

2022 BUYER'S GUIDE

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Hello again and welcome to the 2022 Diversified Machine Inc. Product Guide.

We hope this finds you happy and healthy. We certainly had no idea when we wrote the introduction to our 2020 product guide the craziness that was on the horizon. Illness, volatile pricing, part and raw material difficulties, shipping debacles, employee shortages and RACING! A whole lotta racing!!

Only our industry would have the resiliency to not just survive Earth 2020 but to thrive in it. Racers are used to rising up to challenges. In a world that lacked normalcy the racetrack was the comfort zone many of us were seeking. Coupled with the phenomena that is Kyle Larson (HOW BOUT WHAT THAT GUY HAS DONE?!?!), short track racing has seen record attendance, participation and a resurgent enthusiasm. We're all part of a great time in Motorsport's history.

Motorsports is booming and it does create some challenges in an already challenging climate. No manufacturer or supplier in the racing industry could be prepared for the explosion that took place. Tire shortages, long lead times and lack of availability of common items have affected us all. We haven't been immune and simply ask, "be patient." We're working hard and there's no doubt in our mind that our colleagues are doing the same. They're facing the same challenges we are with employee shortages, increased shipping issues, extended delivery times on raw materials and fluctuating prices. Our great machinists and assemblers are working at record pace to manufacture components. Our shipping department is shipping frantically. And our office girls are working extra hard as well. Staying on top of material orders while trying to maintain reasonable pricing is a gargantuan effort. In addition, shipping and freight companies are seeing increased issues and daily rate adjustments. Freight companies citing their lack of employees have adjusted transit times. Many rural areas now only see deliveries one day a week. I want all our customers to know that your satisfaction remains our top priority. We're working extra hard every day not just to supply you with the best components but to maintain fair pricing and the service you've come to expect from DMI.

As always, we remain aggressive in new product development and growth as a company. With a workload already at max capacity, in early 2021 we stepped up for the industry and produced a billet hub for 2.5" GN Snouts. As difficulty arose with delivery of offshore cast hubs and an industry facing a critical short coming, we reminded everyone what can be accomplished when you're a manufacturer and not an importer! Additionally, we have designed and produced new billet yokes to service the NE Dirt Modified market. Chassis advancements in that segment have created some driveline issues and our new yokes offer a solution. You'll also see that many of our components now feature laser engraving. You'll find the DMI logo, part number, pertinent info and Made in the USA emblazoned proudly. Our EZ rears continue to lead the market in strength and durability and have become the choice of the majority of our closed tube customers. Our aluminum driveshafts continue to impress and amaze sprint car racers across the globe with their weight savings and service in powerful 410's to RaceSaver® 305's. Lastly, you'll find major changes on our rear option structure. In an effort to better serve our distributors we have created an OPT option line. We still offer all the great options you've come to know but with different part numbers to facilitate the integration into different accounting systems.

It is an honor and a privilege to be in the racing industry. We promise to continue to develop, refine and grow in an effort to be the best company in the sport. If you are already a DMI customer, thanks for the support and being a part of our DMI family. If you haven't done business with us yet, I invite you to explore the catalog, call with questions and give us an opportunity to show you what has made DMI the choice of racers around the world. Have a safe and prosperous racing season. See you at the races.




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VISION STATEMENT

At DMI our vision is to create a relationship with our customers where they know not only are they a valued customer but a part of the DMI family. We want the customer to know that their successes are our successes. We will do everything we can to prove to the customer that they made the right choice entrusting DMI with their safety, providing them a fair value and offering the highest performing components available in motorsports today, tomorrow and in the future.

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SS1

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BULLDOG
Quick Change



XR3

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BULLDOG
Quick Change

CT1

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BB-1

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EZ
SERIES

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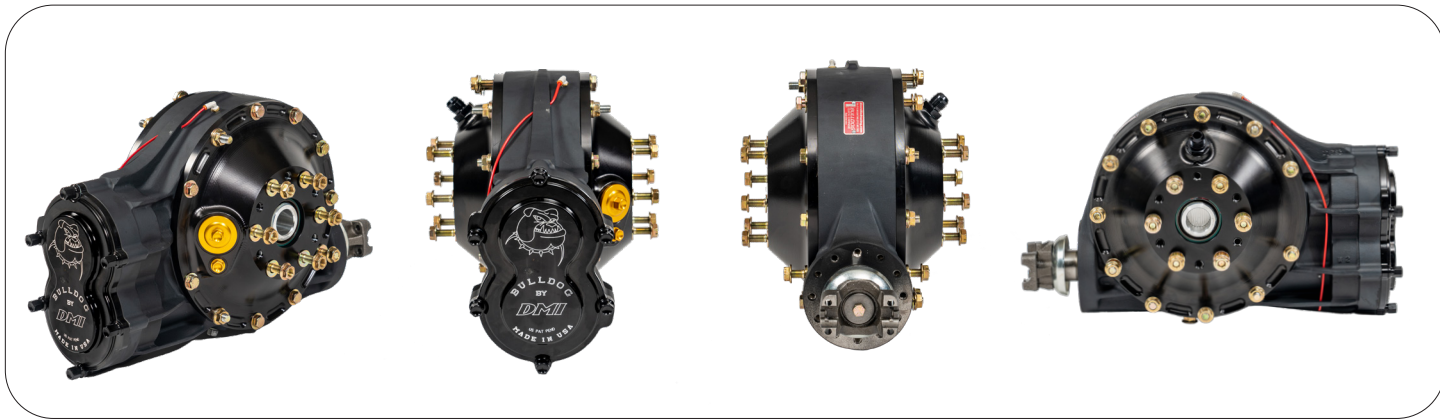
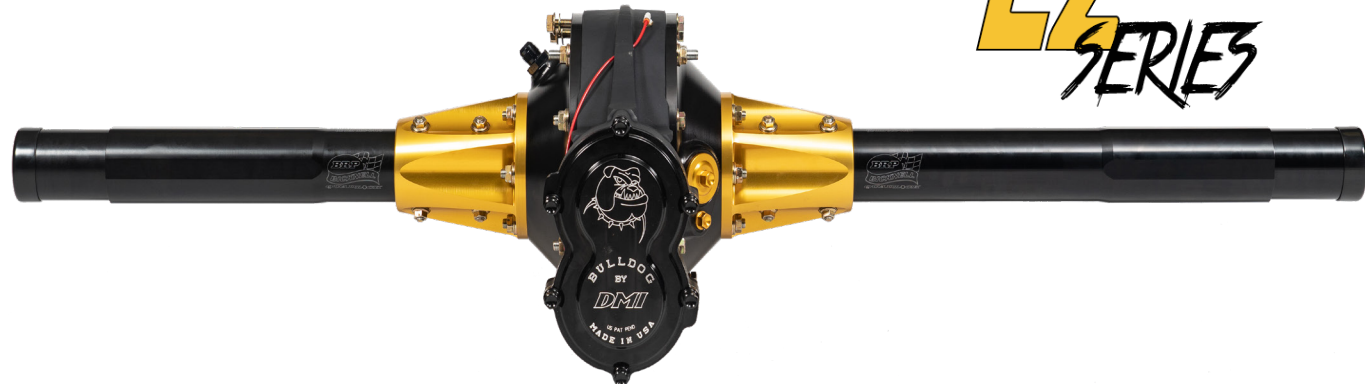
XR2

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EZ Series

EZ
SERIES



The Bulldog EZ Series rears are the newest members of the premier Quick Change Rear lineup in motorsports. Any CT-1, SS-1 or IMCA series rear can utilize the ingenious EZ bell and tube system. Released late in 2018, The EZ Series of rears have been overtaking the closed tube rear market over the last three seasons. The innovative time saving design benefits touring professionals and weekly racers alike. The modular concept offers superior strength, unmatched versatility, and simplifies tube replacement.

Superior Strength:

Shallow aluminum side bells increase side bell rigidity by almost 75%! Less flex = more traction. Heavy duty tube collars remain straight and true in the hardest of crashes. Tubes are held to the bell by (6) Grade L9 hardened 7/16" studs. The EZ system adds 8 lbs to the overall weight of the unit.

Unmatched Versatility:

Want to try a different tube? Is a tube swap required to comply with a different sanctioning body's rule? Loosen the nuts, remove the tube and install the new tube in under ten minutes. The spare tube can be a complete assembly. Brakes, hub, and birdcage can be mounted prior to tube swap. So easy a caveman can do it!

Simple Tube Replacement:

The rear does not even need to be removed from the car. The rear is sealed in the side bell. When the tube assembly is removed it is a dry process. No more fighting with a large bell at the press removing the old tube. Press availability an issue? No problem. Carry a spare tube and collar assembly and get back on track... fast!

EZ Series



EZCT1 - 4.12
Shown with
BRP Quadlock Tubes
(OPT-9002)

EZIMCA 4.86 - PRO
Shown with
2 1/2" GN Tubes
(OPT-9009)

EZCT1 - 4.86
Shown with
Aluminum Wide 5 tubes
(OPT-9005)

EZ Series is available on CT-1 or SS-1 Quick Change Rears. See the CT-1 or SS-1 rear information in the catalog for more details on rear features, specifications, and available options. All IMCA series rears are also available with the EZ bells and tubes.



Innovative rear design allows for UPS ground shipping and offers substantial savings in freight costs. Additionally, this method of shipping and stocking rears saves dealers money while offering more inventory options. Stock the center box and multiple styles of tubes in various lengths. Cover all the classes with one rear center.

“
DMI'S EZ REAR ENDS ARE ABSOLUTELY INDESTRUCTIBLE. I'VE TAKEN A LOT OF HARD LICKS THIS YEAR, SOME DIRECTLY ON THE REAR WHEELS FROM EVERY DIRECTION AND HASN'T TWEAKED A REAR END TUBE. IT REALLY IS INCREDIBLE. I'VE RACED THESE PA BULLRINGS FOR 30+ YEARS AND HAVE NEVER SEEN A REAREND WITHSTAND THE ABUSE THESE DO.
Jeff Strunk

10x Grandview Speedway Track Champion. 8x Freedom 76 Winner. His success has set the standard on the PA 358 Dirt Modified Circuit.

SS-1

SS1-4.12
Bulldog SS-1 4.12
Complete Rear
(Less Tubes)
68 lbs.



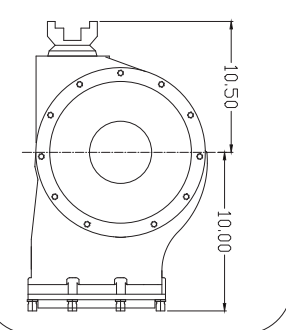
NOW STANDARD WITH BLACK THERMAL COATING

The Bulldog SS-1 features a lightweight 8" 4.12 ring and pinion. We started with a blank screen and put over two years of design and development into producing the shortest, quickest and strongest full size appearing rear. The rear features reduced rotating and unsprung weight and additional fuel cell clearance. Ultralight 8" ring gear and mini pinion assembly is over 2 1/2 lbs. lighter straight out of the box than a standard 10" gear set. The Bulldog Super Short -1 is the shortest rear available from any manufacturer. The rear is more than 1.5" shorter than our already industry leading CT-1 rear. The rear utilizes our standard side bells and tubes as well as standard 10 spline quick change gears. The pinion is supported by one piece pinion bearing cup and revolutionary pinion nose support. Crate cars and lower horsepower applications will see the largest difference in acceleration and deceleration. There are short rears and then there is Bulldog Super Short! Also available with EZ bells.

Standard Features Include:

- O-Ringed Aluminum Gear Cover
- 100% Magnesium Castings
- Breather Assembly
- Bell to Tube Thru Bolts
- Magnetic Drain Plug
- 8" Ring and Pinion produced by the finest Italian Gear Manufacturer
- Correct Length Thru Bolts for your Application
- All Rears Built Standard with Low Drag Seals
- Heat Treated Super Short Lower Shaft
- 5 qts Bulldog Blood Oil

Dimensions:



Side-by-Side Comparison CT-1 & SS-1



Popular SS-1 Options

More options available - contact your DMI sales associate for a complete listing.

- Ring & Pinion Options**
- EDM 8" 4.12 OPT-2002
- REM® 8" 4.12 OPT-2005
- EDM/REM® 8" 4.12 OPT-2008
- Super G 8" 4.12 OPT-2011
- Lower Shaft Options**
- Alum. end yoke OPT-3000
- Heavy Duty Lower Shaft OPT-3003
- Gun Drilled Lower Shaft OPT-3004
- No end yoke OPT-3005
- Ultra Duty Billet Steel End Yoke -1310 Series OPT-3006
- Seal Plate Options**
- Counterbored Front Seal Plate OPT-4000
- Standard Front Seal Plate OPT-4001
- Side Bell Options**
- No Side Bells OPT-5000
- No Side Bells EZ Series OPT-5001
- 8 Rib Bells OPT-5002
- Bearing Options**
- Severe Duty Bearings OPT-6000
- Severe Duty Bearings M2 Treated OPT-6001
- Hardware Options**
- Northeast Dirt Mod Thru Bolts OPT-7000

- Spool Options**
- No Spool OPT-8000
- No Spool - EZ Series OPT-8001
- Bulldog BITE Locker OPT-8002
- Ultralight Alum. Spool OPT-8003
- Ultralight Alum. Spool EZ Series OPT-8004
- Tube Options**
- Alum. Smart Tube Style Tubes OPT-9000
- Alum. Splined Smart Tube Style Tubes OPT-9001
- Alum. BRP Quadlock Tubes OPT-9002
- Alum. Splined Deuce 'N Half Wide 5 Tubes OPT-9003
- Alum. 3/4 Ton Wide 5 Tubes OPT-9005
- Alum. 8 Bolt Tubes OPT-9006
- Alum. Thin Flange 8 Bolt Tubes OPT-9007
- Alum. Camber 3/4 Ton Wide 5 Tubes OPT-9008
- Steel 2.5" GN Tubes OPT-9009
- Steel 3/4 Ton Wide 5 Tubes OPT-9010
- Steel Smart Tube Style Tubes OPT-9011
- Steel Thin Flange 8 Bolt Tubes OPT-9012
- Steel Camber 3/4 Ton Wide 5 Tubes OPT-9013
- Heavy Left Rear Tube OPT-9014
- Mid Weight Left Rear Tube OPT-9015

“
AT MAGNUS PERFORMANCE PRODUCTS OUR ELITE RACE TEAMS AND THE SRX SERIES DEMAND NOTHING BUT THE BEST. SO WE LOOK NO FURTHER THAN DMI. WITH DMI'S QUALITY PARTS AND METICULOUS ASSEMBLY PROCESS, IT'S A WINNING COMBINATION.
Mike Sangermano
Owner - Magnus Performance

CT-1

CT1-4.86
Bulldog CT-1
4.86 Complete
Rear (Less Tubes)
72 lbs.

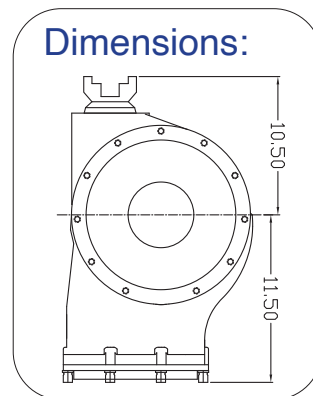
CT1-4.12
Bulldog CT-1
4.12 Complete Rear (Less Tubes)
72 lbs.



The Bulldog CT-1 is the workhorse of the closed tube rear market. Precision machining ensures alignment accuracy unmatched by the competition. Installed tubes feature zero run-out. Internal and external ribs combine to offer the strongest side bells available. The elimination of side bell flex provides a more free rolling rear under load. The CT-1 rear is stronger, truer and more user friendly than any other conventional closed tube rear. Since being introduced in 2010, the Bulldog CT-1 has won every major event and championship in short track racing on dirt and asphalt. Additional success has been achieved in the Trans-Am Series, drifting, and can be found under many of the coolest street rods on the planet! Also available with EZ bells.

Standard Features Include:

- O-Ringed Aluminum Gear Cover
- 100% Magnesium Castings
- Breather Assembly
- Bell to tube thru bolts
- Magnetic drain plug
- Correct Length Thru Bolts for your application
- 10 AN Port for fill can
- Timken® Pinion Bearings
- Heat Treated Lower Shaft
- Three side bell studs per side allow for easy removal without complete disassembly
- 5 qts Bulldog Blood Oil
- All rears built standard with low drag seals



Popular CT-1 Options More options available- contact your DMI sales associate for a complete listing.

Ring & Pinion Options

- EDM 4.12 OPT-2000
- EDM 4.86 OPT-2001
- REM® 4.12 OPT-2003
- REM® 4.86 OPT-2004
- EDM/REM® 4.12 OPT-2006
- EDM/REM® 4.86 OPT-2007
- Super G 4.12 OPT-2009
- Super G 4.86 OPT-2010

Lower Shaft Options

- Alum. End Yoke OPT-3000
- Heavy Duty Lower Shaft OPT-3001
- Gun Drilled Lower Shaft OPT-3002
- No End Yoke OPT-3005
- Ultra Duty Billet Steel End Yoke -1310 Series OPT-3006
- Lower Shaft For Rear End Pump OPT-3007
- TA Lower Shaft OPT-3008
- No Lower Shaft OPT-3009

Seal Plate Options

- Counterbored Front Seal Plate OPT-4000
- Standard Front Seal Plate OPT-4001

Side Bell Options

- No Side Bells OPT-5000
- No Side Bells EZ Series OPT-5001
- 8 Rib Bells OPT-5002

Bearing Options

- Severe Duty Bearings OPT-6000
- M2 Treated Severe Duty Bearings OPT-6002

Hardware Options

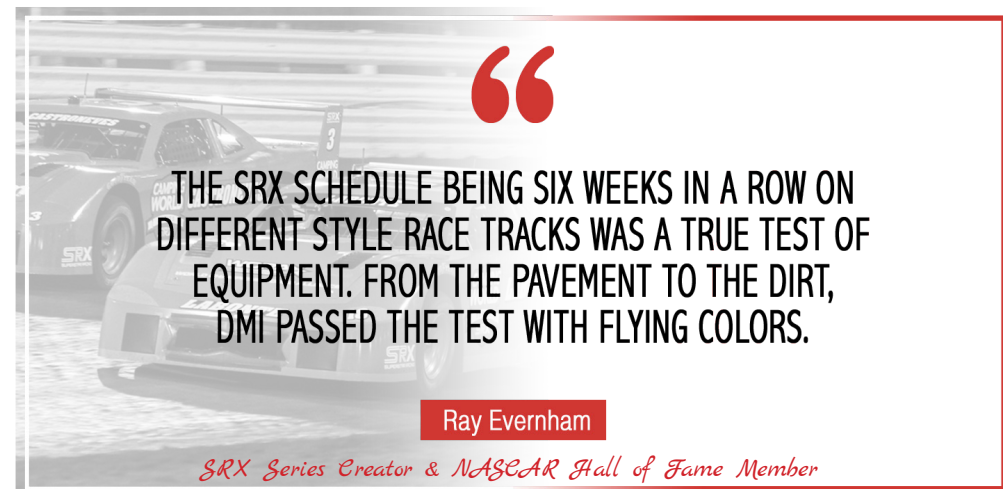
- Northeast Dirt Mod Thru Bolts OPT-7000

Spool Options

- No Spool OPT-8000
- No Spool EZ Series OPT-8001
- Bulldog BITE Locker OPT-8002
- Ultralight Alum. Spool OPT-8003
- Ultralight Alum. Spool EZ Series OPT-8004

Tube Options

- Alum. Smart Tube Style Tubes OPT-9000
- Alum. Splined Smart Tube Style Tubes OPT-9001
- Alum. BRP Quadlock Tubes OPT-9002
- Alum. Splined Deuce 'N Half Wide 5 Tubes OPT-9003
- Alum. Deuce 'N Half Wide 5 Tubes OPT-9004
- Alum. 3/4 Ton Wide 5 Tubes OPT-9005
- Alum. 8 Bolt Tubes OPT-9006
- Alum. Thin Flange 8 Bolt Tubes OPT-9007
- Alum. Camber 3/4 Ton Wide 5 Tubes OPT-9008
- Steel 2.5" GN Tubes OPT-9009
- Steel 3/4 Ton Wide 5 Tubes OPT-9010
- Steel Smart Tube Style Tubes OPT-9011
- Steel Thin Flange 8 Bolt Tubes OPT-9012
- Steel Camber 3/4 Ton Wide 5 Tubes OPT-9013
- Heavy Left Rear Tube OPT-9014
- Mid Weight Left Rear Tube OPT-9015



IMCA / UMP / USMTS MODIFIED REARS

The **SATURDAY NIGHT SPECIAL**

- 100% MAGNESIUM CENTER SECTION & BELLS • O-RINGED REAR COVER W/HEAVY DUTY BEARINGS
- MAGNETIC DRAIN PLUG • FRONT SEAL PLATE • INSPECTION PLUG & FILL LEVEL PLUG
- BREATHER ASSEMBLY • ALUMINUM SPOOL • CORRECT LENGTH CENTER HARDWARE
- BELL TO TUBE HARDWARE • 10 AN FITTING FOR FILL CAN
- PRECISION GROUND HEAT TREATED LOWER SHAFT
 - BLACK THERMAL COATING
 - BULLDOG BLOOD GEAR OIL
 - LOW DRAG SEALS



ALSO AVAILABLE WITH EZ BELLS

PRO SERIES

In addition to the standard features of a Saturday Night Special. All PRO Series rears include:



Bulldog has always tried to make things as easy as possible. When IMCA legalized quick changes we took the opportunity to create two rears to simplify the ordering process. The rears are the same high quality CT-1 rears found on the previous pages. Additionally, the rears can be ordered with the new EZ bells and tubes found on page eight and nine. We offer the rears without tubes or with tubes so you can use the hubs and rotors from your Ford® 9" or complete with tubes, hubs and rotors. All the rears are available with solid or hollow axles. The Saturday Night Special is the rear geared to the no frills racer. The Professional Series features the most popular options chosen by racers looking to leave no stone un-turned. Either rear is more than capable of winning the IMCA Super Nationals!

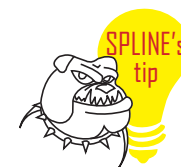
Make the rear a complete assembly. Include DMI's Billet Steel GN Hubs, hollow or solid axles and 11 3/4" x .810 Vented Rotors.



“
 WHEN A CUSTOMER ASKS WHAT WE RECOMMEND, IT'S BULLDOG ONLY. WE'VE WORKED WITH OTHER BRANDS AT CUSTOMER'S REQUESTS, BUT THE QUALITY AND CUSTOMER SERVICE AT BULLDOG IS UNMATCHED.
 Ashley & David Stremme
 Owners - Lethal Chassis



The myth that quick change rears rob horsepower is just that...a myth! A 9" rear utilizes a hypoid ring and pinion. Hypoid ring and pinions run hotter and consume more power than the spiral bevel ring and pinions used in a quick change. Some efficiency is lost through the quick change gears but it doesn't surpass the inefficiency of the 9". When the ability to fine tune your gear ratio is taken into account the choice is obvious – quick change all the way!



Consider using steel Smart Tube style tubes in place of 2.5" GN. The hub uses an inverted drive flange requiring shorter axles- Smart Tube style is lighter, stronger and cheaper!

2.5" GN 5 on 5 Tube to Axle conversion

| Tube Length | Axle Length |
|-------------|-------------|
| 22" | 28.5" |
| 23" | 29.5" |
| 24" | 30.5" |
| 25" | 31.5" |
| 26" | 32.5" |
| 27" | 33.5" |
| 29" | 35.5" |

A 60" centered Rear utilizes two 24" tubes. A rear with 2" offset would use a 22" and 26" for its tube lengths.

Important CT-1 Information

Tube To Axle Conversions

| | |
|----------------------|--|
| 2-½ GN Tube | Overall Tube Length + 6.5" = Axle Length. |
| SmartTube Style Tube | Overall Tube Length + 5.44" = Axle Length. |
| Wide 5 Tube | Overall Tube Length + 6.5" = Axle Length. |
| 8 Bolt Tube | Overall Tube Length + 13.5" = Axle Length. |

Popular Wide 5 Tube Lengths

| Chassis | LS Tube | RS Tube |
|--|---------|---------|
| Capital | 26.625" | 29.125" |
| XR1 Rocket | 25.625 | 30.125 |
| Lazer, Barry Wright | 27.125" | 29.125" |
| Longhorn, Pre XR1 Rocket, Pre 2014 Lazer, Pre 2020 Capital | 26.625" | 30.125" |

Popular SmartTube Style Tube Lengths

| | LS Tube | RS Tube |
|--|---------|---------|
| Northeast DIRT Modified, Bicknell, Troyer, Hig | 20.060" | 28.060" |
| Teo, PMC | 22.188" | 28.060" |

Wide 5 vs. SmartTube Style

| | |
|-------------|--|
| Axle Length | Smart Tube Style Axle Length = Wide 5 Axle Length - 3" |
| Tube Length | Smart Tube Style Tube Length = Wide 5 Tube Length - 2" |

2.5" GN Snout vs. SmartTube Style

| | |
|-------------|---|
| Axle Length | SmartTube Style Axle Length=2.5" GN Axle Length-1" |
| Tube Length | SmartTube Style Tube Length= 2.5" GN Tube Length+.25" |

IMPORTANT!!

EZ Series rears feature a narrower spool than a conventional rear. We recommend butting axles end to end without a bolt between them. Accomplish this by running a 1" longer axle in the left rear then the above formula suggests.

Important Specs

- Side Bell Nuts- 35 ft/lbs.
- Threaded Ring Gear- 60 ft/lbs. w/ Red Threadlocker
- Pinion Retainer Bolts- 25 ft/lbs.
- Front Seal Plate Bolts- 35 ft/lbs.
- Front Yoke Bolt- 35 ft/lbs. with minimum Blue Threadlocker
- Pinion Backlash- .004-.008
- Rotational Pinion Preload (No Spool) - 25 in/lbs. @ 70° F
- Rotational Pinion Preload (Complete Assembly) - 35 in/lbs. @ 70° F
- Starting recommendations for Shims CT-1 Left .024" Right .055"
- Starting recommendations for Shims SS-1 Left .035" Right .035"
- Starting recommendations for EZCT-1 Left .032" Right .038"
- Starting recommendations for EZSS-1 Left .045" Right .040"

Weight Savings of Some Popular Options

CT-1 4.86 w/o tubes = 72 lbs.

| Description | Savings |
|----------------------------|-----------|
| 4.12 Ring & Pinion | .75 lbs. |
| EDM Ring Gear | .80 lbs. |
| Aluminum Yoke | 1.37 lbs. |
| Gundrilled Lower Shaft | 1.10 lbs. |
| Ultra-Light Aluminum Spool | .57 lbs. |

Approximate Tube Weights (Weights may vary by tube length)

| Description | Weight |
|---------------------------|-----------|
| SmartTube Steel | 11.5 lbs. |
| Steel 2.5 GN | 13.5 lbs. |
| Moly 2.5 GN | 11 lbs. |
| SmartTube Alum | 5 lbs. |
| Steel Wide 5 | 12.5 lbs. |
| Aluminum Wide 5 | 6 lbs. |
| Aluminum Deuce N' Half | 6.5 lbs. |
| Heavy Steel Deuce N' Half | 38.5 lbs. |
| Heavy Steel 2.5 GN | 31.5 lbs. |
| Heavy Steel SmartTube | 36.5 lbs. |
| Steel Mid Wt. Wide 5 | 20 lbs. |

All SmartTube Style Axle Tubes Built for Northeast DIRT Modified that require the birdcage timing set are installed at 0° unless requested otherwise.

All tubes insert into bell 5". When determining tube length, measure from end of tube to face of tube opening in bell and add 5". This is true for both conventional and EZ Series rears.

Important CT-1 Information



REM's ISF® Process is a novel and proven approach to eliminating micropitting by removing peak asperities, generating a higher load-bearing surface, and increasing the lambda lubrication values. These surface finish/texture improvements make any metal to metal interaction significantly less likely to occur and effectively eliminate the failure mechanism that generates micropitting. Numerous public and proprietary studies have shown how effective REM's ISF Process and the ISF® Surface that it generates is in eliminating micropitting.



All bearings are available with M2 Metal Treatment. M2 Metal Treatment was formerly known as PROglide. An ownership change early in 2021 has brought a new name but the same great benefits and unmatched results in reducing friction and increased service life. Utilizing nano particles that act as sponges for oil, M2 is a revolutionary process with limitless possibilities. DMI chooses M2 treatment over REM® polished bearings. While DMI does have in-house REM® capabilities we believe they are best suited on gear sets or other "solid" items as opposed to bearings. REM® utilizes fine media as part of the polishing process. In bearings that fine media can be left behind as debris and potentially create an issue. Shiny is nice, but if you want to eliminate friction than M2 is for you!



Superior Bearing is the exclusive supplier of the highest quality bearings and seals used throughout Bulldog Quick Change Rears. Since their inception in 1981, Superior Bearing has been a leader in bearings and seals for the motorsports industry. DMI and Superior have worked hand in hand designing, refining and producing proprietary bearings and seals utilized in Bulldog Quick Change Rears. Superior bearings with superior quality at superior value. There is only one Superior Bearing and we are proud of the relationship we have with them.

EDM Ring Gear

EDM ring gears decrease weight and increase flex. Ring gear bolts should be replaced and torqued to 60ft. lbs. using blue threadlocker every 500 laps when using an EDM ring gear. EDM ring gears are not recommended in high horsepower (800+) applications.

Angular Contact Pinion Pack

Angular contact pinion packs are available in place of standard issue Timken® tapered roller bearings. Angular contact pinion packs offer a 33% reduction in drag when NEW. After two races tapered rollers are just as free and offer superior strength. Angular contact pinion bearings require frequent inspection. Check play by grabbing pinion shaft, if play is present the bearing pack needs to be replaced. Timken® tapered roller bearings are perfect for this application and virtually bullet proof. Angular contact bearings WILL need to be replaced sometime. Choose the pinion bearing that's best for you.

WARNING! DMI recommends using an oven to heat center section. Heat for 10 minutes at 300 degrees F. If a torch has to be used DO NOT CONCENTRATE the heat in one area. Keep torch moving at all times.

Loaded Pinion Removal

Heat area around the pinion until the pinion is able to freely be removed. DO NOT concentrate heat around the pinion nose bearing.

Loaded Pinion Installation

Heat area around the pinion until the pinion freely drops in to the center. DO NOT concentrate heat around the pinion nose bearing support.

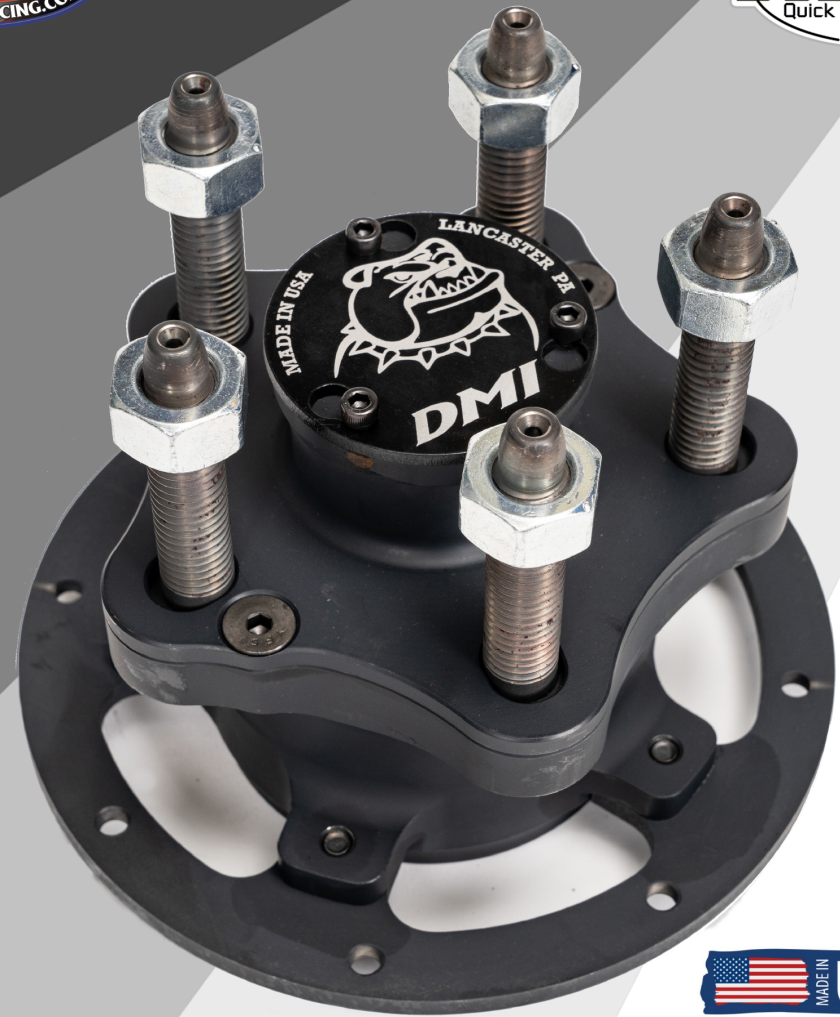
Closed Tube Rear Set-Up

After installing pinion allow rear to return to room temperature. (70° F) Adjust pinion nut until 25 in/lbs rotational preload is achieved without spool. Lubricate Posi retainer O-ring and install Posi-Lock retainer on pinion nut using finger pressure only. Rotate retainer if needed to align locking splines. Attach right sidebell to center using three installed studs. Torque to 35 ft./lbs. Rotate right side down and install loaded spool with check bearings and recommended starting shims (See page 16 under Important Specs). Install left side bell and torque three studs to 35ft/lbs. Verify pinion backlash to be .004-.008 minimum when checked on 10 spline tooth of pinion, using dial indicator. Adjust spool shims accordingly until desired amount of pinion backlash is achieved. Once desired amount of pinion backlash is achieved, verify rotation pinion preload to be 35 in/lbs. with spool installed. Once set-up is complete, remove side bells. Install side bell o-rings and install spool seals utilizing red loctite. Remove spool checking bearings carefully while maintaining shim stacks. Install spool bearings using press. Re-install right side bell, bell and tube spool seal. Drop Spool into center. Lube left spool seal and install bell with ring gear back stop in place. Torque side bells to 35 ft/lbs. Tighten ring gear backstop against ring gear and back off 1/8 turn. Jam ring gear backstop nut. IF YOU DON'T KNOW - CALL!!!!

THE INDUSTRY'S FINEST 2 1/2" GN HUB



DMI BILLET STEEL 5 ON 5" AND 5 ON 4 3/4"



DMI'S BILLET STEEL HUB NOT ONLY PULLED THE NATION OUT OF A HUB SHORTAGE, IT RAISED THE BAR IN THE PROCESS. HEAT TREATED QUICK START THREADED STUDS ARE LONG ENOUGH FOR WHEEL SPACERS. PROFILED STEEL DRIVE FLANGE IS LIGHTWEIGHT BUT STRONG. EASY TO REMOVE 1/4 TURN DUST CAP ALLOWS FOR EASY AXLE REMOVAL WITHOUT LOSING SMALL HARDWARE. MODULAR ROTOR MOUNT IS REPLACEABLE IN THE EVENT OF DAMAGE AND MAINTAINS THE SAME OFFSET AS PREVIOUSLY USED CAST HUBS.

SEE PAGE 28 FOR HUB PART NUMBERS AND COMPONENT BREAKDOWN.

REAR REBUILD TOOL KIT

PROFESSIONAL SERIES



THE FIRST STEP IN REBUILDING A QUICK CHANGE REAR IS HAVING THE RIGHT TOOLS. DMI/BULLDOG HAS PRODUCED THE INDUSTRY'S FIRST COMPLETE TOOL KIT TO REBUILD ALL BRANDS OF QUICK CHANGE REARS. PRECISION DIAL INDICATOR TO MEASURE RING GEAR BACKLASH, MADE IN THE USA TORQUE WRENCH FOR ROTATIONAL PINION PRELOAD AND ALL THE SOCKETS, WRENCHES AND FIXTURES TO REBUILD LIKE THE PROS! COMPLETE WITH INSTRUCTIONS. KIT INCLUDES 6 AND 10 SPLINE PINION SOCKETS.

Closed Tube Center Sections | Side Bells | Components

Center Sections



RRC-1000
Magnesium
Center Section
RRC-0900
Magnesium SS-1
Center Section

Side Bells

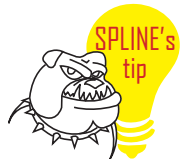


RRC-1102
Magnesium Left Side
6-Rib Bell
RRC-1103
Magnesium Right Side
6-Rib Bell
RRC-1107
Magnesium Left Side
8-Rib Bell
RRC-1108
Magnesium Right Side
8-Rib Bell
RRC-5001
EZ Series Forged
Left Side Bell
RRC-5000
EZ Series Forged
Right Side Bell
RRC-5400
EZ Series
Tube Base

Center and Side Bell Components



RRC-1034
Breather Assembly
RRC-1010
Large Inspection Plug
RRC-1015
Large Inspection Plug
O-Ring
RRC-1016
Fill Level Plug
RRC-1017
Fill Level Plug O-Ring
RRC-1031
Magnetic 3/8" NPT
Drain Plug
RRC-1032
-8 Port to -10 Union
RRC-4150
EZ Ring Gear
Backstop Jam
RRC-0940
Baby Bulldog
Ring Gear
Backstop
RRC-1037
-8 Port Plug
RRC-1038
O-Ring for -8
Port Fitting
RRC-1105
Side Bell O-Ring
CRC-2100
Deluxe GN
Tube Seal for
Moly Tube
RRC-1110
Side Bell Stud
RRC-1116
Steel XL Sidebell Stud
for Panhard Mount
RRC-1127
Side Bell Flange Nut
RRC-1130
Side Bell Washer
RRC-1104T
Side Bell Axle
Seal - Teflon Lip
RRC-1170 *M2*
Side Bell Race
RRC-1117
Bolt Kit for 6 Rib Bell
to Tube
RRC-1119
Bolt Kit for EZ
Bell to Tube
RRC-1145
Back Stop
Washer
RRC-1140
Back Stop
Set Screw
RRC-1136
Ring Gear
Back Stop
Assy.
RRC-1118
Bolt Kit for 8 Rib Bell
to Tube
RRC-1180
Detent for
CT-1 Side Bell
to Tube
**Center / Side
Bell Thru Bolts**
RRC-1124 5"
RRC-1125 5.5"
RRC-1126 6"
RRC-1128 6.5"
RRC-1129 7"



To remove a bent tube from a bell, press tube out from back side. Ensure bell is free from any defects. To install new tube, heat bell until tube slips freely into place. Drill tube and install bolts. If specific tube orientation is required due to birdcage placement, utilize DMI's tube detent system. It makes proper placement a snap! We recommend using an old axle to push the tube out. Weld a strap to an old tube nut and press against it to make removal a snap.

Closed Tube Spools | Components

Spools & Lockers



RRC-1270
Aluminum Spool
RRC-1271
Aluminum Spool -
Ultralight
RRC-1269
Bulldog BITE
Locker by GFS
RRC-5100
EZ Series CT-1
Aluminum Spool
RRC-5101
EZ Series CT-1
Aluminum Spool - Ultralight



All spools were redesigned in 2020 with industry leading radiuses increasing strength. The spools require the large I.D. spool shims. The spools are produced from a domestic forging proprietary to DMI.

Spool Bearings & Shims

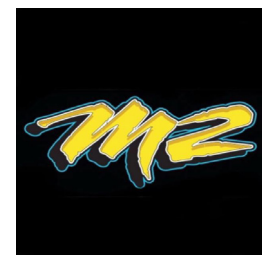


RRC-1272 .010 Spool Shim
RRC-1273 .012 Spool Shim
RRC-1274 .015 Spool Shim
RRC-1275 .020 Spool Shim
RRC-1277 .006 Spool Shim
RRC-1282 Large I.D.
RRC-1283 Large I.D.
RRC-1284 Large I.D.
RRC-1285 Large I.D.
RRC-1281 Large I.D.
RRC-1276
Spool Shim Kit
RRC-1286
Large I.D.
RRC-1173 *M2*
Side Bell Bearing for
Aluminum Spool -
Severe Duty
RRC-1172 *M2*
Side Bell Bearing -
Steel Spool
RRC-1171 *M2*
Side Bell Bearing -
Alum. Spool

Front Seal Plate Assembly



RRC-1011
Bolt for CT-1 Seal Plate
to Center
RRC-1011A
Bolt for CT-1 Seal Plate
to Center
RRC-1012
Washer for
CT-1 Seal
Plate to
Center
RRC-1001
Front Seal
Plate
RRC-1001C
Front Seal
Plate w/o
Counterbores
RRC-1003
Seal O-Ring
for CT-1 Seal
Plate
RRC-1002T
Front Seal
for CT-1 Seal
Plate - Teflon
Lip
RRC-1007
Spirallock
for CT-1
Seal Plate
RRC-1004
O-Ring for
CT-1 Seal Plate
Flange



All bearings are available with M2 Metal Treatment. M2 Metal Treatment was formerly known as PROglide. An ownership change early in 2021 has brought a new name but the same great benefits and unmatched results in reducing friction and increased service life. Utilizing nano particles that act as sponges for oil, M2 is a revolutionary process with limitless possibilities. DMI chooses M2 treatment over REM® polished bearings. While DMI does have in-house REM® capabilities we believe they are best suited on gear sets or other "solid" items as opposed to bearings. REM® utilizes fine media as part of the polishing process. In bearings that fine media can be left behind as debris and potentially create an issue. Shiny is nice, but if you want to eliminate friction than M2 is for you!

Look for the *M2* icon throughout the catalog for availability.



Never use an EDM lightened ring gear and ultralight aluminum spool. Ultralight spools need to be carefully monitored for cracking between the holes and EDM ring gears have increased flex. The combination of the two can result in premature failures.

Closed Tube Rear Covers | Lower Shafts | Components

Rear Covers and Components

| | | | |
|--|--|--|--|
|  RRC-1386B Forged Aluminum Rear Cover w/ Bearings - Black |  RRC-1350 Rear Cover Bearing |  RRC-1355 Rear Cover Stud |  RRC-1361 Rear Cover Nut - Black |
|  RRC-1390 Gear Cover Bearing Retainer |  RRC-1350HD H.D. Rear Cover Bearing |  RRC-1345 Silicone Sealing Ring for Gear Cover |  RRC-1361B Rear Cover Nut - Blue |
| |  RRC-1391 Bolt for Gear Cover Bearing Retainer |  RRC-1340 Steel Insert Rear Cover Gasket |  RRC-1361G Rear Cover Nut - Gold |

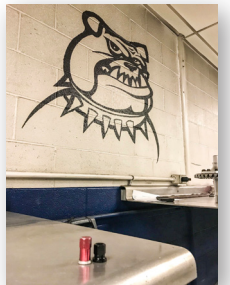


RRC-1373
Vault Lock Quick Change Rear Cover















Spline has done it again! A product so revolutionary and awesome, it will change the industry. No more timely gear changes- with the Vault Lock Quick Change Cover, gear changes take only seconds. One ¼ turn off, change gears and a ¼ turn on. Done! Vault Lock Cover fits all popular brands of rears.



Bulldog Rear Cover Nuts are the shortest in the industry and provide more fuel cell clearance than any other manufacturer.



Lower Shaft and Components Assembly

| | | | | | | | | | |
|--|---|---|--|---|--|---|--|---|---|
|  RRC-1482 Front Yoke Bolt |  RRC-1481 Front Yoke Washer |  RRC-1479 Front Yoke w/ built in Spacer |  RRC-1411 Lower Shaft Bearing |  RRC-1427A Washer for Lower Shaft |  RRC-1427HD Steel Lower Shaft |  RRC-0927 SS-1 Steel Lower Shaft |  RRC-1620 Stub Shaft Snap Ring |  RRC-1412 Lower Shaft Bearing - Severe Duty |  RRC-1411 Lower Shaft Bearing |
| | | |  RRC-1412 Lower Shaft Bearing ME | |  RRC-1427HDG Steel Lower Shaft - Gun Drilled |  RRC-0927HDG SS-1 Steel Lower Shaft - Gun Drilled | |  RRC-1412 Lower Shaft Bearing ME | |

*See page 64 for NEW billet steel & aluminum front yokes



Bulldog CT Lower Shafts are now precision ground. Standard lower shafts are heat treated and rated To 700 HP. If you're looking to save weight- go Gun-Drilled!

Closed Tube Ring & Pinions | Components

10" Ring & Pinion Assembly

| | | | | | | | | | | |
|--|--|---|--|--|---|--|--|--|---|--|
|  RRC-1366 Posi-Lock Retainer |  RRC-1367 Posi-Lock O-Ring |  RRC-1368 Pinion Washer |  RRC-1311 Timken® Big Pinion Bearing |  RRC-1311A Superior Big Pinion Bearing |  RRC-1312 Big Pinion Bearing Race |  RRC-1311 Timken® Big Pinion Bearing |  RRC-1311A Superior Big Pinion Bearing |  RRC-1310 Small Pinion Bearing |  RRC-1301 Ring Gear Bolt |  RRC-1302 Ring Gear Washer |
| | | |  RRC-1369 Posi-Lock Nut - Right Hand | | | | | |  RRC-1313 Angular Contact Pinion Bearing Assembly | |

| | |
|----------------|-------------------------------------|
| RRC-1300 | 4.12 Ring & Pinion - 12.75 lbs. |
| RRC-1300-02 | 4.12 EDM Ring & Pinion |
| RRC-1300-02-05 | 4.12 EDM / REM® Ring & Pinion |
| RRC-1300-05 | 4.12 REM® Ring & Pinion |
| RRC-1300SG | 4.12 Ring & Pinion - Super G Finish |

| | |
|----------------|-------------------------------------|
| RRC 1305 | 4.86 Ring & Pinion - 13.55 lbs. |
| RRC-1305-02 | 4.86 EDM Ring & Pinion |
| RRC-1305-02-05 | 4.86 EDM / REM® Ring & Pinion |
| RRC-1305-05 | 4.86 REM® Ring & Pinion |
| RRC-1305SG | 4.86 Ring & Pinion - Super G Finish |

8" Ring & Pinion Assembly

| | | | | | | | | | | |
|--|--|---|--|--|---|--|--|--|---|---|
|  RRC-0966 Posi-Lock Retainer |  RRC-0967 Posi-Lock O-Ring |  RRC-1368 Pinion Washer |  RRC-1311 Timken® Big Pinion Bearing |  RRC-1311A Superior Big Pinion Bearing |  RRC-0912 Big Pinion Bearing Race |  RRC-1311 Timken® Big Pinion Bearing |  RRC-1311A Superior Big Pinion Bearing |  RRC-0910 Small Pinion Bearing |  RRC-1301S Ring Gear Bolt |  RRC-1302 Ring Gear Washer |
| | | | | | | | | | |  8" ring gear with light weight option 5.3 lbs. |

| | |
|----------------|---------------------------------|
| RRC-1303 | 4.12 Ring & Pinion - 10.12 lbs. |
| RRC-1303-02 | 4.12 EDM Ring & Pinion |
| RRC-1303-02-05 | 4.12 EDM / REM® Ring & Pinion |
| RRC-1303-05 | 4.12 REM® Ring & Pinion |
| RRC-1303-SG | 4.12 Super G Ring & Pinion |

R & P Components

| | | |
|--|---|--|
|  RRC-1330 2 Bolt Locking Tab |  RRC-1315 Pinion Bearing Spacer |  RRC-1320 Pinion Retainer Flange |
|--|---|--|

RRC-1300SG, RRC-1303SG AND RRC-1305SG RING & PINION FEATURE THE SUPER G Treatment. SUPER G treatment dramatically increases ring and pinion life in mega horsepower 410 winged sprint cars. SUPER G ring and pinions are highly recommended for any application that sees severe abuse. For more ring & pinion information see page 17. For weight-saving information see page 16.

Closed Tube Wide 5 Tubes & Accessories

Aluminum 3/4 Ton Wide 5 Tubes



[RRC-2275- \(length\)](#)
Spindle Style Aluminum Axle Tube

Approximate Weight - 6 lbs.

[RRC-2277- \(length\) - \(degrees\)](#)
Aluminum Wide 5 Cambered Tube

Stocking Lengths*

| | |
|---------|---------|
| 25.625" | 28.125" |
| 26.625" | 29.125" |
| 27.125" | 30.125" |

*All tubes stocked in black- other colors available on special request

Aluminum Deuce 'N Half Wide 5 Tubes



Deuce 'N Half Tubes provide the largest snout of any tube on the market and still utilize a conventional Wide 5 Hub with no modifications needed other than swapping out races. Deuce 'N Half tubes offer a remarkable 62% increase in strength. Do NOT confuse Deuce 'N Half tubes with other company's 1 ton tubes – Deuce 'N Half are a ton better!

[RRC- 2279- \(length\)](#)
Deuce 'N Half Spindle Style Aluminum Axle Tube

Approximate Weight - 6.5 lbs.

[RRC- 2240- \(length\)](#)

Deuce 'N Half Spindle Style Aluminum Axle Tube - Splined

Stocking Lengths*

| | |
|---------|---------|
| 25.625" | 28.125" |
| 26.625" | 29.125" |
| 27.125" | 30.125" |

All tubes stocked in black – other colors available on special request.

Steel Wide 5 Style Tubes



[RRC- 2290- \(length\)](#)
Steel Wide 5 Tube

Approximate Weight - 12.5 lbs.

[RRC-2292- \(length\) - \(degrees\)](#)
Steel Wide 5 Cambered Tube

Stocking Lengths

| | |
|---------|---------|
| 25.625" | 26.625" |
| 27.12" | 27.25" |
| 29.25" | |

[RRC- 2295- \(length\)](#)
Steel Wide 5 Tube - Mid Wt.

Approximate Weight - 20 lbs.

Closed Tube Wide 5 Tubes & Accessories

Steel Deuce 'N Half Wide 5 Tubes



[RRC-2279- \(length\) H](#)
Deuce 'N Half Spindle Style HEAVY Steel Axle Tube

Approximate Weight - 38.5 lbs.

Stocking Lengths

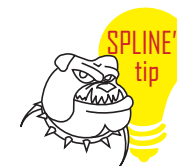
| | | |
|---------|---------|---------|
| 25.625" | 26.625" | 27.125" |
|---------|---------|---------|

Wide 5 Hub - Rear Assembly

[CRC-3004](#) Wide 5 Hub Seal
[CRC-3001](#) Inner Bearing Wide 5 Hub
[CRC-3000](#) Inner Race - Wide 5 Hub
[WIL-270-6513BC](#) Wilwood Starlite 55 Hub - 5 Bolt Black
[CRC-3002](#) Outer Race - Wide 5 Hub
[CRC-3003](#) Outer Bearing - Wide 5 Hub
[BRP-320](#) Wide 5 Lock-Nut Kit
[WIL-270-6732](#) Wilwood 5 Bolt Drive Flange for Wide
[CRC-3005](#) Wide 5 Hub Seal - O-Ring Style

Deuce 'N Half (DNH) Wide 5 Hub - Rear Assembly

[CRC-3006](#) DNH Wide 5 Hub Seal
[CRC-3009](#) DNH Inner Bearing Wide 5 Hub
[CRC-3008](#) DNH Inner Race - Wide 5 Hub
[CRC-3020](#) Wilwood Starlite 55 Hub - 5 Bolt - Black -DNH Races Installed
[CRC-3010](#) DNH Outer Race - Wide 5 Hub
[CRC-3011](#) DNH Outer Bearing - Wide 5 Hub
[CRC-3014](#) DNH Wide 5 Lock-Nut Kit
[CRC-3015](#) Wrench for Deuce 'n' a Half Trick Nut
[WIL-270-6732](#) Wilwood 5 Bolt Drive Flange for Wide



Order CRC-3020 to slide directly onto Deuce 'N Half Tubes. We've already swapped the races out for you. The Deuce 'N Half snout is slightly larger than competitor's 1 ton tubes.

Closed Tube SmartTube Style Tubes & Accessories

Aluminum SmartTube Style Tubes



RRC-2200- (length)
SmartTube Style Axle Tube

Stocking Lengths*

| | |
|---------|---------|
| 20.188" | 26.060" |
| 22.188" | 27.060" |
| 24.125" | 28.060" |
| 24.625" | 30.125" |



RRC-2250- (length)
Splined SmartTube Style Axle Tube

All DMI SmartTube style tubes require RRC-2205 and RRC-2206.



RRC-2205
Steel Sleeve for Seal on SmartTube



RRC-2206
O-Ring for SmartTube Steel Sleeve

Quadlock SmartTube Style Axle Tube



RRC-2225- (length)
Quadlock SmartTube Style Axle Tube

Bicknell Racing Products Quadlock SmartTube Style Axle Tubes have revolutionized DIRT modified tubes. No slip design works well on rough race tracks, with coil overs and withstands the hardest abuse. Tubes require RRC-2205 & 2206

Stocking Lengths*

| | |
|---------|---------|
| 20.060" | 28.060" |
| 21.060" | 29.060" |
| 22.060" | 30.060" |

All tubes stocked in black – other colors available on special request.

SmartTube Style Hub Assembly



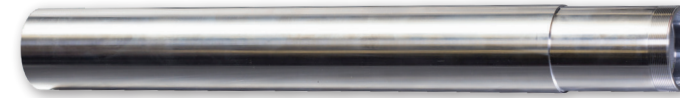
- CRC-1003 O-Ring Style Seal for DMI Style SmartTube w/ Steel Ring
- CRC-1004 O-Ring Style Seal for Bert SmartTube
- CRC-1001 Bearing for SmartTube Style Hubs - Bert I.D.
- CRC-1005 Race for SmartTube Style Hubs
- BER-CTD-001 Bert SmartTube Style Hub
- CRC-1005 Race for SmartTube Style Hubs
- CRC-1001 Bearing for SmartTube Style Hubs - Bert I.D.
- BRP-6230 BRP Locknut for SmartTube Style Tube
- BRP-345 Bicknell Drive Wrench for Flange
- BRP-6231 BRP Lock-Nut



All Bulldog SmartTube Style Tubes Utilize the RRC-2205 Steel Ring. The steel ring provides many benefits. One, it keeps hubs tight preventing brake fade. Two, it provides steel surface for the seal to ride. All Bulldog Smart Tube Style Tubes utilize 73 mm I.D. Bearings (2.874015"). DO NOT USE WINTERS 2.875" BEARINGS ON DMI TUBES!

Closed Tube Steel SmartTube Style Tubes & Accessories

Steel SmartTube Style Tubes



RRC-2201- (length)
SmartTube Style Axle Tube – Steel

Approximate Weight - 11.5 lbs.

RRC-2201- (length) H
SmartTube Style Axle Tube – HEAVY Steel

Approximate Weight - 36.5 lbs.

Stocking Lengths

| | |
|--------|--------|
| 22.25" | 25.25" |
| 23.25" | 26.25" |
| 24.25" | |

All DMI SmartTube style tubes require RRC-2205 and RRC-2206.

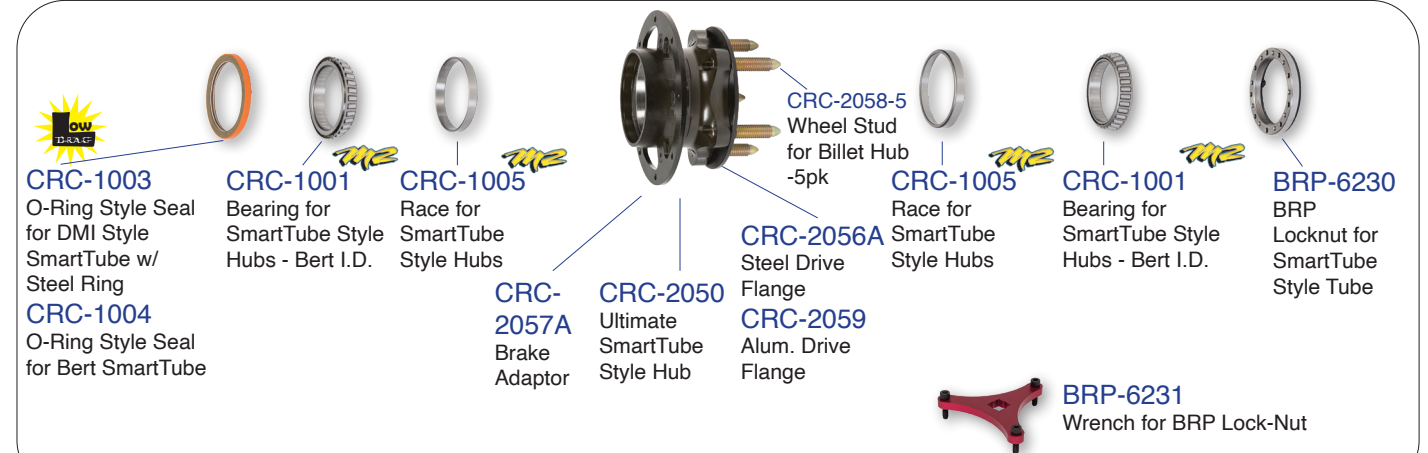


RRC-2205
Steel Sleeve for Seal on SmartTube



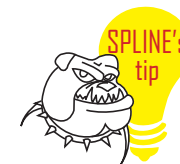
RRC-2206
O-Ring for SmartTube Steel Sleeve

Ultimate SmartTube Style Large Bearing 5 on 5 Hub



- CRC-1003 O-Ring Style Seal for DMI Style SmartTube w/ Steel Ring
- CRC-1004 O-Ring Style Seal for Bert SmartTube
- CRC-1001 Bearing for SmartTube Style Hubs - Bert I.D.
- CRC-1005 Race for SmartTube Style Hubs
- CRC-2050 Ultimate SmartTube Style Hub
- CRC-2056A Flange
- CRC-2059 Alum. Drive Flange
- CRC-2058-5 Wheel Stud for Billet Hub -5pk
- CRC-1005 Race for SmartTube Style Hubs
- CRC-1001 Bearing for SmartTube Style Hubs - Bert I.D.
- BRP-6230 BRP Locknut for SmartTube Style Tube
- BRP-6231 Wrench for BRP Lock-Nut

Ultimate SmartTube Style Large Bearing 5 on 5 Hub is produced from billet steel. The inverted drive flange saves weight and adds strength. Billet fast start tapered studs offer enough length for wheel spacers. Modular brake rotor mount is strong and true. Used and recommended by 4x IMCA National Champion Jordan Grabouski.



If you're looking to save weight on your modified then SmartTube is a great choice. SmartTube style saves over 3.25 lbs. of rotating weight between the billet hubs, inverted drive flanges and shorter axles. The tubes save an additional 4 lbs. The total weight savings by going SmartTube is almost 8 lbs. of unsprung weight! Additionally, when utilizing a heavy left side tube to increase bite more gain percentage can be achieved with SmartTube Style tubes.

Closed Tube 2.5" GN Style Tubes & Accessories

Steel 2.5" GN Style Tubes



[RRC-2285-_\(length\)_](#)
GN Steel Tube

Approximate Weight - 13.5 lbs.

[RRC-2285-_\(length\)_ H](#)
GN HEAVY Steel Tube

Approximate Weight - 31.5 lbs.

Stocking Lengths

| | |
|-----|-----|
| 22" | 26" |
| 23" | 27" |
| 24" | 29" |
| 25" | |

Closed Tube Miscellaneous Rear Tubes

8 Bolt Tubes



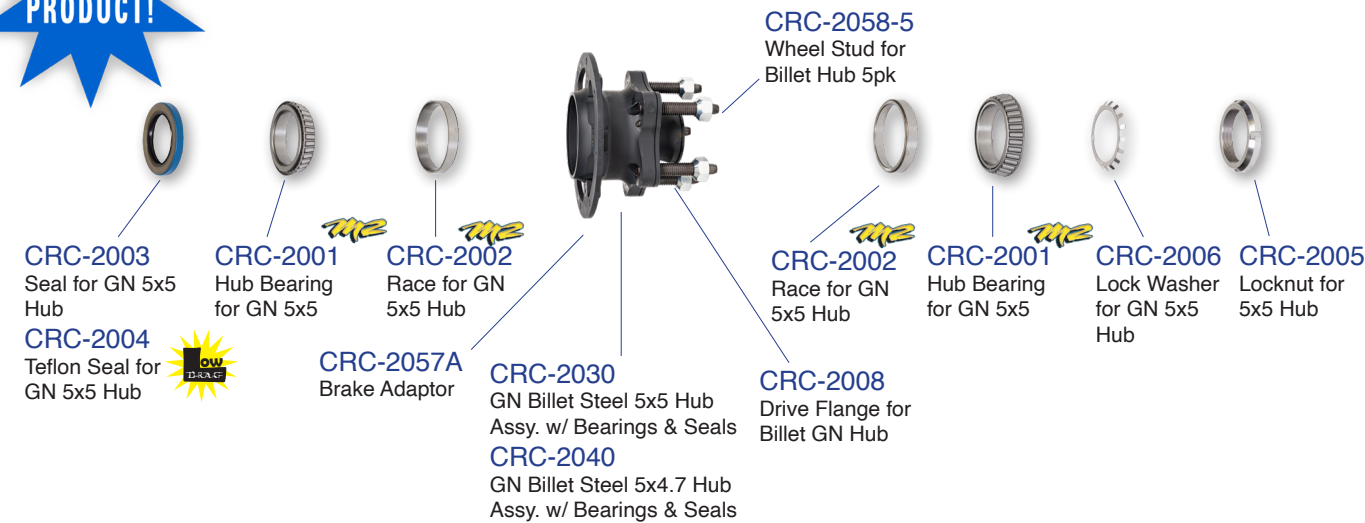
[RRC-2280-_\(length\)_](#)
Aluminum 8 Bolt Tube

[RRC-2260-_\(length\)_](#)
Aluminum Thin Flange 8 Bolt Tube

[RRC-2295-_\(length\)_](#)
Steel 8 Bolt Tube



2.5" GN 5 on 5 and 5 on 4 3/4 Hub Assembly



The Ultimate Billet Steel 5 on 5 and 5 on 4 3/4" Hubs for 2.5" GN Snouts were born out of necessity. The industry stopped when imported hub supplies ground to a halt. Facing the reality of racers being unable to compete, DMI rose to the occasion and showcased what an American company can do when their focus is products Made in the USA. The super strong billet hubs feature a modular brake rotor mount, fast start studs, a steel billet drive flange universal to both bolt patterns and an easy to use 1/4 turn drive flange cap. You just can't beat Made in the USA.



Steel 8 Bolt Spindles

- [RRC-2261](#)
8 Bolt Steel Spindle - .5 Camber
- [RRC-2262](#)
8 Bolt Steel Spindle - 1.0 Camber
- [RRC-2263](#)
8 Bolt Steel Spindle - 1.5 Camber



DMI can produce or get any style tube you desire. If you don't see the tube you require please ask your sales associate. Need a special length? Not a problem. Camber tubes? Not an issue. If it's the tube you need to win - DMI will make it happen!

EZ Tube & Base Kits

EZ Tube & Base Kits



Want to make life easier? Order your replacement tube with the EZ base already installed. Simply loosen the six nuts holding the tube to the bell, remove the damaged tube and install the new assembly. No press - no mess. Totally dry process that saves hours of valuable time.

| | |
|---------------|---|
| RRC-EZKIT2200 | RRC-2200 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2201 | RRC-2201 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2225 | RRC-2225 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2250 | RRC-2250 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2275 | RRC-2275 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2279 | RRC-2279 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2285 | RRC-2285 Tube w/ EZ Base Installed - Specify Length |
| RRC-EZKIT2290 | RRC-2290 Tube w/ EZ Base Installed - Specify Length |

Heavy Tubes

HEAVY TUBES

The old adage of reducing unsprung weight to make more speed became a thing of the past in recent years. Changing technology has opened our eyes to the benefits of heavier suspension components. Racers have seen increased control and traction with heavier birdcages, wheel spacers, rotors and wheels. More specific to our involvement has been the use of heavy tubes in the rears. Many racers are using heavy left and right rear tubes! We offer tubes of varying weights as well as concealed tube inserts. Verify with your track rules or sanctioning body rules the legality of heavy tubes and inserts. Who has seen the biggest benefit of heavy tubes? IMCA-Style Mods! Late Models and Northeast Dirt Modifieds have seen mixed results. But almost all the IMCA-Style Mods that have experimented with heavy tubes have been pleased with the results. Talk to your DMI sales associate for more information.

Closed Tube 31 Spline Axles

Hollow 31 Spline Axles



RRC-2300- [\(length\)](#)
32.5" Axle Weight - 7.4 lbs

Stocking Lengths

| | |
|--------|-------|
| 25.5" | 32.5" |
| 26.5" | 33.5" |
| 27.5" | 34.5" |
| 28.5" | 35.5" |
| 29.75" | 36.5" |
| 30.5" | 38.5" |
| 31.5" | |

DMI Hollow axles are produced from Made in the USA 4340 that is milled and heat treated to our exact specifications. All axles are turned to the correct outside dimensions for optimum traction and reliability. Don't be fooled by black magic axles that make false promises. Trust DMI axles for the best in reliability and performance.

Hollow 31 Spline Axles - Ultralight Crate



DMI Hollow Ultralight Axles are designed exclusively for the crate engine market. Using the same Made in the USA 4340 as our standard hollow axles, the ultralight axles feature a weight reducing smaller O.D. Get that crate to jump off the corner using the "NEW" ultralight hollow axles.

RRC-2325- [\(length\)](#)
32.5" Axle Weight - 6.4 lbs

Stocking Lengths

| | |
|--------|-------|
| 25.5" | 32.5" |
| 26.5" | 33.5" |
| 27.5" | 34.5" |
| 28.5" | 35.5" |
| 29.75" | 36.5" |
| 30.5" | 38.5" |
| 31.5" | |

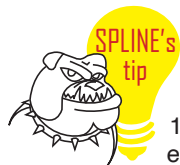
Solid 31 Spline Axles



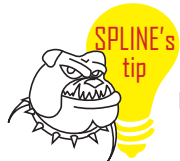
RRC-2350- [\(length\)](#)
32.5" Axle Weight - 10.2 lbs

Stocking Lengths

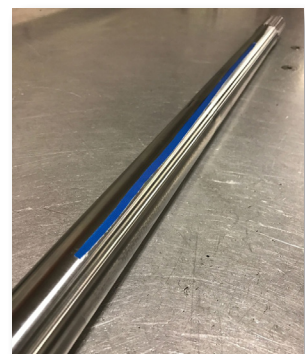
| | |
|--------|-------|
| 25.5" | 32.5" |
| 26.5" | 33.5" |
| 27.5" | 34.5" |
| 28.5" | 35.5" |
| 29.75" | 36.5" |
| 30.5" | |
| 31.5" | |



Spline recommends all EZ rear axles to butt up face to face without utilizing a bolt to set gap. End play should remain 1/8". EZ spools are narrower but still require full engagement to properly perform.



Spline recommends replacing axles every 800-1000 laps. Paint a line on the axle when new and watch for twisting.



Closed Tube Frequently Asked Questions

Q What is the proper oil level for a Bulldog Rear and how do I fill it?

A The proper oil level varies dependant on the model. Below is a guide (all capacities are approximate)
EZ Series Rears - 2-2.5 qts.
CT-1 & SS-1 - 3.5-4 qts.
CT-1 w/ 9" Ring Gear - 4.5qts. (Must maintain max level in this unit or pinion life will be drastically reduced)
The correct method of filling the rear is through a fill can attached to the -10 AN fitting on the left side bell or through the large inspection plug on the right side bell. Remove the fill level plug on the right side bell located below the large inspection plug. Install fluid until oil runs out of fill level port. Re-install the fill level plug and add an additional 4-6 ounces of fluid. Re-install inspection plug. Both plugs only need to be "snug". Over-tightening will cause the plug(s) to stick.

Q What is the best oil for a Bulldog Rear?

A We highly recommend Bulldog Blood (see page. 58) We do not re-package someone else's oil. We spent a lot of time and effort testing different formulations. Our oil is blended to our proprietary specs. If Bulldog Blood isn't for you, we see good, consistent results from Driven 75w-110.

Q What type of quick change gears will work in a Bulldog Rear?

A Any 10 spline quick change gear will work in the standard Bulldogs. Bulldog recommends only quick change gears produced from 9310 steel. Inexpensive gears made using 8620 steel will fail. We do not recommend using helical cut gears. Always use gears with the machined lip facing out. Always install gears the same way. Never mix gear sets. Sets are machined as matched units.

Q How do I tell what ratio ring and pinion I have?

A You can call us (717)397-5347 with the serial number and we can see what the rear was built with. If it's a used rear, we strongly suggest checking the ratio and not relying on the build sheet. The easiest way to verify ring and pinion ratio is to remove the quick change gears. Install a mark on the tire at the 12 o'clock position. Install a mark on the pinion at the 12 o'clock position. Rotate the tire by hand 1 complete revolution. Count the pinion rotation as your turning the tire. If the pinion rotates just over four times, you have a 4.12. If the pinion rotates almost five times, you have a 4.86.

Q How often should a ring and pinion be replaced?

A The inspection plug in the right side bell is placed there for a reason. Weekly inspection of the pinion should occur. Ring gears seldom show wear. Rotate the pinion slowly while inspecting the pinion through the hole. Look at the drive side of the tooth. Small pits need to be monitored. Once you determine the pinion pits are excessive, replace the ring and pinion. As long as the unit looks pit-free, there isn't a life cycle. Use it!

Q What is the service life of a Bulldog Rear?

A Bulldog recommends a thorough inspection every 1,000 laps. Remove the left side bell and inspect spool and pinion. Spools should be replaced every 2,000 laps. Lower shafts should be replaced every 1,800-2,000 laps. Incorrect axle length as well as axles that provide increased twist effect service life. If a driveshaft failure occurs, the lower shaft, end yoke, and bolt should be replaced immediately.

Friction Fighter Sportsman Series Quick Change Gears

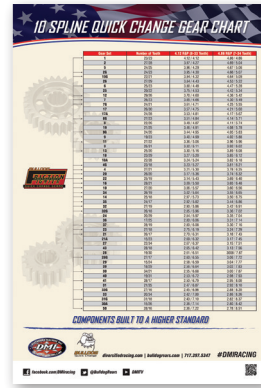


Friction Fighter Sportsman Series 10 Spline Quick Change Gears are produced from high strength 9310 alloy steel and precision hobbed. The gears are lightened and REM® polished. There isn't a nicer gear set available for the money.

FFSSQCG - set#
Friction Fighter Quick Change Gears



GEARCHART
24" x 18"
Laminated
Gear Charts are
available



#20 gear set weighs 4.74 lbs.

To Determine Final Drive $(\# \text{ top teeth}) / (\# \text{ bottom teeth}) \times \text{R\&P Ratio} = \text{Final Drive}$

To Determine RPM Change $(\text{Current RPM}) / (\text{Gear Ratio}) \times (\text{New Gear Ratio}) = \text{New RPM}$
Example: 8200 5.42 5.56 8400

| FFSSQCG 10 SPLINE GEAR RATIOS | | | |
|-------------------------------|--------------|---------------------------------|---------------------------------|
| Gear Set | No. of Teeth | 4.12 Ring & Pinion (8-33 Teeth) | 4.86 Ring & Pinion (7-34 Teeth) |
| 1 | 23/23 | 4.12 / 4.12 | 4.86 / 4.86 |
| 2G | 24/23 | 3.95 / 4.30 | 4.66 / 5.07 |
| 15G | 22/21 | 3.94 / 4.32 | 4.64 / 5.09 |
| 6 | 25/23 | 3.80 / 4.48 | 4.47 / 5.28 |
| 12 | 29/26 | 3.70 / 4.60 | 4.36 / 5.42 |
| 7 | 26/23 | 3.65 / 4.66 | 4.30 / 5.49 |
| 7G | 24/21 | 3.61 / 4.71 | 4.25 / 5.55 |
| 8G | 27/23 | 3.51 / 4.84 | 4.14 / 5.71 |
| 9G | 24/20 | 3.44 / 4.95 | 4.05 / 5.83 |
| 11 | 27/22 | 3.36 / 5.06 | 3.96 / 5.96 |
| 13 | 25/20 | 3.30 / 5.16 | 3.89 / 6.08 |
| 4G | 23/18 | 3.23 / 5.27 | 3.81 / 6.21 |
| 4 | 27/21 | 3.21 / 5.30 | 3.78 / 6.25 |
| 20 | 26/20 | 3.17 / 5.36 | 3.74 / 6.32 |
| 22 | 25/19 | 3.14 / 5.43 | 3.69 / 6.40 |
| 16 | 28/21 | 3.09 / 5.50 | 3.65 / 6.48 |
| 10 | 27/20 | 3.06 / 5.57 | 3.60 / 6.56 |
| 34 | 26/19 | 3.02 / 5.64 | 3.55 / 6.65 |
| 14 | 25/18 | 2.97 / 5.73 | 3.50 / 6.75 |
| 35 | 24/17 | 2.92 / 5.82 | 3.44 / 6.86 |
| 32 | 27/19 | 2.90 / 5.86 | 3.42 / 6.91 |
| 32G | 26/18 | 2.85 / 5.96 | 3.36 / 7.02 |
| 37 | 28/19 | 2.80 / 6.08 | 3.30 / 7.16 |
| 23 | 27/18 | 2.75 / 6.19 | 3.24 / 7.29 |
| 21 | 26/17 | 2.70 / 6.31 | 3.18 / 7.43 |
| 43 | 28/18 | 2.65 / 6.42 | 3.13 / 7.56 |
| 28G | 27/17 | 2.60 / 6.55 | 3.06 / 7.72 |
| 30 | 34/21 | 2.55 / 6.68 | 3.00 / 7.87 |
| 41 | 28/17 | 2.50 / 6.79 | 2.95 / 8.00 |
| 33G | 27/16 | 2.45 / 6.96 | 2.88 / 8.20 |
| 31G | 31/18 | 2.40 / 7.10 | 2.82 / 8.37 |
| 50 | 28/16 | 2.36 / 7.22 | 2.78 / 8.51 |

Friction Fighter Quick Change Gears

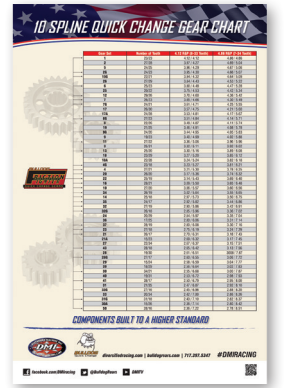


Simply stated Friction Fighter 10 Spline Quick Change Gears are the strongest, lightest, highest quality gears available. 9310 Ultra high strength steel, stone ground, cryogenic processed and REM® finished - The gear mesh area is only 1" wide eliminating friction.

FFQCG- set#
Friction Fighter Quick Change Gears



GEARCHART
24" x 18"
Laminated
Gear Charts are
available



#20 gear set weighs 4.23 lbs.

To Determine Final Drive $(\# \text{ top teeth}) / (\# \text{ bottom teeth}) \times \text{R\&P Ratio} = \text{Final Drive}$

To Determine RPM Change $(\text{Current RPM}) / (\text{Gear Ratio}) \times (\text{New Gear Ratio}) = \text{New RPM}$
Example: 8200 5.42 5.56 8400

| FFQCG 10 SPLINE GEAR RATIOS | | | |
|-----------------------------|--------------|---------------------------------|---------------------------------|
| Gear Set | No. of Teeth | 4.12 Ring & Pinion (8-33 Teeth) | 4.86 Ring & Pinion (7-34 Teeth) |
| 1 | 23/23 | 4.12 / 4.12 | 4.86 / 4.86 |
| 2G | 24/23 | 3.95 / 4.30 | 4.66 / 5.07 |
| 15G | 22/21 | 3.94 / 4.32 | 4.64 / 5.09 |
| 6 | 25/23 | 3.80 / 4.48 | 4.47 / 5.28 |
| 12 | 29/26 | 3.70 / 4.60 | 4.36 / 5.42 |
| 7 | 26/23 | 3.65 / 4.66 | 4.30 / 5.49 |
| 7G | 24/21 | 3.61 / 4.71 | 4.25 / 5.55 |
| 8G | 27/23 | 3.51 / 4.84 | 4.14 / 5.71 |
| 9G | 24/20 | 3.44 / 4.95 | 4.05 / 5.83 |
| 11 | 27/22 | 3.36 / 5.06 | 3.96 / 5.96 |
| 13 | 25/20 | 3.30 / 5.16 | 3.89 / 6.08 |
| 4G | 23/18 | 3.23 / 5.27 | 3.81 / 6.21 |
| 4 | 27/21 | 3.21 / 5.30 | 3.78 / 6.25 |
| 20 | 26/20 | 3.17 / 5.36 | 3.74 / 6.32 |
| 22 | 25/19 | 3.14 / 5.43 | 3.69 / 6.40 |
| 16 | 28/21 | 3.09 / 5.50 | 3.65 / 6.48 |
| 10 | 27/20 | 3.06 / 5.57 | 3.60 / 6.56 |
| 34 | 26/19 | 3.02 / 5.64 | 3.55 / 6.65 |
| 14 | 25/18 | 2.97 / 5.73 | 3.50 / 6.75 |
| 35 | 24/17 | 2.92 / 5.82 | 3.44 / 6.86 |
| 32 | 27/19 | 2.90 / 5.86 | 3.42 / 6.91 |
| 32G | 26/18 | 2.85 / 5.96 | 3.36 / 7.02 |
| 37 | 28/19 | 2.80 / 6.08 | 3.30 / 7.16 |
| 23 | 27/18 | 2.75 / 6.19 | 3.24 / 7.29 |
| 21 | 26/17 | 2.70 / 6.31 | 3.18 / 7.43 |
| 43 | 28/18 | 2.65 / 6.42 | 3.13 / 7.56 |
| 28G | 27/17 | 2.60 / 6.55 | 3.06 / 7.72 |
| 30 | 34/21 | 2.55 / 6.68 | 3.00 / 7.87 |
| 41 | 28/17 | 2.50 / 6.79 | 2.95 / 8.00 |
| 33G | 27/16 | 2.45 / 6.96 | 2.88 / 8.20 |
| 31G | 31/18 | 2.40 / 7.10 | 2.82 / 8.37 |
| 50 | 28/16 | 2.36 / 7.22 | 2.78 / 8.51 |

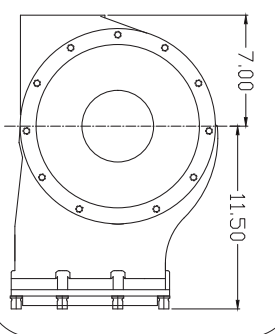
XR-1



XR1-4.86
Bulldog XR-1
4.86 Complete Rear
82 lbs.

XR1-4.12
Bulldog XR-1
4.12 Complete Rear
82 lbs.

XR-1 Dimensions:



The Bulldog XR-1 is the original Bulldog Quick Change. Since being introduced in 2004, the Bulldog XR-1 has raised the bar in performance, reliability and durability. The XR-1 is chosen by some of the sport's top professionals. DMI's machine process ensures zero center section runout. All axles feature 1" increased left side spline length to accommodate deeper offset wheels.

Standard Features Include:

- O-Ringed Aluminum Gear Cover
- Heat Treated Lower Shaft
- Breather Assembly
- Timken® Pinion Bearings
- Non twist one bolt shifter mount
- 3 quarts Bulldog Blood Oil
- Torque Tube Studs
- Center Section warranty
- Ease-Align Shifter Arm

Important Specs

Side Bell Nuts- 30 ft/lbs.
Threaded Ring Gear- 60 ft/lbs. w/ Red threadlocker
Pinion Retainer Bolts- 25 ft/lbs.
Pinion Backlash- .004-.008
Rotational Pinion Preload (No axle) - 25 in/lbs. @ 70° F
Rotational Pinion Preload (Complete Assembly) - 48 in/lbs. @ 70° F
Starting Recommendations for Shims Left- .080" Right - .160"

Weight Savings of Some Popular Options

XR-1 4.86 Std Rear = 82 lbs.

| Description | Savings |
|---------------------------------------|-----------|
| 4.12 Ring & Pinion | .75 lbs. |
| EDM Ring Gear | .80 lbs. |
| Titanium Lower Shaft (Internal 10-10) | 1.18 lbs. |
| Titanium Hardware | .89 lbs. |
| 2" I.D. Axle | 2.27 lbs. |

Important Driveline Lengths when using XR-1 with a 40" Engine Setback

Internal 10-10 Driveshaft – 29" w/ U-Joint Spring
DMI Style Swivel Coupler Driveshaft – 26.5" w/ U-Joint Spring
Winters Style Swivel Coupler Driveshaft – 27.5" w/o a U-Joint Spring
Torque Tube – 27"

Popular XR-1 Options

More options available-contact your DMI sales associate for a complete listing.

Ring & Pinion Options

- EDM 4.12 OPT-2000
- EDM 4.86 OPT-2001
- REM® 4.12 OPT-2003
- REM® 4.86 OPT-2004
- EDM/REM® 4.12 OPT-2006
- EDM/REM® 4.86 OPT-2007
- Super G 4.12 OPT-2009
- Super G 4.86 OPT-2010

Lower Shaft Options

- Titanium Lower Shaft Internal 10-10 OPT-3021
- Steel Lower Shaft - Swivel Coupler OPT-3022
- Titanium Lower Shaft - Swivel Coupler OPT-3023
- Aluminum Internal 10-10 OPT-3040
- DMI Style Swivel Coupler OPT-3042
- Winters Style Swivel Coupler OPT-3043
- Internal 32 Spline OPT-3044
- Aluminum Internal 32 Spline OPT-3045

Bearing Options

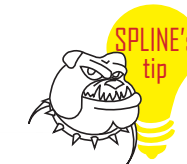
- Severe Duty Bearings OPT-6010
- M2 Treated Severe Duty Bearings OPT-6011

Hardware Options

- Titanium Bolt Kit OPT-7010

Axle Options

- Ultralight Rear Axle OPT-9050
- Split Bearing Rear Axle OPT-9052
- Ultra Light Split Bearing Rear Axle OPT-9054
- Rear Axle For 31" RR Bar OPT-9056
- Ultralight Rear Axle For 31" RR Bar OPT-9058
- Split Bearing Rear Axle For 31" RR Bar OPT-9060
- Ultralight Split Bearing Rear Axle For 31" RR Bar OPT-9062
- Beast 54-4 Pavement Axle OPT-9064
- Custom Axle OPT-9066



Order it "Outlaw - Style"
OPT - 2009 OPT - 3043 OPT - 7010
OPT - 3022 OPT - 6010 OPT - 9050

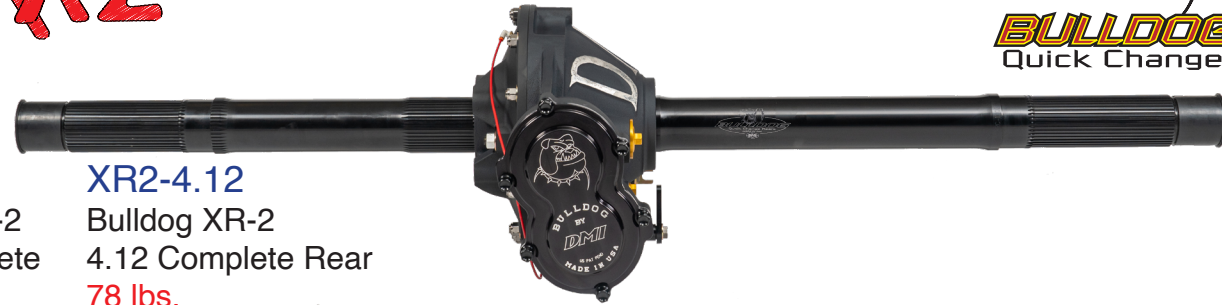
“

I HAVE BEEN USING DMI REAR ENDS SINCE THEY STARTED BUILDING THEM. GREAT RELIABILITY AND GREAT PEOPLE TO DEAL WITH. IT'S AN AWESOME PRODUCT. I'M VERY HAPPY TO DEAL WITH DAVE AND THE PEOPLE AT DMI.

Jimmy Carr

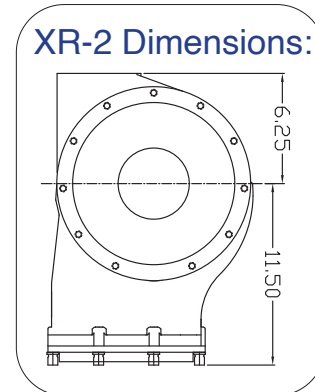
Crew Chief for Dominic Seelzi. Multi time Knoxville Nationals Champion. World of Outlaws Champion. 2012 inductee Canadian Motorsports Hall of Fame

XR2



XR2-4.86
Bulldog XR-2
4.86 Complete
Rear
78 lbs.

XR2-4.12
Bulldog XR-2
4.12 Complete Rear
78 lbs.



Without Snout Adapter



The Bulldog XR-2 was introduced for the 2009 Season. The XR-2 uses the same proven internal components as the XR-1. The weight savings of the XR-2 comes from its unique futuristic housing design. The snout area is strengthened by the addition of internal casting material and external ribs. The XR-2 is the clear cut choice for the weight conscious racer who still demands reliability. All axles feature 1" increased left side spline length to accommodate deeper offset wheels.

Standard Features Include:

- O-Ringed Aluminum Gear Cover
- Heat Treated Lower Shaft
- Breather Assembly
- Timken® Pinion Bearings
- Non twist one bolt shifter mount
- 3 quarts Bulldog Blood Oil
- Torque Tube Studs
- Ease-Align Shifter Arm
- Aluminum Front Snout Spacer for Internal 10-10

Important Specs

Side Bell Nuts- 30 ft/lbs.
Threaded Ring Gear- 60 ft/lbs. w/ Red threadlocker
Pinion Retainer Bolts- 25 ft/lbs.
XR-2 Snout Locking Ring- 70 ft/lbs.
XR-2 Front Spacer Plate Bolts- 35 ft./lbs.
Pinion Backlash- .004-.008
Rotational Pinion Preload (No axle) - 25 in/lbs. @ 70° F
Rotational Pinion Preload (Complete Assembly) - 48 in/lbs. @ 70° F
Starting Recommendations for Shims Left- .060" Right - .060"

Weight Savings of Some Popular Options

XR-2 4.86 Std Rear = 78 lbs.

| Description | Savings |
|---------------------------------------|-----------|
| 4.12 Ring & Pinion | .75 lbs. |
| EDM Ring Gear | .80 lbs. |
| Titanium Lower Shaft (Internal 10-10) | 1.18 lbs. |
| Titanium Hardware | .89 lbs. |
| 2" I.D. Axle | 2.27 lbs. |

Important Driveline Lengths when using XR-2 with a 40" Engine Setback

Internal 10-10 Driveshaft – 29" w/ U-Joint Spring
DMI Style Swivel Coupler Driveshaft w/ Snout Spacer – 26.5" w/ U-Joint Spring
Winters Style Swivel Coupler Driveshaft w/ Snout Spacer – 27.5" w/o a U-Joint Spring
Torque Tube w/ Snout Spacer – 27"
Internal DMI Style Swivel Coupler Driveshaft w/o Snout Spacer – 29.25" w/ U-Joint Spring
Internal Winters Style Swivel Coupler Driveshaft w/o Snout Spacer – 30.5" w/o a U-Joint Spring
Torque Tube w/o Snout Spacer – 28"

Popular XR-2 Options More options available-contact your DMI sales associate for a complete listing.

Ring & Pinion Options

- EDM 4.12 OPT-2000
- EDM 4.86 OPT-2001
- REM® 4.12 OPT-2003
- REM® 4.86 OPT-2004
- EDM/REM® 4.12 OPT-2006
- EDM/REM® 4.86 OPT-2007
- Super G 4.12 OPT-2009
- Super G 4.86 OPT-2010

Lower Shaft Options

- Titanium Lower Shaft Internal 10-10 OPT-3021
- Steel Lower Shaft - Swivel Coupler OPT-3022
- Titanium Lower Shaft - Swivel Coupler OPT-3023
- Steel Lower Shaft - Internal Swivel Coupler OPT-3024
- Titanium Lower Shaft - Internal Swivel Coupler OPT-3025
- Aluminum Intenal 10-10 OPT-3040
- DMI Style Swivel Coupler OPT-3042
- Winters Style Swivel Coupler OPT-3043
- Internal 32 Spline OPT-3044
- Aluminum Internal 32 Spline OPT-3045

Bearing Options

- Severe Duty Bearings OPT-6010

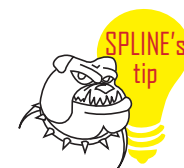
M2 Treated Severe Duty Bearings OPT-6011

Hardware Options

Titanium Bolt Kit OPT-7011

Axle Options

- Ultralight Rear Axle OPT-9051
- Split Bearing Rear Axle OPT-9053
- Ultra Light Split Bearing Rear Axle OPT-9055
- Rear Axle for 31" RR Bar OPT-9057
- Ultralight Rear Axle for 31" RR Bar OPT-9059
- Split Bearing Rear Axle for 31" RR Bar OPT-9061
- Ultralight Split Bearing Rear Axle for 31" RR Bar OPT-9063
- Beast 54-4 Pavement Axle OPT-9065
- Custom Axle OPT-9066



Order it "Scruffy - Style"
OPT - 2009 OPT - 3043 OPT - 7011
OPT - 3025 OPT - 6010 OPT - 9063

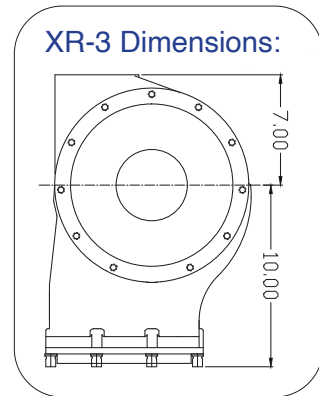
“
WE USE XR2 REARS EXCLUSIVELY IN OUR USAC CHAMPIONSHIP CAMPAIGNS. I CHOOSE DMI XR2 REARS FOR THEIR QUALITY, DEPENDABILITY, AND WEIGHT SAVINGS. THE WEIGHT SAVINGS THE XR2 OFFERS IS THE BEST BANG FOR YOUR BUCK ON THE MARKET.
”

Brady Bacon
Multi-time USAC National Sprint Car Champion

XR-3



XR3-4.12
Bulldog XR-3
4.12 Complete Rear
78 lbs.



The Bulldog XR-3 utilizes an 8" 4.12 ring and pinion that saves more than 2.5lbs compared to a conventional 10" gear. The XR-3 was developed using the latest computer F.E.A. technology to develop and engineer the rear. The rear is a direct replacement utilizing standard 10 spline quick change gears commonly used in full size rears along with conventional length driveline components. The rear offers an additional 2" of fuel cell clearance and 1.75" of seat clearance. The ring and pinion has been used successfully in applications up to 800 horsepower on both dirt and pavement. This rear is an excellent choice for RaceSaver®, 305 or 360 sprint car competitors. All axles feature 1" increased left side spline length to accommodate deeper offset wheels.

Standard Features Include:

- O-Ringed Rear Cover
- Jack Pad
- Increased Oil Reservoir
- Temperature Reducing Cooling Fins
- Billet Aluminum Front Bearing Housing
- Heat Treated Lower Shaft
- Breather Assembly
- Non Twist One Bolt Shifter Mount
- 3 quarts Bulldog Blood Oil

Important Specs

Side Bell Nuts- 30 ft/lbs.
Threaded Ring Gear- 60 ft/lbs. w/ Red threadlocker
Pinion Retainer Bolts- 25 ft/lbs.
Pinion Backlash- .004-.008
Rotational Pinion Preload (No axle) - 25 in/lbs. @ 70° F
Rotational Pinion Preload (Complete Assembly) - 48 in/lbs. @ 70° F
Starting Recommendations for Shims Left- .062" Right - .062"

Weight Savings of Some Popular Options

XR-3 4.12 Std Rear = 78 lbs.

| Description | Savings |
|---------------------------------------|-----------|
| EDM Ring Gear | 1.75 lbs. |
| Titanium Lower Shaft (Internal 10-10) | 1.18 lbs. |
| Titanium Hardware | .89 lbs. |
| 2" I.D. Axle | 2.27 lbs. |

Important Driveline Lengths when using XR-3 with a 40" Engine Setback

Internal 10-10 Driveshaft – 29" w/ U-Joint Spring
DMI Style Swivel Coupler Driveshaft – 26.5" w/ U-Joint Spring
Winters Style Swivel Coupler Driveshaft – 27.5" w/o a U-Joint Spring
Torque Tube – 27"

Popular XR-3 Options More options available- contact your DMI sales associate for a complete listing.

Ring & Pinion Options

- EDM Ring Gear OPT- 2002
- REM® Ring & Pinion OPT- 2005
- REM® / EDM Ring and Pinion OPT- 2008
- Super G Ring and Pinion OPT- 2011

Lower Shaft Options

- Titanium Lower Shaft OPT-3026
- Steel Lower Shaft for Swivel Coupler OPT-3027
- Titanium Lower Shaft for Swivel Coupler OPT-3028
- Aluminum Internal 10-10 OPT-3040
- DMI Style Swivel Coupler OPT-3042
- Winters Style Swivel Coupler OPT-3043
- 32 Spline Internal Coupler OPT-3044
- 32 Spline Internal Coupler OPT-3045

Bearing Options

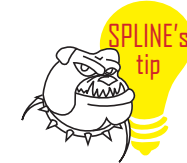
- Severe Duty Bearings OPT-6010
- M2 Treated Severe Duty Bearings OPT-6012

Hardware Options

- Titanium Bolt Kit OPT-7011

Axle Options

- 2" I.D. Axle-7068 Material OPT-9050
- Split Bearing Style Axle OPT-9052
- Ultralight Split Bearing Rear Axle OPT-9054
- Rear Axle for 31" RR Bar OPT-9056
- Ultralight Rear Axle for 31" RR Bar OPT-9058
- Split Bearing Rear Axle for 31" RR Bar OPT-9060
- Ultralight Split Bearing Rear Axle for 31" RR Bar OPT-9062
- Beast 54-4 Pavement Axle OPT-9064
- Custom Axle OPT-9066



Really want a trick piece? *ME* it. Option OPT-6012

“
THANK YOU TO EVERYONE AT DMI FOR BUILDING A QUALITY RELIABLE PRODUCT. THE XR3 HAS BEEN ONE OF MANY OUR RACE TEAM CAN DEPEND ON YEAR AFTER YEAR.
Jason Barney
Multi-time Empire Super Sprint Champion. Owner 87 Speed

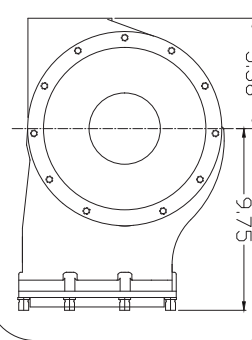
BB-1



BB-3.78
Baby Bulldog 3.78
Complete Magnesium
Rear w/ 31 Spline
44-3 Axle
55 lbs.

BB-4.33
Baby Bulldog 4.33
Complete Magnesium
Rear w/ 31 Spline
44-3 Axle
55 lbs.

BB-1 Dimensions:



The Baby Bulldog is the strongest rear made for midget racing. Compared to other rears on the market, the Baby Bulldog offers strength, reliability, is user friendly and doesn't leak. 7068 aircraft aluminum makes a Baby Bulldog axle the strongest available - period! Take a walk through the pits and see that the BB-1 is the quick change midget rear chosen by more teams than any other brand.

Standard Features Include:

- Breather Assembly
- Heat Treated Lower Shaft
- Non-Twist One Bolt Shifter Mount
- O-Ringed Aluminum Gear Cover
- 3 Quarts Bulldog Blood Oil
- Torque Tube Studs
- 9/16" Hex on all Plugs

Important Specs

Side Bell Nuts- 30 ft/lbs.
Threaded Ring Gear- 60 ft/lbs. w/ Red threadlocker
Pinion Retainer Bolts- 25 ft/lbs.
Pinion Backlash- .004-.008
Rotational Pinion Preload (No axle) - 25 in/lbs. @ 70° F
Rotational Pinion Preload (Complete Assembly) - 48 in/lbs. @ 70° F
Starting Recommendations for Shims Left- .065" Right - .055"

Weight Savings of Some Popular Options

BB-1 4.33 = 55 lbs.

| Description | Savings |
|---------------------------------------|----------|
| EDM Ring Gear | .48 lbs. |
| Titanium Lower Shaft (Internal 10-10) | .81 lbs. |
| Titanium Hardware | .75 lbs. |
| 36 Spline Axle | 2.5 lbs. |

Important Driveline Lengths when using BB-1 with a 33.5" Engine Setback

10-10 Driveshaft - 23.5" w/ U-joint Spring
Torque Tube - 22.5"

Popular BB-1 Options More options available-contact your DMI sales associate for a complete listing.

Ring & Pinion Options

- EDM 3.78 OPT-2020
- EDM 4.33 OPT-2021
- REM® 3.78 OPT-2022
- REM® 4.33 OPT-2023
- EDM/ REM® 3.78 OPT-2024
- EDM/ REM® 4.33 OPT-2025

Lower Shaft Options

- Titanium Lower Shaft-Internal 10-10 OPT-3029
- Steel Lower Shaft-Swivel Coupler OPT-3030
- Titanium Lower Shaft-Swivel Coupler OPT-3031
- Alum. Internal 10-10 OPT-3041
- DMI Style Swivel Coupler OPT-3042
- Winters Style Swivel Coupler OPT-3043

Bearing Options

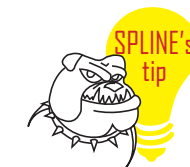
M2 Treated Bearings OPT-6013

Hardware Options

Titanium Bolt Kit OPT-7012

Axle Options

- Custom Axle OPT-9066
- 51-2 Beast Axle 36 Spline OPT-9067
- 44-3 36 Spline OPT-9068



Order it "Keith-Style"
OPT - 2024 OPT-3029



The Baby Bulldog Rear won the first race it ever ran. In December 2011 in DuQuoin, IL at the Battle at the Center Bryan Clauson drove to victory with the first Baby Bulldog we produced. This victory along with many other memories of Bryan's wins, his first start in the Indy 500 and his efforts in helping us develop products made Bryan an important part of the DMI family. Of course we miss seeing Bryan on the track but more importantly we miss the joy of working with him, growing with him and having a relationship with such a respectful and humble young man. #BCFOREVER

SM XR-1

SMXR1-4.12
Bulldog XR-1 4.12
Complete Rear
Super Mod Style

SMXR1-4.86
Bulldog XR-1 4.86
Complete Rear
Super Mod Style



The SMXR-1 is available for the ultra-tough supermodifieds. It's the first integral side bell rear available for Super Mods. The aircraft quality 7068 aluminum 60-19 axle offers superior strength over the competition. This rear was developed in conjunction with ACME Racing, many time MSA champions!

Standard Features Include:

- O-Ringed Aluminum Gear Cover
- 3 Quarts Bulldog Blood
- Breather Assembly
- Ease-Align Shifter Arm
- Non-Twist Shifter Mount
- Front Seal Plate



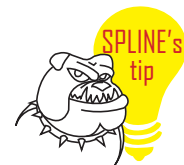
Bulldog Quick Change Rears released the XR-1 rear at the 2004 Performance Racing Industry Show in Indianapolis. The XR-2 was introduced at the 2008 PRI Show in Orlando. 2009 saw the introduction of the CT-1 at IMIS in Indy. The Baby Bulldog made its debut in 2012 at IMIS and the BO5 was released in PRI's return to Indy in December 2013. The SS-1 was released at the Parts Peddler Trade Show in Syracuse, NY in 2015. The XR-3 was debuted at PRI in 2016. EZ Series Closed Tube rears were launched in 2018 at the Northeast Racing Products Show.

Popular SMXR-1 Options More options available-contact your DMI sales associate for a complete listing.

| Ring & Pinion Options |
|--|
| EDM Ring Gear 4.12 OPT-2000 |
| EDM Ring Gear 4.86 OPT-2001 |
| REM® Ring & Pinion 4.12 OPT-2003 |
| REM® Ring & Pinion 4.86 OPT-2004 |
| REM® / EDM Ring and Pinion 4.12 OPT-2006 |
| REM®/ EDM Ring & Pinion 4.86 OPT-2007 |
| Custom Axle OPT-9066 |
| Severe Duty Bearings OPT-6010 |
| M2 Treated Severe Duty Bearings OPT-6011 |



All bearings are available with M2 Metal Treatment. M2 Metal Treatment was formerly known as PROglide. An ownership change early in 2021 has brought a new name but the same great benefits and unmatched results in reducing friction and increased service life. Utilizing nano particles that act as sponges for oil, M2 is a revolutionary process with limitless possibilities. DMI chooses M2 treatment over REM® polished bearings. While DMI does have in-house REM® capabilities we believe they are best suited on gear sets or other "solid" items as opposed to bearings. REM® utilizes fine media as part of the polishing process. In bearings that fine media can be left behind as debris and potentially create an issue. Shiny is nice, but if you want to eliminate friction than M2 is for you!



When changing gears it's a perfect time to inspect rear cover bearings, pinion bearings and stub shaft bearings for wear or damage.

Important XR-1, XR-2, XR-3 & BB-1 Information

EDM Ring Gear

EDM ring gears decrease weight and increase flex. Ring gear bolts should be replaced and torqued to 60ft. lbs. using blue threadlocker every 500 laps when using an EDM ring gear. EDM ring gears are not recommended in high horsepower (800+) applications.



REM's ISF® Process is a novel and proven approach to eliminating micropitting by removing peak asperities, generating a higher load-bearing surface, and increasing the lambda lubrication values. These surface finish/texture improvements make any metal to metal interaction significantly less likely to occur and effectively eliminate the failure mechanism that generates micropitting. Numerous public and proprietary studies have shown how effective REM's ISF Process and the ISF® Surface that it generates is in eliminating micropitting.



All bearings are available with M2 Metal Treatment. M2 Metal Treatment was formerly known as PROglide. An ownership change early in 2021 has brought a new name but the same great benefits and unmatched results in reducing friction and increased service life. Utilizing nano particles that act as sponges for oil, M2 is a revolutionary process with limitless possibilities. DMI chooses M2 treatment over REM® polished bearings. While DMI does have in-house REM® capabilities we believe they are best suited on gear sets or other "solid" items as opposed to bearings. REM® utilizes fine media as part of the polishing process. In bearings that fine media can be left behind as debris and potentially create an issue. Shiny is nice, but if you want to eliminate friction than M2 is for you!



Superior Bearing is the exclusive supplier of the highest quality bearings and seals used throughout Bulldog Quick Change Rears. Since their inception in 1981, Superior Bearing has been a leader in bearings and seals for the motorsports industry. DMI and Superior have worked hand in hand designing, refining and producing proprietary bearings and seals utilized in Bulldog Quick Change Rears. Superior bearings with superior quality at superior value. There is only one Superior Bearing and we are proud of the relationship we have with them.

Swivel Couplers

DMI style swivel couplers and Winters style swivel couplers must be serviced every 6-8 races. Disassemble, clean thoroughly, inspect and replace worn components. Pack liberally with DMI Swivel Coupler Lube (Part# DMI-SWILUBE) and install in coupler, insert seal and install snap ring ensuring engagement. On a Winters style the seal should be zip tied or safety wired to the driveshaft.

Shifter Mechanism

Proper shifter engagement / disengagement is critical to the service life of your Bulldog open tube rear. Bulldog highly suggests using DMI Strato Shifter Assembly SRC-2400. Strato Shifter releases all tension off rear internals when locked in gear. To set cable, place the rear in gear. Lock shifter in gear. Adjust nuts on cable until cable falls onto shifter arm quick disconnect with NO tension. Tighten jams. Lift handle to disengage rear. Remove cable from quick disconnect and ensure that shifter arm is fully out of gear. Reinstall cable onto arm and lock back in gear ensuring one last time the shifter is properly locked in gear.

Important XR-1, XR-2, XR-3 & BB-1 Information

For specific information on each model quick change rear please refer to the pages featuring that specific rear. There you will find torque specs, starting recommendations for shims along with other pertinent information to properly maintain, rebuild and use your Bulldog Quick Change Rear.

WARNING! DMI recommends using an oven to heat center section. Heat for 10 minutes at 300 degrees F. If a torch has to be used DO NOT CONCENTRATE the heat in one area. Keep torch moving at all times.

Loaded Pinion Removal

Heat area around the pinion until the pinion is able to freely be removed.
DO NOT concentrate heat around the pinion nose bearing.

Loaded Pinion Installation

Heat area around the pinion until the pinion is able to freely drop into center.
DO NOT concentrate heat around the pinion nose bearing support.

Open Tube Rear Set-Up

After installing pinion allow rear to return to room temperature. (70° F) Adjust pinion nut until 25 in/lbs. rotational preload is achieved without the spool. Lubricate posi-retainer o-ring and install posi-lock retainer on pinion nut using finger pressure only. Rotate retainer if needed to align locking splines. Install axle with starting shim recommendations found under the important specs section for the model rear being rebuilt. Install sidebell and tighten four nuts to 30 ft/lbs. Verify pinion backlash to be .004"-.008" minimum when checked on 10 spline tooth of pinion using dial indicator. Adjust spool shims accordingly until desired amount of pinion backlash is achieved. Once desired amount of pinion backlash is achieved verify rotation pinion preload to be 45in/lbs. Once set-up is complete remove side bell. Install side bell seal, o-rings and axle seals. Re-install side bell with ring gear back stop in place. Torque side bell nuts to 30 ft/lbs. Tighten ring gear backstop against ring gear and back off 1/8 turn. Jam ring back stop nut.

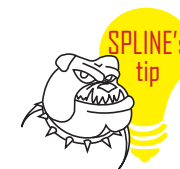
IF YOU DON'T KNOW - CALL!!!!



If you don't feel comfortable rebuilding your own quick change rear DMI can do it for you. For \$99 plus parts we'll rebuild any brand open tube quick change rear. Need help with shipping? Skid up your rear and contact us to schedule a freight pickup. We'll share our carrier discount with you to keep your freight costs minimal. Allow two weeks in most cases. Faster turnaround available in emergency situations.



DMI didn't guess when creating the specs every quick change rear is built to and we didn't copy the competitors. We rented racetracks, did extensive R&D and tested many different rotational pinion preloads and pinion backlash settings until we found the perfect one. DMI Bulldog Quick Changes are produced from 100% aircraft magnesium and that is a major factor in the specification we developed. We know our quick changes feel tight when new but trust us: They need to be that way to perform at their maximum potential.



Use spray or dry graphite on axle nuts prior to installation. The graphite prevents sticking and doesn't attract dirt. When the car comes off the track, loosen axle nuts. Failure to loosen nuts on a 'hot' axle may result in axle nuts sticking.

Open Tube Center Sections | Side Bells | Components

Center Sections

| | | | |
|--|--|--|---|
|  RRC-1005 XR-1 Magnesium Rear Center Section |  RRC-1006 XR-2 Magnesium Rear Center Section |  RRC-0902 XR-3 Magnesium Center Section |  RRC-4000 Baby Bulldog Magnesium Center Section |
|--|--|--|---|

Side Bells

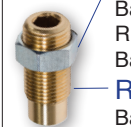
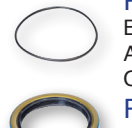






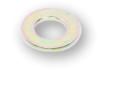


| | | |
|--|--|--|
|  RRC-1100 XR-1 & XR-2 Magnesium Side Bell w/ Brake Mount |  RRC-0970 XR-3 Magnesium Side Bell |  RRC-4050 Baby Bulldog Magnesium Side Bell |
|--|--|--|

XR-1, XR-2 and XR-3 Center and Side Bells Components

| | | | | |
|--|---|--|--|--|
|  RRC-1034 Breather Assembly |  RRC-1010 Large Inspection Plug |  RRC-1016 Fill Level Plug |  RRC-1020 Small Inspection Plug |  RRC-1030 3/8 Oil Drain Plug |
|  RRC-1015 Large Inspection Plug O-Ring |  RRC-1017 Fill Level Plug O-Ring |  RRC-1025 Small Inspection Plug O-Ring | | |
|  RRC-1105 Side Bell O-Ring |  RRC-1109 Short Side Bell Stud |  RRC-1120 Side Bell Locknut |  RRC-1130 Side Bell Washer |  RRC-1150 Back Stop Aluminum Nut |
|  RRC-1215 Axle Bearing Race |  RRC-1109T Short Sidebell Stud - Titanium |  RRC-1120A Side Bell Locknut - Titanium |  RRC-1140 Back Stop Set Screw |  RRC-1135 Ring Gear Back Stop |
|  RRC-1210 Axle Bearing |  RRC-1110 Side Bell Stud |  RRC-1110T Side Bell Stud - Titanium | | |
|  RRC-1008 XR-2 Snout Spacer |  RRC-1008A Washer for Alum. Snout Spacer |  RRC-1008B Bolt for Alum. Snout Spacer |  RRC-1009 Silicone O-Ring for XR-2 Snout |  RRC-1220 Axle Seal O-Ring |
| |  RRC-1217 Axle Seal | Tool  RRC-1900 Snout Locking Ring Wrench | | |

Open Tube Components | Rear Covers

Baby Bulldog Center and Side Bell Components

| | | | | | | | | | | |
|---|---|--|---|--|---|---|--|--|--|---|
|  RRC-4150 Baby Bulldog Ring Gear Backstop Jam |  RRC-4140 Baby Bulldog Ring Gear Backstop |  RRC-4215 Baby Bulldog Axle Bearing Race |  RRC-4220 Baby Bulldog Axle Seal O-Ring |  RRC-4217 Baby Bulldog Axle Seal |  RRC-1475 Baby Bulldog Side Bell Stud |  RRC-4210 Baby Bulldog Axle Bearing |  RRC-4998 Baby Bulldog Gear Spacer for 1" Wide Gears |  RRC-1735 Washer for Shift Arm |  RRC-4120 Baby Bulldog Side Bell Locknut |  RRC-4105 Baby Bulldog Side Bell O-Ring |
|---|---|--|---|--|---|---|--|--|--|---|

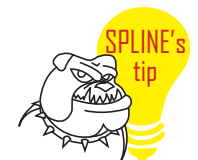
Rear Covers and Components

| | | | |
|---|--|---|---|
|  RRC-1386B Forged Aluminum Rear Cover w/ Bearings - Black |  RRC-1350 Rear Cover Bearing |  RRC-1355 Rear Cover Stud |  RRC-1361 Rear Cover Nut - Black |
|  RRC-1390 Gear Cover Bearing Retainer |  RRC-1350 HD H.D. Rear Cover Bearing |  RRC-1345 Silicone Sealing Ring for Gear Cover |  RRC-1361B Rear Cover Nut - Blue |
|  RRC-4386 Baby Bulldog and BO5 Rear Cover w/ Bearings |  RRC-1391 Bolt for Gear Cover Bearing Retainer |  RRC-1340 Steel Insert Rear Cover Gasket |  RRC-1361G Rear Cover Nut - Gold |
| |  RRC-4390 Baby Bulldog and BO5 Rear Cover Bearing Retainer |  RRC-4350 Baby Bulldog and BO5 Rear Cover Bearing |  RRC-4340 Baby Bulldog and BO5 Silicone Sealing Ring for Gear Cover |



RRC-1373
Vault Lock Quick Change Rear Cover

Spline has done it again! A product so revolutionary and awesome, it will change the industry. No more timely gear changes- with the Vault Lock Quick Change Cover, gear changes take only seconds. One ¼ turn off, change gears and a ¼ turn on. Done! Vault Lock Cover fits all popular brands of rears.



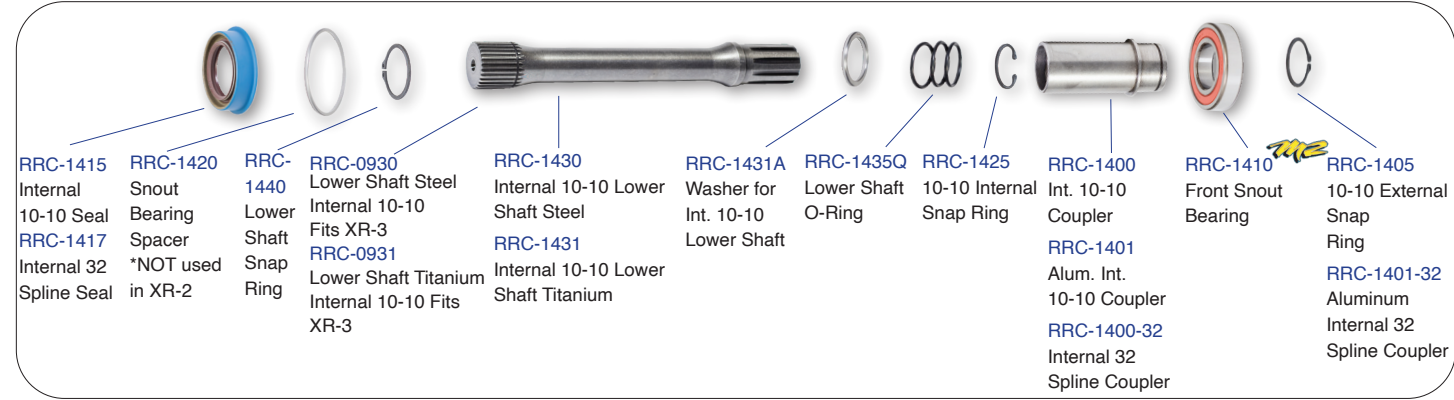
When changing gears it's a perfect time to inspect rear cover bearings, pinion bearings and stub shaft bearings for wear or damage.



Bulldog was the first to utilize an o-ring to seal the rear cover. The high temp silicone o-ring lasts forever and provides a leak-free, positive seal.

Open Tube Lower Shaft Assemblies

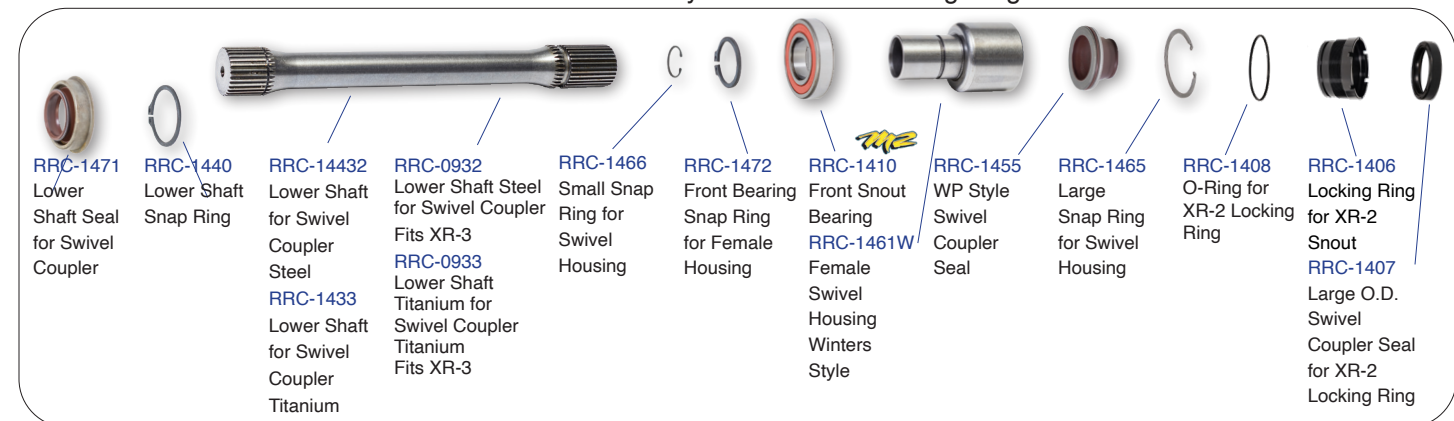
Internal Coupler XR-1, XR-2 and XR-3



WP Style Swivel XR-1, XR-3 and XR-2 with Snout Adaptor



XR-2 Internal WP Style Swivel with Locking Ring

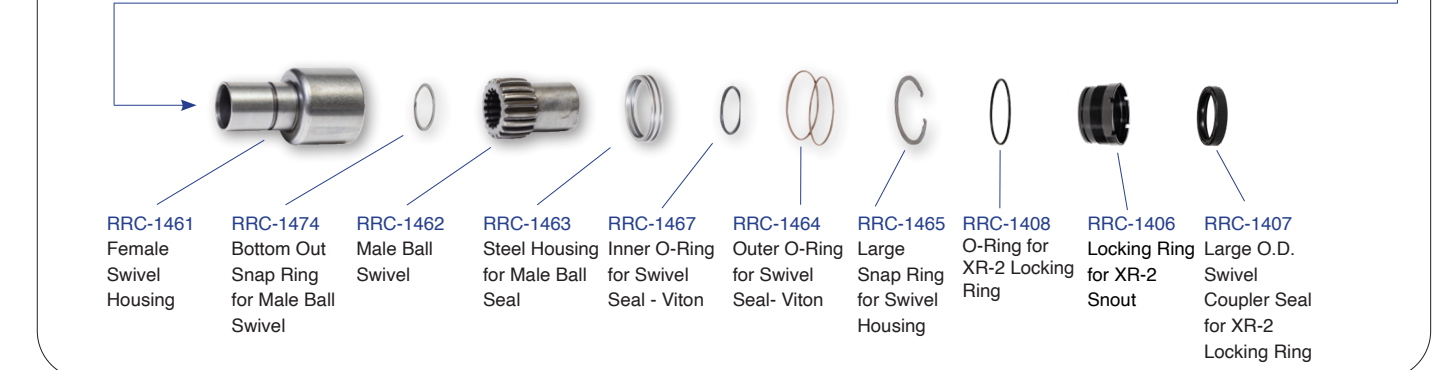


Open Tube Lower Shaft Assemblies

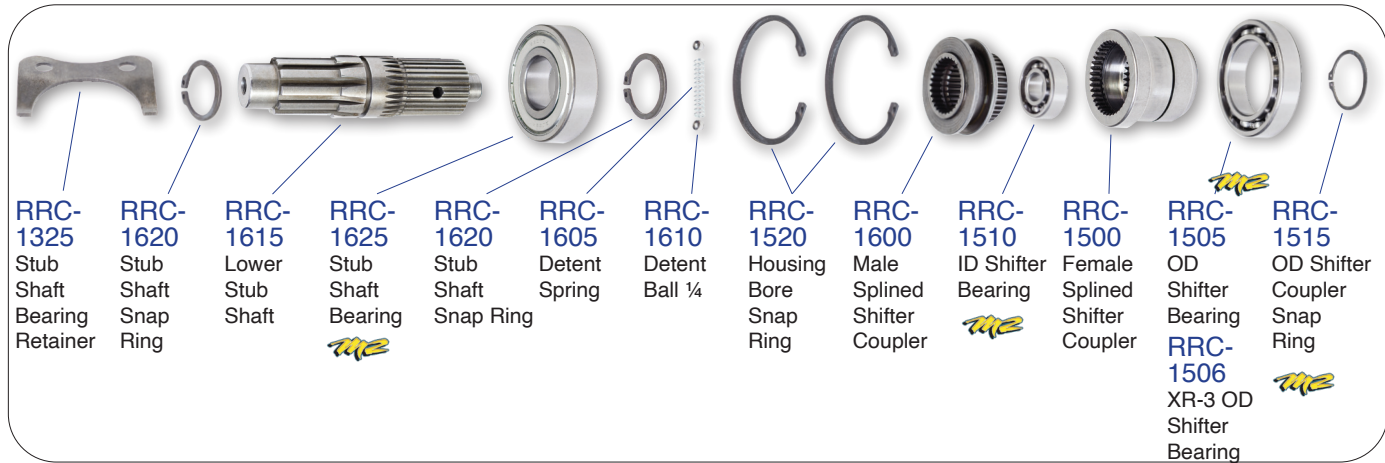
DMI Style Swivel XR-1, XR-3 and XR-2 with Snout Adaptor



XR-2 Internal DMI Style Swivel with Locking Ring

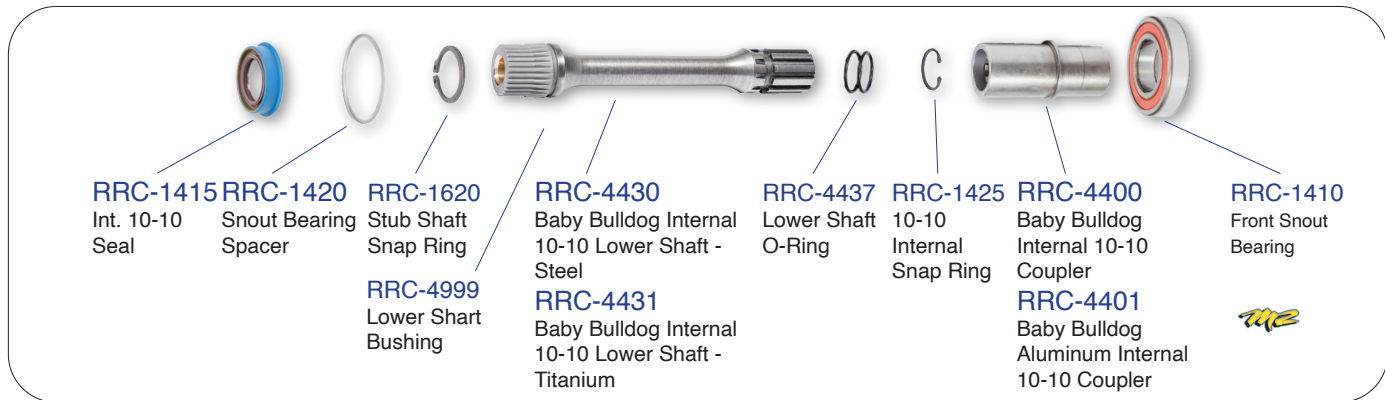


XR-1, XR-2 and XR-3 Stub Shaft and Shifter



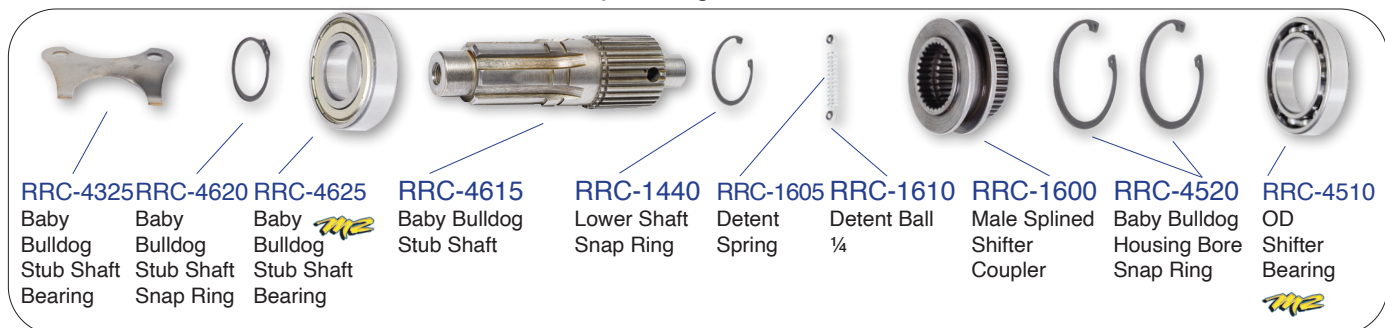
- RRC-1325 Stub Shaft Bearing Retainer
- RRC-1620 Stub Shaft Snap Ring
- RRC-1615 Lower Stub Shaft
- RRC-1625 Stub Shaft Bearing
- RRC-1620 Stub Shaft Snap Ring
- RRC-1605 Detent Spring
- RRC-1610 Detent Ball 1/4
- RRC-1520 Housing Bore Snap Ring
- RRC-1600 Male Splined Shifter Coupler
- RRC-1510 ID Shifter Bearing
- RRC-1500 Female Splined Shifter Coupler
- RRC-1505 OD Shifter Bearing
- RRC-1515 OD Shifter Coupler Snap Ring
- RRC-1506 XR-3 OD Shifter Bearing

Baby Bulldog Internal 10-10



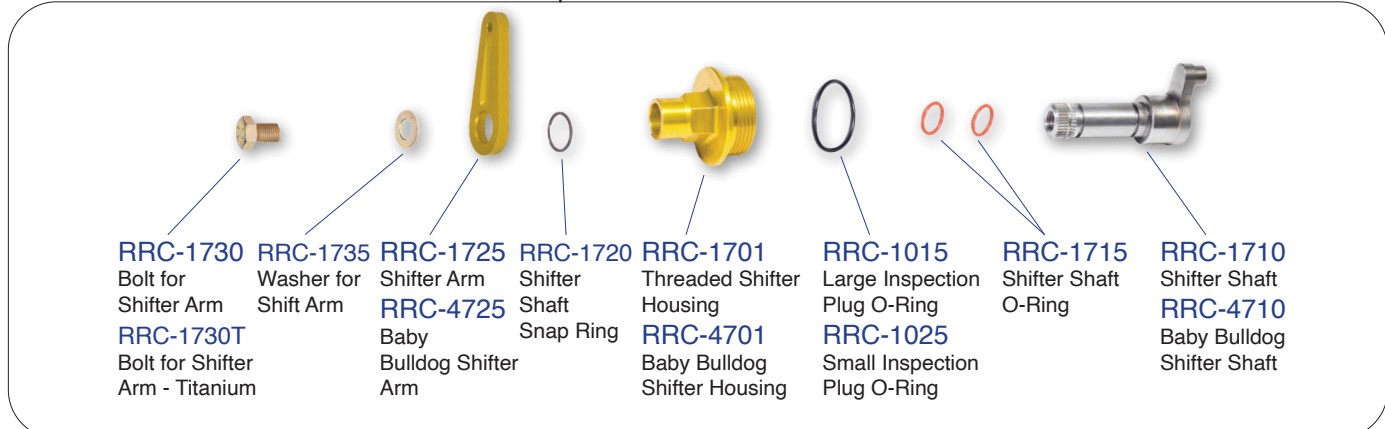
- RRC-1415 Int. 10-10 Seal
- RRC-1420 Snout Bearing Spacer
- RRC-1620 Stub Shaft Snap Ring
- RRC-4430 Baby Bulldog Internal 10-10 Lower Shaft - Steel
- RRC-4431 Baby Bulldog Internal 10-10 Lower Shaft - Titanium
- RRC-4437 Lower Shaft O-Ring
- RRC-1425 10-10 Internal Snap Ring
- RRC-4400 Baby Bulldog Internal 10-10 Coupler
- RRC-4401 Baby Bulldog Aluminum Internal 10-10 Coupler
- RRC-1410 Front Snout Bearing

Baby Bulldog Stub Shaft



- RRC-4325 Baby Bulldog Stub Shaft Bearing
- RRC-4620 Baby Bulldog Stub Shaft Snap Ring
- RRC-4625 Baby Bulldog Stub Shaft Bearing
- RRC-4615 Baby Bulldog Stub Shaft
- RRC-1440 Lower Shaft Snap Ring
- RRC-1605 Detent Spring
- RRC-1610 Detent Ball 1/4
- RRC-1600 Male Splined Shifter Coupler
- RRC-4520 Baby Bulldog Housing Bore Snap Ring
- RRC-4510 OD Shifter Bearing

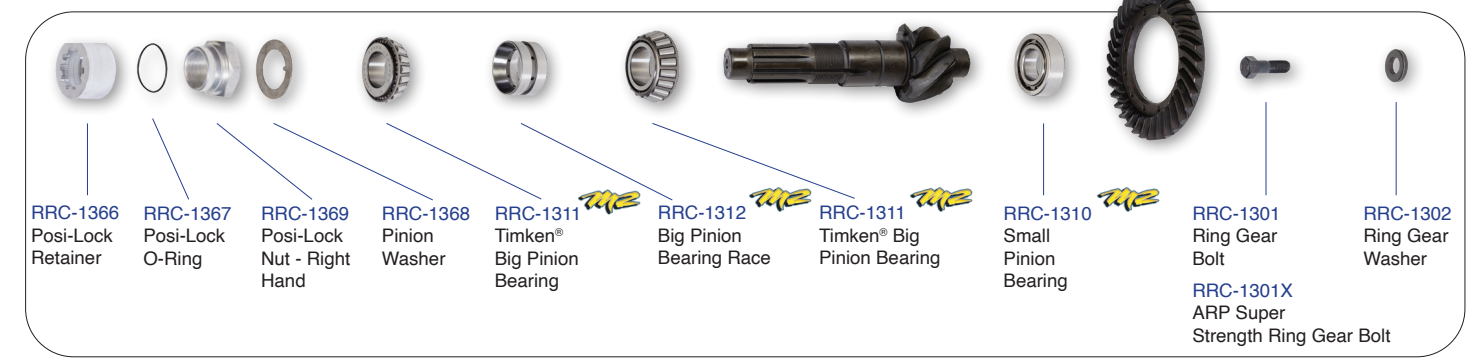
All Open Tube Shifter Assemblies



- RRC-1730 Bolt for Shifter Arm
- RRC-1730T Bolt for Shifter Arm - Titanium
- RRC-1735 Washer for Shift Arm
- RRC-1725 Shifter Arm
- RRC-1720 Shifter Shaft Snap Ring
- RRC-1701 Threaded Shifter Housing
- RRC-1701 Baby Bulldog Shifter Housing
- RRC-1015 Large Inspection Plug O-Ring
- RRC-1025 Small Inspection Plug O-Ring
- RRC-1715 Shifter Shaft O-Ring
- RRC-1710 Shifter Shaft
- RRC-4710 Baby Bulldog Shifter Shaft

Open Tube Ring & Pinions

10" Ring & Pinion Assembly

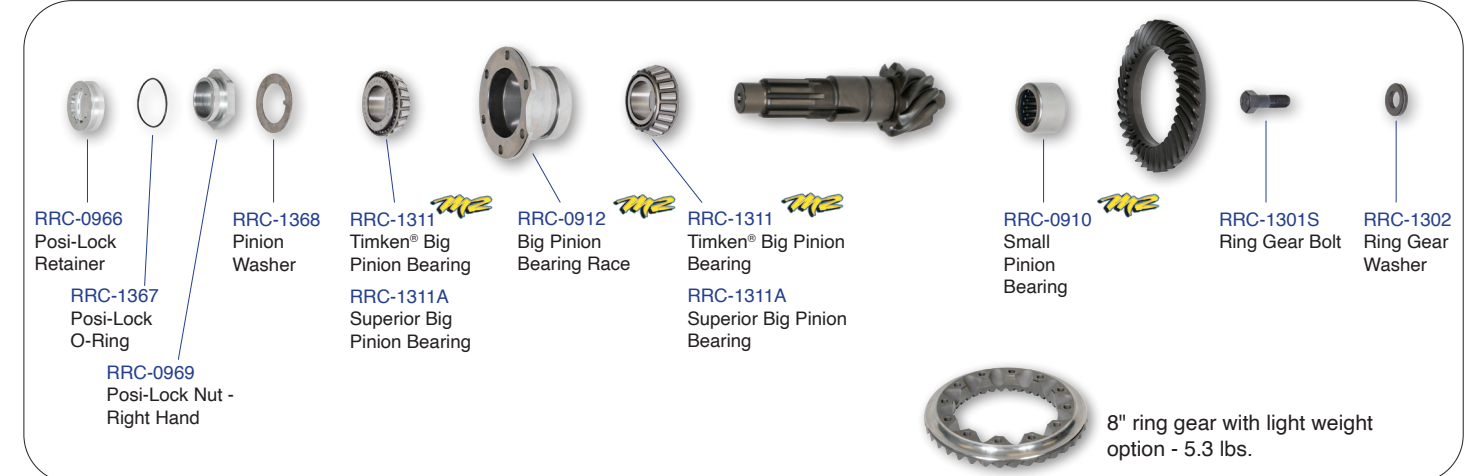


- RRC-1366 Posi-Lock Retainer
- RRC-1367 Posi-Lock O-Ring
- RRC-1369 Posi-Lock Nut - Right Hand
- RRC-1368 Pinion Washer
- RRC-1311 Timken® Big Pinion Bearing
- RRC-1312 Big Pinion Bearing Race
- RRC-1311 Timken® Big Pinion Bearing
- RRC-1310 Small Pinion Bearing
- RRC-1301 Ring Gear Bolt
- RRC-1302 Ring Gear Washer
- RRC-1301X ARP Super Strength Ring Gear Bolt

| | | | |
|----------------|-------------------------------------|----------------|-------------------------------------|
| RRC-1300 | 4.12 Ring & Pinion - 12.75 lbs | RRC-1305 | 4.86 Ring & Pinion - 13.55 lbs |
| RRC-1300-02 | 4.12 EDM Ring & Pinion | RRC-1305-02 | 4.86 EDM Ring & Pinion |
| RRC-1300-02-05 | 4.12 EDM / REM® Ring & Pinion | RRC-1305-02-05 | 4.86 EDM / REM® Ring & Pinion |
| RRC-1300-05 | 4.12 REM® Ring & Pinion | RRC-1305-05 | 4.86 REM® Ring & Pinion |
| RRC-1300SG | 4.12 Ring & Pinion - Super G Finish | RRC-1305SG | 4.86 Ring & Pinion - Super G Finish |

RRC-1300SG AND RRC-1305SG RING & PINION FEATURE THE SUPER G Treatment. SUPER G treatment dramatically increases ring and pinion life in mega horsepower 410 winged sprint cars. SUPER G ring and pinions are highly recommended for any application that sees severe abuse. For more ring & pinion information see page 43

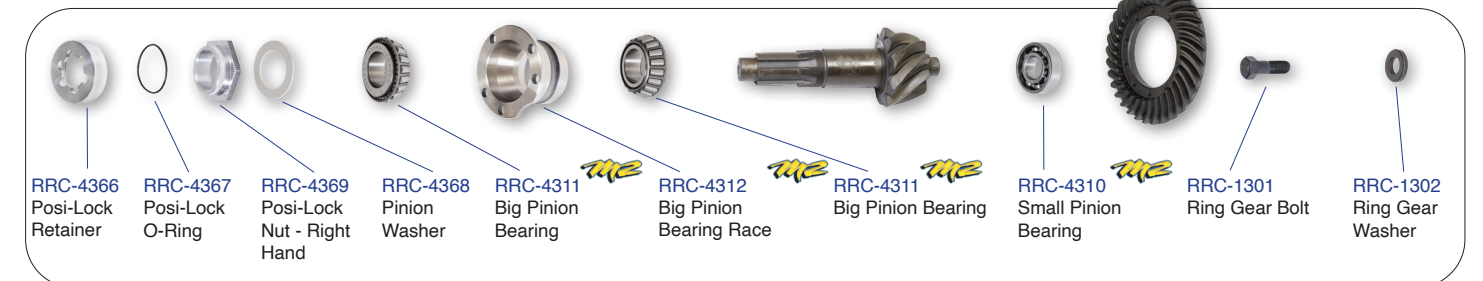
8" Ring & Pinion Assembly



- RRC-0966 Posi-Lock Retainer
- RRC-1367 Posi-Lock O-Ring
- RRC-1368 Pinion Washer
- RRC-1311 Timken® Big Pinion Bearing
- RRC-1311A Superior Big Pinion Bearing
- RRC-0912 Big Pinion Bearing Race
- RRC-1311 Timken® Big Pinion Bearing
- RRC-1311A Superior Big Pinion Bearing
- RRC-0910 Small Pinion Bearing
- RRC-1301S Ring Gear Bolt
- RRC-1302 Ring Gear Washer
- 8" ring gear with light weight option - 5.3 lbs.

| | | | |
|----------------|--------------------------------|-------------|----------------------------|
| RRC-1303 | 4.12 Ring & Pinion - 10.12 lbs | RRC-1303-05 | 4.12 REM® Ring & Pinion |
| RRC-1303-02 | 4.12 EDM Ring & Pinion | RRC-1303-SG | 4.12 Super G Ring & Pinion |
| RRC-1303-02-05 | 4.12 EDM / REM® Ring & Pinion | | |

Baby Bulldog Ring & Pinion Assembly



- RRC-4366 Posi-Lock Retainer
- RRC-4367 Posi-Lock O-Ring
- RRC-4369 Posi-Lock Nut - Right Hand
- RRC-4368 Pinion Washer
- RRC-4311 Big Pinion Bearing
- RRC-4312 Big Pinion Bearing Race
- RRC-4311 Big Pinion Bearing
- RRC-4310 Small Pinion Bearing
- RRC-1301 Ring Gear Bolt
- RRC-1302 Ring Gear Washer

| | | | |
|----------------|--|----------------|--|
| RRC-4300 | 3.78 Baby Bulldog Ring and Pinion | RRC-4305 | 4.33 Baby Bulldog Ring and Pinion |
| RRC-4300-02 | 3.78 Baby Bulldog Ring and Pinion - EDM | RRC-4305-02 | 4.33 Baby Bulldog Ring and Pinion - EDM |
| RRC-4300-02-05 | 3.78 Baby Bulldog Ring and Pinion - EDM/REM® | RRC-4305-02-05 | 4.33 Baby Bulldog Ring and Pinion - EDM/REM® |
| RRC-4300-05 | 3.78 Baby Bulldog Ring and Pinion - REM® | RRC-4305-05 | 4.33 Baby Bulldog Ring and Pinion - REM® |

Open Tube Axles | Components

Axle Bearings & Shims



RRC-1230 .010 Axle Shim
RRC-4230 .010 Axle Shim for Baby Bulldog

RRC-1235 .012 Axle Shim
RRC-4235 .012 Axle Shim for Baby Bulldog

RRC-1240 .015 Axle Shim
RRC-4240 .015 Axle Shim for Baby Bulldog

RRC-1245 .020 Axle Shim
RRC-4245 .020 Axle Shim for Baby Bulldog

RRC-1250 .075 Axle Shim

RRC-1229 Axle Shim Kit

RRC-4229 Baby Bulldog Shim Kit

RRC-1210 Open Tube Axle Bearing

RRC-4210 Open Tube Axle Bearing - Baby Bulldog

Open Tube Axles



Only DMI sprint car axles are produced with 1" more left side spline to accommodate deeper offset wheels

RRC-1203

RRC-1212

RRC-1201

RRC-1200

RRC-4200

RRC-4202

GR-901 Dry Graphite for Axles

*XR-3 rears use the same axle as XR-1 rears

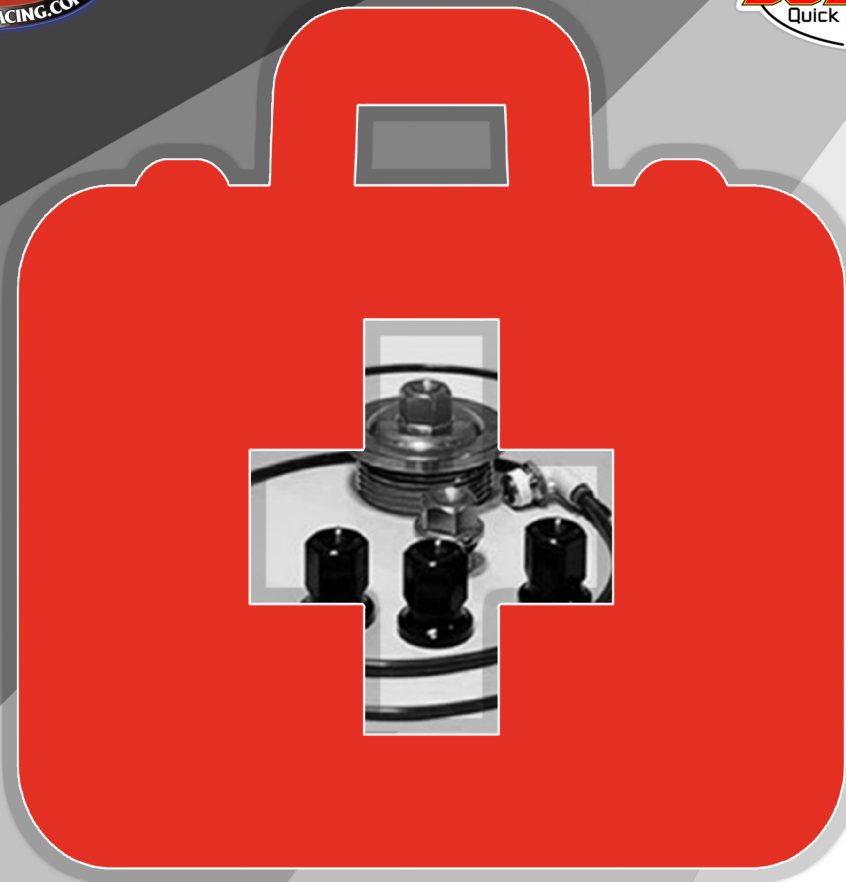
| | | | |
|-------------|---|---------------|---|
| RRC-1200 | Aluminum Axle 2" I.D. Long Splines w/ Spool | RRC-1212HD-31 | Aluminum Axle 1.875" I.D. Long Splines w/ Spool - Split Bearing Style - 31" RS Torsion Bar |
| RRC-1200-31 | Aluminum Axle 2" I.D. Long Splines w/ Spool | RRC-1212-31 | Aluminum Axle 2" I.D. Long Splines w/ Spool - Split Bearing Style - 31" RS Torsion Bar |
| RRC-1201 | Aluminum Axle - Beast Style 54-4 w/ Spool | RRC-1213 | XR-2 Aluminum Axle 2" I.D. Long Splines w/ Spool - Split Bearing Style |
| RRC-1202 | XR-2 Aluminum Axle 2" I.D. Long Splines w/ Spool | RRC-1213-31 | XR-2 Aluminum Axle 2" I.D. Long Splines w/ Spool - Split Bearing Style - 31" RS Torsion Bar |
| RRC-1202-31 | XR-2 Aluminum Axle 2" I.D. Long Splines w/ Spool - 31" RS Torsion Bar | RRC-1213HD | XR-2 Aluminum Axle Long Splines w/ Spool - Split Bearing Style |
| RRC-1203 | Super 60-19 Axle | RRC-1213HD-31 | XR-2 Aluminum Axle 1.875" I.D. Long Splines w/ Spool - Split Bearing Style - 31" RS Torsion Bar |
| RRC-1204 | Aluminum Axle - Beast Silver Crown Axle | RRC-4200 | 31 Spline 44-3 Baby Bulldog Axle |
| RRC-1205 | Aluminum Axle 1.875" I.D. Long Splines w/ Spool | RRC-4202 | 36 Spline 44-3 Baby Bulldog Axle |
| RRC-1205-31 | Aluminum Axle 1.875" I.D. Long Splines w/ Spool - 31" RS Torsion Bar | RRC-4203 | 36 Spline 51-2 Baby Bulldog Axle |
| RRC-1207 | XR-2 Aluminum Axle - Beast Style 54-4 w/ Spool | RRC-4204 | BO5 Aluminum Axle |
| RRC-1208 | XR-2 Aluminum Axle 1.875" I.D. Long Splines w/ Spool | RRC-4205 | BO5 Aluminum Axle - Split Bearing Style |
| RRC-1212 | Aluminum Axle 2" I.D. Long Splines w/ Spool - Split Bearing Style | | |
| RRC-1212HD | Aluminum Axle Long Splines w/ Spool - Split Bearing Style | | |

Open Tube Frequently Asked Questions

- Q** What is the proper oil level for a Bulldog Rear and how do I fill it?
- A** The proper oil level varies dependant on the model. Below is a guide (all capacities are approximate)
XR-1, XR-2 and XR-3 - 2-2.5qts.
Baby Bulldog - 1.5-2qts.
The correct method of filling the rear is to remove the pinion inspection plug and the fill level plug located directly below the inspection plug. On all rears, both plugs are on the right side bell. Fill the rear until the fluid runs out the fill level hole. Re-install the fill level plug and add an additional 4-6 ounces of fluid. Re-install inspection plug. Both plugs only need to be "snug". Over-tightening will cause the plug(s) to stick.
- Q** How do I tell what ratio ring and pinion I have?
- A** You can call us (717) 397-5347 with the serial number and we can see what the rear was built with. If it's a used rear, we strongly suggest checking the ratio and not relying on the build sheet. The easiest way to verify ring and pinion ratio is to remove the quick change gears. Install a mark on the tire at the 12 o'clock position. Install a mark on the pinion at the 12 o'clock position. Rotate the tire by hand 1 complete revolution. Count the pinion rotation as your turning the tire. If the pinion rotates just over four times, you have a 4.12. If the pinion rotates almost five times, you have a 4.86.
- Q** What is the best oil for a Bulldog Rear?
- A** We highly recommend Bulldog Blood (see page 58) We do not re-package someone else's oil. We spent a lot of time and effort testing different formulations. Our oil is blended to our proprietary specs. If Bulldog Blood isn't for you, we see good, consistent results from Driven 75w-110.
- Q** How often should a ring and pinion be replaced?
- A** The inspection plug in the right side bell is placed there for a reason. Weekly inspection of the pinion should occur. Ring gears seldom show wear. Rotate the pinion slowly while inspecting the pinion through the hole. Look at the drive side of the tooth. Small pits need to be monitored. Once you determine the pinion pits are excessive, replace the ring and pinion. As long as the unit looks pit-free, there isn't a life cycle. Use it!
- Q** What type of quick change gears will work in a Bulldog Rear?
- A** Any 10 spline quick change gear will work in the standard Bulldogs. Bulldog recommends only quick change gears produced from 9310 steel. Inexpensive gears made using 8620 steel will fail. We do not recommend using helical cut gears. Always use gears with the machined lip facing out. Always install gears the same way. Never mix gear sets. Sets are machined as matched units.
- Q** How often should axles be replaced?
- A** Open tube aluminum axles should be replaced every 1000 laps.

BULLDOG FIRST AID KIT

THE BULLDOG FIRST AID KIT IS A MUST HAVE IN YOUR RACECAR TRAILER.



BULLDOG FIRST AID KIT INCLUDES:
 RRC-1010 LARGE INSPECTION PLUG W/ O-RING
 RRC-1034 BREATHER ASSEMBLY
 RRC-1016 FILL LEVEL PLUG W/ O-RING
 (3) RRC-1361 REAR COVER TALL NUTS
 RRC-1345 SILICONE REAR COVER SEALING RING

RRC-7050
 BULLDOG FIRST AID KIT

WP Cross Reference - Open Tube & Closed Tube

Open Tube

| DMI # | Description | WINTERS # | DMI # | Description | WINTERS # |
|----------|--|------------|----------|---------------------------------------|-----------|
| RRC-1005 | Magnesium Rear Center Section | K2225XHD | RRC-1330 | 2 Bolt Locking Tab | 2374 |
| RRC-1010 | Large Inspection Plug | 5290 | RRC-1335 | Pinion Retainer Bolt | 7110 |
| RRC-1015 | Large Inspection Plug O-Ring | 7453 | RRC-1340 | Rear Cover Gasket | 6729HD |
| RRC-1020 | Small Inspection Plug | 6857 | RRC-1355 | Rear Cover Stud | 7802 |
| RRC-1025 | Small Inspection Plug O-Ring | 7454 | RRC-1361 | Rear Cover High Nut | 7794A |
| RRC-1030 | 3/8" NPT Allen Drain Plug | 7111B | RRC-1366 | Posi-Lock Retainer | 6484 |
| RRC-1100 | Magnesium Side Bell w/Brake Mount | K6964-02 | RRC-1367 | Posi-Lock O-Ring | 7445 |
| RRC-1105 | Side Bell O-Ring | 7403T | RRC-1368 | Pinion Washer | 5055 |
| RRC-1110 | Side Bell Stud | 2266 | RRC-1369 | Posi-Lock Nut - RH | 6485R |
| RRC-1120 | Side Bell Locknut | 7177N | RRC-1400 | Internal 10-10 Coupler | 6676 |
| RRC-1125 | Side Bell Bolt - Long | 7117 | RRC-1401 | Aluminum Internal 10-10 Coupler | 6676A |
| RRC-1126 | Side Bell Bolt - Short | 7787 | RRC-1405 | 10-10 External Snap Ring | 7657 |
| RRC-1130 | Side Bell Washer | 7178 | RRC-1410 | 10-10 Front Bearing | 7531 |
| RRC-1135 | Ring Gear Back Stop | 5010 | RRC-1415 | Internal 10-10 Seal | 7242 |
| RRC-1140 | Back Stop Set Screw | 6149 | RRC-1420 | Internal 10-10 Bearing Spacer | 6680 |
| RRC-1145 | Back Stop Washer | 7167 | RRC-1425 | 10-10 Internal Snap Ring | 7664 |
| RRC-1150 | Back Stop Aluminum Nut | 7137A | RRC-1430 | Internal 10-10 Lower Shaft | 6678-01 |
| RRC-1200 | Aluminum Axle 2" I.D. Long Splines w/ Spool | 5778UL | RRC-1431 | Internal 10-10 Lower Shaft - Titanium | 6678T |
| RRC-1201 | Aluminum Axle - Beast Style 54-4 | 5778A-54-4 | RRC-1435 | Lower Shaft O-Ring | 7452 |
| RRC-1205 | Aluminum Axle 1.875" I.D. Long Splines w/Spool | 5778L | RRC-1440 | Lower Shaft Snap Ring | 7660 |
| RRC-1210 | Axle Bearing | 7358 | RRC-1444 | External 10-10 Bearing | 7383F |
| RRC-1215 | Axle Bearing Race | 7357 | RRC-1445 | External 10-10 Lower Shaft | 6249 |
| RRC-1217 | Axle Seal | 7224 | RRC-1447 | External 10-10 Coupler | 5987 |
| RRC-1220 | Axle O-Ring | 7433 | RRC-1500 | Female Splined Shifter Coupler | 6252 |
| RRC-1225 | Axle Seal Spiral Lock | 7626 | RRC-1505 | O.D. Shifter Bearing | 7391 |
| RRC-1229 | Rear Axle Shim Kit | 6115 | RRC-1510 | I.D. Shifter Bearing | 7392 |
| RRC-1300 | 4.12 Ring and Pinion w/ Posi Lock | 5715 | RRC-1515 | O.D. Shifter Coupler Snap Ring | 7673 |
| RRC-1301 | Ring Bolt | 7852 | RRC-1520 | Housing Bore Snap Ring | 7636 |
| RRC-1302 | Ring Bolt Washer | 7815 | RRC-1600 | Male Splined Shifter Coupler | 6265 |
| RRC-1305 | 4.86 Ring and Pinion w/ Posi Lock | 5401 | RRC-1605 | Detent Spring | 6318 |
| RRC-1310 | Small Pinion Bearing | 7331 | RRC-1610 | Detent Ball | 7347 |
| RRC-1311 | Big Pinion Bearing | 7308 | RRC-1615 | Lower Stub Shaft | 6250 |
| RRC-1312 | Big Pinion Bearing Race | 7307 | RRC-1616 | Stub Shaft - Titanium | 6250T |
| RRC-1315 | Pinion Bearing Spacer | 5020 | RRC-1620 | Stub Shaft Snap Ring | 7637 |
| RRC-1320 | Pinion Retainer Flange | 6296A | RRC-1625 | Stub Shaft Bearing | 7390 |
| RRC-1325 | Stub Shaft Bearing Retainer | 6267 | | | |

Closed Tube

| DMI # | Description | WINTERS # | DMI # | Description | WINTERS # |
|-----------|---|-----------|-----------|---|-----------|
| RRC-1000 | CT-1 Magnesium Center Section | K5840 | RRC-1172 | CT-1 Side Bell Bearing for Steel Spool | 7309 |
| RRC-1001 | Front Seal Plate for CT-1 | 5018-01ML | RRC-1270 | CT-1 Aluminum Spool | 5034-11A |
| RRC-1002 | Front Seal for CT-1 Seal Plate | 7204V | RRC-1271 | CT-1 Aluminum Spool - Ultralight | 5034-11UL |
| RRC-1002T | Front Seal Plate Teflon for CT-1 | 7204 | RRC-1300 | 4.12 Ring & Pinion | 5714 |
| RRC-1003 | Seal O-Ring for CT-1 Seal Plate | 7474 | RRC-1301 | Ring Gear Bolt | 7852 |
| RRC-1004 | O-Ring for CT-1 Seal Plate Flange | 7413 | RRC-1302 | Ring Bolt Washer | 7815 |
| RRC-1007 | Spirallock for Seal Plate | 7652 | RRC-1305 | 4.86 Ring & Pinion | 5400 |
| RRC-1010 | Large Inspection Plug | 5290 | RRC-1310 | Small Pinion Bearing | 7331 |
| RRC-1015 | Large Inspection Plug O-Ring | 7453 | RRC-1311 | Big Pinion Bearing - Timken | 7308 |
| RRC-1011 | Bolt for CT-1 Seal Plate to Center | 7110 | RRC-1312 | Big Pinion Bearing Race | 7307 |
| RRC-1011A | Bolt for CT-1 Seal Plate to Center - NCB | 7101 | RRC-1315 | Pinion Bearing Spacer | 5020 |
| RRC-1012 | Washer for CT-1 Seal Plate to Center | 7114 | RRC-1320 | Pinion Retainer Flange | 6296A |
| RRC-1102 | CT-1 Magnesium Left Side Bell - 6 Rib | K1663-02 | RRC-1330 | 2 Bolt Locking Tab | 2374 |
| RRC-1103 | CT-1 Magnesium Right Side Bell - 6 Rib | K1663-01B | RRC-1335 | Pinion Retainer Bolt | 7110 |
| RRC-1104 | CT-1 Side Bell Axle Seal | 7205 | RRC-1355 | Rear Cover Stud | 7802 |
| RRC-1105 | Side Bell O-Ring | 7403T | RRC-1361B | Rear Cover High Nut - Blue | 7794ASB |
| RRC-1107 | CT-1 Magnesium Left Side Bell - 8 Rib | K5016-02M | RRC-1366 | Posi-Lock Retainer | 6484 |
| RRC-1108 | CT-1 Magnesium Right Side Bell - 8 Rib | K5016-05 | RRC-1367 | Posi-Lock O-Ring | 7445 |
| RRC-1125 | CT-1 5.5" Center / Side Bell Thru Bolt | 7176 | RRC-1368 | Pinion Washer | 5055 |
| RRC-1127 | CT-1 Side Bell Flange Nut | 7177 | RRC-1369 | Posi-Lock Nut - RH | 6485R |
| RRC-1130 | Side Bell Washer | 7178 | RRC-1411 | CT-1 Lower Shaft Bearing | 7390 |
| RRC-1135 | Ring Gear Back Stop | 5010 | RRC-1427 | CT-1 Steel Lower Shaft | 5003 |
| RRC-1140 | Back Stop Set Screw | 6149 | RRC-1440 | Lower Shaft Snap Ring | 7660 |
| RRC-1145 | Back Stop Washer | 7167 | RRC-1480 | CT-1 Front Yoke | 5038 |
| RRC-1150 | Back Stop Aluminum Nut | 7137A | RRC-1481 | CT-1 Front Yoke Washer | 5037 |
| RRC-1170 | CT-1 Side Bell Race | 7310 | RRC-1482 | CT-1 Front Yoke Bolt | 71094 |
| RRC-1171 | CT-1 Side Bell Bearing for Aluminum Spool | 7340 | RRC-1485 | Aluminum Spacer for under CT-1 Front Yoke | 6532 |

Bulldog Blood High-Performance Gear Oil



Bulldog Blood 75-90w Synthetic Racing Gear Oil is track tested to meet the high demands placed on today's ring and pinions. Bulldog Blood is a proprietary formula that features extreme pressure additives that aid in the prevention of micro-pitting and excessive wear. Bulldog Blood's non-foaming formula lowers operating temperature and is the only choice when it comes to high performance gear oil. The special additives in Bulldog Blood treat the metal and dramatically increases gear life.

As Spline says, "I NEED MY BLOOD!"

- Bulldog1**
Bulldog Blood - 1 Gal.
- Bulldog5**
Bulldog Blood - 5 Gal.
- Bulldog5QT**
Bulldog Blood - 5 QT.
- BulldogCASE**
Bulldog Blood - Case 12 QTS.
- BulldogQT**
Bulldog Blood - QT.

* Early 2022 Bulldog Blood will be shipping in NEW black packaging. Same great product - fresh NEW look.



The color of Bulldog Blood will vary based of available particle size of many of the ingredients. Rest assured it's the same proven formula regardless of color.



We are frequently asked about the service life of Bulldog Blood. Quick change gears should be inspected weekly. If you replace the used fluid with new fluid everytime you have the rear cover off, you never need to do a complete oil change. If you are going to re-use the drained fluid we recommend doing a complete drop every 300 laps. If you do re-use the fluid NEVER strain it with a paint strainer. Ensure the fluid is clean of large debris and pour it back into the rear. Paint strainers remove the solid ingredients from the additive pack.



In year's past we've taken a moment in our catalog and remembered someone important to us that we've lost. At that time we talk of their contribution, the respect we had for them and the place they'll always have as part of our DMI family. Unfortunately, they aren't here to receive our gratitude and accolades. So I decided to change it up and let people know while they're still here that they've played a role in our success. Lots of folks have made us a better company and me a better person. I consider myself so lucky to have crossed paths with much of racing's royalty. Drivers, mechanics, owners, promoters, engine builders, manufacturers, vendors, the list seemingly goes on forever. And even though I do a lot of talking... I also do a lot of listening. They've all shared knowledge that I've soaked up and have as a resource when needed. I'd be remiss if my first tip of the hat was anyone but *Bobby Allen*.

Bob's infectious optimism is balanced by his no-nonsense approach to making things happen. From the racing side he's incredibly experienced with a successful mix of common sense and cutting edge technology. He knows what matters and he knows what doesn't. His cars have always looked minimalistic yet were bad fast. From the human side he is extremely caring, non-judgmental and has a thirst for life. He helps others because he's humble enough to remember everyone that has helped him. He focuses on the positives and is grateful for the life he's led. It was a text from Bob in early September (that later ended up getting some social media attention) that perfectly sums up Bob's wisdom, honesty and willingness to teach others. Those words can be found below. The text made me think and reflect on the emotions I feel through racing and I share that at the end. In closing I just want to say "Thank You" Bob. There has never been someone who defined "racer" the way you have. Thanks for the wins, advice, respect and most importantly for just being Bob.

"What it takes to win with the World of Outlaws ,It takes a great team. It takes good sponsors it takes good mechanics. It takes good equipment, nothing but the best of everything It takes good drivers who are focused and in top shape. It takes a lot of experience of knowing what to do and when to do it. it takes determination. It takes the love Of wanting to do it. Racing is tough, lots up and downs.. heartaches troubles are all part of it that's why when you do win or run really good it makes you a very happy person. And you can relax to a degree till the next race."

- Bobby Allen

It takes that to win everywhere. It's why we race. We're chasing the sigh of relief when things go right. The adrenaline of the pursuit and the calmness at the end of a successful night. - Dave Ely

600 Micro Rear Axles | Wheel Spacers | Axle Nuts **B** = Also available in black

600 Micro Rear Axles



LRC-1252

| All Micro Axles are Black Anodized | | Splines Length | |
|------------------------------------|--|----------------|---------|
| | | Left | Right |
| LRC-1251 | 50" Universal Micro Axle - 1.75" Spline - Black Anodized | 18.75" | 10.75" |
| LRC-1252 | 54.5" Universal Micro Axle - 1.75" Spline - Black Anodized | 18.5" | 17.5" |
| LRC-1253 | 54.5" Universal Micro Axle - 1.75" Spline - Black Anodized | 18.375" | 18.375" |
| LRC-1254 | 53" Universal Micro Axle - 2" Spline - Black Anodized | 18.5" | 9.25" |
| LRC-1255 | 53" Universal Micro Axle - 2" Spline - Black Anodized | 18.375" | 17.375" |
| LRC-1256 | 55.5" Universal Micro Axle - 1.75" Spline - Black Anodized | 18.5" | 18.5" |
| LRC-1257 | 57" Universal Axle- 2" Spline- Black Anodized | 16" | 19.5" |

*See page 80 for 7/8" Spline Hollow Torsion Bars. The choice of 600 micro sprint racing's top racers.



DMI axles have always featured the industry's first large radius at the axle transition point. The radius provides extra strength where it's needed most. LRC-2598 radius spacers for axle shoulder are required before installing any other spacers.

600 Micro Wheel Spacers & Axle Nuts

| | |
|----------|--|
| LRC-2610 | RH Alum. Axle Nut for 1.75" Axle - Black |
| LRC-2620 | LH Alum. Axle Nut for 1.75" Axle - Black |
| LRC-2598 | Radius Spacers for Axle Shoulder |
| LRC-2590 | 14 pc. 1.75" Axle Spacer Kit - Black |



LRC-2610

LRC-2620



LRC-2590

LRC-2590 Consists of:

| | | | |
|------------|---|------------|---|
| 4 LRC-2591 | Inner Wheel Spacer for 1.75" Axle - .250" width | 2 LRC-2595 | Outer Tapered Wheel Spacer for 1.75" Axle - .500" width |
| 2 LRC-2592 | Inner Wheel Spacer for 1.75" Axle - .500" width | 2 LRC-2596 | Outer Tapered Wheel Spacer for 1.75" Axle - 1.50" width |
| 2 LRC-2593 | Inner Wheel Spacer for 1.75" Axle - 1" width | 1 LRC-2597 | Outer Tapered Wheel Spacer for 1.75" Axle - 2.50" width |
| 1 LRC-2594 | Inner Wheel Spacer for 1.75" Axle - 2" width | | |

DMI HUBS AND SPINDLES

THERE ARE MANY CHOICES WHEN SHOPPING FOR FRONT HUBS AND SPINDLES. IT'S A CROWDED MARKET AND IT'S IMPORTANT TO BE AN INFORMED BUYER.



WHILE MANY OF THE OFFERINGS ARE LOW COST IMPORTS, YOU CAN REST ASSURED DMI HUBS AND SPINDLES ARE NOT. DMI HUBS ARE PRODUCED FROM A DOMESTIC ROTARY FORGING. THE HUBS FEATURE THE INDUSTRY'S FIRST THREADED DUST CAP AND BRILLIANT BLACK ANODIZING. SPINDLES ARE MANUFACTURED FROM A 7075-T6 ALUMINUM DOMESTIC FORGING. THE SPINDLE SNOUT IS MANUFACTURED IN-HOUSE AS WELL AND FEATURE A NO-SPIN DESIGN. WOULD YOU TRUST RUNNING IN THE CORNER WITH ANYTHING ELSE? SEE PAGES 68 & 69 FOR THE LATEST OFFERINGS.

Northeast Dirt Modified Components

29" Torsion Bar



Rates in Stock for 29" Solid

| | |
|------|-------|
| .875 | .950 |
| .900 | .975 |
| .925 | 1.000 |

Rates in Stock for 29" Hollow

| | |
|------|------|
| .900 | .950 |
| .925 | .975 |

SRC- (rate) -29S Solid 29"
 SRC- (rate) -29 Hollow 29"

DMI Solid Torsion Bars are produced from Made in the USA 4340 milled and heat treated to our specifications. No Black Magic. No Voodoo. Just a great high performing bar that handles the highly stressed DIRT Mod application. Want to increase traction and forward grip? Install a hollow bar in the left rear. The hollow bar provides a faster reaction producing increased drive.



Good record keeping is a must if you want your torsion bars to perform properly. The ultra soft spring rates of Northeast Dirt Modifieds coupled with the heavy weight of the cars really stress the torsion bars. Bars should be installed at least one day before set-up and scaling to ensure proper "break-in." Every 700-800 laps bars should be replaced.

Splined Roller Birdcages



CRC-4000

CRC-4001

| | |
|-----------|--|
| CRC-4000 | Splined Birdcage Assy. Right |
| CRC-4001 | Splined Birdcage Assy. Left |
| CRC-4010 | Birdcage Inner Plate |
| CRC-4011 | Birdcage Outer Plate |
| CRC-4016 | Birdcage Block for Splined DMI Smart-Tubes |
| CRC-4017 | Caliper Mount for Splined DMI Smart-Tubes |
| CRC-4020 | Birdcage Roller Assy. |
| CRC-4020A | Birdcage Roller |
| CRC-4020C | Birdcage Roller Shaft |
| CRC-4022 | Birdcage Roller Locator Washer |
| CRC-4024 | Birdcage Shock Mount |
| CRC-4025 | Birdcage Shock Mount Spacer |
| CRC-4026 | Birdcage Outer Spacer |
| CRC-4030 | Birdcage Brake Mount Spacer Long |
| CRC-4031 | Birdcage Brake Mount Spacer Short |
| CRC-4032 | Birdcage Brake Mount for 11.75" Rotor |
| CRC-4033 | Birdcage Brake Mount for 12.19" Rotor |
| CRC-4035 | Bearing for Birdcage Roller |



TORSION BARS



DMI'S TORSION BARS ARE THE MOST CONSISTENT TORSION BARS PRODUCED TODAY. USING THE SAME MATERIAL SUPPLIER AND HEAT TREATER SINCE 2001, YOU CAN COUNT ON DMI TORSION BARS FOR RELIABILITY AND REPEATABILITY. PRECISION TURNED TO TIGHT TOLERANCES ENSURES CONSISTENCY. PERFECTLY HOBBED SPLINES ALLOW ARMS AND STOPS TO SLIDE ON AND OFF WITH EASE. LASER ENGRAVING SHOWS BAR SIZE AND THE DMI LOGO BACKED BY MADE IN THE USA PRIDE. BAR INCLUDES BLACK PLASTIC PROTECTIVE TUBE. SEE WHY DMI TORSION BARS ARE THE MOST POPULAR BAR IN THE WORLD! SEE PAGES 80 & 81 FOR MORE INFORMATION.

Northeast Dirt Modified Driveline

The Northeast Dirt Modified Driveline requirements have changed drastically in recent years. With the advent of short rod, left side panhard suspension, the demands on driveline components have increased greatly. The driveline sees substantially more travel during the accel and decel phases. Proper shaft to yoke engagement and ability to misalign are significantly more important than with previous suspension systems. With the latest technology, DMI decided it was time to redesign the entire driveline unit. Manufactured from billet steel and aluminum, yokes now feature increased length to maintain proper engagement even with shorter length driveshafts that are now required because of left rear travel.



RRC-8000

RRC-8001

| | |
|-----------|---------------------------------------|
| RRC-8000 | Billet Quick Change End Yoke |
| RRC-8000A | Billet Aluminum Quick Change End Yoke |
| RRC-8001 | Billet 1310 Bert Transmission |
| RRC-8002 | Billet Yoke Strap |
| RRC-8002A | Billet Aluminum Yoke Strap |

Northeast Dirt Modified Driveline

Open Tube Driveline



| | |
|------------|---|
| CRC-2316 | 7075 Aluminum U-Joint Yoke - X-Long |
| SRC-2335 | Greaseable U-Joint Cross |
| SRC-2336 | Gladiator U-Joint Cross |
| SRC-2339CT | Lightweight Steel U-Joint Yoke - No Spring/Washer |
| CRC-2342 | Steel Billet U-Joint Yoke - X-Long |
| CRC-2466 | Hollow Steel Driveshaft 16-16 Spline - 17.5" |
| CRC-2467 | Hollow Steel Driveshaft 16-16 Spline - 19.5" |
| CRC-2468 | Hollow Steel Driveshaft 16-16 Spline - 21.5" |

32 Spline Open Tube Driveline



| | |
|-------------|---|
| CRC-2316-32 | 7075 Aluminum U-Joint Yoke - 32 Spline - X-Long |
| SRC-2335 | Greaseable U-Joint Cross |
| SRC-2336 | Gladiator U-Joint Cross |
| CRC-2342-32 | Steel Billet U-Joint Yoke - 32 Spline - X-Long |
| CRC-2466-32 | Hollow Steel Driveshaft 32 Spline - 17.5" |
| CRC-2467-32 | Hollow Steel Driveshaft 32 Spline - 19.5" |
| CRC-2468-32 | Hollow Steel Driveshaft 32 Spline - 21.5" |

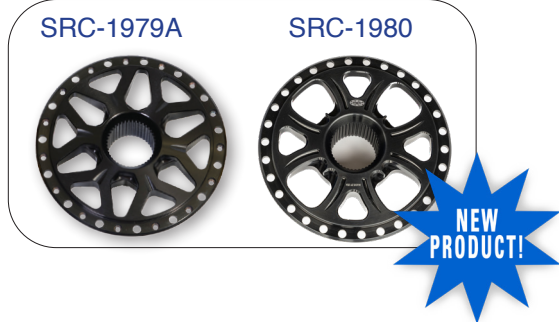
32 Spline vs. 16 Spline

People often ask which spline count is better. It really comes down to personal preference. We see good results and benefits from both styles. Below are the weights for each and the yoke weights.

| Description | Weight |
|-----------------------------------|-----------|
| Steel Yoke | 2.45 lbs. |
| Aluminum Yoke | 1.23 lbs. |
| 16 Spline Hollow Steel Driveshaft | 3.25 lbs. |
| 32 Spline Hollow Steel Driveshaft | 3.35 lbs. |

Splined Rear Wheel Centers | Wheel Spacers | Axle Nuts

Splined Rear Wheel Centers



| | |
|-----------|---|
| MRC-1979 | Midget Black Widow Splined Rear Wheel Center - 2" 31 Spline |
| SRC-1979A | Black Widow Splined Rear Center for Weld/Sanders/Keizer |
| SRC-1980 | Tetris Splined Rear Center for Weld/Sanders/Keizer |

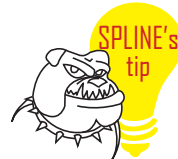
Sprint Car Wheel Spacers & Axle Nuts

| | | | |
|-----------|---|----------|---|
| SRC-2589 | 3/8" Aluminum Axle Spacer - Tapered | SRC-2650 | Rear Magnesium Axle Nut for All Axles - RH Thread |
| SRC-2590 | 10 pc. Aluminum Spacer Kit | SRC-2660 | Rear Magnesium Axle Nut for All Axles - LH Thread |
| SRC-2590B | 10 pc. Aluminum Spacer Kit - Black | SRC-2670 | Rear Magnesium Axle Nut w/ Spacer for All Axles - RH Thread |
| SRC-2600 | Magnesium 10 pc. Spacer Kit | SRC-2680 | Rear Magnesium Axle Nut w/ Spacer for All Axles - LH Thread |
| SRC-2610 | Rear Aluminum Axle Nut for All Axles - RH Thread B | | |
| SRC-2620 | Rear Aluminum Axle Nut for All Axles - LH Thread B | | |
| SRC-2630 | Rear Aluminum Axle Nut w/ Spacer for All Axles - RH Thread B | | |
| SRC-2640 | Rear Aluminum Axle Nut w/ Spacer for All Axles - LH Thread B | | |

SRC-2590 10pc. Spacer Kits include:

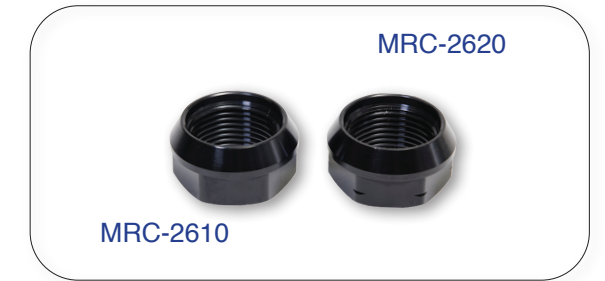
| | | | |
|------------|---------------------------|------------|--|
| 2 SRC-2582 | 3/8" Aluminum Axle Spacer | 1 SRC-2586 | 3/4" Aluminum Axle Spacer - Tapered |
| 2 SRC-2583 | 3/4" Aluminum Axle Spacer | 1 SRC-2587 | 1 1/2" Aluminum Axles Spacer - Tapered |
| 2 SRC-2584 | 1" Aluminum Axle Spacer | 1 SRC-2588 | 2" Aluminum Axle Spacer - Tapered |
| 1 SRC-2585 | 2" Aluminum Axle Spacer | | |

*All aluminum sprint car spacers now anodized black



Always make sure ALL your tapered outer spacers have splines in them. Years ago, un-splined outer spacers worked ok. They no longer work and WILL allow the wheel to come loose.

Wheel Spacers | Axle Nuts



MRC-2590 14pc. Spacer Kits include:

| | | | |
|------------|----------------------------------|------------|---------------------------------|
| 2 MRC-2580 | 1/2" Straight 31 Spline Spacer | 2 MRC-2585 | 1" Tapered 31 Spline Spacer |
| 2 MRC-2581 | 1 1/2" Straight 31 Spline Spacer | 2 MRC-2586 | 1 1/2" Tapered 31 Spline Spacer |
| 2 MRC-2582 | 2 1/2" Straight 31 Spline Spacer | 2 MRC-2587 | 2 1/2" Tapered 31 Spline Spacer |
| 1 MRC-2583 | 3 1/2" Straight 31 Spline Spacer | 1 MRC-2588 | 3 1/2" Tapered 31 Spline Spacer |

MRC Wheel Spacers & Axle Nuts

| | | | |
|----------|---|-----------|---|
| MRC-2500 | Magnesium 1/4" Straight 36 Spline Spacer | MRC-2566 | Magnesium 1 1/2" Tapered 31 Spline Spacer |
| MRC-2501 | Magnesium 1/2" Straight 36 Spline Spacer | MRC-2567 | Magnesium 2 1/2" Tapered 31 Spline Spacer |
| MRC-2502 | Magnesium 1 1/2" Straight 36 Spline Spacer | MRC-2568 | Magnesium 3 1/2" Tapered 31 Spline Spacer |
| MRC-2503 | Magnesium 2 1/2" Straight 36 Spline Spacer | MRC-2569 | Magnesium 1/2" Tapered 31 Spline Spacer |
| MRC-2504 | Magnesium 3 1/2" Straight 36 Spline Spacer | MRC-2579 | 1/4" Straight 31 Spline Spacer |
| MRC-2505 | Magnesium 1" Tapered 36 Spline Spacer | MRC-2580 | 1/2" Straight 31 Spline Spacer |
| MRC-2506 | Magnesium 1 1/2" Tapered 36 Spline Spacer | MRC-2581 | 1 1/2" Straight 31 Spline Spacer |
| MRC-2507 | Magnesium 2 1/2" Tapered 36 Spline Spacer | MRC-2582 | 2 1/2" Straight 31 Spline Spacer |
| MRC-2508 | Magnesium 3 1/2" Tapered 36 Spline Spacer | MRC-2583 | 3 1/2" Straight 31 Spline Spacer |
| MRC-2509 | Magnesium 1/2" Tapered 36 Spline Spacer | MRC-2584 | 1/2" Tapered 31 Spline Spacer |
| MRC-2520 | 1/4" Straight 36 Spline Spacer - Alum | MRC-2585 | 1" Tapered 31 Spline Spacer |
| MRC-2521 | 1/2" Straight 36 Spline Spacer | MRC-2586 | 1 1/2" Tapered 31 Spline Spacer |
| MRC-2522 | 1 1/2" Straight 36 Spline Spacer | MRC-2587 | 2 1/2" Tapered 31 Spline Spacer |
| MRC-2523 | 2 1/2" Straight 36 Spline Spacer | MRC-2588 | 3 1/2" Tapered 31 Spline Spacer |
| MRC-2524 | 3 1/2" Straight 36 Spline Spacer | MRC-2590 | Midget 14pc. 31 Spline Spacer Kit |
| MRC-2525 | 1/2" Tapered 36 Spline Spacer | MRC-2598 | Midget Axle Radius Spacer |
| MRC-2526 | 1" Tapered 36 Spline Spacer | MRC-2600 | Midget 14pc. 31 Spline Spacer Kit Magnesium |
| MRC-2527 | 1 1/2" Tapered 36 Spline Spacer | MRC-2610 | Midget Axle Nut- Right |
| MRC-2528 | 2 1/2" Tapered 36 Spline Spacer | MRC-2610B | Right Hand 31 Spline Axle Nut |
| MRC-2529 | 3 1/2" Tapered 36 Spline Spacer | MRC-2620 | Midget Axle Nut- Left |
| MRC-2530 | Midget 14pc. 36 Spline Spacer Kit | MRC-2620B | Left Hand 31 Spline Axle Nut- Black |
| MRC-2540 | Midget 14pc. 36 Spline Spacer Kit Magnesium | MRC-2630 | Magnesium RH 31 Spline Axle Nut |
| MRC-2560 | Magnesium 1/4" Straight 31 Spline Spacer | MRC-2640 | Magnesium Left Hand 31 Spline Axle Nut |
| MRC-2561 | Magnesium 1/2" Straight 31 Spline Spacer | MRC-2650B | Right Hand 36 Spline Axle Nut - Black |
| MRC-2562 | Magnesium 1 1/2" Straight 31 Spline Spacer | MRC-2660B | Left Hand 36 Spline Axle Nut- Black |
| MRC-2563 | Magnesium 2 1/2" Straight 31 Spline Spacer | MRC-2670 | Right Hand 36 Spline Axle Nut - Magnesium |
| MRC-2564 | Magnesium 3 1/2" Straight 31 Spline Spacer | MRC-2680 | Left Hand 36 Spline Axle Nut - Magnesium |
| MRC-2565 | Magnesium 1" Tapered 31 Spline Spacer | | |

Front Hubs



DMI front hubs are produced from a domestic rotary forging. Rotary forging draws the grain of the material around the hub. Perfect for hubs and wheels because of the increased strength it provides.

DMI - there is a difference

| | | | |
|------------|-------------------------------------|-----------|---|
| SRC-1962LW | Tetris Flyweight Right Front Hub | SRC-1990 | Bearing Kit 2 ea. Bearings, Races 1 Seal for Straight Snout Spindle |
| SRC-1963LW | Tetris Flyweight Left Front Hub for | SRC-1991 | Bearing Kit 2 ea. Bearings, Races 1 Seal for Step Snout Spindle |
| SRC-1964LW | Tetris Flyweight Front Hub Set for | SRC-1993 | Front Rotor Bolt Kit |
| SRC-1968LW | L.W. Black Widow Right Front Hub | SRC-1994A | O-Ring for Front Hub |
| SRC-1969LW | L.W. Black Widow Left Front Hub | SRC-1995B | Threaded Front Hub Dust Cap |
| SRC-1971LW | L.W. Black Widow Front Hub Set | SRC-1998 | Spindle Nut Wrench |
| SRC-1984 | Hub Bearing Race - Small | SRC-1999 | Front Hub Bolt Kit |
| SRC-1984PG | Hub Bearing Race - Small - M2 | | |
| SRC-1985 | Hub Bearing Race - Large | | |
| SRC-1986 | Hub Bearing - Small | | |
| SRC-1986PG | Hub Bearing - Small - M2 | | |
| SRC-1987 | Hub Bearing - Large | | |
| SRC-1988 | Hub Seal for Straight Snout | | |

All bearings are available with M2 Metal Treatment. M2 Metal Treatment was formerly known as PROglide. An ownership change early in 2021 has brought a new name but the same great benefits and unmatched results in reducing friction and increased service life. Utilizing nano particles that act as sponges for oil, M2 is a revolutionary process with limitless possibilities. DMI chooses M2 treatment over REM® polished bearings. While DMI does have in-house REM® capabilities we believe they are best suited on gear sets or other "solid" items as opposed to bearings. REM® utilizes fine media as part of the polishing process. In bearings that fine media can be left behind as debris and potentially create an issue. Shiny is nice, but if you want to eliminate friction than M2 is for you!



“

WE AT CLAUSON MARSHALL RACING ARE DEDICATED TO PERFORMING ON AND OFF THE TRACK. THROUGH ALL THE SERIES WE RACE, WINNING 3 DIFFERENT SERIES CHAMPIONSHIPS, USAC NATIONAL MIDGET, USAC NATIONAL SPRINT CAR AND NOW AN ALL STAR CIRCUIT OF CHAMPION'S CHAMPIONSHIP OUR COMPONENTS HAVE ALL STAYED THE SAME, DMI. QUALITY + PERFORMANCE = CHAMPIONSHIPS! WE ARE PROUD TO BE LONG TIME PARTNERS AND RELY ON DMI'S COMMITMENT TO PRODUCE THE BEST RACING COMPONENTS IN THE SPORT ALONG WITH THEIR GREAT CUSTOMER SERVICE TO COMPETE AT THE HIGHEST LEVELS. THANK YOU DAVE AND JENNIFER FOR ALL OF THE YEARS OF SUPPORT AND BEING A PART OF OUR RACING FAMILY.

Tim Clauson
Owner - Clauson-Marshall Racing

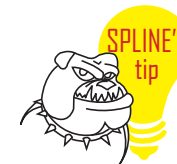
Spindles

B = Also available in black



DMI front spindles are the industry's benchmark for quality and performance. Sprint car spindles are manufactured using a Made in the USA 7075-T6 forging. Midget spindles are produced from billet 2024-T3 aluminum. Both steel and titanium snouts are machined in house.

| | | | |
|-----------|---|-----------|---|
| MRC-2000 | Aluminum Midget Spindle w/ Straight Steel Snout | SRC-2003 | Kingpin Bearing and Race Kit |
| MRC-2020 | Aluminum Midget Spindle w/ Titanium Snout | SRC-2020 | Aluminum Spindle w/ Straight Titanium Snout |
| MRC-2035B | Midget Bottom King Pin Bushing | SRC-2035 | King Pin Bushing |
| MRC-2035T | Midget Top King Pin Bushing | SRC-2039 | Steel King Pin - .859 |
| MRC-2039 | Midget Steel King Pin - .812 | SRC-2045B | King Pin Cap - Short |
| MRC-2059 | Midget Titanium King Pin - .812 | SRC-2055 | King Pin Cap - Long |
| SRC-1997S | Spindle Locknut Kit "Trick" | SRC-2059 | Titanium King Pin - .859 |
| SRC-2000 | Aluminum Spindle w/ Straight Steel Snout | SRC-1998 | Spindle Nut Wrench |



Front spindle nuts should be checked after the first race. Bearings should be checked every six races to ensure proper lubrication. DMI recommends using a high temp #2 grease when packing bearings. Prefer to run your hubs in an oil bath? Supplied seals work with grease or oil.

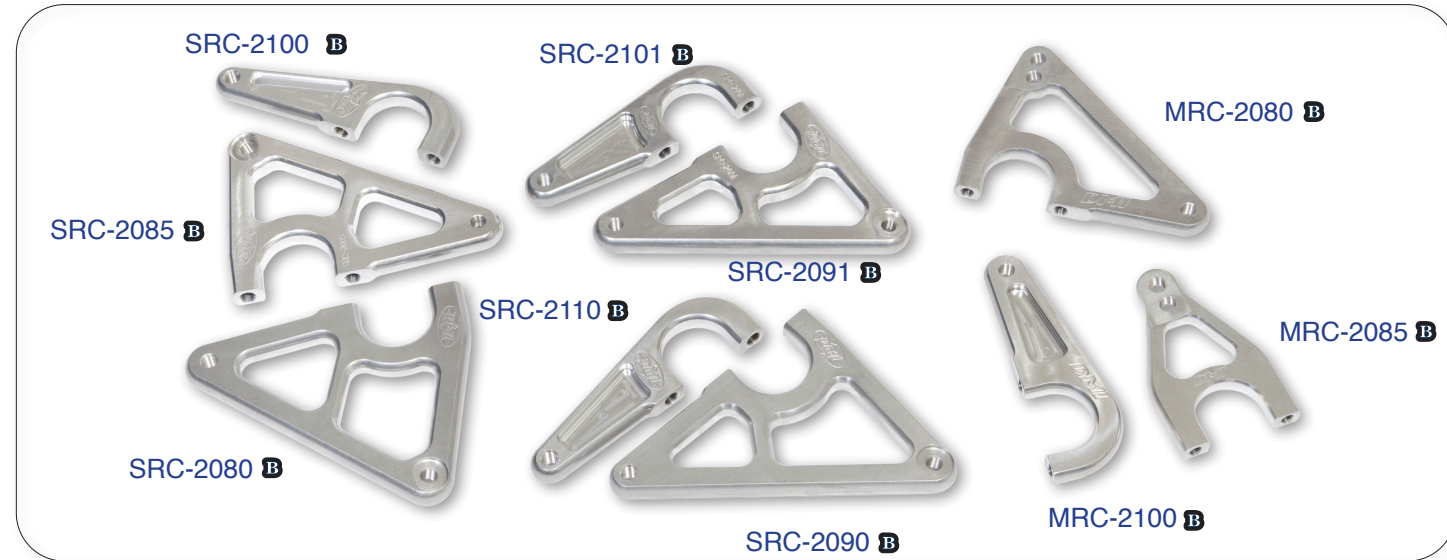


Titanium Snout Spindles and Titanium King Pins save 1.06 lbs. over steel units on the front end assembly.

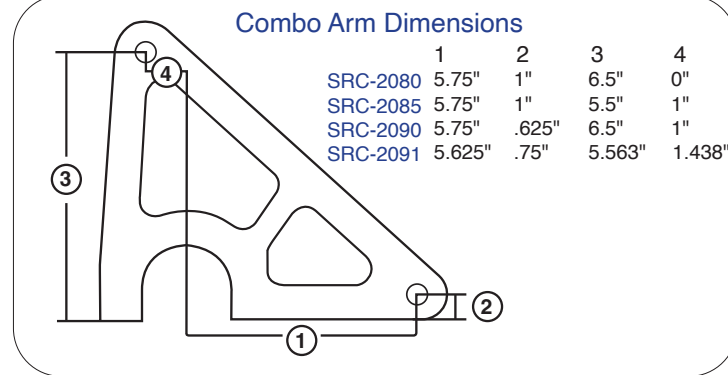
Steering Arms | Pitman Arms

Steering Arms

B = Also available in black



| | |
|----------|---|
| MRC-2080 | Midget Combo Steering Arm |
| MRC-2085 | Midget Wishbone Steering Arm |
| MRC-2100 | Midget Single Steering Arm |
| SRC-2080 | Combo Steering Arm - Standard |
| SRC-2085 | Combo Steering Arm - 5.5" x 1" Forward |
| SRC-2090 | Combo Steering Arm - 6.5" x 1" Forward |
| SRC-2091 | Combo Steering Arm - Maxim Style |
| SRC-2095 | .5" x .5" Aluminum Tapered Spacer |
| SRC-2100 | Single Steering Arm for SRC-2080 & SRC-2085 |
| SRC-2101 | Single Steering Arm for SRC-2091 |
| SRC-2110 | Single Steering Arm for SRC-2090 |



Pitman Arms & Steering Mounts

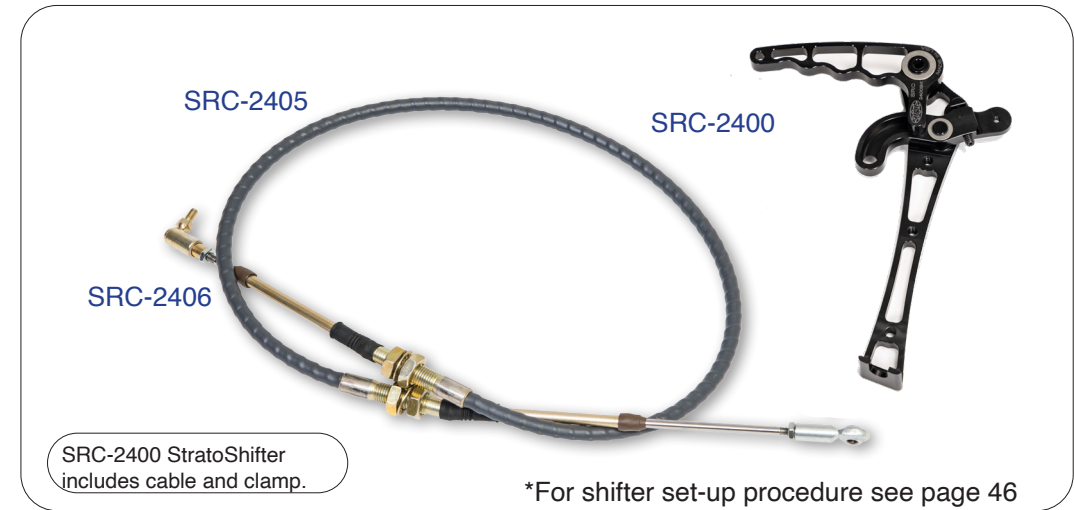


| | | | |
|----------|--|----------|--|
| SRC-2075 | Aluminum Mount for Half Steering | SRC-2255 | X-Short Lightweight Pitman Arm - Angle Broach - 9"/10" |
| SRC-2240 | Long Lightweight Pitman Arm | SRC-2260 | Long Lightweight Pitman Arm - Angle Broach |
| SRC-2253 | X-Long Lightweight Pitman Arm - Angle Broach | | |

StratoShifter | Motor Plates

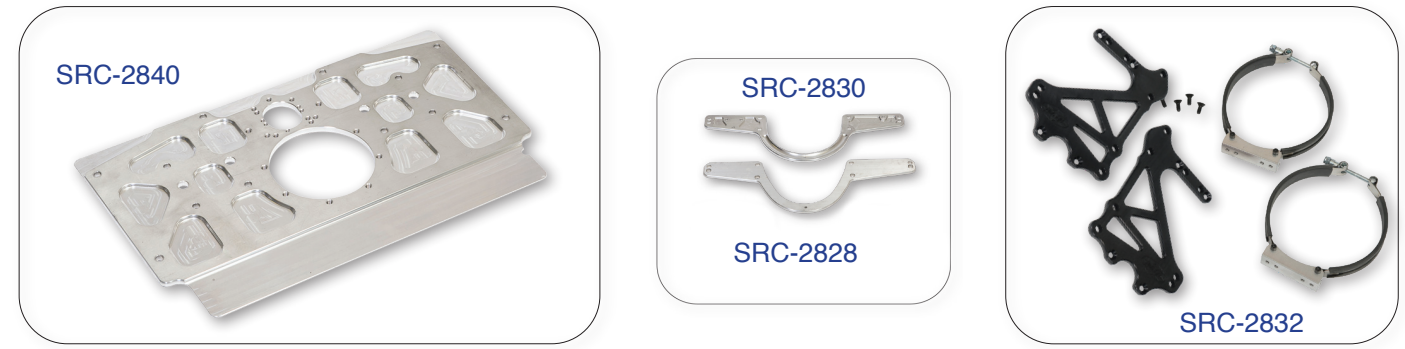
StratoShifter

B = Also available in black



| | | | |
|----------|---|------------|---|
| SRC-2400 | StratoShifter Assembly- Assembly includes cable, quick disconnect and all hardware. | SRC-2405XL | 48" Shifter Cable for StratoShifter/ Shurlock/Robison |
| SRC-2405 | 45" Shifter Cable for StratoShifter/ Shurlock/Robison | SRC-2406 | Shifter Cable Quick Disconnect |
| | | SRC-2407 | 10/32 Female Rod End |

Motor Plates



| | | | |
|------------|--|----------|--|
| SRC-2828 | Aluminum Front Motor Plate - Offset | SRC-2860 | Magnesium Rear Motor Plate |
| SRC-2830 | Aluminum Front Motor Plate - Lightened | SRC-2870 | Aluminum Rear Motor Plate - Lightened - J&J Style |
| SRC-2831 | 2 pc. Aluminum Motor Mount - 1 Side | SRC-2880 | Magnesium Rear Motor Plate - J&J Style |
| SRC-2831-2 | 2 pc. Aluminum Motor Mount - Set | SRC-2890 | Alum. Rear Motor Plate - Lightened - Maxim/Eagle Style Raised Rail |
| SRC-2832 | 2 pc. Aluminum Motor Mount w/ Dry Sump Tank Mounts | SRC-2895 | Mag Rear Motor Plate - Lightened - Maxim/Eagle Style Raised Rail |
| SRC-2836 | Dry Sump Tank Mounts - Set | | |
| SRC-2840 | Aluminum Rear Motor Plate - Lightened | | |
| SRC-2850 | Aluminum Rear Motor Plate | | |
| SRC-2855 | Aluminum Rear Motor Plate - Offset | | |

“

I RELY ON BULLDOG REARS IN ALL MY CARS BECAUSE I NEED THE BEST. QUALITY AND DEPENDABILITY ARE MY NUMBER ONE CONCERNS. DMI EXCEEDS MY EXPECTATIONS.

Jeff Behrent

”

Torque Balls | Tubes | Housings

B= Also available in black

Torque Balls



| | |
|------------|-----------------------------------|
| MRC-2380 | Midget Torque Ball |
| SRC-2370XL | Aluminum Torque Ball - Extra Long |
| SRC-2380 | Lightweight Aluminum Torque Ball |

Did you know All Torque Tubes are available with black anodized tubes to prevent wear. New improved hard-anodizing prevents torque ball galling.

Torque Tubes & Torque Ball Housings



| | | | |
|------------------|---|----------|--|
| MRC-2390 | Midget Torque Tube | SRC-2387 | Big Unit XL Torque Tube Assy - 28" |
| MRC-2395 | Midget Torque Tube - Sprint Car Style | SRC-2388 | Big Unit XL Torque Tube Assy - 32" |
| RRC-1490 | .015 Torque Tube Shim | SRC-2389 | Big Unit XL Torque Tube Assy - 35" |
| RRC-1491 | .030 Torque Tube Shim | SRC-2390 | Aluminum Torque Tube w/H.D. Base - 28" |
| RRC-1492 | .060 Torque Tube Shim | SRC-2391 | Aluminum Torque Tube w/H.D. Base - 32" |
| RRC-2006 | Torque Tube Stud Kit | SRC-2392 | Aluminum Torque Tube w/H.D. Base - 35" |
| SEALSIT-TBS1A-07 | Seals-It Driveline Seal - Mag Housing | SRC-2393 | Aluminum Torque Tube w/L.W. Base - 28" |
| SEALSIT-TBS2A-07 | Seals-It Driveline Seal - Steel Housing | SRC-2394 | Aluminum Torque Tube w/L.W. Base - 32" |
| SRC-2305 | Body Armor Steel Torque Ball Housing w/ Inserts | SRC-2395 | Aluminum Torque Tube w/L.W. Base - 35" |
| SRC-2307 | Torque Ball Housing Stud and Highnut Kit for SRC-2305 | SRC-2396 | 3" (MPD Style) Torque Tube w/L.W. Base - 28" |
| SRC-2308 | Aluminum Torque Ball Housing w/ Inserts | SRC-2397 | 3" (MPD Style) Torque Tube w/H.D. Base - 28" |
| SRC-2309 | Aluminum Hard Anodized Torque Ball Inserts | SRC-2398 | 3" (MPD Style) Torque Tube w/L.W. Base - 32" |
| | | SRC-2399 | 3" (MPD Style) Torque Tube w/H.D. Base - 32" |

U-Joint Assemblies | Components



| | | | |
|----------|---|----------|---|
| MRC-2320 | Toyota Aluminum / Steel U-Joint Assy. | SRC-2357 | 2K11 H.D. Steel/Alum. U-Joint Assy. - Chevy & Mopar - Gladiator Cross |
| MRC-2321 | Toyota Aluminum / H.D. Billet Steel U-Joint Assy. | SRC-2358 | 2K11 H.D. Billet Steel/Alum. U-Joint Assy. Greasable Cross |
| MRC-2322 | Toyota Aluminum U-Joint Assy. | SRC-2359 | 2K11 H.D. Billet Steel/Alum. U-Joint Assy. Gladiator Cross |
| MRC-2323 | Esslinger Aluminum / Steel U-Join Assy. | | |
| MRC-2324 | Esslinger Aluminum / H.D. Billet Steel U-Joint Assy. | | |
| MRC-2325 | SR-11x Aluminum / Steel U-Joint Assy. | | |
| MRC-2326 | SR-11x Aluminum/H.D. Billet Steel U-Joint Assy. | | |
| MRC-2327 | SR-11x All Aluminum U-Joint Assy. | | |
| MRC-2328 | Esslinger Aluminum U-Joint Assy. | | |
| SRC-2354 | 2K11 H.D. Aluminum U-Joint Assy. - Chevy & Mopar - Greasable Cross | | |
| SRC-2355 | 2K11 H.D. Alum. U-Joint Assy. - Chevy & Mopar - Gladiator Cross | | |
| SRC-2356 | 2K11 H.D. Steel/Alum. U-Joint Assy. - Chevy & Mopar - Greasable Cross | | |

U-Joints Components



| | |
|----------|--|
| SRC-2315 | 7075 Aluminum U-Joint Base |
| SRC-2316 | 7075 Aluminum U-Joint Yoke |
| SRC-2327 | U-Joint Spring, Washer & Snap Ring for all yokes |
| SRC-2335 | Greaseable U-Joint Cross |
| SRC-2336 | Gladiator U-Joint Cross |
| SRC-2339 | Lightweight Steel U-Joint Yoke |
| SRC-2342 | Steel Billet U-Joint Yoke - Long |
| SRC-2352 | 2K11 H.D. Aluminum U-Joint Base |
| MRC-2310 | Toyota U-Joint Base |
| MRC-2311 | Esslinger U-Joint Base |
| MRC-2312 | SR-11x U-Joint Base |

Did you know DMI started using non-greasable crosses in 2002.

32 Spline Driveshafts | U-Joint Assemblies

Driveshafts



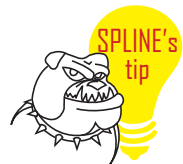
Ultra thin wall driveshaft with large OD provides strength and performance.

| | | | |
|-------------|--|----------------|--|
| RRC-1455 | WP Style Swivel Coupler Seal | SRC-2440-32 | 4340 Steel Tubular Driveshaft - 32" for 32 Spline Yoke |
| SRC-2430-32 | 4340 Steel Tubular Driveshaft - 29" for 32 Spline Yoke | SRC-2442-29-32 | Hollow 29" WP Style Swivel Driveshaft w/ Ball for 32 Spline Yoke |
| SRC-2431-32 | 4340 Steel Tubular Driveshaft - 29" for 32 Spline Yoke and 32 Spline Coupler | SRC-2443 | Titanium Washer for Ball Spline WP Style Driveshaft w/ Bolt |
| SRC-2432-32 | 4340 Steel Tubular Driveshaft - 32" for 32 Spline Yoke and 32 Spline Coupler | SRC-2444-32 | Replacement Ball for WP Style Driveshaft - 32 Spline |

U-Joint Assemblies

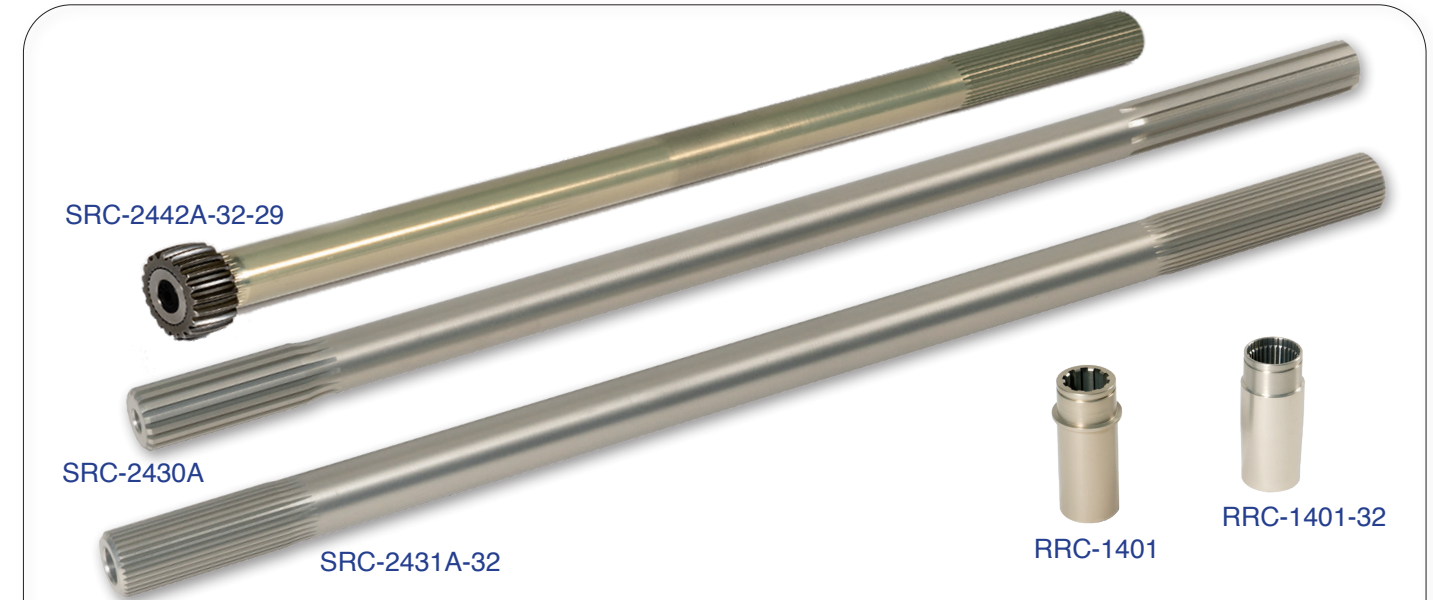


| | |
|-------------|--|
| SRC-2316-32 | 7075 Aluminum U-Joint Yoke - 32 Spline |
| SRC-2342-32 | Steel Billet U-Joint Yoke - Long - 32 Spline |
| SRC-2354-32 | 2K11 H.D. Alum. U-Joint Assy - Chevy&Mopar - Greasable Cross - 32 Spline |
| SRC-2355-32 | 2K11 H.D. Alum. U-Joint Assy - Chevy&Mopar - Gladiator Cross - 32 Spline |
| SRC-2359-32 | 2K11 H.D. Billet Steel/Alum. U-Joint Assy. - Gladiator Cross - 32 Spline |
| MRC-2321-32 | Toyota Aluminum / H.D. Billet Steel U-Joint Assy. 32 Spline |
| MRC-2322-32 | Toyota Aluminum U-Joint Assy. - 32 Spline |
| MRC-2324-32 | Esslinger Aluminum / H.D. Billet Steel U-Joint Assy. -32 Spline |
| MRC-2326-32 | SR-11x Aluminum / H.D. Billet Steel U-Joint Assy. - 32 Spline |



The SRC-2442-29-32 Driveshaft and SRC-2355-32 yoke is an excellent combination on a 410 winged sprint car. The increased o.d. of the shaft provides the strength. The extra large 1" i.d. provides the weight savings. When coupled with the SRC-2355-32 u-joint harmonics are limited, strength is increased and performance is achieved.

Aluminum Driveshafts



| | |
|-----------------|---|
| MRC-2430A | Aluminum Tubular Driveshaft - 24" 10-16 Spline |
| SRC-2430A | Aluminum Tubular Driveshaft - 29" 10-16 Spline |
| SRC-2431A-32 | Aluminum Tubular Driveshaft - 29" 32 Spline |
| SRC-2442A-29 | Aluminum Tubular Driveshaft for WP Style Swivel - 29" |
| SRC-2442A-32-29 | Aluminum Tubular Driveshaft for WP Style Swivel - 32 Spline - 29" |
| RRC-1401 | Aluminum Int. 32 Spline Coupler |
| RRC-1401-32 | Aluminum Int. 10-10 Coupler |

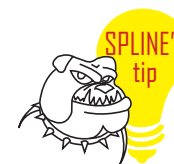
DMI is the only manufacturer to offer ultralight aluminum driveshafts. Developed for 305's, the driveshafts have been used in strong ASCS 360's without issue in certain situations. 305 - any track - any time. 360 - consult the experts at DMI and see if your situation could benefit from an aluminum driveshaft

Weight Comparison:

| Description | Weight |
|---|-----------|
| Steel 10-16 Driveshaft with steel coupler | 5.76 lbs. |
| Alum. 10-16 Driveshaft with alum. coupler | 3.33 lbs. |
| Steel 32-32 Driveshaft with steel coupler | 6.05 lbs. |
| Alum. 32-32 Driveshaft with alum. coupler | 3.21 lbs. |



Are you looking to save some rotating weight on your RaceSaver® 305? Stop looking. This is the ultimate driveline combination. **WARNING: THIS DRIVELINE MAY CAUSE YOUR HEAD TO SNAP BACK UNDER ACCELERATION!**



DMI recommends replacing aluminum driveshafts every 30 races.

44 Spline Driveshafts | U-Joint Assemblies



Fabricated Steel
Fabricated Titanium
Billet 7075 Aluminum



| | |
|-------------|---|
| SRC-2415A | Aluminum 44 Spline DMI Style Swivel Driveshaft |
| SRC-2354-44 | 2K11 H.D. Alum. U-Joint Assy. - Chevy & Mopar - Greasable Cross - 44 Spline |
| SRC-2355-44 | 2K11 H.D. Alum. U-Joint Assy. - Chevy & Mopar - Gladiator Cross - 44 Spline |
| SRC-2413 | Steel 44 Spline WP Style Driveshaft for 40" Car - 5.84lbs. |
| SRC-2413T | Titanium 44 Spline WP Style Driveshaft for 40" Car - 3.99lbs. |
| SRC-2413A | Aluminum 44 Spline WP Style Driveshaft for -40" car - 3.99 lbs. |

DMI's 44 Bulldog Drive Shaft is the only choice for racers looking for an extra-large drive shaft. Originally tested during the 2016 racing season the 44 Bulldog is an ideal choice for teams looking to keep weight to a minimum but increase the strength of the driveline. We further tested throughout the 2017 season assuring the performance and dependability you've come to expect from DMI. The fabricated shaft is offered in titanium and a very affordably priced steel version. New for 2020 is a 7075-T6 billet aluminum version. Tested successfully during the 2019 season, the aluminum version offers an affordable choice and excellent durability. Precision turned to zero runout. High horsepower 410? No problem. This aluminum driveshaft will handle it with ease. All U-Joint assemblies come with our very strong Aluminum 2k11 base and yoke.

Standard Driveshafts | Fabricated Driveshafts



| | | | |
|---------------|---|----------------|--|
| RRC-1455 | WP Style Swivel Coupler Seal | SRC-2446-26.5 | Fab. Tubular D-Shaft for Swivel - 26.5" |
| SRC-2429 | 4340 Steel Tubular Driveshaft - 26.5" | SRC-2446-27.5 | Fab. Tubular D-Shaft for Swivel - 27.5" |
| SRC-2430 | 4340 Steel Tubular Driveshaft - 29" | SRC-2446-29.25 | Fab. Tubular D-Shaft for Swivel - 29.25" |
| SRC-2440 | 4340 Steel Tubular Driveshaft - 32" | SRC-2446-30.5 | Fab. Tubular D-Shaft for Swivel - 30.5" |
| SRC-2441-29 | Hollow 29" WP Style Swivel Driveshaft w/ Ball - Titanium | SRC-2450 | 4340 Steel Tubular Driveshaft - 35" |
| SRC-2442-29 | Hollow 29" WP Style Swivel Driveshaft w/ Ball - Steel | SRC-2470 | 6AL-4V Tubular Titanium Driveshaft - 32" |
| SRC-2443 | Titanium Washer for Ball Spline WP Style Driveshaft w/ Bolt | SRC-2480 | 6AL-4V Tubular Titanium Driveshaft - 29" |
| SRC-2444 | Replacement Ball for WP Style Driveshaft - 16 Spline | SRC-2481 | 4340 Steel Tubular Driveshaft for Swivel Coupler - 26.5" |
| SRC-2444-32 | Replacement ball for WP Style Driveshaft - 32 Spline | SRC-2482 | 4340 Steel Tubular Driveshaft for Swivel Coupler - 31" |
| SRC-2445-28 | Fab. Tubular D-Shaft for Int. 10-10 - 28" | SRC-2483 | 4340 Steel Tubular Driveshaft for Swivel Coupler - 34.5" |
| SRC-2445-28.5 | Fab. Tubular D-Shaft for Int. 10-10 - 28.5" | SRC-2485 | 6AL-4V Ti Tubular driveshaft for Swivel Coupler - 26.5" |
| SRC-2445-29 | Fab. Tubular D-Shaft for Int. 10-10 - 29" | SRC-2486 | 6AL-4V Ti Tubular Driveshaft for Swivel Coupler - 31" |
| SRC-2445-29.5 | Fab. Tubular D-Shaft for Int. 10-10 - 29.5" | SRC-2487 | 6AL-4V Ti Tubular Driveshaft for Swivel Coupler - 34.5" |
| SRC-2445-30 | Fab. Tubular D-Shaft for Int. 10-10 - 30" | | |
| SRC-2445-31.5 | Fab. Tubular D-Shaft for Int. 10-10 - 31.5" | | |
| SRC-2445-32 | Fab. Tubular D-Shaft for Int. 10-10 - 32" | | |
| SRC-2446-25.5 | Fab. Tubular D-Shaft for Swivel - 25.5" | | |



A Titanium Driveshaft saves 1.21 lbs. over a Steel Driveshaft.

“
QUALITY IS OUR TOP PRIORITY AT BRP AND THE BULLDOG REAR IS THE BEST QUALITY REAR ON THE MARKET.
”
Randy Williamson
BICKNELL
RACING PRODUCTS

Driveline Frequently Asked Questions

Q What is the best U-Joint for me?

A It really depends on the class. Our all aluminum U-Joints are used successfully in all classes. Steel vs. aluminum yokes is just a personal preference.

Q How many races can I use my U-Joint assembly?

A With 410, 360 and midgets we recommend replacing U-Joint assemblies every engine freshen. 305's should not exceed fifty races with their assemblies. Our recommendations apply to all U-Joint assemblies.

Q How does the non-greasable crosses work?

A Excellent. We began using them in 2002. They offer many advantages. They are maintenance free. They keep the grease where it belongs. The cross is so well sealed the grease remains in the cross. The solid forged cross features much more strength than the cast hollow joints.

Q What is the best driveline grease?

A On the torque ball assembly a #2 high temp works well. Also 20-50 motor oil works well and doesn't attract as much grease. On the splines of the Driveshaft we recommend the DMI Swivel Coupler Lube (Part # DMI-SWILUBE). DO NOT USE NEVER-SEIZE.

Q How many races should I run on my driveshaft?

A Driveshafts should be replaced every thirty races under normal racing conditions. We recommend checking the driveshaft run out every five races. Run out should be less than .003". In the event of a violent crash or catastrophic engine failure the driveshaft should be replaced immediately.

Q How critical is driveshaft length?

A Driveshaft length is extremely critical. We have seen as little as .250" be a contributing factor in driveline and u-joint failures. Close is not going to get it done when cutting a driveshaft. Measure twice and cut once!! Do not think that a driveshaft cut for a 40" car will be ok to try in a 40.5" car. YOU WILL HAVE PROBLEMS!!! Recommended driveshaft lengths can be found on the pages featuring that specific quick change rear.

Q What is the proper torque on the U-Joint Bolts?

A U-Joint Bolts should be torqued to 65 ft/lbs. and blue threadlocker should be applied. Begin by torquing in an "X" pattern at 45 ft/lbs. and increase torque by 10 ft/lbs. until 65 ft/lbs. is achieved.

Rods & Rod Ends



Rods & Rod Ends



| | |
|----------|--|
| AF-3 | Aluminum Female 10/32 Rod End |
| AF-5 | Aluminum Female 5/16 Rod End |
| ALRSM8B | FK Made in the USA 1/2 x 5/8 Aluminum RH Rod End |
| ALRSM8L | FK Made in the USA 1/2 x 5/8 Aluminum LH Rod End |
| AMT8-10 | 3 pc. 1/2 x 5/8 Aluminum RH Rod End |
| AMTL8-10 | 3 pc. 1/2 x 5/8 Aluminum LH Rod End |
| HDM8-10 | 3 pc. 1/2 x 5/8 H.D. RH Rod End |

| | |
|----------|--|
| HDML8-10 | 3 pc. 1/2 x 5/8 H.D. LH Rod End |
| JAM10 | 5/8 Steel Jam Nut RH - 3/4" Hex |
| JAM10L | 5/8 Steel Jam Nut LH - 3/4" Hex |
| MM8-10 | 3 pc. 1/2 x 5/8 Moly RH Rod End |
| MM8-10R | 2 pc. 1/2x5/8 RH Moly |
| MML8-10 | 3 pc. 1/2 x 5/8 Moly LH Rod End |
| RSM8 | FK Made in the USA 1/2 x 5/8 HD RH Rod End |
| RSML8 | FK Made in the USA 1/2 x 5/8 HD LH Rod End |



Superior Bearings has been servicing and producing bearings for the motorsports industry for over 30 years. Superior is known for their commitment to quality and fair pricing. Their SBS Rod Ends are a trusted name in the industry.



FK Rod Ends produce the highest quality Made in the USA Rod Ends in motorsports. Top Teams across the globe rely on the performance of FK to reach victory lane.

Torsion Bars

T-REX
(Torsion Restraint EXpress)
System

7/8" Spline Torsion Bars



- LRC- (rate) - 26 Standard Rate Hollow 7/8 "Torsion Bar - 26"
- LRC- (rate) - 14.5 Standard Rate Solid 7/8 "Torsion Bar - 14.5"
- LRC- 1500 - T-Rex Locking End Plug for 7/8" Bar

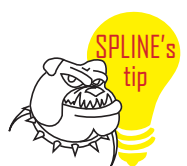
Stocking Rates

| 26 " Hollow | 14.5" Solid |
|-------------|-------------|
| .600 | .550 |
| .625 | .575 |
| .650 | .600 |
| .675 | |
| .700 | |
| .712 | |
| .725 | |
| .737 | |
| .750 | |
| .775 | |
| .800 | |

You asked for it... DMI delivered. The #1 requested NEW product over the last five years. DMI 7/8" Spline Torsion Bars are produced from the same high quality Made in the USA material as their big brother 1 1/8" spline bars. Using the same manufacturing processes, DMI has developed and proven over the last 20 years ensure you that a DMI T-Rex Torsion Bars are the most consistent, high performing springs on the planet. Buy DMI T-Rex Torsion Bars. Buy confidence.



Grease the bearing shoulders on each end of the bar with a water resistant #2 grease. Due to the twist of the bar it is also recommended that grease be applied to the center of the bar,



Always put the arm on the side of the bar that shows the size. Also, bars should only be twisted in one direction. Therefore, a bar used in the right rear corner could only ever be used in the left front corner. Left rear bars could also be used in the right front.

Torsion Bars

T-REX
(Torsion Restraint EXpress)
System

SRC- (rate) -30



The T-Rex Torsion Restraint System is designed to prevent arms or stops from being pulled off the bar. It is the safest system available. A World of Outlaws approved torsion restraining device. T-Rex locking plugs come standard with all 30" Hollow T-Rex Torsion Bars.

| | |
|-----------|--|
| SRC- -18 | Standard Rate Hollow Torsion Bar - 18" |
| SRC- -29 | Standard Rate Hollow Torsion Bar - 29" |
| SRC- -29S | Standard Rate Solid Torsion Bar - 29" |
| SRC- -30 | Standard Rate Hollow Torsion Bar - 30" |

| | |
|--------------|--|
| SRC- -30S | Standard Rate Solid Torsion Bar - 30" |
| SRC- -30TRES | Standard Rate Hollow Torsion Bar - 30" w/ TRES |
| SRC-1500 | T-Rex Locking End Plug |

DMI T-Rex Torsion Bars are the industry leader in quality performance and consumer confidence. Our 4340 domestic material is supplied by the same producer for the last 20 years. Same for our heat treat. The manufacturing process hasn't changed at DMI. No different grade bars here... That makes no sense. DMI Makes one grade - the best. DMI bars - consistent from bar to bar and year to year. Put some spring in your step - choose DMI T-Rex Torsion Bars

Rates in Stock

| 29" Solid | 30" Hollow |
|-----------|------------|
| .875 | .750 |
| .900 | .775 |
| .925 | .800 |
| .950 | .825 |
| .975 | .850 |
| 1.000 | .875 |
| | .900 |
| | .925 |
| | .950 |
| | .975 |
| | 1.000 |
| | 1.015 |
| | 1.025 |
| | 1.050 |
| | 1.065 |

“ WE USE NOTHING BUT DMI TORSION BARS AT SILVA MOTORSPORTS INC. YOU CAN'T BEAT THEIR QUALITY, REPEATABILITY, AND AFFORDABILITY. ”

Paul Silva
Owner Silva Motorsports #57 driven by Kyle Larson

Torsion Arms | Stops

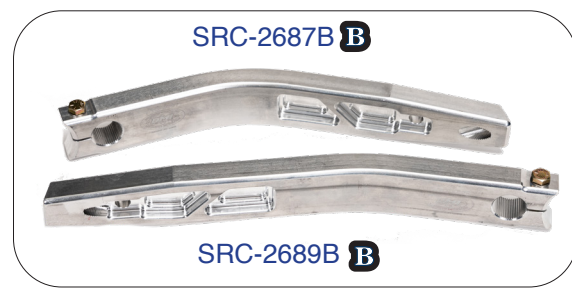
B = Also available in black

Front Torsion Arms & Stops



| | | | |
|-----------|--|----------|--|
| SRC-2115 | Left Front Torsion Arm - "S" Bend | SRC-2160 | Steel Torsion Stop - 1.75" Split |
| SRC-2120 | Front Torsion Arm - Long | SRC-2170 | Steel Torsion Stop - 2" Split |
| SRC-2121 | Anti-Rollbar Stop | SRC-2180 | 6AL-4V Titanium Torsion Stop - 1.75" Split |
| SRC-2122 | Anti-Rollbar Left Front Arm (No Splines) | SRC-2190 | 6AL-4V Titanium Torsion Stop - 2" Split |
| SRC-2122A | Anti-Rollbar Right Front Arm | SRC-2210 | Bronze Torsion Bushing for .095 Tubes |
| SRC-2123 | Heavy Duty Front Torsion Arm - Long | SRC-2211 | Bronze Torsion Bushing for .120 Tubes |
| SRC-2124 | Right Front Torsion Arm - 2" Bend | SRC-2220 | Plastic Torsion Bushing for .095 Tubes |
| SRC-2125 | Right Front Torsion Arm 10° Broach | SRC-2221 | Plastic Torsion Bushing for .120 Tubes |
| SRC-2130 | Front Torsion Arm - Short | | |
| SRC-2140 | Aluminum Torsion Stop - 1.75" Split | | |
| SRC-2150 | Aluminum Torsion Stop - 2" Split | | |

Rear Torsion Arms



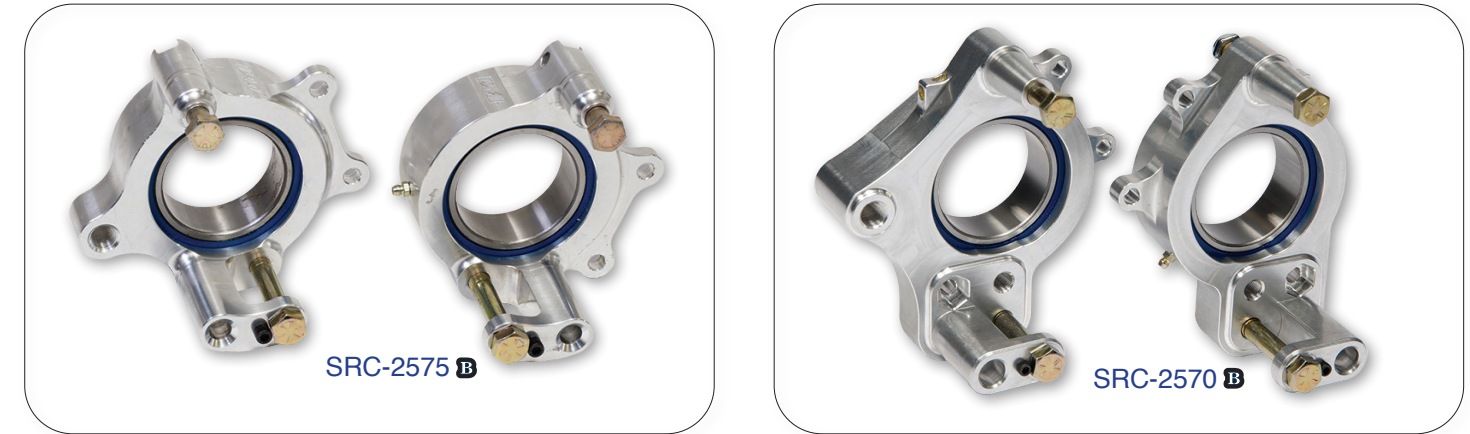
*See page 89 for Custom Arm Form

| | | | |
|------------|---|------------|---|
| SRC-2685 | LW RR Torsion Arm - Custom Dimensions + Labor | SRC-2689R | LW LR Torsion Arm - L.W. Eagle/Maxim - Reverse Tube |
| SRC-2685XL | LW RR Torsion Arm XL - Custom Dimensions + Labor | SRC-2689W | LW LR Torsion Arm - L.W. Woodring Sportsman |
| SRC-2686 | LW RR Torsion Arm - Std. Eagle/Maxim | SRC-2690 | LW LR Torsion Arm - Custom Dimensions + Labor |
| SRC-2687 | LW RR Torsion Arm - L.W. Eagle/Maxim | SRC-2690XL | LW LR Torsion Arm XL - Custom Dimensions + Labor |
| SRC-2687R | LW RR Torsion Arm - L.W. Eagle/Maxim - Reverse Tube | SRC-2694 | LW RR Torsion Arm - J&J 15" |
| SRC-2688 | LW LR Torsion Arm - Std. Eagle/Maxim | SRC-2695 | LW LR Torsion Arm - J&J 17" |
| SRC-2689 | LW LR Torsion Arm - L.W. Eagle/Maxim | | |

Birdcages

B = Also available in black

Birdcages



| | | | |
|----------|--|------------|---|
| SRC-2553 | 6014 Birdcage Bearing | SRC-2577 | Small Double Bearing Left Birdcage |
| SRC-2554 | Birdcage Spirallock for 6014 | SRC-2578 | 5914 Birdcage Bearing - 32mm |
| SRC-2570 | Small Double Bearing Birdcage Set - Non Wing Dual Pickup | SRC-2578A | 5914 Birdcage Bearing - 28mm |
| SRC-2571 | Small Double Bearing Right Birdcage - Non Wing Dual Pickup | SRC-2578AV | 5914 Birdcage Bearing - 28mm VMAC Style |
| SRC-2572 | Small Double Bearing Left Birdcage - Non Wing Dual Pickup | SRC-2578V | 5914 Birdcage Bearing - 32mm VMAC Style |
| SRC-2573 | D6014 Birdcage Bearing | SRC-2578PG | 5914 Birdcage Bearing - 32mm M2 Treated |
| SRC-2574 | Replacement Birdcage Level | SRC-2579 | Birdcage Spirallock for 5914 |
| SRC-2575 | Small Double Bearing Birdcage Set | SRC-2581 | Birdcage Caliper Mount |
| SRC-2576 | Small Double Bearing Right Birdcage | | |

M2 treated birdcage bearings increase bearing life by more than 800%! SRC-2578PG is the treated replacement birdcage bearing. All birdcages and birdcage sets are available with M2 bearings. Ask your sales associate for more details.



| | |
|----------|--|
| SRC-2580 | Steel Spacers to Convert Split Brg. Axle to Std. |
| SRC-2598 | Right Birdcage Spacer |
| SRC-2599 | Left Birdcage Spacer - Spline Saver |
| SRC-2601 | Splined Left Side Birdcage Spacer |
| SRC-2602 | Birdcage Spacer for 31" Torsion Bar |



SRC-2601 Left Birdcage Spacer is splined to prevent axle wear on the splined bearing shoulder.

Fabricated Components

Front Axles

B = Also available in black



Redesigned in 2020, DMI cornerSPEED front axles use proven caster/camber settings to optimize speed at corner entry and through the apex. Adjustable front shock locations allow shock travel to be increased or decreased to maximize lateral and longitudinal traction.

| | |
|----------|--|
| SRC-1910 | 2.5" x 50" cornerSPEED Front Axle - Black |
| SRC-1930 | 2.25" x 53" cornerSPEED Front Axle - Black |

Jacobs Ladders



DMI is the first in the industry to offer different length Jacobs ladder straps. Varying length ladder straps have long been a secret adjustment teams make to change the rear roll centers and adjust the handling. Now it's available to everybody.

Heavy Duty Ladder Straps are perfect for tracks where you have to run the fence. Beat the fence and don't worry about breaking your straps.

A must have to run the wall at Eldora!!!

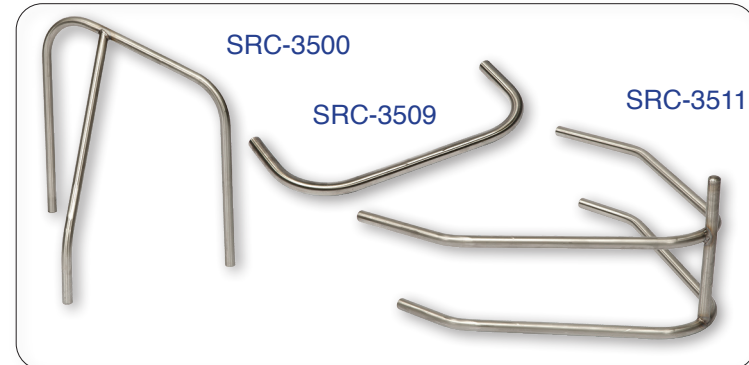
| | |
|----------|--|
| SRC-2505 | 4130 Steel Jacobs Ladder w/ Straps - 13.625" |
| SRC-2510 | 4130 Steel Jacobs Ladder w/ Straps - 14" |
| SRC-2515 | 4130 Steel Jacobs Ladder w/ Straps - 13.25" |

Jacobs Ladder Straps



| | |
|---------------------|----------------------------|
| SRC-2545HD B | |
| SRC-2545L B | 7.25" Ladder Strap |
| SRC-2545 B | 7" Ladder Strap (standard) |
| SRC-2545S B | 6.75" Ladder Strap |

Bumpers & Nerfs



| | |
|----------|--|
| SRC-3500 | Stainless RS Shorty Nerf Bar |
| SRC-3501 | Stainless LS Shorty Nerf Bar |
| SRC-3502 | Stainless LS Shorty Nerf Bar - Raised Rail |
| SRC-3503 | Stainless RS Long Nerf Bar |
| SRC-3504 | Stainless LS Long Nerf Bar |
| SRC-3505 | Stainless LS Long Nerf Bar - Raised Rail |
| SRC-3506 | Stainless RS Hoop Nerf Bar |
| SRC-3507 | Stainless LS Hoop Nerf Bar |
| SRC-3508 | Stainless LS Hoop Nerf Bar - Raised Rail |
| SRC-3509 | Stainless Front Bumper |
| SRC-3510 | Stainless Cow Catcher Front Bumper |
| SRC-3511 | Stainless Rear Bumper |

Wing Valve | Components | Fuel Valve

B = Also available in black

Wing Valve and Components



| | | | |
|-----------|--------------------------------------|----------|---------------------------------|
| SRC-2900 | Straight Front Wing Post | SRC-2921 | 10" Wing Cylinder w/Heim |
| SRC-2910 | Bent Front Wing Post | SRC-2922 | 12" Wing Cylinder w/Heim |
| SRC-2915S | Front Wing Straps - Bolt Style (set) | SRC-2923 | Wing Cylinder Rod End |
| SRC-2916 | Front Wing Straps - Dzus Style (set) | SRC-2926 | Straight Top Wing Post w/Roller |
| SRC-2920 | Hotwing Valve | | |

Fuel Valve



FRC-1000 Fuel Shut-Off Valve



“SINCE SWITCHING TO BULLDOG IN 2009 WE HAVE HAD ZERO FAILURES. I AM VERY HAPPY WITH THE PRODUCT.”

Tommy Carl

Bulldog Speed Equipment



DMI HotWing Valve features 20% more flow than conventional wing valves on the market. The valve remains a closed circuit when not in use eliminating potential problems.

Brake Rotor Mounts | Inboard Brake Rotors

B = Also available in black

Brake Rotor Mounts



| | | | |
|-----------|---|------------|--|
| MRC-2930 | Floater Style Splined Rear Inboard Hub – 31 Spline Midget | SRC-2931XL | Inboard Brake Spacer Extra Long for Custom Fit |
| SRC-2701 | Splined Adaptor for 6 Pin | SRC-2932 | Clamp Style Splined Inboard Rotor Mount for 8 on 7" B.C. |
| SRC-2930 | Floater Style Splined Rear Inboard Hub - Sprint Car | SRC-2934 | Tri-Lock Splined Inboard Clamp |
| SRC-2931 | Inboard Brake Spacer for .810 vented rotor | SRC-2938 | 42 Spline Adaptor for 8 on 7" B.C. Rotor |
| SRC-2931T | Inboard Brake Spacer for Ben Cook titanium rotor | | |

Inboard Brake Rotors



| | | | |
|-----------|---|---------------|--|
| SRC-0810 | 12" Inboard Steel Rotor .810 Width | SRC-0811S | Cast Steel Rotor .810 x 11.75" - Lightened |
| SRC-0810S | 11.75" Vented Steel Rotor 8 on 7" B.C. - .810 Width | SRC-2780 | Splined Right Rear Rotor 10.125" w/ Holes |
| SRC-0811 | 12" Inboard Steel Rotor - .810 Width - Lightened | SRC-2785 | Splined Right Rear Rotor 10.75" w/ Holes |
| | | WIL-160-13373 | Wilwood Super Alloy Inboard Rotor |

Front Brake Rotors | Single Caliper Mounts | Brake Guards

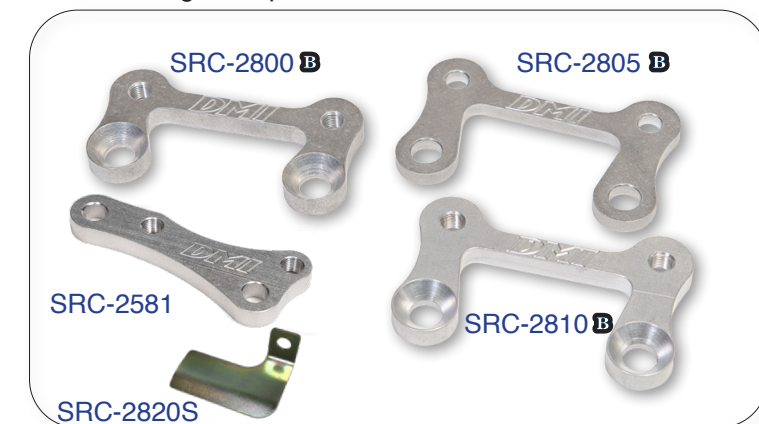
B = Also available in black

Front Brake Rotors



| | | | |
|----------|---|----------|--|
| SRC-2700 | Front 3-Lug Rotor Aluminum 10.125" w/ Holes | SRC-2710 | Front 3-Lug Rotor Aluminum 10.875" w/ Holes |
| SRC-2704 | Front 3-Lug Rotor Steel 10.25" | SRC-2730 | Front 3-Lug Rotor Aluminum 10.875" w/o Holes |
| SRC-2705 | Front 3-Lug Rotor Steel 10.75" | | |

Single Caliper Mounts & Brake Guards



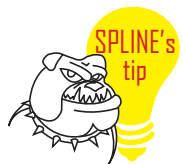
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|----------|---|-----------|---|
| MRC-2800 | Midget Left Front Caliper Mount for 10.125" Rotor w/Allen Bolts | SRC-2810 | Left Front Caliper Mount for 10.875" Rotor w/ Allen Bolts |
| SRC-2581 | Birdcage Caliper Mount | SRC-2811 | Same as SRC-2805 but for 3.75" Spindles |
| SRC-2800 | Left Front Caliper Mount for 10.125" Rotor w/ Allen Bolts | SRC-2820 | Brake Line Rock Guard |
| SRC-2805 | Left Front Caliper Mount for 10.875" Rotor - Non Countersunk | SRC-2820B | Brake Line Rock Guard - Black |
| | | SRC-2820S | Brake Line Guard - Steel |

Tools



EZ Push Wheel makes moving your car a one man job.

| | |
|----------|--|
| RRC-1900 | Snout Locking Ring Tool |
| SRC-1998 | Spindle Nut Wrench |
| SRC-2607 | Rear Axle Nut Wrench w/ L.W. Adaptor |
| SRC-2608 | 3" Aluminum Hex Socket |
| SRC-3000 | Engine Rotator Tool - Sprint |
| MRC-3000 | Engine Rotator Tool - Midget - 31 Spline |
| MRC-3001 | Engine Rotator Tool - Midget - 36 Spline |



Always remember to remove the spark plugs before using the engine rotator turn over tool.

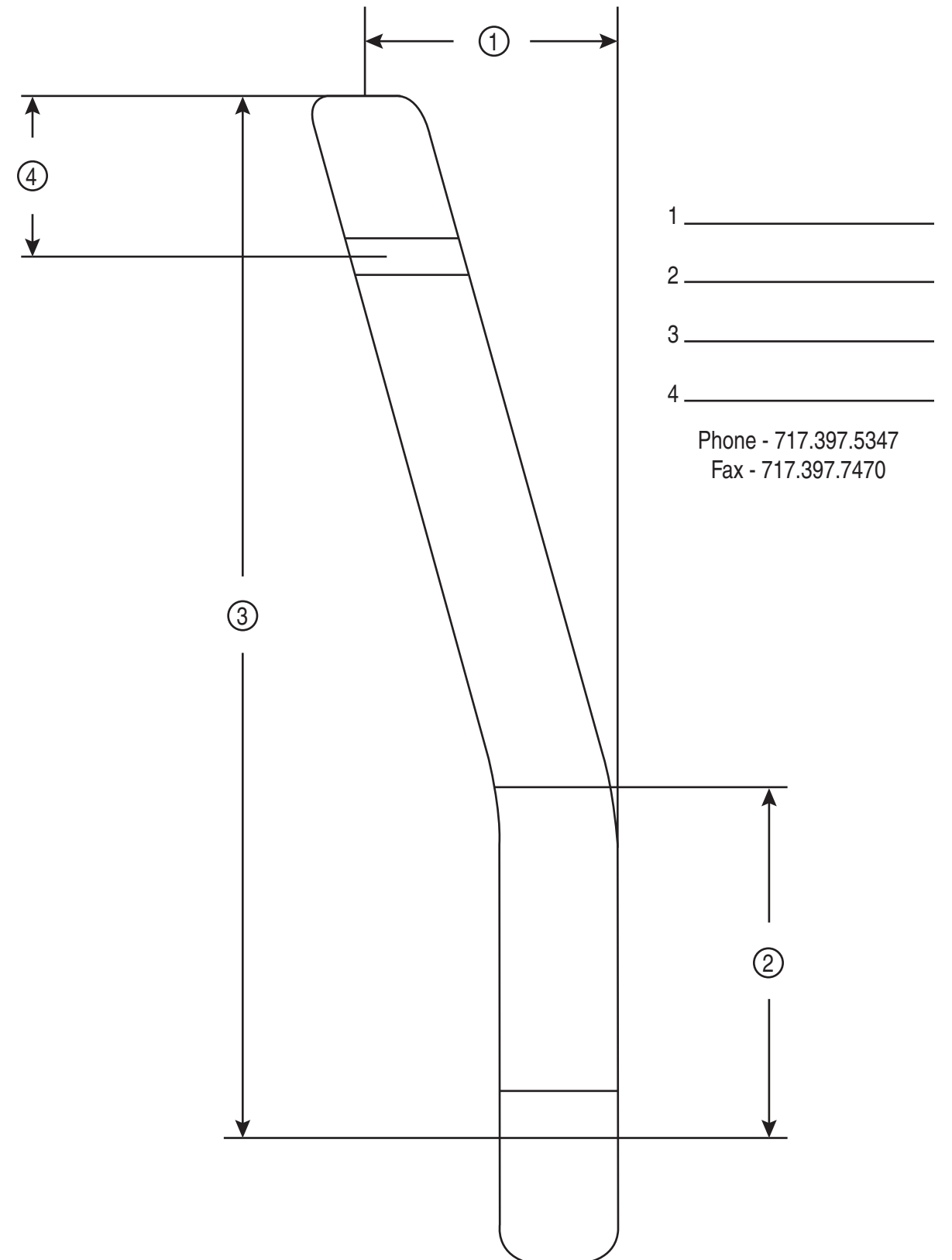
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DMI IS A FAMILY RUN BUSINESS AND THERE ISN'T A COMPANY I DEAL WITH THAT MAKES ME FEEL LIKE PART OF THE FAMILY LIKE DMI DOES. THERE IS NO ONE MORE SINCERE IN THE INDUSTRY DEDICATED TO BUILDING THE BEST STUFF. THE COMPANY IS EXEMPLIFIED BY THE BULLDOG REAR. THEY CHALLENGED A LONG ESTABLISHED COMPANY AND HAVE THRIVED BECAUSE THEIR STUFF IS JUST NICE AND BETTER. NO ONE, DMI USER OR NOT, EVER HAS A NEGATIVE THING TO SAY ABOUT DMI AND BULLDOG PRODUCTS. THEY ARE THE BEST!

Smiley Sitton



Rear Arm Diagram



Phone - 717.397.5347
Fax - 717.397.7470

Tech Specs

| 86-40 Maxim/Eagle/XXX/JJ 1.75 Split | | 87-40 Maxim/Eagle/XXX/JJ 1.75 Split | |
|-------------------------------------|---------------|-------------------------------------|--|
| RF | RR-21.5-1.125 | RR-22.5-1.125 | |
| LF | RR-21-1.125 | RR-22-1.125 | |
| RR | RR-24-1.000 | RR-24-1.00 | |
| LR | RR-23.5-1.000 | RR-23.5-1.00 | |
| Panhard | RR-18.5-1.125 | RR-18.5-1.125 | |
| TieRod | RR-46.0-ST | RR-46-ST | |
| DragLink | RR-48-ST | RR-49-ST | |
| RR Arm | SRC-2687 | SRC-2687 | |
| LR Arm | SRC-2689 | SRC-2689 | |
| Jacobs Ladder | SRC-2515/2505 | SRC-2515/2505 | |

Squaring the Rear Axle:

There are many different ways to square the rear end depending upon mechanical preference and comfort. This is one popular technique utilized by many professional teams. Place the rear end in the chassis and bolt up the torque tube. Set the axles on 6" blocks if it's a standard chassis, 5" on the left side and 6" on the right if it's a raised rail car. Secure the birdcages with spacers and the wheel nuts. Measure the distance from the rear round machined portion of the torque tube to the outer edge of the chassis by placing a straight edge vertically against the frame. Center the rear end by equalizing this distance on both sides of the car. This distance should measure between 10.125" and 10.25". Now with the rear centered side-to-side, start with the right side and measure from the leading edge of the rear axle to the front edge of the motor plate. On a 39" car this measurement is 37.625", 38.625" on a 40" car. Roll the axle forward or back on the blocks to achieve the correct distance. Once you have secured that distance on the right side check the left side. Ensuring that the rear is still centered in the frame and the right side measures correct, the left side may vary by as much as .125". This is generally left to lie as is. With the radius rods connected, place a level on the flat bottom portion of each bird cage and adjust the rods so that each cage is level with the bottom frame rail. Now bring your rear arms up to each bird cage flag and adjust each rod end so that the lower bird cage bolts slide freely through the cage and the rod end. Having completed this, recheck all of your measurements to ensure that nothing was moved during the previous processes. If all measures correct bring your jacobs ladder to the rod end or clevis and adjust the rod end or clevis in or out so that the bolt also slides freely. With these operations complete check your work by ensuring the torque ball is free and the jacobs ladder is not bound. Now you are ready for race height setup blocks and stops.



Tech Specs

Squaring the Front Axle:

Set the front axle on 4" set-up blocks, or 3" and 4" if it is a raised rail car. Offset the axle 1" to the left side by adjusting the sway bar. This gives clearance to the left front torsion arm and combo steering arm. Measure 14" from the center of the right front torsion tube to the center of the axle on both sides. After roughing in the radius rods to this measurement, measure from the leading edge of the rear axle (still on 6" blocks) to the rear edge of the front axle on the rightside. After having gained this measurement we will set the lead. Check the left side the same way and adjust the rod length so that the left measurement is equal to or up to .25" set back depending upon driver preference and size of track. With the axle now square we can adjust the caster. Place an angle finder on the right front steering arm. Adjust the top right front radius rod so that the angle reads anywhere from 6 to 10°. Again this is driver preference, some drivers like more positive feel in the front end than others. With this complete you can drop the axle down to race height set-up blocks and adjust the stops. Don't forget to set the tow. An .125" of tow out is generally the norm.

(Information provided by Maxim Chassis)

Spring Rate Chart

30" BAR 23" EFFECTIVE LENGTH

| Arm Length | 12" | 12.5" | 13" | 13.5" | 14" | 14.5" | 15" | 15.5" | 16" | 16.5" | 17" |
|------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| .900 | 224 | 206 | 190 | 176 | 164 | 153 | 143 | 134 | 126 | 118 | 111 |
| .925 | 250 | 230 | 213 | 197 | 183 | 171 | 160 | 150 | 140 | 132 | 124 |
| .950 | 278 | 256 | 237 | 219 | 204 | 190 | 178 | 166 | 156 | 147 | 138 |
| .975 | 308 | 284 | 262 | 243 | 226 | 211 | 197 | 185 | 173 | 163 | 153 |
| 1.000 | 341 | 314 | 290 | 269 | 250 | 233 | 218 | 204 | 192 | 180 | 170 |
| 1.015 | 362 | 333 | 308 | 286 | 266 | 248 | 232 | 217 | 204 | 191 | 180 |
| 1.025 | 376 | 347 | 321 | 297 | 276 | 258 | 241 | 226 | 212 | 199 | 187 |
| 1.050 | 414 | 382 | 353 | 327 | 304 | 284 | 265 | 248 | 233 | 219 | 206 |
| 1.065 | 439 | 404 | 374 | 346 | 322 | 300 | 281 | 263 | 247 | 232 | 219 |



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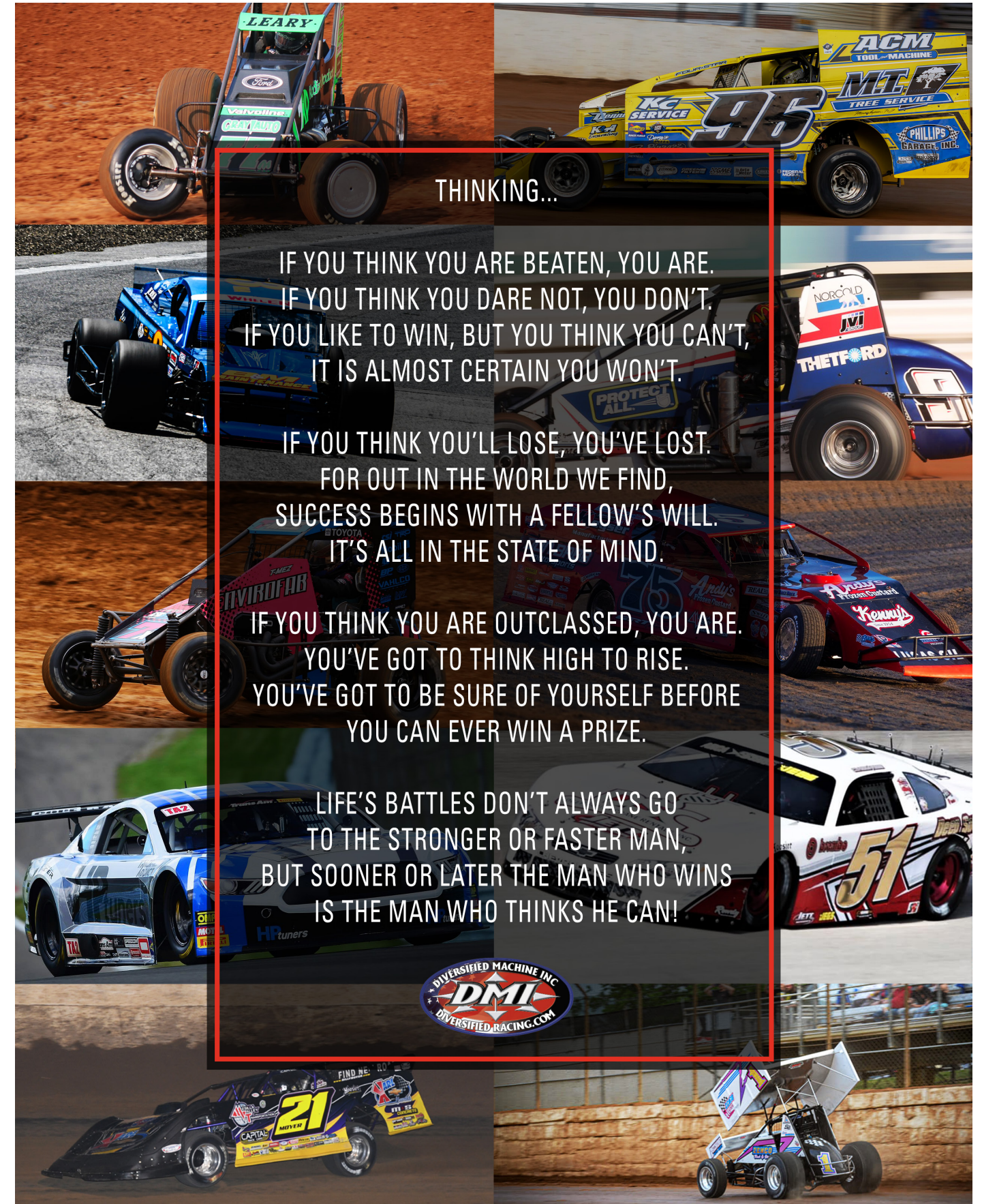
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THINKING...

IF YOU THINK YOU ARE BEATEN, YOU ARE.
 IF YOU THINK YOU DARE NOT, YOU DON'T.
 IF YOU LIKE TO WIN, BUT YOU THINK YOU CAN'T,
 IT IS ALMOST CERTAIN YOU WON'T.

IF YOU THINK YOU'LL LOSE, YOU'VE LOST.
 FOR OUT IN THE WORLD WE FIND,
 SUCCESS BEGINS WITH A FELLOW'S WILL.
 IT'S ALL IN THE STATE OF MIND.

IF YOU THINK YOU ARE OUTCLASSED, YOU ARE.
 YOU'VE GOT TO THINK HIGH TO RISE.
 YOU'VE GOT TO BE SURE OF YOURSELF BEFORE
 YOU CAN EVER WIN A PRIZE.

LIFE'S BATTLES DON'T ALWAYS GO
 TO THE STRONGER OR FASTER MAN,
 BUT SOONER OR LATER THE MAN WHO WINS
 IS THE MAN WHO THINKS HE CAN!

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Notes

Notes



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