb 15oz	Gold Series	A0209SA/28/B
		C/W,3&4 Bolt; Early HO Crank Gear; Flat on Front Face	11lb 7oz	Red Series	0209/50
		3&4 Bolt Pattern; Early HO Crank Gear; Flat front Face	6lb 15oz	Gold Series	A0209SA/50
		3&4 Bolt Pattern; Flat on Front Face; Big Seal	10lb	Red Series	0210
		3&4 Bolt Pattern; Flat on Front Face	6lb 13oz	Gold Series	A0210SA
		3&4 Bolt Pattern; Flat on Front Face	3lb 12oz	Gold Series	A0210AA
		Neutral 6 Bolt Pattern; Flat on Front Face	6lb 13oz	Gold Series	A0210SA/B
		Neutral; Group A; 3&4 Bolt Pattern; Timed HO	10lb	Red Series	0210SVO
		Neutral; Group A; 3&4 Bolt Pattern; Timed HO	3lb 12oz	Gold Series	0210AA/SVO
		Neutral; Group A; 3&4 Bolt Pattern; Timed HO	6lb 13oz	Gold Series	0210SA/SVO
		C/W;Boss;3&4 Bolt ,Timed Opposite, Flat Front Face	10lb 15oz	Red Series	0211
		C/W;Boss;3&4 Bolt ,Timed Opposite, Flat Front Face	6lb 15oz	Gold Series	A0211SA
		Neutral; HQ; 4 Bolt	10lb14oz	Red Series	0240
		Neutral; HQ; 4 Bolt	3lb 15oz	Gold Series	A0240AA
		Neutral; HQ; 4 Bolt	6lb 15oz	Gold Series	A0240SA
		Neutral; HQ; 4 Bolt	10lb14oz	Gold Series	0240/B
		Neutral; HQ; 4 Bolt	6lb 15oz	Gold Series	A0240SA/B
		C/W;28oz HO;4 Bolt; Early Windsor; Boss 302	10lb15oz	Red Series	0241/28
		C/W;28oz HO;4 Bolt; Early Windsor; Boss 302	6lb 15oz	Gold Series	A0241/SA/28
		C/W;28oz HO;4 Bolt; Early Windsor; Boss 302	10lb15oz	Gold Series	0241/28/B
		C/W;28oz HO;4 Bolt; Early Windsor; Boss 302	6lb 15oz	Gold Series	A0241SA/28/B
		C/W; 50oz; HO: 4 Bolt	11lb 7oz	Red Series	0241/50
		C/W; 50oz; HO: 4 Bolt	7lb 3oz	Gold Series	A0241SA/50
		C/W; 50oz; HO: 4 Bolt	11lb 7oz	Gold Series	0241/50/B
		C/W; 50oz; HO: 4 Bolt	7lb 3oz	Gold Series	A0241SA/50/E
Pontiac Big	V8 287-455ci	Neutral; 4 Bolt	10lb 13oz	Red Series	0223
Block		Neutral; 4 Bolt	6lb 14oz	Gold Series	A0223SA
		Neutral; 4 Bolt	3lb 14oz	Gold Series	A0223AA



#### **Straub Tech Performance Gaskets**

Straub Tech has had a relationship with several OE gasket manufacturers for over 2 decades. The valued relationship with these companies has allowed Straub Tech to compile the best in every gasket category for the engine builder. We spec premium materials for all gaskets we supply, from carb gaskets to oil pan. This ensures the builder and the hotrodder is getting the best sealing materials in the industry.

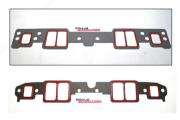
#### **SBC Head Gaskets**

Part No.	Description	Material	Bore Size		Comp. Volume
350-0628	Mls Steel Gasket	Permseal	4.067″	028″	5.00CC
350-1106	Mls Steel Gasket	Permseal	4.070″	.039″	7.20CC
350-1117	Mls Steel Gasket	Permseal	4.175″	.051″	9.10CC
350-1600	Steel Shim Gasket	Permseal	4.100″	.020″	4.40CC
350-1728	Mls Steel Gasket	Permseal W/ Bypass Holes	4.165″	.028″	6.25CC
350-1740	Mls Steel Gasket	Permseal	4.175″	.039″	8.10CC
350-5019	Stainless Shim Head Gasket	Sureseal	4.100	.018″	4.33CC
350-5063	Graphite Shim Head Gasket	Sureseal	4.130	.028″	5.85CC
350-5312	Graphite Core Head Gasket	Sureseal	4.130	.038″	8.40CC
350-5431	Graphite Core Head Gasket	Sureseal W/ Bypass Holes	4.190″	.038″	8.60CC
350-5656	Graphite Core Head Gasket	Sureseal Wo/ Bypass Holes	4.190″	.038″	8.60CC



#### **SBC Intake Gaskets**

Part No.	Description		
352-1102	Large Race Port With Silicone Bead	.060″	2.200 X 1.245″
352-1103	Large Port Intake Gasket No Silicone	.125″	2.200"X 1.255"
352-1106	Stock Intake Port Gasket No Silicone	.125″	1.965 X 1.222″
352-1107	Vortec CPI Intake Gasket with Silicone Bead	.060″	2.300 X 1.380"
352-1119	Vortec CPI Intake Gasket with Silicone Bead	.060″	2.100 X 1.200″
352-1120	Vortec CPI Intake Gasket with Silicone Bead	.125″	2.100 X 1.200″
352-1127	LT1/LT4 Intake Gasket With Silicone	.060″	2.250 X 1.200″
352-1128	Large Race Intake Gasket With Silicone Center Notch For Water Port	060″	2.250 X 1.265″
352-1141	Medium Race Intake Port With Silicone Bead	.060″	2.21 X 1.31″
352-5101	Stock Intake Port Gasket W/Silicone Bead	.060″	1.92 x 1.30″
352-5102	Medium Race Intake Port Gasket W/Silicone Bead	.060″	2.18 x 1.30″
352-5109	Large Race Intake Port Gasket W/Silicone Bead	.090″	2.18 x 1.30″
352-1818	18 Degree Mayhem Head And All Gm	1.275″	18 2.150″



# STRAUB ECHNOLOGIES

#### **SBC Header Gaskets**

Part No.	Descriptopm		
354-1285	Heat Seal Hooker/Stahl Combo Exhaust Header Gaskets		
354-5404	Heat Seal Header Gasket Oem Manifolds	1.45 X 1.45″	
354-9405	Heat Seal Large Race Graphite Header Gasket	1.55 X 1.55	
354-9406	Heat Seal D Port Race Graphite Header Gasket Mayhem 18 Degree Head	1.83 X 1.55	
354-9407	Heat Seal Large Race Graphite Header For Hooker/Stahl Adapter Header Gasket	1.940″	(
354-9408	Heat Seal Large Race Graphite Header Gasket	1.85 X 1.85	
354-9426	Heat Seal Small Round Port Graphite Header Gasket	1.590″	



#### **Valve Cover Gaskets**

Part No.	Description	
357-1628	Early Model Rubber w/steel Valve Cover Gaskets .140" thick	
357-1604WS	5/16" (.312") Cork Valve Cover Gasket with steel core. Pack of 1 per head USA Made	
357-1604	5/16" (.312") Cork Valve Cover Gasket NO STEEL Pack of 1 per head USA Made	
357-1648	.140" Rubber Centerbolt Valve Cover Gasket w/steel Valve Cover Gaskets Sold Each	
357-1648N	.140" Rubber Centerbolt Valve Cover Gasket NO STEEL Valve Cover Gaskets Sold Each	
357-2869T	.160" Rubber Valve Cover Gasket with Steel for 18 Degee VEPR/Brodix/GM heads. Trimmed to avoid rocker arm interference. Sold Each	



#### **Rear Main Seals**

Part No.	Description
356-2900	2PC VITON REAR SEAL HIGH VAC 2.450" MAIN
356-2909	2PC VITON REAR SEAL HIGH VAC 400 AND ROCKET BLOCK CID 2.650"OR LINE HONED
356-2919	1PC VITON REAR SEAL HIGH VAC SBC

# SBC Bulk Oil Pan Front and Rear Seals

Many pans today are put on using silicone. Straub Tech sells the front and rear SBC oil gasket seals in bulk packs of 10

Part No.	Description	Amount
350-0328	SBC Front Cover Oil Pan Seal Thick	10 Pack
350-5147	SBC Oil Pan Front Seal Thin	10 Pack
350-5148	SBC Rear Oil Pan Rubber Seal All Years	10 Pack



# Cam Change Kits (Timing Cover/ Front seal/Water Pump)

Part No.	Description
360-3901	Timing Cover Gasket, Water Pump
	Gaskets, Front Seal



## STRAUB ECHNOLOGIES

### **BBC Performance Gaskets**

#### **BBC HEAD GASKETS**

Part No.	Description	
350-5353	Graphite Sure Seal Head Gasket Mark 4	4.520 X .038" C/TH 10.05CC
350-5354	Graphite Sureseal Head Gasket Gen5/6	4.520 X .038" C/TH 10.05CC
350-3739	Steel MIs Head Gasket Mark 4	4.375 X .039" C/TH 8.00CC
<b>350-6345</b> Steel Mls Head Gasket Mark 4 4.630 X .045" C/TH 12		4.630 X .045" C/TH 12.10CC
350-6359	Steeel Mls Head Gasket Mark 4	4.4630 X .059" C/TH 13.4

#### **BBC INTAKE GASKETS**

Part No.	Description
352-5035	Oval Port Intake Gasket W/Silicone Bead 2.10 X 1.84" X .060" Thick
352-5036	Square Port Intake Gasket W/Silicone Bead W/Top Bolt Holes 2.10 X 1.80" X .060"Thick
352-5034	Oval Port Intake Gaskets For Oem Head W/Heat Risers 2.055" X 1.835" X .060 Thick
352-5060	Square Port Intake Gasket Fits Afr 305-335/Promaxx 317 With Silicone Bead.
352-3106	GM Roval Intake Gasket For Roval Heads .125 Thick

#### **BBC HEADER GASKETS**

Part No.	Description
354-9044	Heat Seal Large Race Header Graphite Gaskets 1.90 X 1.90"
354-9047	Heat Seal Large Race Header Gasket 2.100 Round
354-9447	Graphite Header Gasket For Marine And Endurance Applications 1.75" X 1.75" Expandable
354-3183	Large Square Port Header Gasket 2.00" Square







Production runs of camshafts available upon request. Call 423-391-7774 for quote Warning: all oem fasteners are torque to yield and are designed to be torqued one time. Reusing these fasteners can cause pre mature failure.

## STRAUB ECHNOLOGIES

#### VALVE COVER

Part No.	Description
357-1635	Rubber w/Steel Valve Cover Gaskets .140" thick
357-5639	BBC 5/16"Thick Valve Cover Gasket made from Cork w/steel Core Sold Each
357-1635NS	BBC 5/16"Thick Valve Cover Gasket made from Cork NO steel Sold Each



#### **OIL PAN GASKET**

Part No.	Description
358-1866	1 pc rubber Oil Pan Gasket Gen 5/6
358-1884	1 pc rubber Oil Pan Gasket All Mark 4 Blocks
358-1663	SBC 1 pc Oil Pan Gasket 60-79 with steel limit Bushings Driver side Fits all OEM and Aftermarket SBC Blocks
358-1664	SBC 1 pc Oil Pan Gasket 80-85 with steel limit Bushings Passenger side, Fits OEM and Dart SHP Blocks
358-1803	57-79" SBC Oil Pan Gasket Set. Includes Felt Rails with both thick and thin front seals.
358-1880	SBC Oil Pan Gasket Rubber with steel inner core. Fits 2pc rear seal bocks RH and LH Dipstick. 1 pc gasket
358-1886	SBC Oil Pan Gasket Rubber with steel core. Fits 1pc rear seal bocks RH and LH Dipstick. 1 pc gasket



#### **REAR MAIN SEALS**

Part No.	Description		
356-2904	2PC Viton Rear Seal High Vac		
356-2918	1PC Viton Rear Seal High Vac		
356-29045	2PC Viton Rear Seal High Vac applications. Made from pure silicone.		
SB Ford 302	SB Ford 302 Rear Main Seals		
302-6092	SB Ford 302 Late Model 1 PC Rear Main Seal		
SB Ford 302-351W Timing Cover Gaskets			
351-2000	SB Ford 302-351W Timing Cover Gasket Kit Included Gasket and Front Seal		

#### CAM CHANGE KIT (Timing Cover/Front Seal/Water Pump)

Part No.	Description
360-3921	Timing Cover Gasket, Water Pump Gaskets, Front Seal







### **Ford Performance Gaskets**

#### Head Gaskets

Part No.	Description
302-1002MLS	FORD Small Block 62-82 260,289,302 EXC Boss & Eliminator MLS
302-1002	FORD Small Block 62-82 260,289,302 EXC Boss & Eliminator Steel Core
302-5906	SB Ford Head Gasket 4.080 x .038″ C/TH

#### Valve Cover Gaskets

Part No.	Description
302-1684	SB Ford 302-351W Valve Cover Gasket Rubber with
	Steel core.

#### **Oil Pan Gaskets**

Part No.	Description
302-1819	SB Ford 260-302 Oil Pan Gasket Rubber with steel core. Fits 65 to 85
351-4506	Oil Pan Gasker SB Ford 351W

#### **Intake Gaskets**

Part No.	Description
302-3890	SBF OEM Heads 255-260-289-302-351W 62-94' Intake Manifold Gasket Set
302-3976	Ford 302-351W with Aftermarket heads Brodix/ Dart/Edelbrock

#### **Rear Main Seals**

Part No.	Description
302-6092	SBF 302 Main Rear Seal

#### **Timing Gaskets**

Part No.	Description
351-2000	SBF Timing Cover Gasket Kit













#### **Brass Freeze Plug Kits**

Straub Tech Brass Freeze Plug Kits resist corrosion better than standard steel plugs. In marine applications they help prevent cracks caused by the pressure of frozen coolant. These can be used in mild to high HP build with or without antifreeze. Several kits are offered with every plug you need for a large variety of applications.



SB Chevrolet	SB Chevrolet		
Part No.	Block Type	Kit Contents	
<b>350-100B</b> GM OEM 283-350 8 Brass Plugs, 8 steel galley plugs, 5 pipe plugs, 1		8 Brass Plugs, 8 steel galley plugs, 5 pipe plugs, 1 Cam Plug	
350-101B	GM OEM 400	10 Brass Plugs, 8 steel galley plugs, 5 pipe plugs, 1 Cam Plug	
350-102B	Iron Dart/World/BPE	10 Brass Plugs, 8 pipe plugs, 1 Cam Plug	
350-103B	Iron Dart/World/BPE 50MM	10 Brass Plugs, 8 pipe plugs, 1 Cam Plug for 50MM Cam	
350-104B	Iron Dart/World/BPE 55MM	10 Brass Plugs, 8 pipe plugs, 1 Cam Plug for 55MM Cam	
350-105B	Dart SHP Block BBC Cam	10 Brass Plugs, 8 pipe plugs, 1 Cam Plug for BBC Cam	

454-100BAll OEM BBC up to 19908 Brass Plugs (1 ¾"), 3 steel galley plugs, 5 pipe plugs, 1 Cam Plug454-101BAll OEM BBC 1991-20008 Brass Plugs (1 5/8"), 3 steel galley plugs, 5 pipe plugs, 1 Cam Plug454-102BIron Dart/World/Brodix/BPE8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam Plug454-103BIron Dart/World/Brodix/BPE8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 50MM Plug454-104BIron Dart/World/Brodix/BPE8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 55MM Plug	<b>BB</b> Chevrolet		
454-102BIron Dart/World/Brodix/BPE8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam Plug454-103BIron Dart/World/Brodix/BPE8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 50MM Plug	454-100B	All OEM BBC up to 1990	8 Brass Plugs (1 ¾"), 3 steel galley plugs, 5 pipe plugs, 1 Cam Plug
454-103B Iron Dart/World/Brodix/BPE 8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 50MM Plug	454-101B	All OEM BBC 1991-2000	8 Brass Plugs (1 5/8″), 3 steel galley plugs, 5 pipe plugs, 1 Cam Plug
	454-102B	Iron Dart/World/Brodix/BPE	8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam Plug
454-104B Iron Dart/World/Brodix/BPE 8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 55MM Plug	454-103B	Iron Dart/World/Brodix/BPE	8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 50MM Plug
	454-104B	Iron Dart/World/Brodix/BPE	8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 55MM Plug
<b>454-105B</b> Iron Dart/World/Brodix/BPE8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 60MM Plug	454-105B	Iron Dart/World/Brodix/BPE	8 Brass Plugs (1 5/8"), 14 pipe plugs, 1 Cam 60MM Plug

SB Ford 302-351W		
<b>302-100B</b> All OEM 302-351W '68-19977 Brass Plugs, 3 steel galley plugs, 4 pipe plugs 1 Cam plug		7 Brass Plugs, 3 steel galley plugs, 4 pipe plugs 1 Cam plug
302-101B	Dart Ford Block	10 Brass Plugs, 11 pipe plugs, 1 Cam Plug
302-102B	Dart Ford Block 55MM Cam	10 Brass Plugs, 11 pipe plugs, 1 Cam Plug for 55MM Cam

Bulk Brass Plugs		
900-1500	Brass 1 1/2" OD Freeze Plugs	50 pcs per box
900-1562	Brass 1 5/8" OD Freeze Plugs	50 pcs per box
900-1750	Brass 1 <sup>3</sup> / <sub>4</sub> " OD Freeze Plugs	50 pcs per box



#### **Engine Fasteners**

Straub Tech Cylinder Head Bolts are made by OEM suppliers. These bolts are Grade 8 150K PSI head bolts, and are used on the crate performance engines. These bolts are a inexpensive way to ensure proper cylinder head torque on your new engine. Sold in complete engine sets.

Part No.	Description
900-3500	All SBC OEM Iron and Aluminum heads. Teflon Coated Threads
900-4540	All BBC OEM Iron and Aluminum heads Mark 4 and Gen5/6. Coated Threads
346-8545	All LS engines 97-2003. Teflon coated threads
346-0568	All LS engines 2004 and newer. Teflon coated threads
900-3020	All SB Ford 260-289-302. Teflon coated threads.

#### **Harmonic Damper Bolts**

Straub Tech Pro Harmonic Balancer bolt is 4140 Chrome moly 190K PSI, with the unique feature of a 1" Nut with captive flange head. This fully machined bolt features rolled threads for maximum thread engagement. The 1" head makes turning the engine over a snap. Finished in Black oxide.

Part No.	Description
900-6200	SBC 1 7/8" long 7/16" NF
900-6400	BBC 1 5/16" long 1/2" NF

### **Straub Tech Hotrod Harmonic Balancer Bolt**

Straub Tech Hotrod Harmonic Balancer bolt is a Grade 8 gold zinc bolt and extra thick (.312") washer combination. This 150K PSI bolt is recommended for sportsman type applications with RPM under 6500 using OEM type balancers.

Part No.	Description
900-7200	SBC 2.250" long 7/16" NF
900-7400	BBC 1.500" long ½" NF



### **Front Cover Bolts**

Straub Tech's Front Cover Bolt kits come in 12 point, Socket Cap, and 6pt Flange. This gives the engine builder his choice of what he wants to use on his own build. We use Grade 8, Chrome Moly, and Stainless material to fit any application.

Part No.	Description
400-2500	SB and BBC Front Cover Kit 6pt Flange Head Zinc 10 pcs
400-2501	SB and BBC Front Cover Kit Socket Cap Head Black Oxide 10 Pcs
400-2502	SB and BBC Front Cover Kit 12pt Head Black Oxide 10 pcs
400-2503	SB and BBC Front Cover Kit 12 pt Head Stainless Steel 10 pcs





#### **Front Cover Studs**

Straub Tech Oil pan stud kits include 150K PSI studs and captive flange nuts with serrations. This type of nut bites the metal and locks the nut into place.

Part No.	Description
400-3500	SB and BBC Front Cover Kit ¼" x 1" stud and 6pt Flange Head
	Nuts Zinc 10 pcs



#### **Intake Bolt Sets**

Straub Tech Intake bolt sets use bolts made here in the USA from Alloy steel. Once called "Ferry Heads", the 12 point was designed during WWII for its ease of serviceability. Each bolt features rolled threads and is finished in black oxide. Washers are included with each kit.

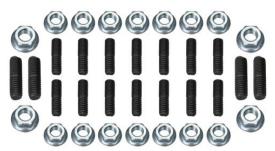
Part No.	Description
350-3500	SBC with OEM Intake manifold 12 pcs
350-3501	SBC with Aftermarket Intake manifold 12 pcs
454-4540	BBC with OEM intake manifold 16 pcs
454-4541	BBC with Aftermarket manifold 16 pcs
302-2001	Ford 260-289-302-351W Intake Bolts Cap Socket
302-2103	Ford 260-289-302-351W Intake Stud Kit
352-2004	Ford 351C-351M-400 Intake Bolts
390-2002	Ford 390-428 Intake Bolts
340-2001	Mopar SB and BB 310-440 Intake Bolts



### **Oil Pan Stud Kits**

Straub Tech Oil pan stud kits include 150K PSI studs, and captive flange nuts with serrations. This type of nut bites the metal and locks the nut into place.

Part No.	Description
350-4520	SBC Oil Pan Bolt Kit $14 \times \frac{1}{4}$ and $4 \times \frac{5}{16}$
302-4520	SB Ford Oil Pan Bolt Kit 18 x ¼" and 4 x 5/16"
360-4520	SB Chrysler Oil Pan Bolt Kit 20 x 5/16"
455-4520	All Pontiac Oil Pan Bolt Kit 20 x 5/16"
454-4520	BBC Oil Pan Bolt Kit 20 x 5/16" and 2 x ¼"
460-4520	BB Ford 429-460 Oil Pan Bolt Kit 18 x ¼" and 6 x 5/16"
390-4520	FE Ford 352-428 Oil Pan Bolt Kit 20 x 5/16"





#### **Oil Pan Bolt Sets**

Straub Tech Oil Pan Bolt sets are available in USA made 12pt, and Taiwan Made 6pt Flange heads. The 12pt was designed during WWII for its ease of serviceability. The 6pt flange with its captive flange and serrations grips metal and resists loosening. The 12pts are finished in black oxide, and the 6pts are silver zinc finished.

Part No.	Description	
12 Point Heads		
350-3520	SBC Oil Pan Bolt Kit $14 \times \frac{1}{4}$ and $4 \times \frac{5}{16}$	
302-3520	SB Ford Oil Pan Bolt Kit 18 x ¼" and 4 x 5/16"	
360-3520	SB Chrysler Oil Pan Bolt Kit 20 x 5/16"	
455-3520	All Pontiac Oil Pan Bolt Kit 20 x 5/16"	
454-3520	BBC Oil Pan Bolt Kit 20 x 5/16" and 2 x ¼"	
460-3520	BB Ford 429-460 Oil Pan Bolt Kit 18 x ¼" and 6 x 5/16"	
390-3520	FE Ford 352-428 Oil Pan Bolt Kit 20 x 5/16"	
6 Point Head	s	
350-3620	SBC Oil Pan Bolt Kit $14 \times \frac{1}{4}$ and $4 \times \frac{5}{16}$	
302-3620	SB Ford Oil Pan Bolt Kit 18 x ¼" and 4 x 5/16"	
360-3620	SB Chrysler Oil Pan Bolt Kit 20 x 5/16"	
455-3620	All Pontiac Oil Pan Bolt Kit 20 x 5/16"	
454-3620	BBC Oil Pan Bolt Kit 20 x 5/16" and 2 x ¼"	
460-3620	BB Ford 429-460 Oil Pan Bolt Kit 18 x ¼" and 6 x 5/16"	
390-3620	FE Ford 352-428 Oil Pan Bolt Kit 20 x 5/16"	



### Main Bolt Kit

Straub Tech uses the OEM supplier for some of our fasteners. We are proud to offer the main bolt used on SBC 2 Bolt blocks for over 3 decades. No point in using that old bolt or paying outrageous prices for main bolts.

Part No.	Description	
900-5001	SBC Large Journal 2Bolt Kit.	10 bolts OEM 3932480

### **Pipe Plugs**

Straub Tech Pipe plugs are a must when putting a fresh engine together. Plugs are pipe sized and come with sealant on the plug. Sold in quantities of 10 pcs.

Part No.	Description
125-7911	1/8" Pipe Plug w/sealant Hex countersunk
250-7369	1/4" Pipe Plug w/sealant Hex countersunk
375-7921	3/8" Pipe Plug w/sealant Hex countersunk
500-7921	1/2" Pipe Plug w/sealant Hex countersunk
750-7927	3/4" Pipe Plug wo/sealant Hex countersunk





#### **Flywheel Bolts and Adapters**

Straub Tech's Flywheel bolts are made by the companies that are OE to the big 3. All bolts are designed to OEM specs and can be used in mild performance builds.

Our LS Flywheel adapter is made from alloy steel and allows one to bolt an LS 1/2/3/7 or LT to an early model GM transmission.

Part No.	Description
900-7973	All SB and BBC 7/16"-20 x 1" Long Flexplate and flywheel Bolt
900-5858	BB Ford 429-460 Flexplate Bolt
900-7940	LS Flywheel Adapter bolts, For adapter 900-3532. This allows and
	LS engine to be bolted to a 350, 400 turbo or 700R4.
900-3532	LS Flywheel Adapter for early model transmission conversion.





#### 12 Point 180K Bolts

These 12 point bolts can be used for a variety of applications that need to have improved strength over OEM bolts. These bolts are 180K PSI. They are 100% machined in the USA from chrome moly steel with rolled threads. They feature a 12 point flange style head. All bolts are finished in black oxide. Available in Boxes of 100 pcs.



Application: Valve cover, Front Cover, Oil Pan, Distributor, Header bolts, Carb Bolts, Engine mounts, water necks

Part No.	Description		
<sup>1</sup> ⁄4″ 12 Points: V	¼″ 12 Points: Valve Cover, Front Cover, Oil Pan		
250-0750	12 Point .750" UHL Bolt		
250-1750	12 Point .750" UHL Bolt Stainless Steel		
250-1000	12 Point 1.00" UHL Bolt		
5/16" 12 Points:	5/16" 12 Points: Carburetor, Oil Pan, Valve Cover		
312-0750	12 Point .750" UHL Bolt		
312-1000	12 Point 1.00" UHL Bolt		

#### 3/8" Bolts: Intake, Header, Fuel Pump Plate, Engine Mounts, Distributor Hold down, Water neck

375-1000	12 Point 1" UHL Bolt
375-1250	12 Point 1.25" UHL Bolt
375-0000	.625" Flat Washer for bolts



## **Straub Tech Tools**

### **Valve Spring Seat Cutters**

Our carbide tipped cutters will machine spring pads in both aluminum or iron heads for correct pad size and depth. Pilots are interchangeable with our valve guide cutters or sold separately.

Part No.	Description
990-1460	1.470" OD Cutter x .625 guide boss
990-1458	1.500" OD Cutter x .625 guide boss
990-1461	1.570" OD Cutter x .625 guide boss
990-1462	1.680" OD Cutter x .625 guide boss
990-1435	8MM / 5/16" Pilot
990-1438	11/32" Pilot
990-1442	3/8" Pilot





#### **Valve Spring Testers**

Maintaining correct spring pressure at the beginning of a build and during a build is the life of the engine. We offer 2 spring testers for checking valve springs. Our bench mounted spring tester and on the head tester are good for springs up to 600#. We recommend checking the spring pressure at the installed height with the on-head tester. Once the spring has lost 15% of its original seat pressure, replace the springs.

Part No.	Description
990-5075	Bench mounted spring tester, good to 600#
990-5099	On the head spring tester, good to 600#



#### **AN Wrench**

Straub Tech's new "Strauby" AN wrench gives the mechanic, engine builder, and owner a 1 in all AN wrench. This wrench features 4 different AN sizes for a quick and handy tool to have at the track or in the tool box. Made out of 6061-T6 aluminum plate this wrench will be with you for years.

Part No.	Description
900-6802	Fits 6, 8, 10, 12 Fittings

## STRAUB ECHNOLOGIES



### Valve Lapping Tool

To insure a proper seal between the valve and seat, our lapping tool and compound can be used to accomplish this. We offer lapping tools made with hardwood handles for years of use. Tools and compound sold separately.

990-4480	Lapping tool with suction cup combo of 5/8" and 1 3/16"	
990-4481	Lapping tool with suction cup combo of 1 1/8's to 1 3/8"	
990-4453	Lapping compound 120 grit Course for roughing 16oz	
990-4455	Lapping compound 280 grit Fine for finishing 16oz	

### Valve Seal Removal Tool

The ability to rotate the plier handles at 90 degrees or 180 degrees allows for seal removal on just about any cylinder head. The jaws of the tool feature ridges to grab any type of seal material for positive grip.

Part No.	990-4609	
----------	----------	--

### **Valve Guide Machining Tools**

These tools perform 3 machining process at 1 time. Machines top of valve guide for correct valve seal install height Machines OD of valve guide for positive fit with seal Machines a chamfer on top of guide to prevent damaging the seal Kit comes with 2 pilots and 2 seal cutters. This kit will machine all heads with 11/32" and 3/8" stem valve size for seal sizes of .500 and .530".

**990-1440** 1 x .341" pilot, 1 x .371" pilot, 1 x cutter for .500" valve guide OD, 1 x cutter for .531" valve guide

### **Valve Spring Height Mic**

Known as a "Swifty" by engine builders, this mic will allow accurate measurement of spring install height on a cylinder head. This mic has a range of 1.600" to 2.100" which covers all pushrod V-8 engines.

Part No. 990-0712

### **Valve Spring Compressors**

Manual Heavy Duty Spring Compressor

Our HD valve spring compressor is designed for the high performance engine builder using heads with higher spring rates. Designed to handle up to 600# springs, the cantilever handle allows for easy removal and install of springs.

### **Stud Mount Spring Compressor**

Our stud mount spring compressor allows for spring change outs while heads are installed. Can be used with both 3/8" and 7/16" Rocker studs.

990-4254	Stud Mount Spring Compressor
----------	------------------------------









#### **Plug Wire Crimp and Cutting Fixture**

A must when stripping plug wires. Cuts just the right amount of wire insulation off for proper installation. Does not Damage the spiro wound conductor. Crimps all terminals when used with a bench vice without damage to wires. Can be used with 8.5MM and 10MM wire sizes.

#### **Plug Wire Crimp and Cutting Fixture**

Part No.	Description	
900-3395	Plug Wire Crimp and Cut Fixture	



Separates, organizes & supports ignition wires. Molded from non-conductive type 6/6. Black nylon. Will not melt, mar, distort, crack or fade. Stainless steel hardware and allen key included

Part No.	Description	r.
900-7795	Wire Loom Kit 2 each of 4, 3 , and 2 hole looms	



#### **Distributor Gear Checking Fixture**

Straub Tech offers a checking fixture for distributor gear to cam gear engagement. This clearance is critical for proper ignition timing. The use of this fixture will ensure you have OEM Blueprint spec engagement which will give you improved ignition timing which results in more power. Developed in the 90's for the highest forms of circle track racing, these checking fixtures are a must for highly competitive classes.



Part No.	Description
500-3500	Chevrolet Distributor Gear Checking Fixture SBC/BBC/V-6
500-3510	Ford Distributor Gear Checking Fixture Ford SB 302, 351W, 351C, BBF 460
500-8599	Distributor Setup Tool, 3-in-1, for Oil Pump Shaft Length/Slip Collar Position/Oil Pump Primer, Chevy, Each





#### **Holley Carb Inlet kits**

Straub Tech offers easy to install, pre-assembled fuel lines to help clean up your engine compartment and properly deliver fuel to your carb. We offer a full line of kits for 4150 and 4500. Constructed from stainless braided flex line, we offer quality fit and finish. All inlet kits come with provision for mounting a fuel pressure gauge.

Part No.	Color	Hose Size	Description
902-5108	Black	-8	Fits Holley Dominator/4500 Ultra
901-5114	Red/Blue	-8	Fits Holley Dominator HP
902-5114	Black	-8	Fits Holley Dominator HP
901-5115	Red/Blue	-8	Fits Holley 4150
902-5115	Black	-8	Fits Holley 4150
901-5117	Red/Blue	-6	Fits Holley 4150
902-5117	Black	-6	Fits Holley 4150

### **Fuel Pump Pushrod**

Straub Tech now offers a new fuel pump pushrod for SBC/BBC/GM 90 Degree V-6 Engines and for BB Mopar Engines. These pushrods are the lightest in the industry with the Chevy coming in at 59 grams compared to the OEM pushrod at 144gms on average. We have achieved this by using aircraft grade aluminum billet stock and inserted the tip. **These are 100% USA MADE.** 

Part No.	Description	
100-4609	Fits Chevy Small Block, Big Block, and 4.3L V-6. Can be used with billet or cast core cams.	
100-4626	Fits BB Mopar B engines and Hemi's. Can be use with billet or cast core cams.	







#### **Fuel Nut**

There is nothing more frustrating than having to adjust fuel pressure during race day in the heat of competition; "Do I have an open-end wrench? Where is the allen wrench that fits this regulator? Get me a towel to wipe my hand off! I can't hold the wrench!"

Well, those days are over with the Fuel Nut! Designed by Chris Nowack and tested on Troy LaCrone's Camaro, the Fuel Nut only needs your God-given tools, your hands, to adjust your fuel pressure. The knurled locking nut is turned to release the lock and then you simply turn the knurled adjusting nut to dial in your fuel pressure. Once set, tighten the locking nut and you're ready



to go! This is fuel pressure regulator adjusting made easy and it's all done with your hands and nothing else. Stop the headaches and get yours today! *The Nut fits any fuel regulator with a 7/16-14 Thread* 

Part No. De	Description
<b>950-1000</b> Fu	uel Regulator Retro Kit for hand adjustment of fuel pressure.

#### **Carburetor Billet Throttle Brackets**

Straub Tech billet throttle cable brackets fits 4150 / 4160 /and 4500 carburetors, mount to the carburetor base, and include a return spring and installation hardware. The stainless steel dual return springs are adjustable, as are the cable ends for Morse and OEM GM.

Part No.	Color	Description		
901-4150	Blue	Billet Throttle Bracket for Holley 4150/4160		
902-4150	Black	Billet Throttle Bracket for Holley 4150/4160		
903-4150	Red	Billet Throttle Bracket for Holley 4150/4160		
904-4150	Polished	Billet Throttle Bracket for Holley 4150/4160		
901-4500	Blue	Billet Throttle Bracket for Holley 4500 Dominator		
902-4500	Black	Billet Throttle Bracket for Holley 4500 Dominator		
904-4500	Polished	Billet Throttle Bracket for Holley 4500 Dominator		



### Bulk Hose

Part No.	Description		
Ren 350499	Black Braided Hose, -4AN		
Ren 350699	Black Braided Hose, -6AN		
Ren 350899	Black Braided Hose, -8AN		
Ren 351099	Black Braided Hose, -10AN		
Ren 351299	Black Braided Hose, -12AN		
Ren 320499	Stainless Braided Hose, -4AN		
Ren 320699	Stainless Braided Hose, -6AN		
Ren 320899	Stainless Braided Hose, -8AN		
Ren 321099	Stainless Braided Hose, -10AN		
Ren 321299	Stainless Braided Hose, -12AN		





### **Straub Tech Swag**

Straub Tech has the "Swag" to make you look good in the winners circle!! All shirts and hats are screen printed in the USA by small business!!!!

#### Short Sleve T Shirts (Lightweight)

Size	Description	Color
Small	Straub Tech Front/Cam Lobes Valve Events on back	Black
Medium	Straub Tech Front/Cam Lobes Valve Events on back	
Large	Straub Tech Front/Cam Lobes Valve Events on back	Black
X-Large	Straub Tech Front/Cam Lobes Valve Events on back	
XX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black
XXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black
XXXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black

#### Long Sleve Shirts (Lightweight)

Size	Description	
Small	Straub Tech Front/Cam Lobes Valve Events on back	Black
Medium	Straub Tech Front/Cam Lobes Valve Events on back	
Large	Straub Tech Front/Cam Lobes Valve Events on back	
X-Large	-Large Straub Tech Front/Cam Lobes Valve Events on back	
XX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black
XXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black
XXXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black





#### Hoodies No Zipper (Midweight)

Size	Description		
Small	Straub Tech Front/Cam Lobes Valve Events on back	Black	
Medium	Straub Tech Front/Cam Lobes Valve Events on back		
Large	Straub Tech Front/Cam Lobes Valve Events on back		
X-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black	
XX-Large	Straub Tech Front/Cam Lobes Valve Events on back		
XXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black	
XXXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black	



#### Hoodies with Zipper (Midweight)

Size	Description	Color
Small	Straub Tech Front/Cam Lobes Valve Events on back	Black
Medium	Straub Tech Front/Cam Lobes Valve Events on back	Black
LargeStraub Tech Front/Cam Lobes Valve Events on back		Black
X-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black
<b>XX-Large</b> Straub Tech Front/Cam Lobes Valve Events on back		Black
<b>XXX-Large</b> Straub Tech Front/Cam Lobes Valve Events on back		Black
XXXX-Large	Straub Tech Front/Cam Lobes Valve Events on back	Black



#### Straub Tech Hats (Embroidered)

Size	Description	Color
S/M	Straub Tech	Black
S/M	Straub Tech	Gray
S/M	Straub/Fisher Engines	Black
S/M	Straub/Fisher Engines	Gray
L/XL	Straub Tech	Black
L/XL	Straub Tech	Gray
L/XL	Straub/Fisher Engines	Black
L/XL	Straub/Fisher Engines	Gray

#### **Straub Beanies (Embroidered)**

Size	Description	Color
All	Straub Tech	Black
All	Straub/Fisher Engines	Black



#### **Straub Visor**

Size	Description	Color
All	Straub Tech	Black









#### **Limited Warranty**

Straub Technologies Inc., Incorporated will be herein referred to as 'Straub Tech'. The warranties set forth below are made possible by the most modern production technology in the industry. Straub Tech products are proven by laboratory and field testing. Straub Tech does not warrant the product's performance because Straub Tech cannot control its installation, application or usage. Straub Tech does not warrant any items outside of the Straub Tech line of products. Straub Tech does not warrant or accept liability for the destruction or damage to other products used in conjunction with Straub Tech products. By installing a Straub Tech component you acknowledge that high performance parts sometimes fail and you agree in not holding Straub Tech liable for any and all incidental damages. Shipping is offered at our lower rates as a service, you may use your own account at your discretion. Shipping is not considered part of your Straub Tech purchase, but is an independent transaction associated with your purchase's delivery. Shipping/Handling is not covered during warranty replacement issues. Shipping redits on an individual basis. Straub Tech neither delegates nor authorizes any person to assume obligations or liabilities on behalf of Straub Tech in connection with any Straub Tech products or the sale of any Straub Tech products. Nothing in this Statement of Policy shall alter or enlarge the terms of the warranties, obligations or liabilities issued with the products. Warranty is void in race applications.

#### WARRANTY PROVISIONS:

Applies to all connecting rods, crankshafts, and valve train components. Valve train components include: roller lifters, valve springs, aluminum rocker arms and pushrods. Straub Tech warrants all of the above listed products against manufacturer's defects for one year from date of purchase by purchase user.

### **CAM WARRANTY PROVISIONS:**

Straub Tech warrants its entire cam series against excessive lobe wear for one year from the date of purchase by the purchaseruser in accordance with Straub Tech policies. Straub Tech cams are designed and required to be used in conjunction with Straub Tech kits to insure optimum performance and longevity. The warranty is valid only where a complete Straub Tech kit is used. If excessive lobe wear occurs during said one year period, purchaser must return the cam and lifters to Straub Tech, freight prepaid. The parts will be analyzed. If Straub Tech is not at fault, the purchaser must secure the means for return delivery of the parts. Should Straub Tech be at fault, Straub Tech has one of two options: Repair or replacement will be accomplished at no cost to the purchaser and returned, freight collect. Straub Tech does not pay shipping. DISCLAIMERS: The following terms apply to any Straub Tech warranty

Straub Tech warranties are void where the Straub Tech product has been physically altered, improperly installed, used or otherwise damaged due to no fault of Straub Tech has not been used for the purpose intended or for which it was designed.

Purchaser must fill out and mail to Straub Tech the completed Warranty card within thirty (30) days of purchase to obtain the benefits of the foregoing warranties. Failure to do so will void all of the express warranties herein above set forth.

Implied warranties of merchantability and fitness are limited for a term of one (1) year from the date of original purchase.

- Straub Tech is not responsible for incidental or consequential damage.
- These warranties are not assignable or transferable.
- These warranties do not apply to reground cams or components used therein.
- Each warranty will apply to all repaired or replaced cams or components until the expiration of the remaining period of the original warranty.
- This warranty gives you specific legal rights and may also have other legal rights which vary from state to state.
- All Straub Tech products are not legal for sale or use on emission controlled motor vehicles.



### HOW TO RETURN MERCHANDISE AND RECEIVE YOUR REFUND OR EX-CHANGE IN THE LEAST AMOUNT OF TIME

Although we are sure that you will be completely satisfied with your Straub Tech purchases, if you find that you must return your order for any reason, please follow the procedures listed below. Compliance will allow us to issue your credit/or/ exchange in the least amount of time. You may return any item in our current catalog, unless it is a special order product. There is a 25% RESTOCKING CHARGE for all returns unless an error has been made by Straub Tech. RETURNS ARE ACCEPTED UP TO ONE YEAR AFTER PURCHASE. Returns are subject to restrictions. Returns must be in 'new' condition. Rust, marks, dents, scratches or damage in any way will make the Part No. 'new' and an appropriate value must be determined.

#### **EASY RETURN STEPS:**

Call our order desk to obtain a written RGA number (Returned Goods Authorization.)

Please have the following information ready: The Part No. to be returned, the purchase invoice number, the reason for the return, a copy of the invoice and your requested disposition (what should we do with your return... exchange, credit, etc.). An RGA number will be provided to you by one of our sales representatives. Reference your RGA number on the outside of your package and in your disposition to us.

- Attach a copy of your original sales order (or invoice) to the RGA.
- Please make note of any special requests (directly on the RGA form) that you may have regarding your return/exchange.
- List your contact information. Include your Name, address, home phone number, cell phone, fax, and e-mail address, in case we need to contact you.
- Wrap your package securely.
- Return your package to Straub Tech (using the RGA label), freight prepaid and fully insured.
- Returns are accepted up to one year after purchase.
- Straub Tech reserves the right to lessen the 25% restocking fee at its discretion and only when RMAs accompany a product.
- Shipping/Handling is not credited or refunded during any transaction.
- The refund process may take up to 60 days to complete
- After 90 days from the date of purchase, any refund will be given as store credit. The refund process is not part of the 90 days.

These easy steps minimize the time required to process your return/refund, saving you time and money. There will be delays in processing your return if these steps are not completed. Your cooperation will always be appreciated.

You may contact our Customer Service Representatives or our Technical Representatives at:

#### Straub Technologies Inc.

198 Industrial Park Rd Piney Flats, TN 37686 423 391 7774

#### www.straubtechnologies.com

# PERFORMANCE CATALOG CALL 423-391-7774 FOR QUOTE

EDGE

STRAUBTECHNOLOGIES.COM 198 INDUSTRIAL PARK ROAD PINEY FLATS, TN 37686