Terms & Conditions

Terms C.O.D. or Credit Card. Axles and special built products require a deposit as do items requiring shipment by methods other than UPS. Credit Card usage will expedite order processing. We accept money orders, certified checks or official bank checks only for C.O.D. orders. UPS will no longer accept cash for COD shipments. If a C.O.D. delivery is refused we will not ship C.O.D. on future orders; prepayment will be required. We accept Visa, Master Card, American Express and Discover. All credit card orders must be shipped to the billing address of the card only.

Axle Ordering In the catalog there is a sample of the dimensions needed to place an axle order. Before phoning, read this carefully and familiarize yourself with the terminology and how measurements are to be taken. This will allow us to accurately complete your order, and lessen the chance of a costly mistake.

Shipments F.O.B. Louisville, Colorado (Denver-Boulder Metro Area). Unless otherwise specified UPS will be utilized.

Foreign Shipments Unless restricted by law, MW will ship to foreign customers. Full purchase price (in U.S. currency) must accompany order. No C.O.D. shipments. Name of desired freight carrier, and shipping method must be included with order. Unless specified UPS World Ship will be used.

Claims Claims for damages, open or concealed, or shortages must be made within five (5) days of receiving an order. Damage claims should be made with the freight company first and shortage claims with Mark Williams Enterprises. In the event of a damaged package, keep all packaging boxes and materials. All shipments are accurately weighed before shipping. If there is a part shortage check the shipment weight to see if it matches the shipping weight. This is the first step to determining if parts were lost in transit.

Returns Axles, driveshafts, housings and specially produced parts cannot be returned! Other merchandise requires permission and is subject to a 15% handling charge. Shipping charges on returned items must be prepaid.

Ordering All orders are processed on an in-house computer. Customer numbers are generated from your zip code plus 2 computer assigned numbers. If possible, please use catalog part numbers and your customer number. Toll free order lines are open weekdays from 8:00 AM to 5:00 PM mountain time. Parts can be ordered 24 hours per day on line at www.markwilliams.com.

Back Orders All back orders will be shipped as soon as the item is restocked. If a back order is no longer wanted please call 1-800-525-1963 or 303-665-6901 and cancel the item(s).

Prices Prices are subject to change without notice.

Warning Modification of your car's chassis or driveline to enhance performance with the parts identified in this catalog may create a dangerous condition which could cause serious bodily injury. The buyer hereby expressly assumes all risks associated with any such modifications.

Disclaimer of Warranty Seller disclaims any warranty express or implied with respect to the parts sold hereby whether as to merchantability, fitness for particular purpose, or any other matter.

Specifications Non-critical specifications are subject to change without notice.

Contents

Questions & Answers

1. Are all axles with similar spline counts interchangeable?

No! For example, an OEM 35-spline Dana axle and a special MW 35 spline axle are not interchangeable because the MW spline features a 45-degree pressure angle, which differs from stock Dana 30-degree configuration. Mark Williams does, however, offer Hi-Torque forged steel axles with OEM type splines. Please read additional spline text on page 3.

2. Why do MW Hi-Torque axles have a reduced diameter after the spline?

In order for a splined shaft to carry its maximum torsional load it is necessary to have a working shaft diameter smaller than the major spline diameter. The reduced section after the spline works in the same manner as a torsion bar allowing the rotational wind up to occur over a longer area. This prevents the axle from experiencing permanent set. Axles that are not undercut will twist at the end of the spline engagement and eventually fail at this point.

3. What type of axle retention is required?

Most race-sanctioning organizations require some type of positive retention. The OEM C-clip does not meet these requirements. Accordingly, MW offers a special C-clip eliminator kit to provide the necessary retention. However, it is advisable to change to weld-on housing ends if your plans call for narrowing the axle housing. MW can supply weld-on ends, with oversize bearings and retainers for most popular brake applications.

4. Why is the spline area on MW axles shorter than others?

Most manufacturers do not make custom axles for each order. Instead, they gang-run axles in certain lengths and make them with very long splines. When an order comes in, they simply cut off the excess spline. MW axles are manufactured to the correct length to insure 100% engagement in the spool spline. Excessive unused spline length reduces the torsional capability of an axle.

5. Should I get 35 or 40-spline axle-spool combination?

For many applications the 1.500" diameter 35-tooth special MW spline axles are more than adequate. For "bulletproof" reliability there's no question the 40-spline setup is preferred. We've found these big 1.708" diameter axles to also prolong housing life and wheel alignment because of their ability to handle increased torsion as well as bending (toe in) loads. If your rear end will accept a 40 spline spool we recommend using it.

6. Why are MW axles shorter than my "old" ones?

This question is often asked by customers who replace an OEM axle/differential or another brand axle/spool combination with a MW setup. The reason is that the spline location in most MW spools is positioned further outboard to allow a larger spline. As a result, the axles can be shorter and as an added bonus are slightly lighter.

7. Is a 3-1/4" bore 9" Ford case needed to run 35 spline axles?

Not with MW axles. Unlike our competitors, we manufacture a 35 spline spool that fits in the stock 9" Ford cases (2.893" or 3.062" bore). MW spools have been designed to position the splines at the outboard end of the spool on both sides. This is an exclusive MW feature that has been used for over 20 years. This same feature applies to 10 and 12-bolt G.M. spools which are also limited to stock carrier bearing sizes.

8. Why do I see axles advertised as "Alloy Axles" so cheap?

These axles are actually produced by an OEM axle forging company whose main business is making axles for the truck and construction industry. The material used is a carbon steel, common to OEM axles. It is not usually regarded as an alloy steel as advertised. The manufacturer produces the axle blank and the advertiser cuts the axle to length and splines it. These axles are made from the same material as stock axles and receive the same heat treatment. The only difference is that they are available in shorter lengths and with different splines.

9. Which Housing End Should I use?

We recommend choosing the ends to match the brakes you want to use. If you are going to use disc brakes we recommend the symmetrical housing ends. This will allow the best designed Disc Brake kit and eliminates confusion about wheel stand outs. We do not recommend using the small Ford housing ends. The wheel bearing is too small and delicate.

Warranty & Services

Axle Confirmation

MarkWilliams Exclusive!

MW has created a special form to verify all custom axle orders. Within two days of placing your order you will receive via UPS overnight letter, e-mail or fax a confirmation form that shows exactly what is being manufactured. If there are any questions or discrepancies, please contact the MW sales department immediately.

PRIORITY-Service

For those racers who need axles in a big hurry, Mark Williams Enterprises offers priority service for a nominal extra charge. Axles purchased under these terms are guaranteed to ship within 5 WORKING DAYS for an additional charge of $100.00

Mark Williams Enterprises, Inc. warrants against breakage of our special 35 or 40-spline spool combination axles for a period of five years. ***UNDER NO CIRCUMSTANCES WILL MARK WILLIAMS ENTERPRISES, INC. BE HELD RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN CONNECTION WITH, THE INSTALLATION OR USE OF ANY M-W PRODUCT.*** This warranty shall not apply to any product which has been improperly installed, or repaired in any manner which affects the strength of the axle or any axle that has been involved in an upset or collision, including welding lock rings on axles, Warranty applies for drag racing applications only. Any other application not covered.

Mark Williams Enterprises®

Leading the Industry

Quality - Whether you are in the market for axles, brakes, a driveshaft or chassis components you can rest assured that every part from Mark Williams Enterprises has been designed and manufactured to the highest standards. This includes researching the proper material and manufacturing processes (see below). MW quality is assured by performing designing, testing and manufacturing in-house, including heat treating and our high speed driveshaft balancing.

Customer Service - Mark Williams Enterprises provides unmatched customer service. From the time you place your order, through manufacturing, to shipping, everyone at Mark Williams Enterprises is committed to completing orders on time and to making sure that everything is right the first time. There are a couple of areas that help make this happen. First, MW sends a confirmation sheet, by fax or UPS overnight letter, on all custom axle orders to verify dimensions. Second, MW components all have part numbers on them for trace ability and easy identification (custom axles have a serial number).

Technical Assistance - Mark Williams' sales staff are some of the most knowledgeable in the industry and can help with just about any question you might have. Unlike some companies we provide ordering and tech assistance on our toll free lines (800-525-1963). You can also visit our full service website www.markwilliams.com any time to place an order or e-mail tech questions to sales@markwilliams.com.

Commitment - Mark Williams Enterprises is very committed to the racers through our comprehensive contingency programs. Mark Williams is a triple NHRA major sponsor. Mark Williams was the first to post for rear axles, 1980, and is currently the only manufacturer posting for driveshafts and disc brakes at all NHRA national and divisional events as well as the NHRA E.T. bracket racing series. Mark Williams is also a triple major sponsor with the IHRA for axles, brakes and driveshafts.

MAJOR NHRA SPONSOR

NHRA LUCAS OIL Drag Racing Series

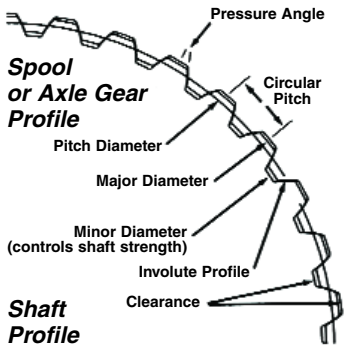
IHRA MOTORSPORTS

2005 NHRA E.T. Bracket Series

Details Make the Difference

Axle Manufacturing The ability to produce a quality racing axle requires more than meets the eye. We have learned from our 40+ years that the improvement process never stops. We are constantly making improvements to assure that every axle produced incorporates the latest technology. Axles are our primary product and as such we have a considerable investment in dedicated CNC and other equipment for the production of race axles. In addition, Mark Williams Enterprises is the only company in the racing axle business that has both induction and thru hardening in-house heat treating capability. This allows us total control over the most important operation in the manufacturing process. One example of the details that make MW "Hi-Torque" axles superior is the CNC grinding of the axle flange face and bearing seat/shoulder with a freshly-dressed true radius grinding wheel. The radius at the bearing shoulder is the most critical part of an axle because it's the focal point of the bending moment (where the most force is concentrated). To insure the accuracy of this radius the grinding wheel is dressed prior to grinding each axle with CNC precision. By dressing the wheel for each axle it also eliminates the chance of imbedded contaminants causing friction-induced surface cracks. MW's extra efforts in manufacturing pay huge dividends in reliability.

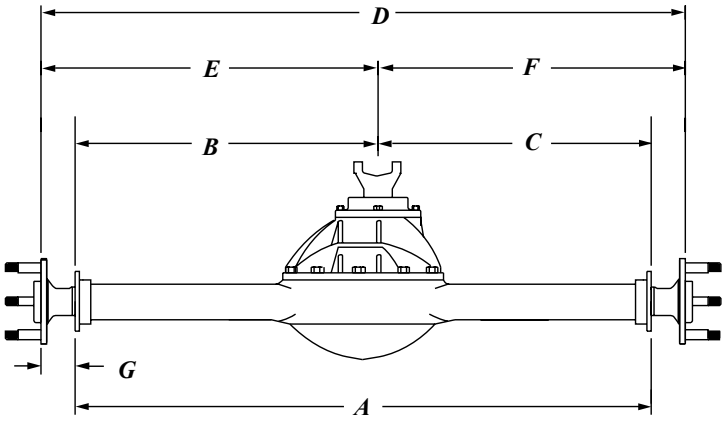
Axles Splines A key factor to consider when purchasing axles is the axle spline. Naturally, if the axles you are purchasing are to be mated to existing components you will need a similar replacement spline. Accordingly, MW manufactures axles with all popular spline configurations, including Dana 60, 12-bolt Chevy, 9" Ford, etc., plus splines compatible with after-market products from other manufacturers. If you have a choice of splines, as in the case of a new axle/spool combination, it is highly recommended that you utilize MW's special 35 or 40 spline. This is especially important since locked (spool-equipped) rear ends are subject to as much as twice the torsion load of standard open-type differentials. For most applications the MW 35 spline with a 1.500" diameter and 45 degree pressure angle is adequate. In comparative shear strength, the MW 35 spline is 61% stronger than the Chevrolet 12-bolt with 30 spline, 45% stronger than a 9" Ford with 31 spline, and even 3% stronger than the Dana 35 spline which has a 30 degree pressure angle. These calculations are based on the physical dimensions of the spline itself, and do not take into consideration the extra strength benefits of MW's Nickel Chromium Molybdenum alloy forging and austempering heat treating process. For those applications requiring maximum strength axles MW offers a big 1.708" diameter 45 degree pressure angle 40-tooth spline that is 51% stronger than the 35-tooth MW spline. Get the MW Hi-Torque axle with the spline that's best suited to your needs.

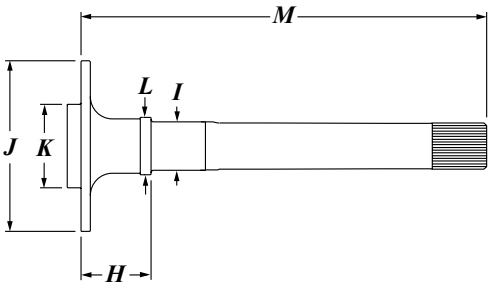


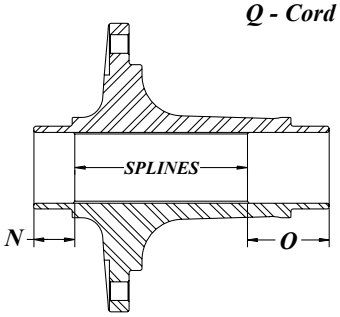
Part Numbers Every Mark Williams produced part carries a visible part number. Our part numbering system uses a revision letter at the end of the part number that indicates the design change. Example: A spool with part number 53133-H indicates there have been 8 changes to this part (A thru H) since it was first introduced. Anytime a part is re-designed to the point it is would no longer be interchangeable with earlier versions, it is assigned a new part number. Parts that are produced from castings may have two revision letters. Our 9" thirdmember housing 57448 is on the U casting revision and the T machining revision, (at the time of this publication printing). This system allows trace-ability of our parts and can assist identifying the age of parts in the field. All axles and driveshafts are serialized allowing us to access the build information. Other parts have recorded production batch numbers that allow tractability. All raw materials used to produce MW products are certified from the mills and are traceable to the individual products.

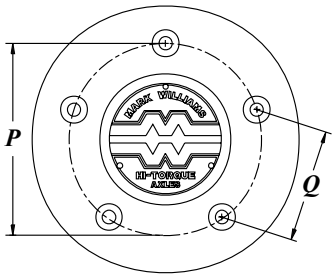
How To Order Axles

Every set of Mark Williams axles are custom built to meet each customer's requirements. This requires accurate information to insure that the axles are a perfect fit. You will need to provide as many of the dimensions shown as possible for your application. A simplified version of this order form can be downloaded from www.markwilliams.com, click on technical help, click on SB0077.









A - Housing flange to flange
B - Driver side housing flange to pinion center
C - Passenger side housing flange to pinion center
D - Axle flange to axle flange width
E - Axle flange (driver's side) to pinion center
F - Axle flange (passenger side) to pinion center
G - Axle flange to housing flange (brake stand-out)
H -Flange to bearing seat
I - Bearing journal diameter
J - Flange diameter
K - Brake drum register
L - Seal diameter (optional)
M - Overall axle length (right & left)
N - Driver side spline relief
O - Passenger side spline relief
P - Bolt Circle
Q - Cord measurement between two studs

Starting from Scratch The following steps have proven to be the most accurate method for determining the width of the rear end assembly when building a new car.

1) *Obtain a set of the widest tires and wheels (with appropriate offset) to be used.*

2) *Remove the stock rear end housing and make modifications to inner fender wells as required.*

3) *Position the tires/wheels under the car, and through the use of jack stands, etc. place the car in the desired running attitude.*

4) *With wheels in position, measure from wheel mounting surface to the opposite wheel mounting surface. This will give you the proper axle flange to axle flange dimension (D). Allow for brake hats or drums.*

5) *Also supply the (E & F) distance or indicate if the pinion is centered or the amount of pinion offset required and the direction. Offset toward the passenger side is normal and toward the driver side is abnormal.*

Measuring an Existing Housing Measure the distance to the outside of both housing flanges (A). Not all pinions are centered, so it is also essential to measure the distance from the housing flange to the center of the pinion on both driver and passenger side (B & C).

Measuring Existing Axles Provide as many measurements as possible. Use of a MW 35 or 40 spline spool will change axle lengths in relation to axles with stock splines. A Mark Williams salesman can help with questions about changes in axle lengths.

Spools All spools are not manufactured the same. If the spool to be used is a MW spool, the part number on the spool will give us the required information. If the spool is from another manufacturer, please check the spline count and location of the spline as measured in the illustration above (N & O values).

Bolt Circle If you do not know the bolt circle (P value) of a 5-bolt application, measure the center-to-center distance (Q) between two adjacent wheel studs and reference the table below.

4-1/2" B.C. = 2.645" normal later Ford pattern
4-3/4" B.C. = 2.792" normal Chevrolet pattern
5" B.C. = 2.939" normal older Olds-Pontiac
5-1/2" B.C. = 3.233" normal early Ford and T/F wheel pattern

Hi-Torque Axles

MW Standard "HI -TORQUE" Axles: MW standard forged steel axles have set the quality standard in the industry for racing axles. The standard axles will normally be used in applications where weight is not a large factor for your car. The standard axle is the heavy duty version in the MW "Hi-Torque" axle line. Each MW axle order is custom manufactured per application with all axles designed to accept an axle bearing with the largest diameter possible for the particular housing end being used, then each axle shaft is tapered from bearing journal to spline. This combination of the large bearing diameter and tapered shaft increases torsion and bending capacity. All Mark Williams "Hi-Torque" axles are available in any spline and bearing combination with the bolt pattern or patterns of your choice and either 1/2" or 5/8" tapped stud holes. Dual patterns available without an extra charge. Flange lightening option available on standard axles for an additional charge. (weight 32 lbs*)

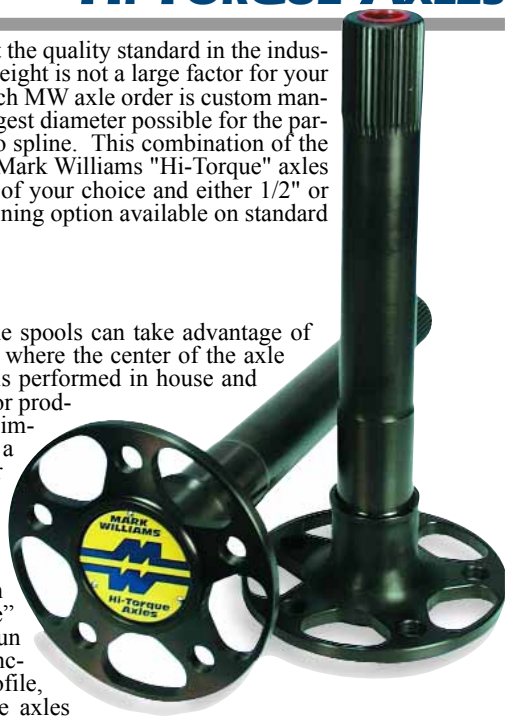
50100 . . . . . .530.00 pair

Superlight 35 Spline "HI-TORQUE" Axles: Rears that are limited to 35 spline spools can take advantage of MW 35 spline gun drilled axles. These axles are pocket lightened and "gun drilled" where the center of the axle shaft is bored (11/16" dia.) the entire length to resemble a gun barrel. This process is performed in house and allows us to control the bore finish assuring a quality product. This results in a superior product, fully capable of handling the shock loads of the heavier Super Stock cars that are limited to 35 splines! These operations result in a weight savings of roughly 19% over a pair of standard 35 spline MW "Hi-Torque" axles. (weight saving is 6.88 lbs on a pair of 35 spline 24" long axles)

50550 . . . . . .660.00 pair

Superlight 40 Spline "HI-TORQUE" Axles: The next step in the high strength light weight axles would be the Mark Williams SUPER-LIGHT 40 spline "Hi-Torque" axles. In an effort to reduce rotating and un-sprung weight, these axles have been gun drilled to a 7/8" bore along with extensive milling of the axle flanges. This in conjunction with the additional machining behind the MW name plate and revised axle profile, result in a weight savings of approximately 35% over the standard MW axles. 40 spline axles are recommended for all race cars that can utilize a 40 spline spool . (19.9 lbs*)

50500 . . . . . .660.00 pair



**Axle weights are per pair for 40 spline axles less bearings and studs to fit a 31" wide housing.*

Ultimate "HI-TORQUE" Axles: It doesn't get any better than this. The MW ULTIMATE "Hi-Torque" axles represent the latest in axle and material technology. The axle profile and flange lightening are carried over from the SUPER-LIGHT axles. The use of aircraft 300M alloy forgings make it possible to enlarge the diameter of the gun drill bore to 1 1/16" diameter without sacrificing strength. This represents a savings of 2.6 pounds per pair! You won't find lighter axles. Anywhere!!! (weight 17.3 lbs*)

50800 . . . . . .970.00 pair

Drag Race Axle Bearings

56003 57803 58503 58504 58505 58507 58508 58509 58519 CB 58509

MW drag race axle bearings are special size ball and roller bearings. Many feature an "O" ring seal around the outside of the bearing. These are designed to utilize our wide selection of mating housing ends that will allow largest inside diameter, increasing the axle strength. Our technical representative can recommend the best bearing/housing end combination based on your brake requirements.

56003 Mopar Non-Adjustable Axle Bearings (pr) . . .89.00
2.875" O.D., 1.562" I.D. for stock ends w/spiral lock.

57803 Small Ford Axle Bearings(pr) 86.00
2.835"stock O.D. with larger than stock 1.562" I.D. stock Mustang end

58503 Axle Bearings, 1-17/32" (pr) 85.00
Sealed bearings 3.150" O.D.,1.532" I.D. stock Ford/Olds size.

58504 Axle Bearings, 1-5/8" (pr) 85.00
Sealed bearings 3.150" O.D.,1.625" I.D. used for C-Clip eliminator.

58505 Axle Bearings, 45 mm (pr) 85.00
Sealed bearings 3.150" O.D., 1.774" I.D. used for 40 spline axles

58507 Axle Bearings, 1-9/16"(pr) 89.00
Sealed bearings 3.150" O.D., 1.564" I.D. MasterLine *axle size*

58508 Axle Bearings, 3.347 X 45 mm, wide (pr) . .222.00
Double row sealed ball bearings 3.347" O.D., 45 mm I.D. For 58595/58598 Heavy Duty Symmetrical ends (o-ring is in housing end).

58509 Axle Bearings, 3.347 45mm I.D. narrow (pr)175.70
Narrow bearing for 58595 Symmetrical Pro-Stock ends

58519 Axle Bearings.3.347 x 45mm, wide (pr) 227.00
Wide single row bearings for deep 58595/58598 Heavy-Duty ends...

CB-58509 Axle Bearings,3.347 x 45mm (pr) 672.00
Ceramic bearings, narrow, for 58595 Symmetrical Pro-Stock ends

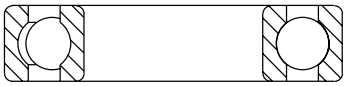
Evolution-4™ Axle System

The tremendous torque loads generated by a Pro Stocker during acceleration can actually distort a fabricated steel rear end housing, bend the axle and generate side-loads on the axle bearings. Not only does this hamper performance, but it can lead to axle "walk-out" and potential breakage. Now Mark Williams Enterprises introduces the Evolution-4™ axle, which employs a rugged self-aligning bearing to compensate for any housing distortion. This solution retains the integrity of a one piece forged axle, superior to competitors two-piece designs, without paying a 12 lb. weight penalty! A convenient package is available from M-W to convert your rear end to an Evolution-4™ setup. It includes heat-treated Chromium-Molybdenum steel housing ends to accommodate the bearings, heavy-duty self-aligning bearings, special retainer/caliper mounts with low drag seals, and a pair of axles. You can get an Evolution-4™ package with either M-W Superlight Hi-Torque axles or "Ultimate" 300M axles that are 2.6 lbs. lighter than the Superlight axles. Newer axles (serial #27482-on) can be converted to this setup. Call toll-free for details on adapting Evolution-4™ technology to your race car!

Standard Bearings

These standard sealed ball bearings have been the norm for many years when using Large Ford, Olds/Pontiac or Symmetrical housing ends. As axles increased in size (up to 40 spline) the bearing bores were changed to accept the larger shafts. The outside diameter has remained 3.150" while the inside diameter has increased to 1.772" (45mm). The result is a less than desirable cross section thickness due to the increased bore.

Oversize Bearings

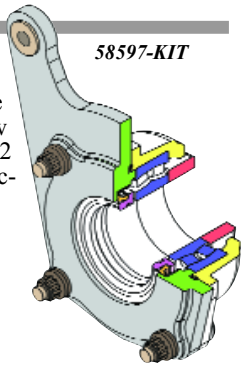


To handle higher loads being put on axle bearings, oversized sealed ball bearings are now in use. While the I. D.. remains 1.772" (45mm) the O. D. is now 3.349". The increase in diameter allows for larger balls and thicker bearing races. These new bearings are available in a single row or double row configurations, as well as with an optional extra cost upgrade to ceramic balls.

Self-Aligning Bearings

A key component of the new M-W Evolution-4™ axle technology is the double row of spherical bearings in angled concave races. The load capacity of these bearings is several times greater than conventional bearings. They can accommodate axle movement associated with housing flex without frictional resistance from binding bearings —which in turn eliminates bearing "walk off."

Evolution-4™ Housing End Kits



The Evolution-4™ housing end kit contains all the parts required to convert the MW Symmetrical, Lamb Standard or Olds type axles to the spherical-aligning bearings. The housing ends are 1-1/2" long and will accept butt-welding to a 3" or 3-1/4" diameter tube. The kit includes the standard backing plate bolt kit and special hardened axle lock rings. The housing end depth and bolt pattern is the same as our 58595 or 58598 ends that use the double row bearing. Housings using this end are able to utilize the kit without changing ends. Axles with serial number 27482 or later can be used as these have the necessary seal surface ground behind the bearing and increased straight section length for the wider bearing and lock ring.

58597-Kit Evolution-4™ Housing End Kit 699.20
For MW 11-3/4" Disc Brakes

58597-Kit B Evolution-4™ Housing End Kit 699.20
For Lamb 11-7/16" Disc Brakes

Evolution-4™ Axle Kits

Kits include a new pair of Hi-Torque ™ axles with your Evolution-4™ end kit. The Superlight option is good for 26% weight savings over regular Hi-Torque axles. The Ultimate option saves an additional 13% over the Superlights, and are made from 300M material.

50500-EV4 Evolution-4™ Kit w/ Axles 1359.00
Includes Superlight Hi-Torque Axles.For MW 11-3/4" Disc Brakes

50500-EV4 B Evolution-4™ Kit w/ Axles 1359.00
Includes Superlight Hi-Torque Axles.For Lamb 11-7/16" Disc Brakes

50800-EV4 Evolution-4™ Kit w/ Axles 1669.00
Includes Ultimate Hi-Torque Axles.For MW 11-3/4" Disc Brakes

50800-EV4 B Evolution-4™ Kit w/ Axles 1669.00
Includes Ultimate Hi-Torque Axles.For Lamb 11-7/16" Disc Brakes

Oval Track Axles

MW "Hi-Torque" forged steel axles are substantially stronger than stock. But the real key to reliability is in the axle bearing. The heavy-duty Timken® unit bearings used by MW offer many times the load strength of factory OEM bearings. MW flange-type oval track axles are equipped with a special threaded retainer that holds the axle bearing firmly in position. Installing MW oval track axles requires one of two basic systems: 1) a Bolt-on adapter kit, available for 10 and 12 bolt GM rear ends with small brakes and 9" Ford housings with large Ford ends or 2) a Weld-on kit, available for most popular OEM drum brake configurations.

Hi-Torque Oval Track Flange Axles

50300 Hi-Torque Oval Track Axles, (pr) 530.00
Flanged axles with any spline and housing end combination

50300-1 Hi-Torque Oval Track Axles, (1 ea) 290.00
Single flange axle with any spline, housing end combination

MasterLine Oval Track Axles

ML-300-series MasterLine axles are designed for oval track applications. They are Deep Cycle Induction Harden and precision CNC-machined. True involute and hobbed splines insure complete 100% compatibility with factory differentials, posi-traction units and after market spools. Each axle is custom made for the specific application. Oval track axles are made from high manganese steel and induction hardened with extra thick flanges for increased durability.

ML-300 Oval Track Axles (pr) 322.00
Custom produced for 9" Ford and GM rears. Ford axles need to use the large 3.150" o.d. housing end or MW weld on ends. GM axles require C-Clip eliminator kit, purchased separately. Single axles available $185.00

ML-300

Oval Track/Road Race Floater Axles

50200 Floater Axle With Drive Plate

MW can produce double splined floater axle shafts for any spline combination up to 36" in length. Some of the options available on oval track/road race floater axles include crowned outer spline (for cambered rear wheels), gun drilling and extra strength material such as 300M. We routinely produce all types of double splined axles and shafts for racing and industrial applications. Flange bolt pattern on 50200 with flange is standard truck floater/wide 5 hub type with 8ea 7/16" diameter holes on 3-17/32" bolt circle. MW's special austempering process makes this axle much more durable than competitors oil quenched product.

50200 Floater Axles with Drive Plates, (pr) 560.00
Austempered 4340 double splined floater axles with 24 spline drive plates. 36" max overall length. Any carrier spline.

50201 Floater Axles, (less Drive Plates) (pr) 384.00
Pair of double splined floater axles only. No drive plates. 36"max overall length. Any carrier spline. Single axles available.

Wheel Studs For Oval Track Axles

MW offers 1/2-20 or 5/8" screw-in wheel studs in several lengths. The latest MW 2" and 3" studs feature a special thin 12 point head to help with brake component clearance and a small quick start end. The screw-in wheel studs are made of 8740 aircraft quality material with 5/8-18 threads and they have a quick start end (except 51250).

51200 1/2-20 x 3" Wheel Studs, 12 point head (set of 10) 40.00
51250 1/2-20 x 2" Wheel Studs, Socket head (set of 10) 24.00
51255 1/2-20 x 2" Wheel Studs, 12 point head (set of 10) 36.00
51260 5/8-18 x G/N Studs, 2-5/8" long (2" of thread) (set of 10) 80.00
51270 5/8-11 Grand National Axle Studs, (10) 80.00
Coarse thread Threaded to head (3-3/8" overall length.) Axles must be special order with 5/8-11 stud

Oval track Hi-Torque Weld On Housing Ends

MW weld-on housing end kits offer several advantages to bolt-on kits. Bent axle housings can easily be corrected by installing a pair of new MW weld on housing ends. Another benefit to using weld on ends is adapting brakes of a different make, such as Ford brakes on a GM rear. Our housing ends that match your brake assembly allow the use of larger 45mm wheel bearings that increase axle strength. This is a definite advantage to the overall rear axle strength. An alignment fixture in required to correctly install new housing ends. This tool P/N 300F and others are available from MW.

57700 Weld-on Housing End Kit, Small Ford 254.00
For small Ford brakes (Mustang), includes housing ends, Timken® bearings, retainers, seals, threaded lock rings and backing plate bolts.

57750 Weld-on Housing End Kit, Large Ford 254.00
For large Ford brakes, includes housing ends, Timken® bearings, retainers, seals, threaded lock rings and backing plate bolts.

58700 Weld-on Housing End Kit, Small GM 249.00
For GM small car brakes (Camaro, Chevelle, Nova), housing ends, Timken® bearings, retainers, seals, threaded lock rings and backing plate bolts.

58740 Weld-on Housing End Kit, Large GM 270.00
For 10 & 12-Bolt Chevrolet brakes (Impala, Biscayne & 1/2-ton truck), includes housing ends, Timken® bearings, retainers, seals, threaded lock rings and backing plate bolts.

57750 Weld-On Housing End Kit

Oval Track Axle Bearings & Parts

A special spanner nut wrench is available to secure the threaded retaining ring. This tool allows installation and removal without damaging the lock nut .

Spanner Wrench p/n 630

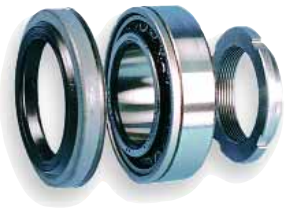
630 Lock Ring Wrench 125.00

58506 Axle Bearing Assembly 131.00
For MW oval track axles with weld-on ends and Ford bolt-in oval track axles. Includes outboard seal and threaded lock ring.

58506GM GM Axle Bearing Assembly 145.00
For MW GM Bolt-in Oval Track Axles. Includes special retainer seal, "O" rings and modified threaded lock ring.

58518 Outboard Seal (ea) 13.10
For MW oval track axles with weld-on ends and Ford bolt-in oval track axles.

MW Oval track bearing assembly is unique in that it takes thrust from either direction and uses a threaded lock ring for positive bearing retention. This tapered roller bearing exceeds the radial and axial load capacity of common ball and roller bearings. Assemblies include Timken® unit bearings, outboard seals and threaded bearing lock rings. For use on Hi-Torque axles manufactured for 45mm bearings.



58506 Bearing Assy.

N09M Modified Lock Ring (ea) 14.00

N09 Threaded Lock Ring (ea) 7.10

21069 Retainer Seal (ea) 9.25
For MW GM Bolt-in Oval Track Axles.

Bolt-On Bearing Adapter Kits

58800

MW bolt-on retainer kits allow the use of MW axles in stock G.M. or Ford rear end housings without any welding. All kits feature heavy-duty Timken® unit bearings that have a large 45mm I.D. (1.772") and are designed to handle thrust in both directions. Includes seals, o-rings and fastening hardware. Housing modification required for GM housings, backing plate modifications for the Ford rear.

57760 Bearing Adapter Kit, Large Ford 235.00
Use MW Oval Track Axles without changing stock housing ends. Must have large Ford ends with 3.150" bearing bore, 1/2" backing plate bolts. Includes bearings & seals

57770 Bearing Adapter Kit, New Style Ford 259.00
Use MW Oval Track Axles without changing stock housing ends. Must have New Style large Ford ends with 3.150" bearing bore, 3/8" backing plate bolts. 3-9/16" x 2" pattern. Includes bearings & seals

57760/57770

58800 Bearing Adapter Kit, Small GM 275.00
Allows the use of 50300 MW Oval Track Axles without changing the stock housing end. Must have GM small car brake (Camaro, Chevelle, Nova) Includes bearings & seals

Pro Street Components

For those performance enthusiasts building sophisticated "Pro Street" type vehicles with narrowed rear ends, MW offers premium quality driveline components engineered specifically for daily street use, not "after market OEM" type axles. These are designed for those who want the BEST custom-made axles money can buy. MW "Pro Street" axles overcome the problem commonly encountered when using OEM or drag-type units: flange breakage. In fact, Mark Williams warrants each axle flange against breakage for two years when used in conjunction with a MW Pro Street housing end kit with Timken® 45mm bearings. Increasing axle shaft diameter and flange strength are critical factors when deciding on axles for high powered street machines (which often weigh more and operate on more harsh surface conditions than their race-only cousins). Add serious muscle to any heavy street machine and you can bet the OEM driveline can't provide the necessary reliability. Why settle for anything less than premium quality MW components?

Pro Street Axles

MW Hi-Torque Pro Street axles are custom built per order and are manufactured from the same Tri-Alloy forgings as our drag race axles, featuring 45mm bearings and thicker flanges for street use.

50400 Pro Street Axles, (pr) 530.00
For use with any MW weld-on or bolt-on end kits on this page that incorporate the heavy-duty Timken® unit bearings

Pro Street Axle Bearings

58506S

MW's Pro Street axle bearing features a large 45mm (1.774") I.D. and is unique in that it can take thrust in either direction. This tapered roller bearing exceeds the radial capacity of common O.E.M. ball and roller bearings. Axle bearing assembly includes bearings, heavy duty seals and press on bearing lock rings. Requires matching MW housing ends.

58506S Unit Axle Bearing Assembly (pr) 129.00
For MW Pro Street Axles, Timken® unit bearings with seals and press on lock rings.

Weld-on Housing End Kits

The preferable method to obtain a reliable axle and bearing combination for Pro Street applications is the installation of our weld-on housing ends. MW has designed ends that accept the 45 mm bore Timken® bearing and a heavy-duty seal. A slightly bent housing can be corrected when installing new Pro Street weld-on ends. A variety of kits are available that accommodate the most popular brakes. If you are going to use disc brakes we recommend using the 58780 Symmetrical end kit that accepts the best designed brake kits and can incorporate a parking brake

58780 Housing End Kit, Disc Brakes 206.00
For use with MW Disc Brake Kits with symmetrical bolt pattern. Includes Timken® wheel bearings, seals and backing plate bolts.

66700 Housing End Kit, Mopar Brakes 288.00
For Mopar brakes. Includes Timken® bearings, retainers, seals and backing plate bolts.

67700 Housing End Kit, Small Ford 259.00
For small Ford (Mustang) brakes. Includes Timken® bearings, retainers, seals and backing plate bolts.

67750 Housing End Kit, Large Ford 259.00
For large Ford brakes (w/1/2" bolts). Includes Timken® bearings, retainers, seals and backing plate bolts.

68700 Housing End Kit, Small GM 255.00
For GM small brakes (Camaro, Chevelle, Nova). Includes Timken® bearings, retainers, seals and backing plate bolts.

68740 Housing End Kit, Large GM 276.00
For Large GM brakes (Impala, Biscayne & 1/2-ton truck). Includes Timken® bearings, retainers, seals and backing plate bolts.

68700 Weld-On Housing Kit for GM 10 & 12 Bolt Ends

Pro Street Brakes

72300 Pro Street Disc Brake Kit w/Park Brake 866.00
For Pro-Street Symmetrical type housing ends (MW #58580 or 58780 kit). ***This is the only kit with mechanical parking brake calipers.***

Models without Parking Brake

72000 Olds Disc Brake Kit (ends rotated) 712.00
For MW 58550 housing ends rotated 90 degrees from stock.

72100 Olds Disc Brake Kit (ends stock) 712.00
For MW 58550 housing ends in stock position.

72200 Symmetrical Disc Brake Kit 712.00
For MW 58585 Symmetrical ends.

72500 Large Ford Disc Brake Kit 735.00
For MW 57820 housing ends.

72600 Mopar Disc Brake Kit 735.00
For MW 53188 housing ends. Requires bracket modification.

72700 GM Disc Brake Kit 712.00
For stock GM or MW 58560 passenger car housing end.

72800 Small Ford Disc Brake Kit 735.00
For MW 57810 housing ends. Requires bracket modification.

72900 GM w/C Clip Kit Disc Brake Kit 712.00
For stock GM passenger car housing end with MW C-Clip Eliminator kit. Requires modification to bearing housing.

Mark Williams Enterprises has the ideal brake kit for the Pro Street and street rod enthusiasts that requires a parking brake. For use with MW's symmetrical housing ends. This brake kit has a provision for a floating mechanical wedge action parking brake caliper built into the caliper mounting bracket. As is the case with all other MW brake kits, the caliper mount also acts as the bearing retainer. The kit includes: MW's race proven 4 piston aluminum calipers with pads, vented cast iron rotors, aluminum brake hats, floating parking brake calipers with pads, caliper mounting brackets, and all of the necessary mounting hardware. This is a safe and reliable kit for Pro Street and street rod applications requiring a parking brake. (Note: bracket to anchor the parking brake cable must be fabricated.)


72300

Bolt on Retainer Kits

MW bolt-on retainer kits allow you to easily use MW "Pro-Street" axles in G.M. and Ford rear end housings without replacing housing ends. All bolt-on kits utilize a heavy duty Timken® unit bearing that can take thrust from either direction and exceeds radial and axial load capacity of common ball and roller bearings. Bolt-on ends are recommended if housing can not be narrowed. Weld-on kits should be used rather than this kit, when narrowing a housing.


67760

67760 Bolt-On Adapter Kit, Large Ford 233.00
Allows the use of 50400 MW Pro Street Axles without changing the stock housing end. Must have large Ford ends with 3.150" O.D. bearings, 1/2" backing plate bolts. Includes bearings & seals.

67770 Bolt-On Adapter Kit, New Style Ford 233.50
Allows the use of 50400 MW Pro Street Axles without changing the stock housing end. Must have New style large Ford ends with 3.150" O.D. bearings, 3/8" backing plate bolts. 3 9/16" x 2" pattern. Includes bearings & seals.

68800 Wheel Bearing Adapter Kit, Small GM 270.00
Allows the use of 50400 MW Pro Street Axles without changing the stock housing end. Must have GM small car brake (Camaro,Chevelle, Nova). Includes bearings & seals should be used when narrowing housing.

Pro Street Lockers

MW offers a special 9" Ford Detroit Locker type differential that accepts larger than stock spline 1.5" diameter 35-spline axles. This setup provides optimum traction and the durability required of high power applications. (Note: The spline location and pressure angle are not the same as a MW 35 spline spool). Axles must be manufactured specifically for this Locker. The spline has a 30 degree pressure angle. Same as Dana 60 spline, but different axle lengths are required.

187S-35S 35 spline, Steel Housing 827.50
Case is machined from billet stock for 3.250 bore case

187S-35C 35 spline, Nodular Housing 606.00
Case is hi strength ductile iron for 3.250" bore case. 100% smooth machine finish.


187S-35S *187S-35C*

Wheel Stud Kits

MW drive studs are recommended in all drag racing applications using after-market wheels. With a drive stud the 11/16" dia. shoulder needed to center the wheel is incorporated in the stud rather than the lug nut as with smaller studs. This system dramatically increases shear strength and eliminates bent wheel studs. MW drive studs require a 5/8"-18 thread holes in the axle flange. Studs are then secured in the flange with a jam nut. Wheels are held in place with an open end flanged lug nut and an aluminum washer that prevents marring the wheel. A standard MW drive stud kit comes complete with 10 steel drive studs, 10 self locking jam nuts, 10 aluminum washers, (specify thickness) and 10 steel Snap-Lock™ flanged lug nuts. Titanium drive studs are also available and listed below. The following page has lug nut options available at an additional cost. For applications using OEM steel wheels MW also offers high strength 1/2-20 screw-in type wheel studs.

Steel Drive Stud Kits

51500 Drive Studs 11/16" dia. (complete set) 110.00
A=3-1/2" B=1-3/16" C=1-1/2" D=13/16"

51540 Drive Studs 11/16" dia. (complete set) 110.00
A=2-11/16" B=1" C=7/8" D=13/16"

51560 Drive Studs 11/16" dia. (complete set) 110.00
A=4" B=1-3/16" C=2" D=13/16"

51580 Drive Studs 11/16" dia. (complete set) 110.00
A=2-7/8" B=7/8" C=1-3/16" D=13/16"

51590 Drive Studs 11/16" dia. (complete set) 110.00
A=3-7/16" B=7/8" C=1-3/4" D=13/16"

Drive Stud Sets with MW Aluminum Lug Nuts 195.00
Add "A" to Part Number (specify c-bore depth1/8 or 3/8").

Titanium Drive Stud Kits

Reduce rotating weight with the addition of a titanium stud kit. All studs are carefully manufactured to insure concentricity with the stud threads. All kits include titanium studs, self locking jam nuts, and choice of MW hard anodized aluminum lug nuts *(51520 or 51521)*.

41540 Titanium Drive Studs 11/16" dia 290.00
A=2-11/16" B=1.00" C=7/8". Save 1.2 lb (Specify nut)

41560 Titanium Drive Studs 11/16" Dia 330.00
A=4" B=1 3/16" C=2" Save 1.2 lb (Specify nut)

41580 Titanium Drive Studs 11/16" Dia 290.00
A=2-7/8" B=7/8" C=1-3/16" Save 1.2 lb (Specify nut)

Screw-In Wheel Studs

MW offers 1/2-20 screw-in wheel studs in two standard lengths. The latest MW 2" and 3" studs feature a special thin 12 point head to help with brake component clearance and a small quick start end. 2" studs are also available with a socket head cap screw (Allen) bolts. The G.N. wheel studs are made of 8740 aircraft quality material with 5/8-18 threads and they also have a quick start end. All stud kits include aircraft washers to prevent the threads from wedging on the imperfect threads by the head.

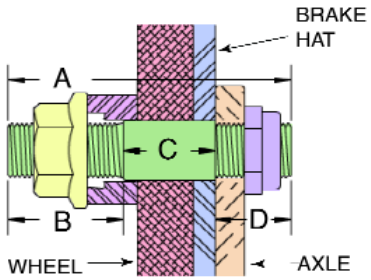
51200 1/2-20 x 3" Wheel Studs, 12 point head (10) 40.00

51250 1/2-20 x 2" Wheel Studs, Allen head (10) 24.00

51255 1/2-20 x 2" Wheel Studs, 12 point head (10) 36.00

51260 5/8-18 Grand National Axle Studs, (10) 80.00
Threaded to head (2-5/8" overall length.) 2" of thread

51270 5/8-11 Grand National Axle Studs, (10) 80.00
Coarse thread Threaded to head (3-3/8" overall length.) 3" of thread Note: MW axles are normally produced with fine thread. Axles must be special order with 5/8-11 threads



Selecting the Proper Drive Studs

The most important factor when selecting the proper drive stud is that the drive shoulder of the stud be fully engaged in the wheel. It is recommended that the "C" length on the stud be slightly greater than the combined thickness of the brake hat or drum and the wheel. These two dimensions should be specified when ordering a MW drive stud kit. Washer thickness must be greater than the portion of the shoulder of the stud that extends past the face of the wheel.

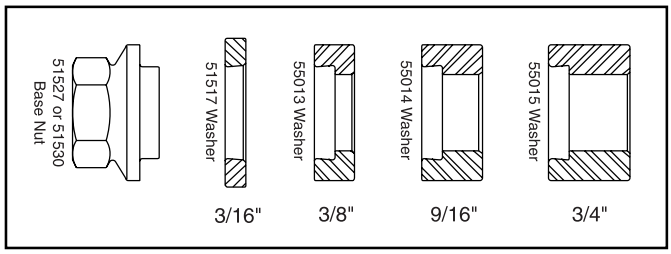
Wheel Stud Nuts & Stud Installer

MW has developed a series of reduced hex (7/8") base nuts for use with the MW drive stud wheel retention system. The base nuts are manufactured from 17-4 stainless steel. The aluminum spacer washer attaches with a snap fit over the base nut. The washer spins freely, but will not separate from the nut, this prevents marring of the wheels and losing washers. The aluminum washers are available in different thicknesses (1/8" to 3/4") to compensate for different wheel and brake hat combinations. Corrosion is eliminated through the use of stainless steel. These nuts are CNC machined from billet material. This makes the nut a dimensionally and visually superior part. The thread pitch diameter is held extremely square with the flange which results in even pressure loading against the wheel and stud threads. MW also builds special integral billet aluminum lug nuts that are hard anodized for durability (see below). These nuts are sold with special stainless steel washers and are standard nuts in MW titanium drive stud kits.

51530 Steel MW Snap-Lock™ Base Nut 3.00
Replaces old 55016 standard flange steel nut

51527 Stainless MW Base Nut 10.50
Requires addition of Aluminum washers 3/16" to 3/4" thick

MW Snap-Lock™ Washer System



55012 Steel Washer, 1/8" 2.00
For use with old 55016 standard flange lug nut, 1/8" thick.

55017 Aluminum Washer, Snap-Lock™3/16" 2.00
For use with MW base nut, stainless or standard nut, 3/16" thick.

55013 Aluminum Washer Snap-Lock™3/8" 2.00
For use with MW Stainless Steel or 51530 nut, 3/8" thick.

55014 Aluminum Washer, Snap-Lock™ 9/16" 2.25
For use with MW base nut ,stainless or standard nut, 9/16" thick.

55015 Aluminum Washer, Snap-Lock™ 3/4" 2.50
For use with MW base nut, stainless or standard nut, 3/4" thick.

NOTE: All aluminum washers except, 3/16 can be used with 51530, 51227 stainless nuts as well as older 55016 with standard flange steel nuts. Aluminum nuts use a stainless washer.

Integral Aluminum Nuts

The MW integral aluminum lug nuts are for applications where every ounce of weight is critical. The part is produced from 7075-T6 aluminum alloy with a durable hard coat finish. The integral stainless steel washer snaps on to the nut and spins freely, but will not separate from the nut, preventing accidental loss. The nuts have fixed counter bore depths of 1/8" and 3/8" that make them equivalent to using a standard nut and washer combination of equal thickness. These nuts come standard with all MW titanium drive stud kits for the lightest possible combination. Can also be used with steel drive studs.

51520 Encapsulated MW Nut, 1/8" grip (ea) 10.00
1/8" grip, threads relieved 1/8" on wheel side of nut

51521 Encapsulated MW Nut, 3/8" grip (ea) 10.00
3/8" grip, threads relieved 3/8" on wheel side of nut

Stud Installation Tool

The MW stud installation tool utilizes a threaded collet that clamps evenly on the threads of the stud to properly install and tighten drive studs in the axle flanges. This type of system eliminates possible damage to either the threads or stud shoulder that can happen without the proper installations tools.

600-H Housing for stud install collet 65.00
600-1 5/8-18 stud install collet 29.00
600-2 1/2-20 stud install collet 29.00
600-3 7/16-20 stud install collet 29.00
600-4 3/8-24 stud install collet 29.00
600-5 5/16-24 stud install collet 29.00

Steel Spools

53140

53137

All Mark Williams steel spools are precision machined from 4140 steel forgings on CNC machinery to ensure accuracy. The ring gear register and bearing diameters are precision ground with the spool mounted on a special arbor to assure concentricity between the splines and the ground surfaces. The final grinding operation also ensures zero runout on the ring mounting surface. Engineered for maximum reliability, MW spools also have an increased cross-section under the ring gear register to prevent ring gear deflection. MW spools are heat treated in-house with the same austemper through hardening heat treat process as MW's "Hi-Torque" axles. Mark Williams steel spools are offered in both standard and lightweight versions. The major differences are the addition of lightening holes drilled through the hub of the spool and a profile milled ring gear flange. This reduces the weight by as much as 25% over the standard version without sacrificing the strength of the spool. See footnotes for wheel bearing requirements.

Standard Steel Spools

53120 35 Spline 8" Ford Spool 240.00
MW 35 spline. 10.5 lbs (3).

53132 35 Spline 8.8" Ford Spool 240.00
MW 35 spline. 14 lbs. (3).

53136 40 Spline 9" Ford Spool 240.00
For 3.250" bore case, requires 45 mm bore wheel bearing and matching housing ends. 11 lbs. (2)

53139 28 Spline 9" Ford Spool 240.00
Stock type 28 spline. 10 lbs.

53140 35 Spline 9" Ford Spool 240.00
MW 35 spline. For stock 2.893" or 3.062" case. 11 lbs.(3)

53144 31 Spline 9" Ford Spool 240.00
Stock type 31-spline. 12 lbs.

53146 35 Spline 9" Ford Spool 240.00
MW 35 spline For 3.250" bore case. 12 lbs. (3)

53130 35 Spline 8.5 GM 10-Bolt Spool.* 240.00
MW 35 spline. For 1970 or later. 14 lbs .(3)(1)

53150 35 Spline '57-'64 Olds/Pontiac Spool 240.00
MW 35 spline. 16 lbs. (3)

53160 35 Spline 12 Bolt Chevrolet Spool * 240.00
MW 35 spline. 14 lbs. (1)(3)

53164 30 Spline 12-Bolt Chevrolet Spool * 240.00
Stock type 30 spline. 14 lbs. (1)

53170 35 Spline Dana 60 Spool 240.00
MW 35 spline. 21 lbs.

53176 40 Spline Dana 60 Spool 240.00
Requires 45 mm bore wheel bearing and matching housing ends. 20.5 lbs.

53190 35 Spline Dana 60 Spool 240.00
Stock type 35 spline. 21 lbs.

53180 35 Spline 8-3/4" Mopar Spool 240.00
MW 35 spline. 14 lbs.

53186 30 Spline 8-3/4" Mopar Spool 240.00
Stock type 30 spline. 14 lbs.

Lightweight Steel Spools

D1554 33 Spline 9" Ford Spool 240.00
Strange Engineering spool (not profiled)

53125 40 Spline 9" Ford Lightweight Spool 290.00
For 3.812" case bore and 1/2" ring gear bolts. 9.7 lbs

53127 40 Spline 9" Ford Lightweight Spool 290.00
For 3.812" bore case and 7/16" ring gear bolts. 9.7 lbs

53134 35 Spline 8.8 Ford Lightweight Spool 290.00
MW 35 spline. 11 lbs.

53137 40 Spline 9" Ford Lightweight Spool 290.00
For 3.250" bore case. 8.5 lbs.

53138 35 Spline 9" Ford Lightweight Spool 290.00
Summers Bros. type for 3.250" bore case. 9 lbs.

53145 35 Spline 9" Ford Lightweight Spool 290.00
MW 35 spline for 2.983 or 3.062 bore case. 8.75 lbs.

53147 35 Spline 9" Ford Lightweight Spool 290.00
Strange type for 3.250" bore case. 10.5 lbs.

53148 35 Spline 9" Ford Lightweight Spool 290.00
MW 35 spline for 3.250" case. 9 lbs.

53129 40 Spline Modular 12 Bolt LW Spool 290.00
MW 40 spline. 12.5 lbs.

53163 35 Spline Modular 12 Bolt LW Spool 290.00
MW 35 spline. 12.5 lbs.

53165 35 Spline12-Bolt Chevy LW Spool * 290.00
MW 35 spline. 11 lbs.

53173 35 Spline Dana 60 Lightweight Spool 290.00
MW 35 spline. For Series 3 gears. 17 lbs.

53175 35 Spline Dana 60 Lightweight Spool 290.00
MW 35 spline. 17 lbs.

53177 40 Spline Dana 60 Lightweight Spool 290.00
Requires 58505 bearings and proper housing ends. 16 lbs.

53187 35 Spline 8 3/4 Mopar LW Spool 290.00
MW 35 spline. 12.5 lbs.

53195 35 Spline Dana 60 Lightweight Spool 290.00
Stock type 35 spline. 17 lbs.

53265 35 Spline 12-Bolt Lightweight Spool* 290.00
MW 35 spline 3.250" bore carrier.

Notes: (1) GM. applications require C-Clip eliminator or other axle retention method. (2) 40 spline spools require 45 mm bore wheel bearing and matching housing ends. (3) 35 spline spools require wheel bearings and housing ends that utilize with 1.531 or larger bore.

Aluminum & Titanium Spools

In the never ending battle to reduce rotating driveline weight, Mark Williams offers spools manufactured from aluminum and titanium. MW's aluminum spools are successfully being used in Pro Stock, Comp, Super Comp, Super Gas and Stock eliminator cars. They are machined from 7075-T6 aluminum alloy forgings and hard coat anodized for durability. Aluminum spools are approximately half the weight of the profile milled steel spools. 35 spline aluminum spools are currently available for 9" Ford, 8 3/4" Mopar and Chevy 12 bolt rears. 40 spline spools are available for 9" Fords as well as Dana 60 rears. 28 and 31 spline aluminum 9" Ford spools are also available but recommended only for oval track racing. A 9" Ford 40 spline titanium spool for high horsepower applications is also available special order. Aluminum 9" Ford 40 spline spools must be used in a case with a 3.812" bore while the 35 spline aluminum 9" Ford spool requires a case with a 3.250" bore. 9" Ford 40 spline steel spools are available for 3.25 and 3.812" bore cases.

43127 9" Ford Titanium Spool . . . . . .P.O.R.
MW 40 spline (3.812 bore case required) weight 4.5lbs

53123 9" Ford Aluminum Spool 225.00
Stock Ford 31 spline, weight 4.9 lbs

53128 9" Ford Aluminum Spool 225.00
Stock Ford 28 spline, weight 5.0 lbs.

53133 9" Ford Aluminum Spool 345.00
MW 40 spline, for 3.812 bore case. 4.7 lbs

53135 9" Ford Aluminum Spool 345.00
MW 35 spline, for 3.250" bore case. 4.9 lbs.

53158 12-Bolt Aluminum Spool 416.50
**MW 35 spline, housing must be bored to 3.250". Includes 58925 shim kit and 53161A bearing kit. 5.3 lbs.*

53166 12-Bolt Modular Aluminum Spool 345.00
MW 35 spline for 12-bolt modular housing, weight 5.2 lbs.

53174 Dana 60 Aluminum Spool 490.00
MW 40 spline, 58505 axle bearings and proper housing ends required. 8 lbs.

53179 8-3/4" Mopar Aluminum Spool 345.00
MW 35-spline, weight 5.2 lbs.

Locking Carriers

187S-13A

187S-17B

225S-23A

187S-35S

187S-35C

DETROIT LOCKER® is offered for popular 9" Ford applications (28 and 31-spline), as well as Dana 60 rear ends. These units are designed to provide power to both wheels even in those situations where one tire loses traction. Detroit lockers will also compensate for differences in wheel speed when turning corners by letting the wheel with the larger turning radius overrun and unlock from the other wheel.

PROS: Strongest differential unit. Available in 35 spline for heavy duty street-drag usage. Allows totally locked operation when in straight or tire slip condition.

CONS: Clicking sound when turning corners, considerable inherent backlash. Causes "understeer" due to locked action

TRUETRACK® or GOLD TRACK® differentials do not use friction plates, but rather the wedging action of separating spiral pinion gears. This type of differential is unique in that it increases traction, but does not affect the steering, and there is no friction plate wear. It allows normal differentiation without adverse effect on steering, or chattering when cornering. Only when there is a loss of traction, will power transfer occur. The worm drive differential offers moderate strength, operates smoothly and uses standard lubricants.

PROS: Quiet operation, smooth operation, will not steer the vehicle.
CONS: Not as tough as Locker type. Available only with stock axle splines. Requires load on spinning wheel to start driving action.

187S-13A 9" Ford 28 spline Locker 523.00

187S-17B 9" Ford 31 spline Locker 523.00

187S-35S 9" Ford 35 spline Locker 827.50
Billet steel housing. Requires 3.250" bore case.

187S-35C 9" Ford 35 spline Locker 606.00
Nodular iron housing. Requires 3.250" bore case.

225S-23A Dana 60 Detroit Locker® 681.00
35 Spline for 4 series gears.

57231 9" Ford 31 spline Gold Track® 845.00
Worm drive with billet housing.

Posi-Traction Units

There are a number of excellent after-market posi-traction units which have proven to be exceptionally reliable in increased power street machines. These units provide increased traction prior to wheel spin. This is accomplished through the use of pre-loaded friction discs and to some degree the wedging action of the axle gear. This distributes torque to the wheel with superior traction rather than letting the wheel without traction spin free. All Eaton™ units are equipped with carbon fiber clutches and are available for 10 and 12 bolt GM passenger car and truck rears as well as 8.8 Ford rears. Most of the Eaton™ units also have the option of upgrading to 33 spline side gears to accommodate larger diameter axle splines.

57131 9" Ford Posi-Traction 401.00
31 spline cone type Auburn® posi-traction.

57311 9" Ford Posi-Traction 408.00
31 spline clutch type Ford Motorsports posi-traction.

58911 12 Bolt Posi-Traction (Series 4) 381.00
30 spline, light duty clutch type Torque-Line® posi-traction.

58912 12 Bolt Posi-Traction (Series 3) 381.00
30 spline, light duty clutch type Torque-Line® posi-traction.

EATON
Eaton® Posi Performance Differentials

We stock all the internal parts for the Eaton Posi-Traction Call us for Parts!

19510 12 Bolt Eaton™ Posi-Traction 413.00
30 spline with 800 lb clutch preload. For 4.10-6.14 ratios.

19515 8.5"10 Bolt Eaton™ Posi-Traction 413.00
30 spline with 800 lb clutch preload. For 2.73 and up ratios.

19554 12 Bolt Eaton™ Posi-Traction (Series 3) . . .413.00
30 spline with 400 lb clutch preload. For 3.08 to 4.10 ratios.

19555 12 Bolt Eaton™ Posi-Traction 413.00
28 spline with 400 lb clutch preload. For 4.10 and up ratios.

19555-33 12 Bolt Eaton™ Posi-Traction 711.60
33 spline with 400 lb clutch preload. For 4.10 and up ratios.

19556 12 Bolt Eaton™ Truck Posi-Traction 413.00
400lb preload unit, 30-spline for 3.73 to 5.38 ratio.

19557 8.5 10 Bolt Eaton™ Posi-Traction 450.00
28 spline with 400 lb clutch preload. For 2.73 and up ratios.

19588 8.8 Ford Eaton™ Posi-Traction 450.00
31 spline with 400 lb clutch preload. For 3.08 and up ratios.

19588-33 8.8 Ford Eaton™ Posi-Traction 813.00
33 spline with 400 lb clutch preload. For 3.08 and up ratios.

19603 8.2" GM Eaton™ Posi-Traction 450.00
28 spline with 400 lb clutch preload. For 3.08 and up ratios.

Bearing Kits and Ring Gear Bolts

All MW spool bearing kits feature Timken® bearings and races. MW also offers special bearing adapters to allow the use of spools for smaller bore sizes to be used in larger bores. MW ring gear bolts provide the best method of securing the ring gear to a spool or carrier. MW ring gear bolts are manufactured with a ground shoulder to drive against, while the 12 point bolt heads are drilled to accept aircraft type safety wire. This fool-proof method eliminates the chance of the ring gear bolts loosening and "backing out".

53121 8" Ford Spool Bearings 45.60

53124 9" Ford Spool Bearings 3.812 O.D. 74.80

53126 9" Ford Spool Bearings 3.812 O.D. 120.30
To use a spool with 2" dia. journals in a 3.812 case

53131 8" Ford and 8.5" 10-Bolt Spool Bearings 45.60

53141 9" Ford Spool Bearings, 2.893" O.D. 45.50

53142 9" Ford Spool Bearings, 3.062" O.D. 50.75

53143 9" Ford Spool Bearings, 3.250" O.D. 51.00

53151 '57-64 Olds/Pontiac Spool Bearings 58.10

53157 GM 12 Bolt Inner Carrier Shim, (pr) 28.00

53161 GM 12 Bolt Spool Bearings 50.85

53161A GM 12 Bolt Spool Bearings (for 53158) 68.10

53171 Dana 60 Spool Bearings 88.60

53181 8-3/4" Mopar Spool Bearings 58.10

57510 Spool Shim Adapter, (pr) 32.50
To use a spool with 1.7" dia. journals in a 3.250" case

57570 Adjuster Adapter, (pr) 70.00
To adapt a 3.062" bearing to 3.250" bore case (Best method)

57900 MW 9" Ford Ring Gear Bolt Set 26.00

57920 MW 9" Ford Ring Gear Bolt Set 50.00
1/2"-20 threads

58900 MW G.M.12 Bolt Ring Gear Bolt Set 26.00

Safety Wire and Pliers

Use with any drilled bolt head to provide vibration proof positive bolt retention

300-1/4 Safety Wire, 1/4 lb. roll, .032 stainless 9.00

300-1 Safety Wire, 1 lb roll, .032 stainless 18.00

300-2 Safety Wire Twist Pliers 9" 76.00

Open Carriers

MW handles new replacement open carriers for 9" Ford and Dana 60. 9" Ford units are heavy duty 4 spider gear models. A specially designed 4140 billet carrier built by MW is available for the 9" Ford and the MW 11" Modular rear. The 9" unit utilizes 31 spline axle gears and 4 pinion gears. The bearing journals are over size and require a 3.250" bore case. The 11" carrier is also 4140 and features 40 spline side gears. The Dana 60 carriers are new "take-out" units and fit the 3 and 4 series gear ratios.

Modular 11" *9" Ford* *Dana 60* *Billet 9" Ford*

57260 9" Open Carrier, 31 spline 1680.00
Special 4140 billet housing with 4 spider gears for 3.25" bore case.

57412 9" Open Carrier, 28 spline, 4 pinion 323.00

57411 9" Open Carrier, 31 spline, 4 pinion 323.00

706036X Dana 60 Carrier, Series 3, 30 spline 160.17
New take outs with 30 spline axle gears

706037X Dana 60 Carrier, Series 4, 30 spline 152.08
New take outs with 30 spline axle gears

56920 Dana 60 35 spline axle gear kit 106.00
Replacement axle gears for open Dana carriers with 30 spline.

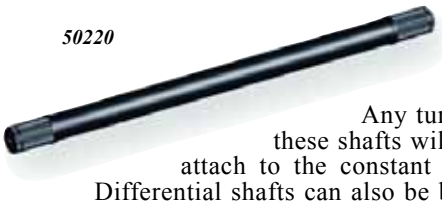
90030 Modular 11" Open Carrier, 40 spline 2250.00
Special 4140 billet housing and spider gears for 2.91 ratio gears.

Custom Shafts

Mark Williams Enterprises has the capacity in-house to machine and heat treat just about any type of custom shaft. Whether you are in need of a special double splined shaft, a stub shaft, an input shaft or a special flanged axle, MW can build it for you. The staff at Mark Williams Enterprises can take a drawing with basic dimensions and spline information and produce engineered AutoCad Inventor drawings to create CNC programs. We can also help specify materials and heat treat processes for special applications.

50000 Custom Splined Axle Shafts . . . . . .**Price On Request**
Send, fax or E-mail axle information and/or samples to Mark Williams engineering staff for a quote on price and delivery.

C5 Corvette Half Shafts



50220

If you've got a hot-rod Corvette, this is the differential output shaft that you will need to put the power to the ground. With generous shaft diameters to eliminate stress risers, and manufactured from 300M aircraft steel, these shafts have been designed to put up with the rigors of any high powered application. Any turbo application will benefit from this shaft. When the power is being layed out, these shafts will not give up! Applications are for 1997 and newer C5 Corvette axle shafts that attach to the constant velocity (CV) joints. The internal intermediate shaft is also available. Differential shafts can also be built in custom lengths for street rod or specialty applications using the Corvette rear...Axle shafts are sold in pairs. Intermediate shaft is per side.

P/N 50210 is an intermediate shaft for GM P/N 88893900.

P/N 50220 is a axle c/v shaft for GM10311201

50210

50210 C5 Corvette 300M Intermediate (ea) 310.00
300M replacement intermediate shaft for '97 thru '02 C5 Corvette.

50220 C5 Corvette 300M Axle C/V Shafts (pair) 620.00
300M C.V axle shafts (pair) '97 thru '02 C5 Corvette

HONDA/ACURA PROFESSIONAL STRENGTH DRIVE LINE

60100-AP

The stress of any serious increases in horsepower can spell instant doom for OEM Honda and Acura drivelines often with near-catastrophic results. Even mild power-adders like a "50-shot" nitrous kit can lead to broken CV joints, shafts, etc. Attempts have been made to remedy this situation by firms offering "after-market" products manufactured from supposedly higher grade materials but these too have failed with alarming regularity. This prompted a number of racers to contact Mark Williams Enterprises for a solution, and after a year of extensive R&D here it is! Starting with a "clean sheet of paper," M-W engineers have developed a "bulletproof" hub-to-hub driveline that incorporates absolutely no factory parts! The interior shafts are substantially beefier than OEM, with the spline 45% larger than the factory intermediate shaft! They're also forged from a superior Tri-alloy material and austempered for optimum ductility (same process as M-W Hi-Torque racing axles). CV joints are also significantly larger than stock and of a high angle design. A large 15-plunge style CV joint replaces the factory "tripod" style inner joint, and a forged steel spool ensures equal power transfer with absolute reliability. Outer shafts are made from 300M material. What's more, the components have been machined to reduce weight wherever possible, with the net result being an incredibly strong driveline at the lightest possible weight. The finishing touch comes in the way of racing brakes with 11-3/4" drilled steel rotors, aluminum hats and 4-piston aluminum calipers. Complete packages are available for all popular Honda/Acura applications.

FORGED 4140 SPOOL

- Lightened flange to reduce rotating mass
- Accepts OEM Ring Gear Bolts
- Intermediate Shaft
- Increased shaft size results in a 73% increase in overall strength
- Positive Retention eliminates snap rings
- CV Flanges are incorporated into the shaft to make a superior strength single piece shaft

HALF SHAFT ASSEMBLY

- Increased shaft size results in a 75% increase in overall strength
- Half Shaft is made from 300m aircraft alloy and thru-hardened
- Large Size 15 Plunge Style CV Joints replace factory "tripod" joint
- Outer flange is mated to a High Angle CV Joint to allow better articulation
- Wheel flange available with dual 4 hole metric patterns or dual standard 5 hole patterns

DISC BRAKES

- Custom mounting brackets insure seamless installation
- Aluminum hat dissipates rotor heat quickly
- 4 piston MW aluminum brake calipers
- 11-3/4" diameter brake rotor (must use 15" Wheels)
- Hi Friction Ferodo Pads

60100-AP Accord/Prelude Driveline and Brake System 4975.00
Complete system for Accord/Prelude trans including spool, intermediate shafts, half shafts with CV joints, outer wheel flanges, drive stud kit and MW brake kit with MW calipers and drilled steel rotors

60100-LS Honda/Acura LS Driveline and Brake System 4975.00
Complete system for Honda LS trans including spool, intermediate shafts, half shafts with CV joints, outer wheel flanges, drive stud kit and MW brake kit with MW calipers and drilled steel rotors

60100-GSR Honda/Acura GSR Driveline and Brake System 4975.00
Complete system for Honda GSR trans including spool, intermediate shafts, half shafts with CV joints, outer wheel flanges, drive stud kit and MW brake kit with MW calipers and drilled steel rotors

WE HAVE PRODUCED MANY SPECIAL ENGINEERED DRIVE LINE SOLUTIONS THAT UTILIZE CONSTANT VELOCITY DRIVING SYSTEMS. SOME OF THE MODELS THAT HAVE BEEN PRODUCED INCLUDE PANTERA AXLES AND CV DRIVESHAFTS, DODGE VIPER SPOOL AND AXLE SYSTEMS, MAZDA AXLE AND SPOOL SYSTEMS. WE DO CUSTOM DESIGN DRIVE SYSTEMS FOR UNUSUAL APPLICATIONS. EXTRA ENGINEERING AND PROGRAMMING CHARGES WILL APPLY.

Richmond Gears

Mark Williams Enterprises, Inc. is one of the nation's largest factory warehouse distributors for Richmond Gear. At any given time, you'll find over 1,300 ring & pinion gear sets in stock at MW! This includes standard gears for oval track and street use as well as 9310 alloy "Pro" gears for drag race only applications. Additionally, Mark Williams Enterprises, Inc. has everything necessary to properly install and set up a rear end gear set. This includes installation kits, tools, measuring devices, gear marking compound, special ring gear bolts, safety wire and gear lube. On the following pages you will find a detailed listing of the applications and ratios available. Should Richmond Gear introduce any additional ratios following the printing of this catalog, rest assured that they will be added to our inventory and available for immediate shipment. Competitors and chassis shops alike have come to rely on MW for gears because we offer.....

•Same-day shipping of stock gears •Competitive prices •Courteous & knowledgeable sales staff

8620 "Standard" Gears

Standard Gears are primarily used in oval track and street applications. The material and heat treating provide excellent wear service life but doesn't handle shock loads as well as Pro gears. 9" Ford standard gears have a 28 spline pinion.

9310 "Pro" Gears

"Pro" gears are designed specifically for drag racing. The 9310 alloy and heat treat are ideally suited to absorb high impact shock loads. 9" Ford ratios from 4:86 to 6:50 have 28 spline pinions. Select ratios available for 12 Bolt and Dana 60.

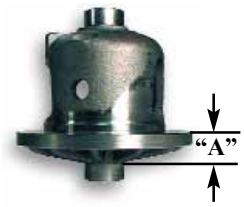
"Large Pinion Pro" Gears

These 9" & 9 1/2" Ford gears are built specifically for ultra high horsepower drag racing applications from 9310 material. All available ratios (3.40 to 4.86) have a large 35 spline shaft.

9" Ford Gear Notes

While many new 9" gears are now manufactured for clearance, many 9" Ford ring gears require modification to clear the pinion pilot bearing area. ***Do not grind on the case.*** Instead, chamfer the ring gear for clearance. Oval Track applications require a baffle to prevent all the lube from becoming built up in the right axle housing tube. We recommend using one gallon of Torco GL-6 racing gear oil, SAE 85w140 (Part number 55-0030, 1qt.). Our rear end filler bung and cap, part numbers 5015 & 5016 installed in the top of the housing make it easy to fill. If using a stock Ford front pinion bearing support, it must be the unit that has the HM89443 rear cone. Richmond Standard Pinion Pro gears must use a HM89444 rear cone. This bearing has a larger radius that matches the increased radius in the pinion. The recommended pinion support is our Heavy Duty Support, part number 57620 or 57670, which uses even larger bearings. All 35-spline pro gears must use the pinion support, part number 57630 or 57680, with matching coupler or yoke. Some gears do not have the engraved pinion setting depth (OEM gears); however, the setting depth can be calculated. The master housing dimension for 9" Ford is 4.375". This is the distance from the centerline of the third-member case main bearing bores, to the shoulder that the stock rear pinion bearing would stop against. By measuring the pinion head thickness, then subtracting this measurement from 4.375" (master housing dimension), the setting depth is obtained. Some of these pinions are marked with a + or - and a number. This is the variance from the master housing dimension that the pinion needs to be set. Example: If the pinion is marked +2 the master housing dimension would be 4.375" plus .002 or 4.377".

GM 12 Bolt Carrier Notes

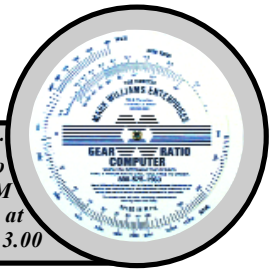


"A"	Car	Truck
2 Series	.590"	NA
3 Series	1.020"	.895"
4 Series	1.325"	1.145"

Check the distance from the bearing shoulder to ring gear flange ("A") to determine the carrier series for proper ring & pinion selection.

Caution: If a ring gear spacer is to be used, check the length of the register on the carrier. On some OEM carriers the ring gear register is not long enough to register the ring gear when a spacer is used. Do not run a ring gear that does not locate on the register of the carrier.

What gear ratio is right for my car?



The answer to this often asked question is easier than you might think. The Mark Williams Gear Ratio Calculator allows you to insert 3 of 4 variables, tire diameter , engine RPM and MPH with the result being the final gear ratio required. You can also use it to determine the correct tire size or see how a tire size change will affect engine RPM and/or speed. This is a must for the serious racers tool box. Ratios can also be calculated on our web site at www.markwilliams.com click Technical Help. 3.00

9" Ford Gears

8620 Street/Oval Track Gears
'57-'73 Passenger Car - '57-'87 Light Trucks
1.313" dia. pinion stem 28 spline pinion

429-0107	2.80	9" Ford Richmond Gear	.325.50
429-0106	2.86	9" Ford Richmond Gear	.325.50
429-0121	2.91	9" Ford Richmond Gear	.325.50
429-0105	2.94	9" Ford Richmond Gear	.325.50
429-0038	3.00	9" Ford Richmond Gear	.325.50
429-0092	3.07	9" Ford Richmond Gear	.325.50
629-0284	3.25	9" Ford Richmond Gear	.325.50
629-0266	3.33	9" Ford Richmond Gear	.325.50
629-0364	3.40	9" Ford Richmond Gear	.325.50
629-0414	3.45	9" Ford Richmond Gear	.325.50
429-0027	3.50	9" Ford Richmond Gear	.179.00
629-0195	3.55	9" Ford Richmond Gear	.222.40
629-0365	3.60	9" Ford Richmond Gear	.325.50
629-0361	3.70	9" Ford Richmond Gear	.189.90
629-0366	3.75	9" Ford Richmond Gear	.325.50
629-0286	3.82	9" Ford Richmond Gear	.325.50
629-0177	3.89	9" Ford Richmond Gear	.179.00
629-0272	4.00	9" Ford Richmond Gear	.325.50
629-0179	4.11	9" Ford Richmond Gear	.179.00
629-0367	4.22	9" Ford Richmond Gear	.325.50
629-0161	4.33	9" Ford Richmond Gear	.189.90
629-0368	4.44	9" Ford Richmond Gear	.325.50
629-0369	4.50	9" Ford Richmond Gear	.325.50
629-0185	4.56	9" Ford Richmond Gear	.184.40
629-0379	4.63	9" Ford Richmond Gear	.325.50
629-0362	4.71	9" Ford Richmond Gear	.200.70
629-0067	4.86	9" Ford Richmond Gear	.200.70
629-0360	5.00	9" Ford Richmond Gear	.200.70
629-0068	5.14	9" Ford Richmond Gear	.200.70
629-0270	5.29	9" Ford Richmond Gear	.200.70
629-0069	5.43	9" Ford Richmond Gear	.200.70
629-0070	5.67	9" Ford Richmond Gear	.200.70
629-0288	5.83	9" Ford Richmond Gear	.211.50
629-0199	6.00	9" Ford Richmond Gear	.211.50
629-0290	6.20	9" Ford Richmond Gear	.211.50
629-0276	6.33	9" Ford Richmond Gear	.211.50
629-0197	6.50	9" Ford Richmond Gear	.211.50

9310 Drag Race Large Pinion Pro Gears
1.875" dia. pinion stem 35 spline pinion

729-0043	3.89	9" Ford Large Pinion 9310	.379.70
729-0045	4.11	9" Ford Large Pinion 9310	.352.60
729-0079	4.29	9" Ford Large Pinion 9310	.358.00
729-0080	4.57	9" Ford Large Pinion 9310	.358.00
729-0070	4.71	9" Ford Large Pinion 9310	.247.20
729-0086	4.77	9" Ford Large Pinion 9310	.385.10
729-0060	4.86	9" Ford Large Pinion 9310	.347.20

9310 Drag Race Standard Pinion Pro Gears
1.313" dia. pinion stem 28 spline pinion

729-0066	4.86	9" Ford Pro Gear 9310	.314.60
729-0078	5.00	9" Ford Pro Gear 9310	.303.80
729-0017	5.14	9" Ford Pro Gear 9310	.303.80
729-0069	5.29	9" Ford Pro Gear 9310	.347.20
729-0005	5.43	9" Ford Pro Gear 9310	.303.80
729-0007	5.67	9" Ford Pro Gear 9310	.330.90
729-0019	5.83	9" Ford Pro Gear 9310	.330.90
729-0021	6.00	9" Ford Pro Gear 9310	.303.80
729-0023	6.20	9" Ford Pro Gear 9310	.303.80
729-0054	6.50	9" Ford Pro Gear 9310	.303.80

9" Ford Installation Kits

83-1011	Installation Kit, 9" Ford w/ 2.893" bearing 98.40
83-1013	Installation Kit, 9" Ford w/ 3.062" bearing 116.00
83-5728	Installation Kit, 9" Ford std pinion .....140.00 *For 3.250 case w/MW support. Includes pilot bearing*
83-5735	Installation Kit, 9" Ford large pinion .....140.00 *For 3.250 case w/MW support. Includes pilot bearing*

9 1/2" Ford Gears

9310 Drag Race Large Pinion Pro Gears
1.875" dia. pinion stem 35 spline pinion (unless noted otherwise noted))

729-0097	4.10	9-1/2" Ford Large Pinion 9310	.493.60
729-0098	4.29	9-1/2" Ford Large Pinion 9310	.493.60
729-0101	4.57	9-1/2" Ford Large Pinion 9310	.493.60
729-0106	4.71	9-1/2" Ford Large Pinion 9310	.493.60
729-0100	4.86	9-1/2" Ford Std. Pinion 9310	.493.60 *28 spline standard pinion.*
729-0107	4.89	9-1/2" Ford Std. Pinion 9310	.493.60 *28 spline standard pinion.*

Ring Gear Lightening

MW offers a special ring gear lightening service for 9" Ford, 12 bolt GM (4:88 to 6:20 ratio) and Dana 60 gears. This process is performed on a CNC lathe with special tooling to produce a generous radius and smooth finish. The result is a weight reduction of between 1/2 and 3-1/2 lbs.

LRG	Lighten ring gear. (with gear purchase)	.85.00
91110	Hex broached pinion for lube pump (specify 5/16" or 3/8")	.75.00

** All Richmond gears shown in blue type are special orders only. Please allow extra time for delivery.*

8.8" Ford Gears

8620 Street Gears *'85-'98 Mustang\Hi Po. - '81-'97 F100 & F150* *1.626" dia. pinion stem 30 spline pinion*

429-0103	3.55	8.8" Ford Gear 8620	.179.00	629-0376	4.33	8.8" Ford Gear 8620	.195.30
429-0104	3.73	8.8" Ford Gear 8620	.179.00	629-0312	4.56	8.8" Ford Gear 8620	.195.30
629-0310	4.10	8.8" Ford Gear 8620	.195.30	629-0382	4.88	8.8" Ford Gear 8620	.206.10

8.8" Ford Installation Kit 83-1043 Installation Kit, 8.8" Ford .110.70

8" Ford Gears

8620 Street Gears *'65-'79 Mustang - '67-'72 Cougar - '64-'72 Comet - '60-'72 Falcon & Fairlane .188" dia. pinion stem 25 spline pinion*

429-0100	3.00	8" Ford Gear 8620	.200.70	629-0064	4.11	8" Ford Gear 8620	.184.40
429-0101	3.55	8" Ford Gear 8620	.184.40	629-0065	4.62	8" Ford Gear 8620	.184.40
429-0111	3.80	8" Ford Gear 8620	.184.40				

8" Ford Installation Kit 83-1015 Installation Kit, 8" Ford .110.70

7.5" Ford Gears

8620 Street Gears *'79-'95 All Ford Compact and midsize - '83-'90 Bronco/Ranger - '86-'96 Aerostar 1.626" dia. pinion stem 28 spline pinion*

429-0042	3.45	7.5" Ford Gear 8620	.189.90	629-0320	4.56	7.5" Ford Gear 8620	.179.00
429-0043	3.73	7.5" Ford Gear 8620	.179.00	629-0348	5.13	7.5" Ford Gear 8620	.220.40
629-0318	4.10	7.5" Ford Gear 8620 •	.179.00	80-0271		Special cross pin for ratios with	.31.78

7.5" Ford Installation Kit 83-1045 Installation Kit, 7.5" Ford .110.70

Dana 60 Gears

8620 Street Gears *'66-'73 Dodge & Chrysler w/Hemi - Various 3/4 ton trucks '67-'98 9 3/4" ring gear 1.626" dia. pinion stem 29 spline pinion*

429-0130	3.73	Dana 60 Gear 8620	.200.70	629-0057	5.13	Dana 60 Gear 8620	.211.50
629-0052	4.10	Dana 60 Gear 8620	.200.70	629-0146	5.38	Dana 60 Gear 8620	.220.40
629-0053	4.56	Dana 60 Gear 8620	.200.70	706033-8X	7.17	Dana 60 Spicer Gear	.282.60
629-0054	4.88	Dana 60 Gear 8620	.206.10				

9310 Drag Race Pro Gears *9 3/4" ring gear 1.626" dia. pinion stem 29 spline pinion*

729-0011	4.10	Dana 60 Pro Gear 9310	.330.90	729-0013	5.38	Dana 60 Pro Gear 9310	.303.80
729-0077	4.56	Dana 60 Pro Gear 9310	.330.90	729-0015	5.57	Dana 60 Pro Gear 9310	.360.00
729-0068	4.88	Dana 60 Pro Gear 9310	.330.90	729-0041	6.17	Dana 60 Pro Gear 9310	.347.20
729-0025	5.13	Dana 60 Pro Gear 9310	.303.90	729-0037	6.50	Dana 60 Pro Gear 9310	.352.60

Dana 60 Installation Kit 83-1034 Installation Kit, Dana 60 .175.90

Dana 40 Gears

8620 Street Gears *'67-'75 Jeep CJ5 &CJ7 - '67-'83 Wagoneer - Various 1/2 ton fronts 8 1/2" ring gear 1.376" dia. pinion stem 26 spline pinion*

629-0216	4.10	Dana 44 Gear 8620	.168.20	629-0240	4.10	Dana 44 Reverse Cut (front) 8620	....200.70
629-0218	4.56	Dana 44 Gear 8620	.189.90	629-0242	4.56	Dana 44 Reverse Cut (front) 8620	....200.70

Supra-Fin

Supra-Fin™
Surface Improvement

MW offers Supra-Fin surface finish improvement for ring and pinion sets. This fine micro finishing process reduces friction and eliminates the need for break-in procedures required to assure a long gear life. We exclusively protect the mounting and bearing surfaces so this process will not alter the installation fit

SUPRA-FIN .125.00

MARK WILLIAMS Enterprises®

GM Car 12 Bolt Gears

8620 Street/Oval Track Gears
'65-'72 Chevelle/Chevy II - '67-'72 Camaro - '70-'72 Nova/GTO/Firebird — *1.625" dia. pinion stem 30 spline pinion*

429-0094	3.08	GM Car 12 Bolt - 3 series	.200.30
429-0113	3.42	GM Car 12 Bolt - 3 series	.179.00
429-0095	3.55	GM Car 12 Bolt - 3 series	.211.50
429-0039	3.73	GM Car 12 Bolt - 3 series	.173.60
429-0096	3.73	GM Car 12 Bolt - 4 series	.211.50
429-0040	3.90	GM Car 12 Bolt - 3 series	.211.50
629-0304	4.10	GM Car 12 Bolt - 3 series	.189.90
629-0031	4.10	GM Car 12 Bolt - 4 series	.168.20
629-0378	4.33	GM Car 12 Bolt - 4 series	.184.40
629-0306	4.56	GM Car 12 Bolt - 3 series	.184.40

3 series carriers 3.07 to 3.73

629-0032	4.56	GM Car 12 Bolt - 4 series	.168.20
629-0308	4.88	GM Car 12 Bolt - 3 series	.211.30
629-0033	4.88	GM Car 12 Bolt - 4 series	.162.70
629-0034	5.14	GM Car 12 Bolt - 4 series	.179.00
629-0035	5.38	GM Car 12 Bolt - 4 series •	.211.50
629-0036	5.57	GM Car 12 Bolt - 4 series •	.222.40
629-0037	5.86	GM Car 12 Bolt - 4 series •	.222.40
629-0038	6.14	GM Car 12 Bolt - 4 series •	.222.40
80-0269		Special cross pin for gears w/•	.31.78
58950		12 Bolt Ring Gear Spacer	.49.80

For using 4.10 to 6.14 ratio gears on 3 series carrier.

4 series carriers 3.73 and numerically higher

9310 Drag Race Pro Gears
1.625" dia. pinion stem 30 spline pinion, 4 series

729-0099	4.11	12 Bolt Chevy Pro Gear	.314.60
729-0074	4.33	12 Bolt Chevy Pro Gear	.320.00
729-0072	4.56	12 Bolt Chevy Pro Gear	.195.30
729-0123	4.75	12 Bolt Chevy Pro Gear	.287.50
729-0064	4.88	12 Bolt Chevy Pro Gear	.287.50

729-0027	5.14	12 Bolt Chevy Pro Gear	.287.50
729-0029	5.38	12 Bolt Chevy Pro Gear	.287.50
729-0031	5.57	12 Bolt Chevy Pro Gear •	.303.80
729-0033	5.86	12 Bolt Chevy Pro Gear •	.303.80
729-0035	6.14	12 Bolt Chevy Pro Gear •	.303.80

GM Car 12 Bolt Installation Kit — 83-1019 Installation Kit, GM Car 12 Bolt .140.30

GM Truck 12 Bolt Gears

8620 Street Gears
'64-'82 C10/K10 & K20, Blazer - G10/G20 Van — *1.437" dia. pinion stem 30 spline pinion*

429-0068	3.08	GM Truck 12 Bolt - 3 series	.179.00
429-0070	3.42	GM Truck 12 Bolt - 3 series	.179.00
429-0072	3.73	GM Truck 12 Bolt - 3 series	.195.00
429-0280	3.73	GM Truck 12 Bolt - 4 series	.179.00
629-0350	4.10	GM Truck 12 Bolt - 3 series	.195.30
629-0204	4.10	GM Truck 12 Bolt - 4 series	.179.00

3 series carriers 3.40 and numerically lower

629-0352	4.56	GM Truck 12 Bolt - 3 series	.200.70
629-0206	4.56	GM Truck 12 Bolt - 4 series	.179.00
629-0298	4.88	GM Truck 12 Bolt - 4 series	.200.70
629-0300	5.13	GM Truck 12 Bolt - 4 series •	.200.70
629-0302	5.38	GM Truck 12 Bolt - 4 series •	.200.70
80-0269		Special cross pin for gears w/•	.31.78

GM Truck 12 Bolt Installation Kit — 83-1018 Installation Kit, GM Truck 12 Bolt .110.70

4 series carriers 3.73 and numerically higher

GM 8.5" 10 Bolt Gears

8620 Street Gears
'70-'76 Chevelle & Olds F85 - '70-'75 Chevy II - '70-'81 Camaro/Firebird/GTO — *1.625" dia. pinion stem 30 spline pinion*

429-0017	3.08	GM 8.5" 10 Bolt	.189.90
429-0019	3.23	GM 8.5" 10 Bolt	.222.40
429-0278	3.42	GM 8.5" 10 Bolt	.195.30
429-0033	3.70	GM 8.5" 10 Bolt	.211.50
429-0041	3.73	GM 8.5" 10 Bolt	.189.90
429-0034	3.90	GM 8.5" 10 Bolt	.189.90
629-0165	4.10	GM 8.5" 10 Bolt	.184.40

629-0167	4.56	GM 8.5 10 Bolt	.189.90
629-0169	4.88	GM 8.5 10 Bolt	.189.90
629-0171	5.13	GM 8.5 10 Bolt	.200.70
629-0173	5.38	GM 8.5 10 Bolt •	.227.80
629-0175	5.57	GM 8.5 10 Bolt •	.227.80
80-0272		Special cross pin for gears w/•	.31.78
58980		8.5" 10 Bolt Ring Gear Spacer	.52.70

For using 2.56 or numerically lower series carrier.

All gears fit 3 series carriers (2.73 and numerically higher) or MW Spool

GM 8.5" 10 Bolt installation kit

83-1021 Installation Kit, GM 8.5" 10 Bolt .110.70

83-1021-S Installation Kit, GM 8.5" 10 Bolt .150.00
For use with MW spool

GM 8.2" 10 Bolt Gears

8620 Street Gears *'64-'72 Chevelle - '64-'70 Chevy II - '67-'70 Camaro - '70-'72 Nova* *1.438" dia. pinion stem 25 spline pinion*

429-0011	3.08	65-70 Chevy 8.2" 10 Bolt	.233.20	629-0159	4.11	65-70 Chevy 8.2" 10 Bolt	.157.30
429-0013	3.36	65-70 Chevy 8.2" 10 Bolt	.233.20	629-0028	4.56	65-70 Chevy 8.2" 10 Bolt	.168.20
429-0015	3.55	65-70 Chevy 8.2" 10 Bolt	.233.20	629-0029	4.88	65-70 Chevy 8.2" 10 Bolt	.249.50
429-0112	3.73	65-70 Chevy 8.2" 10 Bolt	.179.00	629-0030	5.13	65-70 Chevy 8.2" 10 Bolt	.249.50

All gears fit 3 series carriers (3.08 and numerically higher)

GM 8.2" 10 Bolt Installation Kit

83-1022	Installation Kit, GM 8.2 10 Bolt	.110.70

GM 7.5" 10 Bolt Gears

8620 Street Gears *82 and later Camaro/Z28/Firebird/Trans Am - S10/S15 truck* *1.437" dia. pinion stem 27 spline pinion*

429-0048	2.73	7-1/2" GM 10 Bolt - 2 Series	.206.10	429-0044	3.23	7-1/2" GM 10 Bolt - 3 Series	.206.10
429-0001	3.08	7-1/2" GM 10 Bolt - 2 Series	.206.10	429-0045	3.42	7-1/2" GM 10 Bolt - 3 Series	.195.00
429-0003	3.23	7-1/2" GM 10 Bolt - 2 Series	.222.40	429-0046	3.73	7-1/2" GM 10 Bolt - 3 Series	.195.30
429-0005	3.42	7-1/2" GM 10 Bolt - 2 Series	.200.70	629-0322	4.10	7-1/2" GM 10 Bolt - 3 Series	.195.30
429-0007	3.73	7-1/2" GM 10 Bolt - 2 Series	.200.70	629-0324	4.56	7-1/2" GM 10 Bolt - 3 Series	.195.30
429-0009	4.10	7-1/2" GM 10 Bolt - 2 Series	.200.70	58970		8.2" GM Ring Gear Spacer	.44.00
629-0326	4.56	7-1/2" GM 10 Bolt - 2 Series	.220.40	80-0270		Special cross pin for ratios w/•	.31.80

2 series carriers 3.08 and numerically lower **3 series carriers 3.23 and numerically higher**

GM 7.5" 10 Bolt Installation Kit

83-1016	Installation Kit, GM 7.5" 10 Bolt '72-'81	.110.70
83-1044	Installation Kit, GM 7.5" 10 Bolt '82-'94	.115.00

'55-'64 Chevrolet Gears

8620 Street Gears *'55-'64 Chevy passenger car - '55-'62 Corvette (thirdmember type)* *8.2" ring gear 1.437" dia. pinion stem 17 spline pinion*

429-0052	3.55	55-64 Chevy Gear - 3 Series	.244.10	629-0022	4.56	55-64 Chevy Gear - 4 Series	.244.10
429-0099	3.73	55-64 Chevy Gear - 3 Series	.200.70	58970		8.2" GM Ring Gear Spacer	.44.00
629-0163	4.11	55-64 Chevy Gear - 4 Series	.200.70				

3 series Carriers 3.08 and numerically lower **4 series carriers 3.23 and numerically lower**

Corvette Gears

8620 Street Gears *'63-'79 Corvette IRS* *8.375" ring gear 1.626" dia. pinion stem 30 spline pinion*

429-0097	3.08	'63-'79 Corvette - 3 series	.287.50	429-0023	3.70	'63-'79 Corvette - 3 series	.287.50
429-0098	3.23	'63-'79 Corvette - 3 series	.287.50	429-0031	3.90	'63-'79 Corvette - 3 series	.287.50
429-0139	3.36	'63-'79 Corvette - 3 series	.287.50	429-0025	4.11	'63-'79 Corvette - 4 series	.287.50
429-0021	3.55	'63-'79 Corvette - 3 series	.287.50				

4 series gears must be used on 4.10 and numerically higher carriers

'57-'64 Olds-Pontiac Gears

8620 Street Gears *13 spline pinion '57-'64 Thirdmember type rears* *9.3" ring gear 1.875" dia. pinion stem*

629-0006	4.10	'57-'64 Olds-Pontiac Gear	.303.80	629-0009	4.88	'57-'64 Olds-Pontiac Gear	.303.80
629-0008	4.56	'57-'64 Olds-Pontiac Gear	.303.80				

All Gears fit 4 series carriers (4.10 and numerically higher) or MW Spools

'57-'62 Olds-Pontiac Gears

83-5810	Installation Kit, '57-'62 Olds Pontiac	.155.80
83-5810S	Installation Kit, '57-'62 Olds Pontiac *For use with MW Spool*	.141.90

8 3/4" Mopar Gears - 742 Case

8620 Street Gears *'57-'68 Dodge, Chrysler and Plymouth* *1.750" dia. pinion stem 10 spline pinion*

629-0375	3.91	8-3/4" Mopar Gear 1-3/4"	.189.90	629-0048	4.86	8-3/4" Mopar Gear 1-3/4"	.189.90
629-0045	4.10	8-3/4" Mopar Gear 1-3/4"	.189.90	629-0145	5.13	8-3/4" Mopar Gear 1-3/4"	.189.90
629-0046	4.30	8-3/4" Mopar Gear 1-3/4"	.189.90	629-0049	5.38	8-3/4" Mopar Gear 1-3/4"	.265.80
629-0047	4.57	8-3/4" Mopar Gear 1-3/4"	.189.90	629-0050	5.57	8-3/4" Mopar Gear 1-3/4"	.276.60

8 3/4" Mopar Gears - 742

83-1037 Installation Kit, 8 3/4" Mopar - 742 .....139.00

83-5810S Installation Kit, 8 3/4" Mopar - 742 .....141.90
For use with MW Spool

8 3/4" Mopar Gears - 489 Case

8620 Street Gears *'69-'73 Dodge, Chrysler and Plymouth* *1.875" dia. pinion stem 10 spline pinion*

629-0371	3.55	8-3/4" Mopar Gear 1-7/8"	.222.40	629-0061	4.57	8-3/4" Mopar Gear 1-7/8"	.200.70
629-0058	3.91	8-3/4" Mopar Gear 1-7/8"	.217.00	629-0062	4.86	8-3/4" Mopar Gear 1-7/8"	.200.70
629-0059	4.10	8-3/4" Mopar Gear 1-7/8"	.200.70	629-0063	5.13	8-3/4" Mopar Gear 1-7/8"	.217.00
629-0060	4.30	8-3/4" Mopar Gear 1-7/8"	.200.70	629-0151	5.38	8-3/4" Mopar Gear 1-7/8"	.260.40

8 3/4" Mopar Gears - 489

83-1031 Installation Kit, 8 3/4" Mopar - 489 .....139.00

8 1/4" - 8 3/8" Mopar Gears

8620 Street Gears *66-'98 W100/W200 - D100 - B100/200 - '91-'98 Dakota and all passenger cars* *1.626" dia. pinion stem 27 spline pinion*

429-0074	3.55	8-1/4" Mopar Gear	.206.10	629-0314	4.10	8-1/4" Mopar Gear	.206.10
429-0076	3.91	8-1/4" Mopar Gear	.206.10	629-0316	4.56	8-1/4" Mopar Gear	.206.10

9 1/4" Mopar Gears

8620 Street Gears *'66-'98 W100/W200 - D100 - B100/200* *1.876" dia. pinion stem 29 spline pinion*

429-0078	3.55	9-1/4" Mopar Gear	.238.70	629-0220	4.10	9-1/4" Mopar Gear	.238.70
429-0080	3.91	9-1/4" Mopar Gear	.238.70	629-0222	4.56	9-1/4" Mopar Gear	.238.70

Torco Racing Gear Oil

Torco GL-6 Racing Gear oil has proven to be ideal for drag racing and oval track applications. SAE 85W-140 can be used when running a spool, posi-traction or open differentials. It provides superior adhesive strength and extreme anti-score protection. In addition, the Torco gear oil available from MW is specially blended to include the friction modifying additives required for most clutch type posi-traction units. Available by the quart or 12 quart case. Look for the MW logo on the label.

55-0030 Torco SAE 85-140 Gear Oil (1 qt) 6.00

55-0040 Torco SAE 85-140 Gear Oil (12 qts) 66.00

Ring and Pinion Set-Up Videos

MW offers two educational installation videos. The MW video explains in step by step detail the set-up of a MW 9" center section. The Richmond Gear video is designed for basic ring and pinion gear set-ups. This video explains gear terminology and basic setup procedures for popular passenger car rear ends including 9" Ford, 10/12 Bolt Chevrolet, Dana 60 and 8 3/4" Mopar. Both videos are a must for rear end set-ups.

629-0000 Richmond Gear Video 17.70

10099 MW 9" Ford Assembly Video 35.00

MW Bench Mule

The good solution for those hard to hold items is the Mark Williams Bench Mule. The Bench Mule is a very sturdy and versatile fixture capable of holding differentials, transmissions, cylinder heads, etc. for assembly. Being able to securely position your work is essential. With two axis adjustment and heavy duty steel construction the MW Bench Mule makes tough jobs much easier to handle. The standard arms will easily hold a thirdmember or transmission and can even hold a full size 12 bolt housing. Optional attachments include arms for cylinder head assembly, an attachment to hold either a 35 or 40 spline spool for torquing ring gear bolts, and a special attachment to hold a MW modular 12 bolt housing. For safe use, the Bench Mule base must be securely mounted to a heavy duty work bench or stand.

670

57492

650	Bench Mule	.299.00
670	Spool Holding Fixture (35 & 40 spline)	.125.00
680	Cylinder Head Holding Forks	.37.00
57492	Spool Holder, 35 & 40 spline (for vise)	.70.00

Deluxe Pinion Depth Checker

Pinion depth is easily the most important element of correctly setting up a ring and pinion. The T&D pinion depth checker, used by many leading shops and racers, is easy to use and allows you to precisely set pinion depth. This deluxe kit has the components required for checking the most popular rears including 10 & 12 Bolt GM, Dana 60, 8.8 & 9" Ford and 8 3/4 Mopar rears. All components are stored in the included plastic carrying case to prevent damage. This is a very popular item and it works very well on a large variety of rears. Unfortunately it will not work on Mark Williams aluminum and nodular cases due to the captive pilot bearing area. Use PCMW for MW cases.

PCD

PCD T&D Deluxe Pinion Depth Checker .313.00

MW Pinion Depth Checker

MW 9" Ford thirdmember cases have more material around the pilot bearing than stock cases. This prevents the use of the PCD pinion depth checker or simular tools that must have access to the tip of the pinion. Fortunately, MW cases are precisely manufactured so that the required shim can be easily calculated. All you need to know is the distance from the end of the pinion pilot stem to the flange of the support. The PCMW makes finding this measurement easy. 1" travel dial indicator and precision calibration standard are included.

PCMW

PCMW Pinion Depth Checker Tool .127.50

Works with Mark Williams aluminum or nodular iron cases only. Must be 4.10 to 6.50 ratios (the pinion head diameter is too large on high ratios)

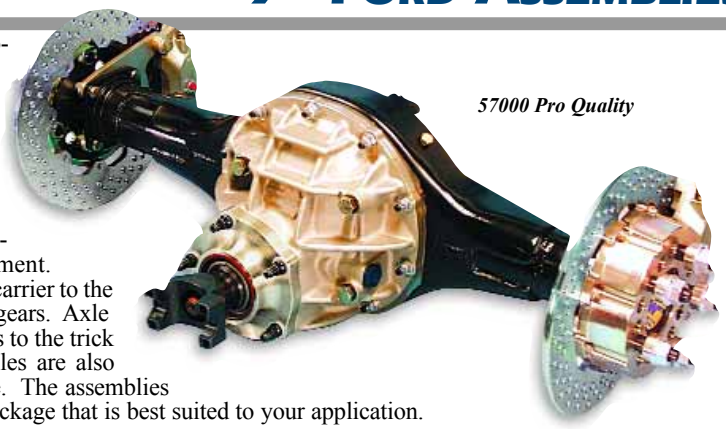
Specialty Set-Up Tools

Mark Williams offers a variety of special tools to aid in the assembly and set-up of ring and pinions. These tools include a wrench to hold either a female pinion coupler or 1350 series yoke while tightening/torquing the pinion nut, wrenches for turning the back lash adjusters on a 9", safety wire twist pliers, backlash indicator kit and pinion bearing pullers.

57493/57494 *57488* *300-2* *55-0001* *90250* *57485* *57490* *57499*

300-2	Safety Wire Twist Pliers, 9" length	.76.00
55-0001	Gear Marking Compound	.5.00
57485	Adjuster Wrench, 3.812 case	.98. 00
57488	Coupler/Yoke Wrench	.180.00
57490	Adjuster Wrench, 3.062 & 3.250 cases	.55.00
57493	Bearing Puller (standard pinion)	.148.50
57494	Bearing Puller (large pinion)	.148.50
57499	Backlash Indicator Kit	.87.50
90250	Slide Hammer, 12 Bolt Modular Cover	.32.50

9" Ford Assemblies



57000 Pro Quality

The steel housing MW 9" rear end assemblies are custom produced to suit your individual application. MW's years of experience assures you that the finished product will match your exact requirements. Each assembly starts with a brand new coil spring heavy duty 9" Ford center. 3 1/4" 4130 chromoly tubes are installed and given extensive internal supports. The thirdmember mounting flange is reinforced at the attachment stud locations. MW housing ends are installed after all structural welding is completed, including any suspension mounts and\or rear brace, to assure true alignment. Thirdmembers are available from the economical nodular iron carrier to the full competition thru bolt aluminum case with oversize 9-1/2" gears. Axle choices available range from the standard MW Hi-Torque axles to the trick Super-Light gun drilled models. The new MW Ultimate axles are also available in assemblies with 40 spline for an additional charge. The assemblies below are a few popular combinations, call for a quote on a package that is best suited to your application.

57000 9" Ford Complete Pro Quality Rear 4904.00
Aluminum thirdmember with thru bolt case, L.W. steel spool, Pro Gears, ball bearing pinion support and MW yoke, Super-Light gun drilled 40 spline axles with bearings and drive stud kit. Housing with 4130 tubes and brace. MW Disc brake kit with drilled steel rotors is also included.

57050 9" Ford Complete M/L Economy Rear 2814.00
MasterLine *Nodular iron thirdmember, standard spool, 8620 gears, MW tapered bearing pinion support and MW Ford pinion yoke, standard* MasterLine *axles with bearings and 1/2" wheel studs (less brakes). Add $250.00 for optional housing brace.*

57060 9" Ford Complete Locker Rear 3680.00
Nodular iron thirdmember, 31 spline locker, 8620 gears, MW tapered bearing pinion support and MW Ford pinion yoke, standard Hi-Torque axles with bearings and 1/2" wheel studs (less brakes). Add $83.00 for optional 35-spline locker.

57070 9" Ford Full Floater Rear 5825.00
Aluminum thirdmember with thru bolt case, L.W. 40 spline steel spool, Pro Gears, ball bearing pinion support and coupler. Housing has 4130 tubes and rear brace. Includes MW Floater kit with axles and brakes. Specify wheel to wheel width, bolt pattern and splines (same dimensions as required on axles). Add $200 for 5 1/2" B.C.

57080 9" Ford Floater Rear (less center) 3854.00
Same as 57070 assembly described above less thirdmember assembly. Specify wheel to wheel width, bolt pattern and splines (same dimensions as required on axles). Add $200 for 5 1/2" B.C.

57090 9" Ford Pro-Street Rear (less center) 2643.00
Narrowed steel 9" Ford housing with rear brace installed. Includes MW Pro Street Axles, wheel bearings, 5/8" drive stud kit and MW vented disc brakes. Specify wheel to wheel width, bolt pattern and number of splines (same dimensions as required on axles). Complete rear less thirdmember assembly.

9" Ford Steel Housings

57220

Mark Williams offers several steel 9" Ford housings. Housings with 3 1/4" diameter tubes are built with brand new coil spring centers, 4130 tubes with internal bracing and MW housing ends. MW also offers bolt-in housings for some popular applications that are built from stock tube housings with all required suspension mounts. All housings have a lube fill cap, drain, housing vent and thirdmember studs installed. We can install custom brackets to any of these housings for an additional charge. If you are going to install your mount brackets in the car, we can build the housing with the ends tacked on, so it can be returned for final housing end installation. This will eliminate the welding distortion caused by the bracket installation process.

57120 9" Ford housing with mounts 1129.00
Fits '82-'92 Camaro/Firebird. Includes torque arm mount.

57130 9" Ford housing with mounts 1088.00
Fits '78-'79 Mid size GM passenger car.

57140 9" Ford housing with mounts 1015.00
Fits '79-'93 Ford Mustang with Quad shock mounts.

57150 9" Ford Floater Housing 1687.00
9" center with 4130 tubes, rear brace, filler cap and bung, vent and floater spindles installed. Large tubed housing.

57160 9" Ford Housing with Mounts 1088.00
Fits '64-'72 Mid size GM passenger car

57200 9" Ford Large Tube Housing 1008.00
9" center with 3 1/4" 4130 tubes, filler cap and bung, vent and choice of any MW housing ends. No brace.

57220 9" Ford Large Tube Housing 1258.00
9" center with 3 1/4" 4130 tubes, rear brace, filler cap and bung, vent and choice of any MW housing ends.

Check out the Modular 9" housing in this catalog. Many quality minded builders are opting for the advanced modular rears available with a variety of housing ends and mounting brackets. Sometimes the Modular is a better cost value than the steel housings.

9" Low Friction Ford Thirdmembers

New ratio Pro Stock gears are available in specially prepared thirdmember assemblies. MW designed 9½" Richmond ratios are in stock and ready for shipment in specially prepared complete thirdmembers.

The ratios available in the 9310 alloy 32 spline pinion are: 5.00, 5.11, 5.14, 5.17 with others in process. Other 28 spline 9-1/2" ratios can be assembled with the same components. The assemblies feature the Supra-Fin™ processing that reduces friction and eliminates material transfer normally found in the break-in process. We also use a Sub-Zero thermo-treatment to eliminate the possibility of retained austenite. The gears feature a 9 ½" diameter 32 spline input (the same size as transmissions) eliminating an obvious weak link in the drive system.

We use a ceramic double angular contact pinion support bearing that is lighter, reducing friction and adding rigidity to the pinion. Special angular contact spool bearings are a huge advantage in reducing friction and maintaining correct ring gear position. A low drag pinion seal, used in conjunction with our aluminum pinion yoke reduces the pre-load drag by about 5 inch pounds.

The proven MW Thru-Bolt case features the new Sure-lock™ adjuster system that makes other retention methods obsolete and prevents adjuster back out. Top this with expert setup to special low drag specifications creates the most advanced features available. Our expert assembly technician meticulously assembles each unit documenting all critical settings. Quick delivery of these assemblies is available.

Features:

- **Pocket Lightened Ring Gear**
- **Supra-Fin™ Finished Gears**
- **Ceramic Pinion Support Bearings**
- **Aluminum Hard Coated Yoke**
- **Low-Drag Seal**
- **Aluminum 40 Spline Spool**
- **Angular Contact Spool Bearings**
- **New Sure-Lock Adjuster System**
- **32 Spline Pinion Input 9 ½" Gear**
- **Sub-Zero Treated Ring and Pinion**
- **Low Drag Assembly Procedures**
- **Optional Pressurelube/Dry Sump System**

57022-500 Low Friction 9-1/2" Thirdmember 4275.00
5.00 ratio 32 input spline Sub-Zero, Supa-Fin treated gears

57022-511 Low Friction 9-1/2" Thirdmember 4275.00
5.11 ratio 32 input spline Sub-Zero, Supa-Fin treated gears

57022-514 Low Friction 9-1/2" Thirdmember 4275.00
5.14 ratio 32 input spline Sub-Zero, Supa-Fin treated gears

57022-517 Low Friction 9-1/2" Thirdmember 4275.00
5.17 ratio 32 input spline Sub-Zero, Supa-Fin treated gears

57022 Low Friction 9-1/2" Thirdmember . . . . . .*P.O.R
*Units built with same component technology but different gears will be *Priced on Request.*

Exchange Thirdmember Program

To enhance our support for NHRA teams Mark Williams Enterprises has created a unique Thirdmember rebuild exchange program. After purchasing the 57022 Low Friction Thirdmember these units can be exchanged at the Mark Williams Race Trailer at a NHRA national event for a rebuilt freshly set-up unit. The program is designed for units that require a gear change due to normal cycle life. Any damages other than gear replacement will incur an extra charge. The MW Torco gear lube, (available are the MW Race Trailer) is required to be used exclusively in these thirdmembers.

We will make every effort to keep ample units available, but exchanges will be limited to units in stock. Units that have been modified (mounting holes opened up or other damages) will be subject to additional charges. The replacement of any other components due to gear breakage, etc. may require additional charges. These units can be exchanged for other ratios that are available. If you were running a 5.00 ratio and wanted to change to a 5.14 you can exchange the unit by paying the exchange/rebuild fee.

Exchange Rebuilt Thirdmember 1068.00
Units can be exchanged at the MW Race Trailer at most national events or shipped to Mark Williams Enterprises for rebuild of existing unit. Rebuild price for in plant overhauls includes return ground UPS shipping.

9" Ford Thirdmembers

For the past two decades, Mark Williams Enterprises has continually improved the effectiveness and reliability of our 9" Ford assemblies. We have introduced new and improved components, developed specialized tooling, and created detailed processes to ensure that our 9" Ford thirdmembers are the best money can buy. We offer three different styles of thirdmember cases and several different types of pinion supports to cover almost any application. Assemblies can be built with nodular iron, lightweight aluminum, or rugged thru-bolt style aluminum with several bore sized to match the spool/carrier required. Pinion Supports are available with tapered bearings or angular contact ball bearings.

The experts at Mark Williams can also assemble any of our thirdmembers to meet your exact needs. We can insure the accuracy of all critical operations by utilizing numerous specialized tools and applying over forty years of experience with 9" Ford carriers. Our attention to detail is reflected in every MW assembly and is evident even in the special transport containers supplied to ensure safe shipping and handling.

Door Car Thirdmembers, U-Joint Yoke

57003 Super Class/E.T. Bracket Assembly 1868.00
Aluminum thru bolt case (3.250 bore), lightweight steel spool, MW 28 spline 1350 series pinion yoke, ball bearing support, 4:86 to 6:50 9" Richmond std. pinion Pro Gear. (58#)

57004 Street Rod Assembly 1878.00
Aluminum light weight case (3.062 bore), Posi Unit, MW 1330 or 1350 pinion yoke, tapered pinion support, 3:00 to 6:50 9" 8620 gear. (70#)

57005 Street/Oval Track Assembly 1880.00
Nodular iron case (3.062 bore), 28 or 31-spline Detroit Locker, MW 1330 or 1350 pinion yoke, tapered support, 3:00 to 6:50 9" 8620 gear. (75#)

57007 E.T. Bracket/Oval Track Assembly 1525.00
Nodular iron case (3.062 bore), standard spool (28, 31, 35 or 40 spline), 1350 MW pinion yoke, tapered support, 3:00 to 6:50 9" Richmond 8620 gear. (72#)

57008 Super Class/E.T. Bracket Assembly 1901.00
Aluminum thru bolt case (3.250 bore), 35 Spline lightweight steel spool, MW 35 spline 1350 series pinion yoke, ball bearing support, 3:89 to 4:86 Richmond large pinion 9" Pro Gear. (58#)

57009 Pro Stock Assembly, Large Pinion 2010.00
Aluminum thru bolt case (3.812 Bore), 40 spline aluminum spool, MW 35 spline 1350 series pinion yoke, ball bearing support, 3:89 to 4:86 Richmond large pinion 9" Pro Gear.

57011 Pro Modified Assembly 9" 1966.00
Aluminum thru bolt case (3.812 bore), 40 spline lightweight steel spool, MW 35 spline 1350 series pinion yoke, ball bearing support, 3:20 to 4:86 Richmond large pinion 9" Pro Gear. (62#)

57014 9-1/2" Pro Stock Assembly 2215.10
Aluminum thru bolt case (3.812 Bore), 40 spline aluminum spool, MW 1350 series pinion yoke, ball bearing support, 4.10 to 5.22 ratio Richmond std. pinion 9-1/2" Pro Gear.

57015 Pro Street Assembly 2125.00
Aluminum thru bolt case (3.250 bore), 35 spline locker (nodular), MW 28 spline 1350 series pinion yoke, tapered support, 3.00 to 6.50 ratio 9" Richmond 8620 gear. (75#)

57019 Pro Stock Assembly 1958.00
Aluminum thru bolt case (3.812 Bore), 40 spline aluminum spool, MW 28 spline 1350 series pinion yoke, ball bearing support, 4:86 to 6.50 9" Richmond std. pinion Pro Gear.

57021 9-1/2 Pro Modified Assembly 2150.00
Aluminum thru bolt case (3.812 bore), 40 spline lightweight steel spool, MW 35 spline 1350 series pinion yoke, ball bearing support, 1/2" ring gear bolts, 4:10 to 4:86 Richmond large pinion 9-1/2" Pro Gear. (68#)

Dragster/Altered Thirdmembers, Coupler

57001 Pro Dragster Assembly 1773.00
Aluminum thru bolt case (3.250 bore), lightweight steel spool, 28 spline female pinion coupler, ball bearing support, 4.86 to 6.50 9" std. pinion Pro Gear. (58#)

57002 Pro Dragster Assembly 1828.00
Aluminum thru bolt case (3.250 bore), lightweight steel spool, 35 spline female pinion coupler, ball bearing support, 3:89 to 4:86 9" Richmond large pinion Pro Gear. (61#)

57010 Top Dragster Assembly 1895.00
Aluminum thru bolt case (3.812 bore), 40 spline lightweight steel spool, 35 spline female pinion coupler, ball bearing support, 3:89 to 4:86 Richmond large pinion 9" Pro Gear. (58#)

57012 Superlite Econo/Comp Assembly 1630.00
Lightweight aluminum case (3.250 bore), 35 spline aluminum spool, ball bearing support, female pinion coupler, lightened 9" 8620 standard Gear. (49#)

57013 9-1/2" Alcohol Dragster-F/C Assy 2190.00
Aluminum thru bolt case (3.812 bore), 40 spline lightweight steel spool, 35 spline female pinion coupler, tapered pinion support, 1/2" ring gear bolts, Richmond large pinion 9-1/2" Pro Gear. (62#)

9" Ford Thirdmembers Options

MW Aluminum Pinion Yoke . . . . . .add 145.00

MW Titanium Pinion Yoke . . . . . .add 620.00

MW Titanium Spool . . . . . .Price On Request.

Richmond NASCAR Ratio Gears . . . . . .add 195.00

Billet Detroit Locker (35 spline only) . . . . . .add 220.00

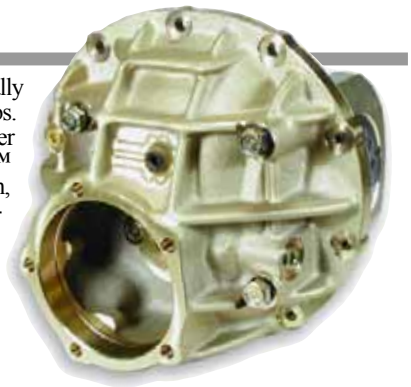
57466 Internal Lubrication Pump Kit Option 460.00

Supra-Fin™ Ring and Pinion Surface Improvement 125.00

57463 Case Mod for Internal Pump 125.00
Allows usage of 57466 Internal Pump Kit

CB Ceramic Bearing Upgrades . . . .Price On Request.

9" Ford Cases



ALUMINUM THRU-BOLT - This highly refined, heavy duty unit has become the "standard" in virtually all Pro Stockers, and has also proven to be exceptionally reliable in alcohol cars as well. It weighs 11 lbs. less than our nodular iron carrier. The design and use of an ultra strong aircraft alloy that is 30% stronger than billet 6061-T6, makes this superior to Nodular case strength. Other features of the MW Thru-Bolt™ cases include special bolts that go clear through the center section that provide extra compressive strength, and a completely captive pinion bearing housing. Billet aluminum caps, billet steel adjusters, pinion support 7/16" (3/8" available) stud kit and pilot bearing retainer are included. 3.062", 3.250" and 3.812" (with "Grip-Lock"™ adjusters) carrier bore sizes are available. All thru bolt cases have clearance for 9-1/2" style gears (9-1/4" actual diameter). Fluid passage ports are pre drilled.

57430 9" Ford Thru-Bolt Aluminum Case 575.00
3.062" bore w/aluminum caps and adjusters. 16.5 lbs.

57440 9" Ford Thru-Bolt Aluminum Case 575.00
3.250" bore w/aluminum caps and adjusters. 16.5 lbs.

57448 9" Ford Big Bore Thru-Bolt Case 625.00
3.812" bore w/aluminum caps and adjusters. (3.812 bore size required to run a 40 spline aluminum spool) 16.2 lbs.

57448-95S 9" Ford Big Bore 9-1/2" Gear Case 690.00
Same as 57448 but with steel billet caps. 19.6 lbs.

57448-95P 9" Ford Big Bore 9-1/2" Gear Case 732.00
Same as 57448 but machined for internal pump. 16.5 lbs.

LIGHT WEIGHT ALUMINUM - The MW Light Weight case is based on the MW nodular case design and is cast from the same material used in the MW thru-bolt cases, but does not have the additional reinforcing and heavier walls of a thru-bolt case. The case should only be used in lighter drag racing and street applications. The MW Light Weight case is 5 lbs. lighter than a thru-bolt case and over 15 lbs. lighter than an OE nodular case. It can also be used in street or oval track applications.

57415 9" Ford Light Weight Case 426.00
3.062" bore with aluminum caps and adjusters. 11.5 lbs.

57425 9" Ford Light Weight Case 426.00
3.250" bore with aluminum caps and adjusters. 11.5 lbs.

57465 NASCAR Case

NODULAR IRON - An excellent replacement for OEM carriers. The MW nodular iron case features a unique case design that provides necessary reinforcement in all critical areas, yet is comparable in weight to a stock unit while lighter than competitors. Each MW nodular iron case comes with billet steel rear end caps that have been precision alignment bored, special billet steel adjusters and studs to secure the pinion assembly. 3.062" or 3.250" bore sizes available.

57460 9" Ford MW Nodular Case 387.00
3.062" bore with steel caps and adjusters. 29 lbs.

57470 9" Ford MW Nodular Case 387.00
3.250" bore with steel caps and adjusters. 29lbs.

57465 9" Ford MW NASCAR Case 495.00
3.062" bore with pump mounts and fluid ports. Load bolt provision, 3/8-16 threads for support lightened caps. 27.7 lbs.

Internal Lubrication

Internal lubrication pumps pressure feed oil to areas that become starved from acceleration forces. The pump in internally mounted to the thirdmember case (special machining required). Circle track applications use the pump for flow to an oil cooler with the return flow providing cooling and lubrication.

57466 Internal Oil Pump Kit 460.00
Pump mounts to pinion pilot bearing area, includes hard line and case fitting. (external lines extra)

57463 Case Modifications for Pump 125.00
Machining required to mount internal pump. 57465 and 57488-95P are pre machined for pump.

Thru-Bolt Features

9" Ford Aluminum Pinion Support

57620

57680

Mark Williams manufactures 9" Ford pinion support assemblies for several applications. Assemblies are available for standard 28 spline pinions and 35 spline large pinion pro gears. The support housings are CNC machined from aircraft quality aluminum and use either oversized tapered roller bearings or low friction angular contact ball bearings. All pinion supports come pre-assembled. The bearing pre-load is set through the use of a solid hardened pre-load spacer rather than a crush sleeve or stack of thin shims. The spacer is factory machined to the required preload for each assembly. Pinion seals are included. Housings are drilled to accommodate the 7/16" studs used in all MW cases. However, by using special reducer bushings (#57606) and studs (#57609) the housing can also be used with 9" Ford cases that have 3/8" threads. All MW 9" yokes and couplers are designed to work perfectly with MW pinion supports, stock Ford yokes must be shortened for proper thread engagement.

57620 Pinion Bearing Housing Assembly 254.00
For 9" Ford standard 28 spline pinion gears, with tapered bearings. Requires MW yoke or coupler.

57630 Pinion Bearing Housing Assembly 232.00
For 9" Ford 35 spline large pinion Pro gears, with tapered bearings. Requires MW yoke or coupler.

57650 40 Spline Pinion Bearing Housing Assy. . . .692.00
For 9-1/2" Ford, 40-spline, long pinion (+1.0") with tapered bearings, requires MW coupler. With external oil feed port.

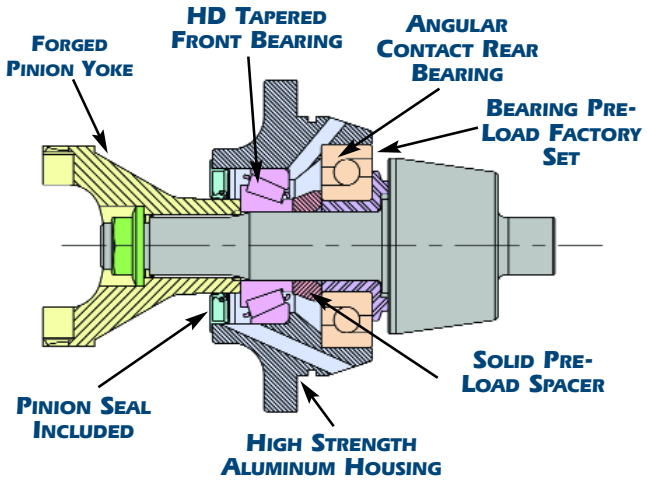
57670 Pinion Bearing Housing, Ball Bearing 270.00
For 9" Ford standard 28 spline pinion gears, with angular contact rear bearing. Requires MW yoke or coupler.

57680 Pinion Bearing Housing, Ball Bearing 275.00
For 9" Ford 35 spline large pinion Pro gears, with angular contact rear bearing. Requires MW yoke or coupler.

57606 7/16" to 3/8" flanged reducers (5ea.) 9.50
Required for use with 3/8" coarse threaded cases.

57609 3/8" pinion stud kit (5ea.) 23.00
For stock or after-market cases with 3/8" course threads in the case.

Ceramic bearing upgrade for 57670 or 57680 . . . . .495.00



57670 Pinion Support Section

9" Ford Nodular Pinion Support

The Mark Williams nodular iron ball bearing pinion support is identical in appearance to a standard Ford OEM support and accepts a standard 28 spline pinion shaft. However, to reduce friction and bearing pre-load the assembly uses an angular contact ball bearing in the rear and a heavy duty Timken® tapered bearing in the front. With this combination, the initial bearing pre-load can be reduced from 18-20 inch lbs. to 3-5 inch lbs. As with all MW supports, each is pre-assembled and the bearing pre-load is factory set using a hardened solid pre-load spacer rather than a crush sleeve or shims. Field shimming for preload is not required. A standard pinion seal is also included and a low drag Teflon seal is available as an option. The nodular iron support will accept a stock OE Ford yoke or a MW 39024 NASCAR type pinion yoke. ceramic ball in the angular contact bearing. Optional low drag Teflon lip seal is also available

57690

57690 Nodular Iron Steel Ball Bearing Pinion Support 295.00
Steel balls angular contact rear bearing Pre-Set.

57690-CB Nodular Iron Ceramic Ball Bearing Pinion Support 790.00
Ceramic balls angular contact rear bearing Pre-Set.

57924 Seal, Teflon Low Friction for 28 spline pinion 53.55
Special low drag 9" pinion seal

9" Ford Spools


53140


53133


53127

The MW 9" Ford standard and scalloped light weight steel spools are made from 4140 alloy steel forgings and CNC machined to extremely tight tolerances. All steel spools are thru hardened using our in-house austemper heat treating process. This exclusive process produces a reliable, highly ductile, quality spool. MW aluminum spools are produced from 7075 T-6 forgings and hard coat anodized for durability. The bearing journals and ring gear flange on all spools are CNC ground on special fixtures that ensure perfect concentricity with the axle spline and zero ring gear run-out.

53123 9" Ford Aluminum Spool 225.00
Stock 31 spline, weight 4.9 lbs

53128 9" Ford Aluminum Spool 225.00
Stock 28 spline, weight 5.0 lbs.

53133 9" Ford Aluminum Spool 345.00
Aluminum spool (40 spline), 3.812" bearings. Requires 3.812 bore case, 57448XX series weight 5.5 lbs.

53135 9" Ford Aluminum Spool 345.00
Aluminum spool (35 spline), requires 3.250" bore case weight 4.9 lbs.

43127 9" Ford Titanium Spool . . . . . .Price On Request.
MW 40-spl., L/W milled 3.812 case required, weight 4.5 lbs.

53136 9" Ford Standard Spool 240.00
MW 40-spline, requires 3.250" bore case and large bore wheel bearing with proper housing ends. weight 11 lbs.

53139 9" Ford Standard Spool 240.00
Stock type 28-spline, weight 10 lbs.

53140 9" Ford Standard Spool 240.00
MW 35-spline for stock case, 2.893" or 3.062" bore, 11lbs.

53144 9" Ford Standard Spool 240.00
Stock type 31-spline, weight 11 lbs.

53146 9" Ford Standard Spool 240.00
MW 35-spline 3.25" case, weight 12 lbs.

53125 9" Ford Light Weight Spool 290.00
Light weight profile milled steel spool (40 spline), 3.812 bearings with 1/2" ring gear bolts, 3.812" case, 10 lbs

53127 9" Ford Light Weight Spool 290.00
Light weight profile milled steel spool (40 spline), 3.812 bearings, 7/16" ring gear bolts, 3.812" case, 10 lbs.

53137 9" Ford Light Weight Spool 290.00
MW 40-spline, L/W milled, 3.250" bore case, large bore wheel brgs and proper housing ends are required, weight 8.5 lbs

53138 9" Ford Light Weight Spool 290.00
Summers type 35-spl., L/W milled, weight 9 lbs. (Dana spline)

53145 9" Ford Light Weight Spool 290.00
MW 35-spline, L/W milled for stock case, 2.983" or 3.062" bore, weight 8.75 lbs.

53147 9" Ford Light Weight Spool 290.00
Strange type 35-spline, (Dana spline)weight 9 lbs.

53148 9" Ford Light Weight Spool 290.00
M-W 35-spline, L/W milled 3.250" case, weight 9 lbs.

9" Ford Lockers & Posi-Tractions

The 9" Ford has several ways to go when an increased traction differential is required. Mark Williams stocks several different types, the Detroit Locker, the Truetrac®, the DPI Gold Track and the Ford Clutch Posi.

DETROIT LOCKER® is offered for popular 9" Ford applications (28 , 31, and 35-spline). These units are designed to provide power to both wheels even in those situations where one tire loses traction. Detroit lockers will also compensate for differences in wheel speed when turning corners by letting the wheel with the larger turning radius overrun and unlock from the other wheel. The 35 spline unit is popular for Pro-Street application, requiring a large axle spline and can be used for drag racing.


187S-35C


57311


187S-35C

TRUETRAC® OR GOLD TRACK® differentials do not use friction plates, but rather the wedging action of separating spiral pinion gears. This type of differential is unique in that it increases traction, but does not affect the steering, and there are no friction plates to wear. It allows normal differentiation without adverse effect on steering, or chattering when cornering. Only when there is a loss of traction, will power transfer occur. The worm drive differential offers moderate strength.

CLUTCH POSI-TRACTION are the most common and are used in the original rears. Smooth quite action relies on spring pressure and friction in the clutch plates to increase driving traction. Quietest for street rod applications.

187S-13A 9" Ford 28 spline Detroit Locker® 523.00

187S-17B 9" Ford 31 spline Detroit Locker® 523.00

187S-35S 9" Ford 35 spline Locker 827.50
Billet steel housing. Requires 3.250" bore case.

187S-35C 9" Ford 35 spline Locker 606.00
Nodular iron housing. Requires 3.250" bore case.

57231 9" Ford 31 spline Black Gold 845.00

57131 9" Ford Posi Unit (31 spline) 401.00
Auburn cone type posi unit.

57311 9" Ford Posi Unit (31 spline) 408.00
Clutch type posi-traction (Motorsports type).

9" Ford Components

39008 MW 9" Ford Pinion Yoke 150.00
28-spline, 4340 steel for 1350 series U-joint.

39011 MW 9" Ford Pinion Yoke 150.00
35-spline,4340 steel for 1350 series U-joint.

39025 9" Ford Pinion Yoke 1330 Ford Joint 135.00
4340 steel for Ford 1330 series joint 3-5/8 x 1-1/8" for MW support.

5000-181 Retaining Ring For MW Ford Case 1.00

53124 9" Ford Spool Bearings 3.812 O.D. 74.80

53141 9" Ford Spool Bearings, 2.893 O.D. 45.50

53142 9" Ford Spool Bearings, 3.062 O.D. 50.75

53143 9" Ford Spool Bearings, 3.250 O.D. 51.00

57407 Pinion Stud Kit for MW Cases 7/16" 36.50

57408 Pinion Stud Kit for MW Case 3/8" 36.50

57449 Load Bolt Kit for MW Case 23.00

57500 Heavy-Duty Adjusters, 3.062 bore 46.50

57502 Replacement Cap, 2.893" bore (ea) 85.00

57503 Replacement Cap, 3.062" bore (ea) 85.00

57510 Shim, Spool/Carrier (pr) 32.50
For 9" Ford Spool/Carrier in a 3-1/4" case.

57550 Heavy-Duty Adjusters, for 3.250 bore (pr) . . .62.00

57560 Heavy-Duty Adjusters, for 3.812 bore (pr) . . .70.00

57570 Adjuster Adapter (pr) 70.00
To use 3.062" bearing in a 3.25" case, (best method).

57602 Pinion Bearing Sleeve 12.00
For rear bearing of 57600/57620 Pinion Bearing Housing.

57603 Solid Pre-Load Spacer 14.20
For 57600, 57610, 57620 and 57630 (machining required).

57604 Shim, Yoke/Coupler 11.00
For use with 39008 or 40300 with stock 9" Ford pinion housing.

57608 Bolt Kit, 9" Ford Pinion Support 4.00

57609 Stud Kit, 9" Ford Pinion Support 21.50
For stock and non M-W cases.

57900 Ring Gear Bolt Set (7/16") 26.00
Drilled for safety wire (use ARW77 washers w/Strange spool)

57901 Gasket, 9" Ford Thirdmember 3.10

57901-TS 9" Ford Thirdmember Gasket 7.20
EZ-Release reusable gasket.

57902 Pinion Nut, 9" Ford (standard pinion) 4.30

57903 Pinion Nut, 9" Ford (35 spline pinion) 4.50

57904 Seal, 9" Ford Pinion (standard pinion) 13.50

57905 Seal, 9" Ford Pinion (35 spline pinion) 11.50

57906 Adjuster Locks(pr) 4.75

57907 Pinion Pilot Bearing (standard bearing) 16.75

57908 Pilot Bearing Retainer (for stock case) 5.20

57909 Crush Sleeve (stock support) 10.00

57912 Seal, 9" Ford Pinion (40 spline pinion) 31.80
For 57650 or 11"pinion support Viton high temperature compound.

57913-10 Thirdmember Stud Kit (10 ea.) 33.00
Thirdmember to housing attachment bolts, nuts and washers.

57914 Pinion Pilot Bearing, .812" Long 19.60
For MW thru bolt cases.

57916 9" Pinion Depth Shims .002-.007 (7/16") 15.00
MW alum. shims. 2ea.-.005, .007 & 1 ea.-.010, .012, .015.

57920 Ring Gear Bolt set (1/2") 50.00
Drilled for safety wire (use ARW78 washers w/Strange spool)

TRD-3244 Pinion Bearing Shim 7.60
Required with 57602 sleeve.

57999 Thirdmember Transport Container 30.00

9" Ford Axle & Spool Package

The MW 9" Ford Axle/Spool Package includes a pair of custom built standard Hi-Torque axles (any length/35 or 40 spline combination), axle bearings, bearing retainer plates, standard steel spool and a complete 5/8 drive stud kit with Snap-Lock™ washers This kit allows you to have the top of the line axle and spool kit while saving 10%.

HI-K12 Axles/Spool/Bearing/Retainer/Stud Kit 890.00
9' Ford spool, axle and drive stud kit

Call for additional savings on a lightweight components package.

8.8 Ford Components

With the ever increasing popularity of 5.0 Mustangs, the demand for premium driveline components to beef up the 8.8 Ford rear end has also increased. To meet these needs, Mark Williams has expanded it's product line of 8.8 components. Along with the MW Hi-Torque axles, spools and "C" clip eliminator kit currently available, MW is now offering the new Master Line axles and "C" clip eliminator kit for street/strip applications and a new Eaton™ 31 spline posi-traction unit. A new 8.8 upgrade package shown on page 33 is now available to convert the OEM 28 spline rear into a 31 spline with an Eaton™ posi-traction (a 33 spline posi upgrade is also available). All of the new MW products are produced in-house to the same high standards as all other Mark Williams components.

HI-K10 8.8 Ford Axle/Spool/Weld on End Kit 971.00
35 spline spool, Axles Housing ends,retainers Drive studs

HI-K11 8.8 Ford C-Clip Eliminator/Spool Kit 982.00
35 spline spool, Hi-Torque axles, C-Clip eliminator kit Drive studs

8.8 Spool and Posi-Traction

For drag race applications Mark Williams offers a pair of steel spools, a standard steel and a lightweight steel, with MW 35 splines. These spools can be used with either MW Hi-Torque axles or MW's new MasterLine axles both require the use of a MW "C" clip eliminator kit or updating to weld on housing ends. For high horsepower/torque street applications the new Eaton™ 31 spline posi-traction is the only way to go. With carbon fiber clutches and 400 lbs. preload this unit delivers the most torque to the rear wheels yet still gives excellent driveability. These units are the ideal companion for MW MasterLine axles and "C" clip eliminator kits.


53134


19588

53132 8.8" Ford 35 Spline Spool 240.00

53134 8.8" Lightweight Ford Spool 290.00

19588 8.8" Eaton™ Posi-Traction (31 Spline) 450.00

19588-33 8.8" Eaton™ Posi-Traction (33 Spline) . . .813.00

8.8 C-Clip Eliminator Kits


59260

Mark Williams has developed "C" clip eliminator kits for the 8.8 Ford for most applications. Two kits are primarily for drag racing (with sealed ball bearings) while the other is for street/strip applications and is set up with Timken® tapered roller bearings to handle cornering loads.

59210 8.8 Ford C-Clip Eliminator Kit 225.00
For stock axles. 1.564" I.D. bearings w/reducer bushings.

59250 8.8 Ford C-Clip Eliminator Kit 222.00
For MW or MasterLine axles with 1.564" I.D. ball bearings.

59260 8.8 Ford Street/Strip C-Clip Elim. Kit 212.00
For MW or MasterLine axles with 1.564" I.D. Timken® tapered roller bearings. Best kit for street applications.

8.8 Billet Cap and Yoke

One of the most common causes of rear end failure can be traced to the stock rear end caps. To cure this problem, MW offers a billet steel replacement cap that has an increased cross section and heat treated hardware. Requires simple milling or surfacing in rod cap grinder to install.
Our 1350 series Pinion Yoke eliminates the circular companion flange and allows the use of a 1350 series U-Joint and high strength driveshafts as used in all other drag race cars. Driveshafts are available in steel or aluminum with transmission yokes for all popular models.


39023


59300

59300 8.8" Ford Steel Main Cap (ea) 85.00
Requires milling of cap parting line to install

39023 MW 8.8" Ford Pinion Yoke 165.00
For 1350 series Spicer joint for u-bolt retention

8.8 Upgrade Package

The Mark Williams MasterLine package has been designed to strengthen and upgrade the 28 spline OEM 8.8 Ford rear ends for high horsepower street/strip applications. This package includes a pair of MW MasterLine 31 spline street/strip axles, a 31 spline Eaton™ posi-traction unit, a new street/strip "C" clip eliminator kit and a set of 1/2" screw-in wheel studs. The increase from 28 to 31 spline increases the torsion strength of the axle by 37%. The new generation Eaton™ posi unit has also been designed to handle higher torque loads. The carbon fiber clutches in this unit have the unique ability to increase their friction coefficient as they heat up from slipping. The street/strip c-clip eliminator kit incorporates Timken® tapered unit bearings that have superior radial and thrust load capacity and a heavy duty outboard seal that eliminates leakage associated with "C" clip kits in the past. Also available is a 33 spline posi kit for applications that need increased axle strength. For the serious Drag Race only applications the 35 spline spool is the only way to go.

ML-K01 8.8" Ford 31 spline upgrade kit 1054.00
MasterLine axles, Eaton™ Posi, "C" clip kit and wheel studs.

ML-K02 8.8" Ford 33 spline upgrade kit 1419.00
Same kit as above with posi unit modified to accept 33 side gears

ML-K03 8.8" Ford 35 spline spool/C-clip eliminator 932.00
35 spline axles and spool, 1/2" wheel studs, C-clip eliminator kit.

8.8 Complete Rebuilds

MW can do a complete rework of your existing 8.8 rear. Just ship us your stock housing and we will perform all the necessary modifications for heavy-duty street-strip use or Pro-Class drag racing. The first step is to replace the stock housing ends with our ends, eliminating the troublesome c-clip axle retention clips. We have special ends that will accept your present 8.8" brakes (disc or drum), or can install any end based on your brake requirement. The tubes are welded to the center with a special stainless TIG process. A steel main cap is fitted on the drivers side to eliminate the possibility of stock cap failure. An Eaton™ posi-traction or 35 spline spool unit is installed in conjunction with your choice of 3.55 to 5.14 ratio Richmond™ gears. MasterLine™ axles are available with either 5 hole or 4 hole wheel patterns. Special ½" screw in wheel studs are used,and are available in either 2" or 3" long to match your wheels. The Pro-Class drag unit features Hi-Torque ™ axles in solid or gun drilled models and Drive stud wheel studs. The rear is assembled by MW's professionals with new bearings and seals, and includes necessary modification to your existing brake system for the new housing ends. When rebuilding the rear we can change the wheel to wheel width without additional charge. Your completed rear is crated for shipping protection, and returned ready to bolt in and run, including 3 quarts of Torco gear lube.

ML-R01 8.8" Rebuild, 31 spline ML Axles & Posi . .2018.00
Your rear modified with choice of gears and 1350 yoke & cap.

ML-R02 8.8" Rebuild with 35 spline ML Axles,Spool 1727.00
Your rear modified with choice of gears and 1350 yoke & cap..

HI-R03 8.8" Rebuild Hi-Torque Axles, 35 Spool . . .1963.00
Standard Hi-Torque axles, spool, yoke, cap, drive studs and gears

HI-R04 8.8" Rebuild Gun-Drilled Axles, LW Spool .2128.00
Gun Drilled (11/16) axles L/W spool, cap, drive studs, yoke and lightened gear.

Optional Equipment for the 8.8:


TA1806

TA rear cover strengthens the housing and provides support to the main caps. Available as an addition on new and rebuild packages.

TA1806 TA Cast Aluminum Cover. 163.20

9" Bolt in Rear

57145 9" Ford Mustang Bolt In Rear 2834.00
An option to consider is the 9" housing that has bolt in mounting brackets installed. MasterLine 31 spline axles are used with a MasterLine™ Thirdmember, 31 spline posi with a choice of 3.50 to 6.50 gear ratio. This is a complete bolt in rear, less brakes.


72300

Pro Street Brake kit with a parking brake. For use with MW's symmetrical housing ends, (#58580) this brake kit has a provision for a floating mechanical wedge action parking brake caliper built into the caliper mounting bracket. The kit includes: MW's race proven 4 piston aluminum calipers with pads, vented cast iron rotors, aluminum brake hats, floating parking brake.

72300 MW Pro-Street Disc Brake Kit 866.00

Dana 60 Assemblies

The Dana 60 series rear end has for many years been one of drag racing's most popular differentials, mainly due to the heavy-duty nature of the unit itself. The Dana features a large 9-3/4" diameter ring gear and the availability of aftermarket 8620 or 9310 alloy gears with ratios of 3.54 to 7.17! The Dana is the only passenger O.E.M. rear that was available with 35 spline axles in the original factory configuration. The main drawback to the Dana is the weight. By comparison, a complete Dana 60 is approximately 35# heavier than a 9" with a braced steel housing. A newly designed center casting has threaded adjusters for the carrier/spool bearing and pad for the Mopar type pinion snubber. The one piece center casting creates stiffness not found in thirdmember type rears. The Dana 60 offers excellent strength and reliability for the dollar. MW has a complete array of specialized components to further improve a Dana 60.

56002 Dana 60 Pro-Quality Rear 3210.00
Complete with Superlight axles, bearings, lightweight spool (35 or 40 spline), choice of Pro-Gears, New thread adjuster center housing, MW pinion yoke, with 4130 steel tubes and MW symmetrical housing ends with Pro-Stock wheel bearings and drive stud kit. (less brakes)

56050 Dana 60 Economy Rear 2741.00
Complete with axles, bearings, standard spool (35 or 40 spline), choice of 8620 gears, stock MW pinion yoke, new thread adjuster housing 4130 tubes with any MW housing end and 1/2" screw in wheel studs. (less brakes)

56060 Dana 60 Rear with Detroit Locker 3182.00
Complete with axles, bearings, Detroit Locker, 35 spline, choice of 8620 gears, stock MW pinion yoke, new thread adjuster housing 4130 tubes with any MW housing end and 1/2" screw in wheel studs. (less brakes)

56100 Dana 60 Housing 805.00
Complete with Superlight axles, bearings, lightweight spool (35 or 40 spline), choice of Pro-Gears, new thread adjuster center housing, MW pinion yoke, with 4130 steel tubes and MW symmetrical housing ends with Pro-Stock wheel bearings and drive stud kit. (less brakes)

Dana 60 Spools

53170 Dana 60 Spool 240.00
MW 35-Spline, standard, 21 Lbs.

53173 Dana 60 Spool 290.00
MW 35-Spline, L/W profile milled, 17 Lbs. This spool is for 3 series gears only.

53174 Dana 60 Aluminum Spool 550.00
MW 40-spline, Aluminum, weight 8 lbs.

53175 Dana 60 Spool 290.00
MW 35-Spline, L/W profile milled, weight 17 lbs.

53176 Dana 60 Spool 240.00
MW 40-Spline, weight 19.7 lbs. (45mm bore wheel bearings and proper housing ends are required)

53177 Dana 60 Spool 290.00
MW 40-Spline,L/W profile milled steel (45mm bore wheel bearings and proper housing ends are required) 15 lbs.

53190 Dana 60 Spool 240.00
35-Spline stock type spline, standard, weight 21 lbs.

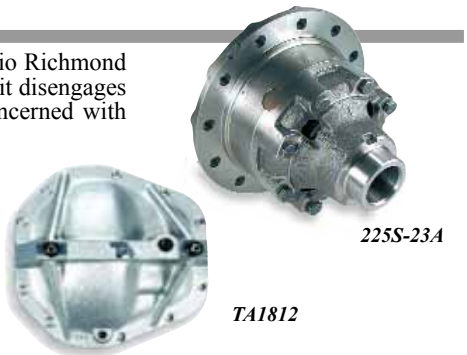
53195 Dana 60 Spool 290.00
35-Spline stock type, L/W profile

Dana 60 Locker

The Dana 60 Detroit Locker features 35 spline axle gears and will accept 4.10 to 7.17 ratio Richmond gears. In straight line motion the unit is locked similar to a spool. When cornering the unit disengages the tire turning the largest radius allowing differentiation. Best for applications not concerned with slight noise when cornering.

225S-23A Detroit Locker 681.00
Dana 60 rear 35-Spline (for 4.10 to 7.17 Richmond gear)

TA1812 TA Dana 60 rear cover 162.20
The TA rear cover strengthens the housing and provides support to the main caps. Available as an addition to complete rears or separately.



Dana 60 Components

30275 Dana 60 Pinion Nut Washer 2.00

39007 Dana 60 Pinion Yoke 83.00
1350 joint stock type Dana Corp. Mfg.

39014 MW Dana 60 Pinion Yoke 165.00
29-spline, 4340 steel for 1350 series U-joint

53171 Spool Bearings, Dana 60 . . . . . .88.60

53172 Pinion Bearing Set, Dana 60 . . . . . .96.25

56200 Dana 60 Main Cap 65.00

56900 Dana 60 Ring Gear Bolt Kit 36.00

56901 Dana 60 Cover Gasket 6.10

56902 Dana 60 Pinion Nut 2.75

56904 Dana 60 Pinion Seal 16.25

56910 Dana 60 Shim Kit 54.00
Pinion depth and pre-load shims, spool shims, gasket, pinion nut and washer.

56930 Clutch Pack 75.60
For Dana 60 Power-Loc with 35 splines.

56940 Axle Gear,(ea.) 47.50
For Dana 60 Power-Loc with 35 splines.

56950 Ring Gear Spacer 49.60
Dana 60 for using 4.56 to 7.17 gear on 3.54 to 4.10 carrier.

56955 Dana 60 Chrome Cover 44.50

56956 Dana 60 Cover Bolt Kit (10 pcs) 11.70

56960 Power Lock Kit Dana 60 or 70 . . . . . .275.00
Clutches, axle and spider gears, spider gear pin for 35 spline Power lock posi traction. Converts 23 spline carriers to 35.

83-1034 Gear Installation Kit, Dana 60 . . . . . .161.30
Shims (carrier, pinion depth, and preload), pinion nut, carrier bearings, pinion bearings, ring gear bolts, pinion nut and washer, gear marking compound and gasket.

TA1812 TA Rear Cover 175.90

Dana Billet Cap

Replace one of the most common component failures on a Dana 60 with a MW billet steel replacement cap. The Dana 60 typically only requires one on the drivers side. Installation requires milling or rod cap grinding on the parting line of the cap.

56200 Dana 60 Steel Main Cap w/fasteners(ea) 65.00

888 Labor (cap installed by MW Ent.) (ea) 40.00

Dana 60 Axle & Spool Package

The MW Dana 60 Axle/Spool Package includes a pair of custom built standard Hi-Torque axles (any length/spline combination), axle bearings, bearing retainer plates, standard steel spool and a complete 5/8 drive stud kit. This kit can be 40 splines if the housing ends accept 45mm bore bearings. If using stock Mopar ends the 56001 wheel bearing is supplied and limit is 35 splines.

HI-K16 Dana 60 Hi-Torque Axle Package 890.00
Hi-Torque axles with steel spool, wheel bearings, retainers and drive stud kit.

Mopar Housing Ends and Retainers

Two different type Mopar ends are produced. We recommend using the 53189 end to take advantage of the larger bore (up to 45mm) wheel bearings for most applications. 53184 ends are for the stock replacement (2.875" O.D). bearings.

53184 Mopar Housing Ends, (pr) 102.50
For 56001 or 56003 bearings 2" Long.

53189 Mopar Housing Ends, (pr) 90.00
For Mopar brakes using 58503, 58504 and 58505 axle bearing.

56501 Mopar Bearing Retainers, (pr) 24.00
For 53189 Mopar housing ends.

8-3/4 Mopar Components

39016 MW 8-3/4" Mopar Pinion Yoke 180.00
10-spline, 4340 steel for 1350 series U-joint

53181 8-3/4" Mopar Spool Bearings 58.10
3.265" bore stock case (for MW spool)

53182 Pinion Bearing Set 106.00
8-3/4" Mopar, 1-3/4" pinion diameter

53900 8-3/4" Mopar Ring Gear Bolt Kit 22.50

53901 8-3/4" Mopar Rear Gasket 7.62

53902 8-3/4" Mopar Pinion Nut 3.12

53904 8-3/4" Mopar Pinion Seal, 1-3/4" 27.40

53905 8-3/4" Mopar Pinion Seal, 1-7/8" 12.50

53910 Shim Kit 56.90
8-3/4" Mopar, 1-3/4" pinion. Includes pinion depth and preload shims, pinion seal, and marking compound, pinion nut and washer.

53920 Pinion Shim Kit (489 Case) 45.00
8-3/4" Mopar, 1-7/8" pinion (tapered pinion). Includes pinion depth shims, crush sleeve, pinion seal, pinion nut / washer, and marking compound.

83-1037 Installation Kit, 8-3/4" Mopar 139.00
For 742 case with 1-3/4" pinion. Includes pinion depth and preload shims, pinion nut and washer, pinion seal, spool bearings (with 2.00" bore), pinion bearings, ring gear bolts, gear marking compound, and gasket.

83-1031 Installation Kit, 8-3/4" Mopar 124.00
For 489 case with 1-7/8" Pinion. Includes pinion depth shims, crush sleeve, pinion nut and washer, pinion seal, spool bearings (with 2.00" bore), pinion bearings, ring gear bolts, gear marking compound, and gasket.

56003 Mopar Non-Adjustable Axle Bearings (pr) . . .87.00
2.875" O.D., 1.562" I.D. for stock ends w/spiral lock (not shown)

Note: ***When ordering a 8-3/4" Mopar installation kit please specify whether using a spool or stock carrier so that correct carrier bearings are sent with the installation kit.***

8-3/4 Mopar Spools

53179 8-3/4" Mopar Aluminum Spool 345.00
MW 35-spline for cars under 1800 lbs., weight 5.2 lbs.

53180 8-3/4" Mopar Spool 240.00
MW 35-Spline, 14 Lbs.

53186 8-3/4" Mopar Spool 240.00
Stock type 30-spline, weight 14 lbs.

53187 8-3/4" Mopar Spool 290.00
MW 35-spline, L/W profile milled, weight 12.5 lbs.

8-3/4 Mopar Billet Cap

As with most rears, the stock caps are a weak link of the 8 3/4 Mopar. MW now offers a billet steel cap that is pre-bored and threaded. Caps are easily installed with a simple milling operation. Caps include Grade 8 hardware.

53950 8 3/4 Mopar Billet Cap(ea). 85.00

53960 Heavy Duty Adjusters (pr) 46.50
CNC Machined Billet Steel

8-3/4 Mopar Axle & Spool Package

The MW 8 3/4 Mopar Axle/Spool Package includes a pair of custom built standard Hi-Torque axles (any length/spline combination), 56003 axle bearings, standard steel spool and a complete 5/8 drive stud kit.

HI-K13 8-3/4 Mopar Axle Spool kit 890.00
Hi-Torque axles, spool, wheel bearings, retainers, drive stud kit

Call for additional savings on a lightweight components package

GM 12 Bolt Assemblies

In sheer numbers alone, the Chevrolet 12 bolt rear end is the most popular in racing. With the proper components and modifications, the 12-bolt can be strengthened to the point where it is adequate for most moderately powered full-bodied racecars. Using MW's exclusive 35-spline axle/spool package and the addition of the DTS Express (KTRE) housing extend life cycle of the 12 Bolt. These housings feature improvements over the original GM housings that include ductile iron castings, 4130 tubes, 3.062" or 3.250" main bore caps with ½" bolts and jig fitted suspension brackets. Three basic units are available; configurations include street/strip with Eaton™ posi-traction units, standard drag race with 35 spline steel spool and lightweight 35-spline aluminum spool. Bolt in models are available for **ALL** popular GM cars including the F body with torque arm mounts. With its favorable hypoid distance and overall weight the 12 bolt is a good choice for applications where friction loss and weight are important.

58060-S Complete GM 12 Bolt Street/Strip pkg . . .2709.12
With MasterLine Axles, Eaton posi, 8620 gears (no brakes)

58000-R Complete GM 12 Bolt Drag Race pkg . . .3021.43
With 35 Spline Hi-Torque axles, spool Pro Gears (no brakes)

58000-RL Complete GM 12 Bolt Light Wt Drag . . .3302.93
With MW Lightweight Aluminum Spool and Superlight Hi-Torque Gun drilled (11/16') Axles, Pro Gears, TA Cover (No Brakes).

GM 12 Bolt Housing

58020

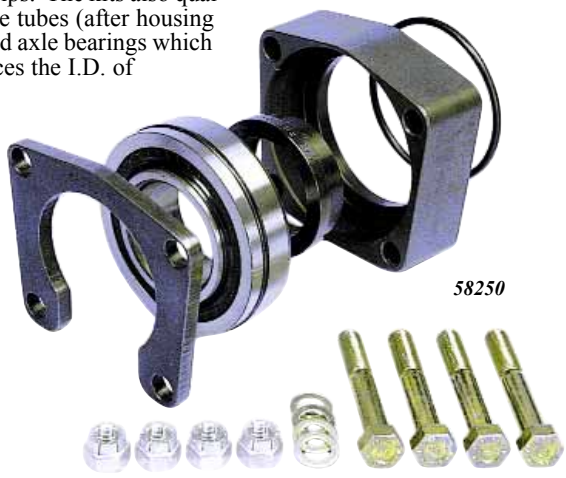
MW offers DTS Express (KTRE) bare housings. Both utilize 4130 tubes and can be assembled with your choice of housing ends. The housings are produced with the stock carrier bore size 3.062" and the oversize 3.250" bore that will accommodate the MW aluminum 35 spline spool. For the builder who wants to fabricate the suspension mount in the car it makes sense to get the bare housing. We can tack weld the ends so they can be removed to install slide over brackets, and reinstall after welding.

58025 12 Bolt Bare 3.062" bore Housing 1076.00
DTS housing, 4130 tubes and any MW housing ends, 3.062" bore. Suspension mounts can be installed at an extra charge. Price will be based on the application.

58030 12 Bolt Bare 3.250"bore Housing 1076.00
DTS housing with 4130 tubes and any MW housing ends. 3.250" bore. Suspension mounts can be installed at an extra charge. Price will be based on the application.

GM C-Clip Eliminator Kits

These simple and handy kits are the perfect way to eliminate pesky Chevrolet C-clips. The kits also qualify as an accepted Safety Hub. They are easily installed on stock 10/12 Bolt axle tubes (after housing end is trimmed with a common hack saw) and accommodate large Ford style sealed axle bearings which are press fit on the axle (when using stock axles, a bushing is provided that reduces the I.D. of the bearing to fit the shaft diameter). The press fit of the bearing and a steel retainer plate hold the axle in place in the event of breakage at splines, keeping the wheel in place. All MW C-clip kits include detailed installation instructions and mounting hardware.



58250

58210A C-Clip Eliminator Kit 184.70
For stock axles used in '65-75 10 and 12-bolt Camaro, Chevelle and Chevy II, with 58504 bearings and shim for stock axle with 1.400" bearing diameter.

58250 C-Clip Eliminator Kit 171.10
Small 10/12 Bolt, for MW axles with 1.625" I.D. bearings.

58300 C-Clip Eliminator Kit 226.00
Full size 12 Bolt and 1/2 ton pick-up, for stock axles (requires grinding of axles for bearings).

58350 C-Clip Eliminator Kit 244.80
Full size 12 Bolt and 1/2 ton pick-up, for use with M/W axles 1.625" I.D. bearing.

GM 12 Bolt Spools

53130 10-Bolt 8.5" Chevrolet Spool 240.00
MW 35-spline 1970 or later 10 bolt, weight 14 lbs.

53158 12-Bolt Aluminum Spool 416.50
MW 35 spline, housing must be bored to 3.250". Includes 58925 shim kit and 53161A bearing kit. 5.3 lbs.

53160 12-Bolt Chevrolet Spool 240.00
MW 35-spline, weight 14 lbs.

53164 12-Bolt Chevrolet Spool 240.00
30-spline, requires C-clip kit or weld on ends, weight 14 lbs.

53165 12-Bolt Chevrolet Spool 290.00
MW 35-spline, L/W milled, weight 11 lbs.


53160


53158


53165

53265 12-Bolt Chevrolet Spool 290.00
MW 35-spline, L/W milled, 11.1 lbs.

GM 12 Bolt Posi-Tractions

EATON
Eaton® Posi Performance Differentials

Mark Williams stocks Eaton™ posi-traction units for 10 and 12 Bolt GM applications. All Eaton™ units feature carbon fiber clutches. MW also offers a 33 spline side gear upgrade on 30 spline Eaton™ assemblies.

19554 12 Bolt Eaton™ Posi-Traction (Series 3).. . .413.00
30 spline with 800 lb. clutch preload. For 3.08 to 4.10 ratios.

19555 12 Bolt Eaton™ Posi-Traction 413.00
30 spline with 800 lb. clutch preload. For 4.10 and up ratios.

19555-33 12 Bolt Eaton™ Posi-Traction 711.60
33 spline with 800 lb. clutch preload. For 4.10 and up ratios.

19556 12 Bolt Eaton™ Truck Posi-Traction 413.00
30 spline with 800 lb. clutch reload. For 3.73 and up ratios.

19557 8.5 10 Bolt Eaton™ Posi-Traction 450.00
28 spline with 800 lb. clutch preload. For 2.73 and up ratios.

58911 12 Bolt Posi-Traction (Series 4) 381.00
30 spline, light duty clutch type Torque-Line® posi-traction.

58912 12 Bolt Posi-Traction (Series 3) 381.00
30 spline, light duty clutch type Torque-Line® posi-traction.

GM Housing Ends & Retainers

58400 G.M. Housing Ends, (pr) 90.00
Full size 12 Bolt, Chevrolet Impala, Biscayne and 1/2-ton pickup, for 58503, 58504 or 58505 sealed axle bearings.

58450 G.M. Housing Ends, (pr) 112.00
Full size 12 Bolt, for 58506 Timken® tapered roller axle bearings and seals.

58410 Full Size GM Bearing Retainers (pr) 24.00
For MW 58400 Full Size GM housing ends.

58560 G.M. Housing Ends, (pr) 112.00
Mid-size 10/12 Bolt, for 58506 Timken® tapered roller axle bearings and seals.


58600


58230

58600 GM Housing Ends (pr) 85.00
Mid-size 10/12 Bolt, for 58503, 58504 or 58505 sealed axle bearings.

58230 Standard GM Bearing Retainers (pr) 24.00
For MW 58600 10 and 12-bolt housing ends.

GM Housing End Kits


68700

MW weld on housing ends allow use of larger axle bearings and eliminate potential grease leakage that can occur with adapter type bearing ends. End kits are available for most popular GM brake assemblies.

58610 Housing End Kit, Drag Racing 182.00
Contains 58600 housing ends, 58505 bearings, 58230 retainers, and backing plate bolts.

68700 Housing End Kit, Small GM Pro-street 255.00
For GM small brakes (Camaro, Chevelle, Nova) Pro-Street applications, includes housing ends, Timken ® bearings, retainers, seals, and backing plate bolts.

68740 Housing End Kit, Large GM Pro-street 276.00
10 & 12-Bolt Chevrolet brakes (Impala, Biscayne & 1/2-ton truck) Pro-Street applications, includes housing ends,Timken® bearings, retainers, seals, and backing plate bolts.

GM 12 Bolt Components

39006	MW 12 Bolt Pinion Yoke (3.875 long)	.165.00
39038	MW 12 Bolt Pinion Yoke (2.875 long)	.165.00
58903	Chrome Cover, 12 Bolt (not shown)	.24.90
53161	12 Bolt Chevrolet Spool Bearings	.50.85
53161A	12 Bolt Spool Bearings for Alum. Spool	.68.10
53162	12 Bolt Chevrolet Pinion Bearing Set	.59.30
58900	Ring Gear Bolt Kit, (12 ea)	.27.50
	12 Bolt Chevrolet 12 point with safety wire holes.	
58901	12 Bolt Rear Cover Gasket	.4.80
58901-TS	12 Bolt E-Z Release Rear Cover Gasket	.14.50
58902	12 Bolt Chevrolet Pinion Nut	.8.60
58904	12 Bolt Chevrolet Pinion Seal	.9.00
58906	12 Bolt Chevrolet Crush Sleeve (OE)	.11.30
58907	12 Bolt Chevrolet Crush Sleeve (truck)	.6.00
58920	12 Bolt Complete Shim Kit	.53.20
	Assortment of pinion depth, carrier shims and a crush sleeve.	
58925	12 Bolt Carrier Shim Kit (3.250" bore)	.70.80
	Special inner shim with assortment of standard carrier shims. Must be used with 53158 spool and 53161A bearing kit.	
58950	12 Bolt Ring Gear Spacer	.49.80
	For using 4.10 to 6.14 ratio gears on 3 series carrier.	
80-0269	Spider Pin	.31.78
	12 Bolt Posi (for 5.14 to 6.14 ratios with stock c-clip axles).	
RP1563	GM "Repair" Axle Bearing 1.400" (ea)	.43.70
RP1559	GM "Repair" Axle Bearing 1.625" (ea)	.41.50

12 Bolt Billet Cap & Cover

One of the most common causes of rear end failure can be traced to the stock rear end caps. To cure this problem, MW offers a billet steel replacement cap that has an increased cross section and heat treated hardware. ***Simple milling required to install.***

58100	12 Bolt Chevrolet Steel Main Cap (ea)	.65.00
888	Labor (cap installed by MW Ent.) (ea)	.40.00
TA1810	TA Cast Cover for 12 bolt GM rears	.163.20

12 Bolt Preload Spacer

The use of a solid spacer has been standard in 9" Ford assemblies for a long time. Until now, 12 bolt rears have been forced to rely on a standard crush sleeve. The MW solid preload spacer is CNC machined from 4140 steel and heat treated. Spacers are long and must be trimmed to the required length.

58905 12 Bolt Solid Pre Load Spacer .25.60

Requires machining to set the preload.

12 Bolt Axle & Spool Package

The MW 12 Bolt Axle/Spool Package includes a pair of custom built standard Hi-Torque axles (any length/spline combination), complete C-Clip eliminator kit w/bearings, standard steel spool and a complete 5/8 drive stud kit. Axles for non-narrowed rears are in stock.

HI-K14 12 Bolt Axle/Spool/C-Clip Elim Package .945.00

Call for addition savings on a lightweight components package.

’57-’64 Olds-Pontiac Components

83-5810

The’57-’64 Olds-Pontiac rear end is still enjoying some popularity in drag racing. These rears were fairly popular in the past and have been used in surprising numbers which is why Mark Williams Enterprises continues to manufacture and stock many of the hard to find pieces needed to assemble and strengthen this rear.

39018 MW ’57-’64 Olds Pinion Yoke 185.00
13 spline, 4340 steel for 1350 series U-joint.

53150 ’57-’64 Olds-Pontiac Spool 240.00
Standard Steel Spool with MW 35 spline

53151 ’57-’64 Olds-Pontiac Spool Bearings 58.10

53152 ’57-’64 Olds Rear Gasket 6.13

543325 ’57-’64 Olds-Pontiac Crush Sleeve 12.00

58500 Olds-Pontiac Housing Ends (pr) 72.50
For 58503, 58504 or 58505 axle bearings.

58500H Olds-Pontiac Housing Ends 1” long (pr) 72.50
1” long for 58503, 58504 or 58505 axle bearings.

58501 Olds-Pontiac Bearing Retainers (pr) 24.00

58590 Olds-Pontiac Housing Ends 1” long(pr) 80.00
With tapped holes for 58503, 58504 or 58505 axle bearings.

58910 ’57-’64 Olds-Pontiac Shim Kit 26.60
Pinion depth shims and preload spacer.

83-5810 Gear Installation Kit ’57-’62 Olds 155.80
Pinion depth shims, crush sleeve, spool & pinion bearings, seal, pinion nut and gear marking compound.

83-5810-S Gear Installation Kit ’57-’67 Olds 155.80
Pinion depth shims, crush sleeve, spool & pinion bearings, seal, pinion nut and gear marking compound. For MW Spool.

Olds-Pontiac Billet Cap

58502

Main cap breakage is a major problem with the ’57-’64 Olds. Mark Williams now offers a superior strength billet cap that is pre-bored and threaded. Caps are easily installed with a simple fly cut milling operation.

58502 ’57-’64 Olds-Pontiac Cap (ea) 75.00

Olds-Pontiac Axle & Spool Package

The MW Olds-Pontiac Axle/Spool Package includes a pair of custom built standard Hi-Torque axles (any length with 35 spline spool) , axle bearings, bearing retainer plates, standard steel spool and a complete 5/8 drive stud kit.

HI-K15 Olds-Pontiac Axle spool Kit 890.00
Axles, spool, wheel bearings, retainers and drive stud kit

Shop Labor Operations

444 Re-Drill MW Axles (only) 221.00
Bolt pattern change or enlarge for 5/8 drive studs. Requires heat treating. Bearings and studs must be removed. New bearings required. Can not be performed on axles that have studs welded or holes that have been damaged

555 Magnaflux and Inspect Axles (pr) 40.00
Bearings and studs must be removed for thorough inspection.

666 Thirdmember Type Gear Set Up 225.00
9” Ford, 8 3/4 Mopar or Early Olds-Pontiac.

777 Salisbury Type Gear Set Up 260.00
Dana 60, 10 or 12 bolt Chevrolet or 8.8 Ford.

888 MW Main Cap Installation (ea) 40.00
Dana 60, 12 bolt Chevrolet, 9” Ford, 8-3/4” Mopar and ‘57-64 Olds/Pontiac.

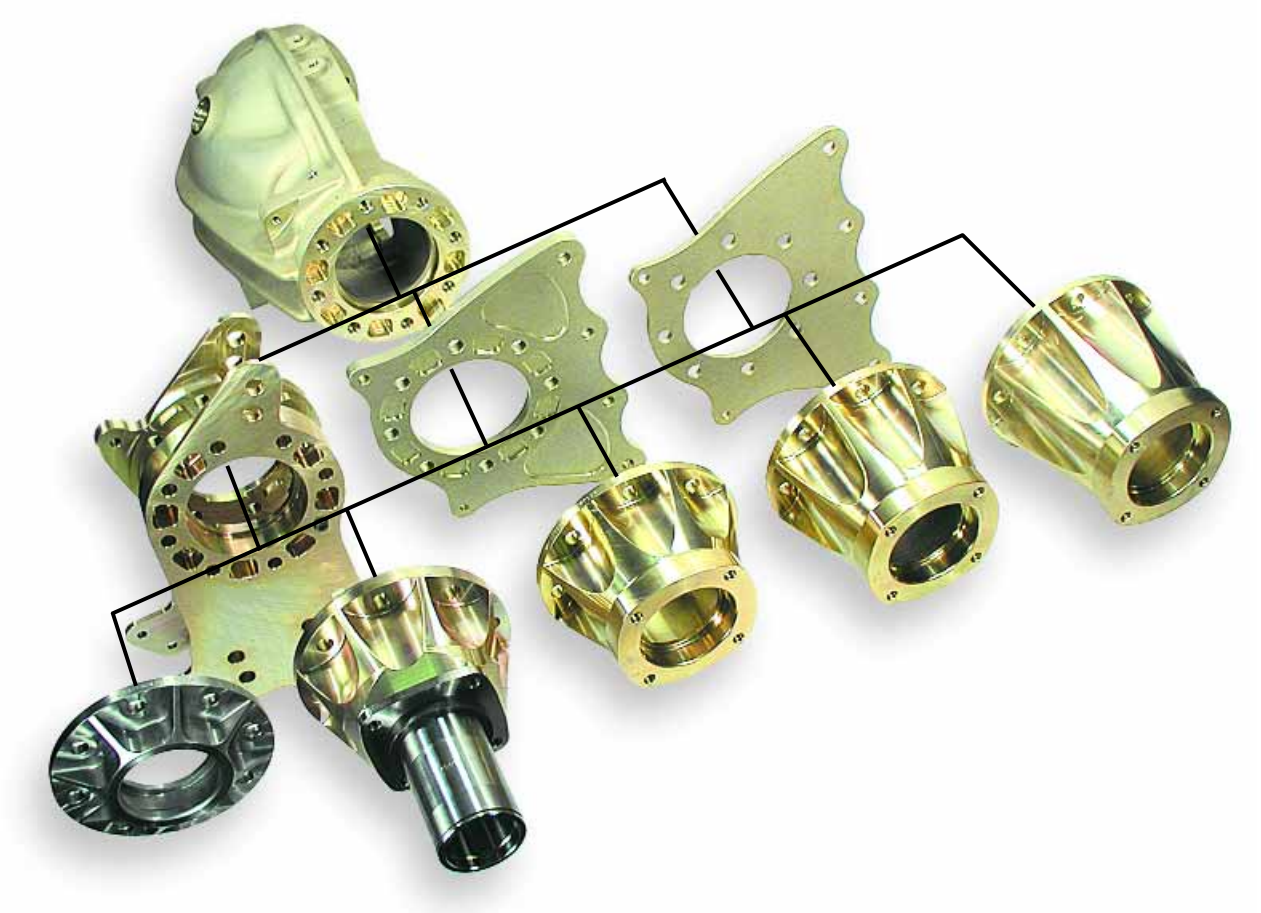
999 Install Housing Ends (labor only) 225.00
Narrow housing or re-align housing ends.

57463 Machine Case for Internal Pump 160.00
Machine mounting pad for internal pump, drill fluid passage hole.

57464 Broach Pinion for Pump Drive 100.00
Add 5/16” hex to 9” pinion shaft to drive internal fluid pump.

91110 Broach Pinion for MW Pump Drive 75.00
Add 3/8” hex to 9” pinion shaft to drive modular fluid pump.

The MW Modular Design

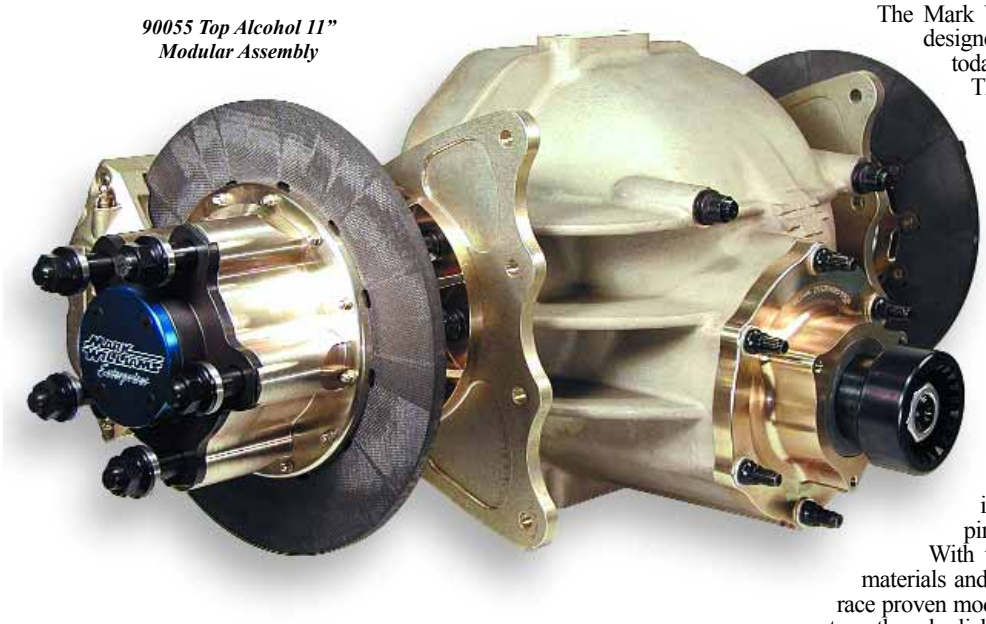


....THE CONFIGURATIONS ARE COUNTLESS

toll free **800-525-1963**

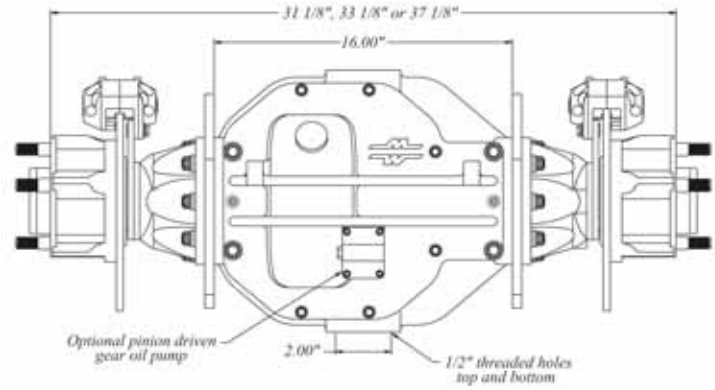
on the web **www.markwilliams.com**

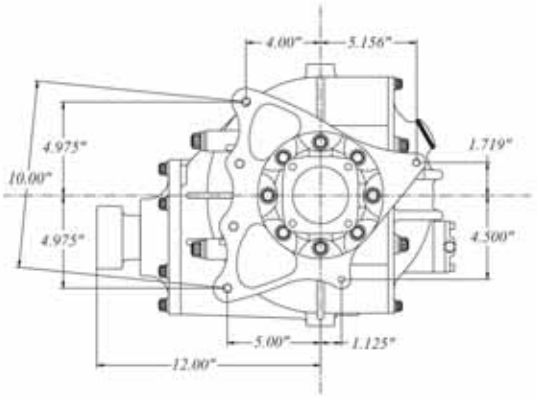
MW Modular 11" Full Floater



90055 Top Alcohol 11" Modular Assembly

The Mark Williams 11" Modular rear end has been designed to handle the harsh environment of today's Top Alcohol and Pro Modified cars. This assembly is based on a ring and pinion designed by Richmond Gear and produced exclusively for Mark Williams Enterprises. Features include an 11" diameter ring gear and 40 spline pinion shaft. Gear ratios currently available are 2.91, 3.89, 4.10, 4.29 and 4.57. With current MW 9" modular users in mind, the center casting is 16" wide and has a 2.25" hypoid distance (same as a 9" Ford) to allow an easy conversion of any application currently using the MW 9" modular rear. The MW floater end bells, the complete MW floater assembly and even the axles or one piece axle can all be used with the assembly. The unique design allows easy removal of the rear cover to inspect the ring gear, while the removable pinion support gives access to the pinion gear. With the beefy 11" gears, the use of premium materials and features carried over from the other MW race proven modular rears, the MW 11" offers unmatched strength and reliability.





Modular 11" Assemblies

90050 Complete 11" Modular Assembly 10936.00
Complete 90000 center with MW full floater assembly with lightened steel brakes, end bells and axles. 210#

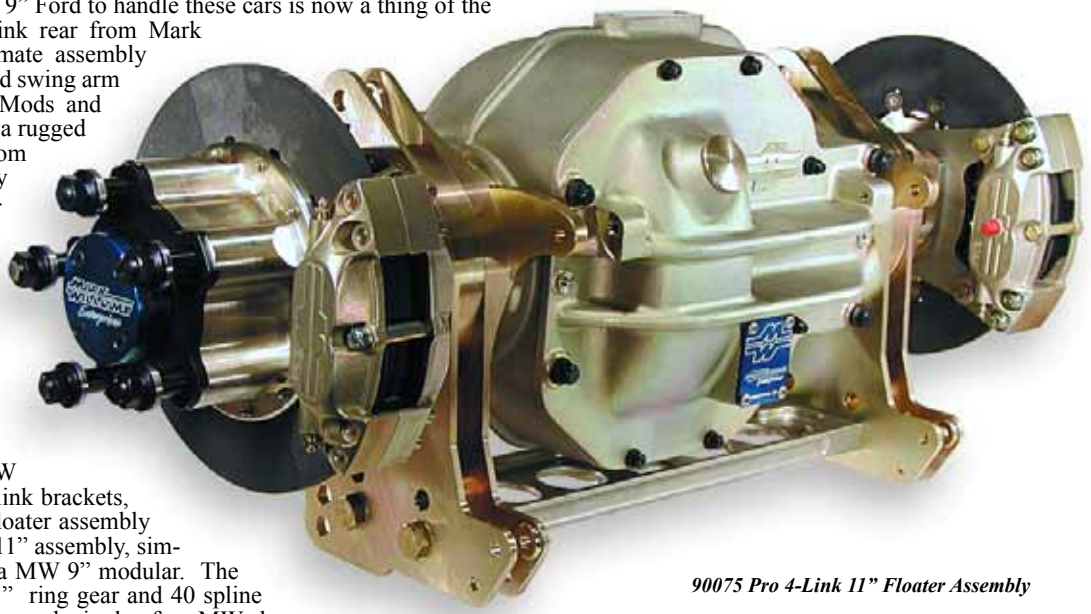
90055 Complete 11" Modular Assembly 13170.00
Complete 90000 center with MW full floater assembly with MW carbon brakes, end bells and axles. 198#

90000 11" Modular Center Section 8190.00
Fully assembled center casting with gears, spool, pinion support, coupler and hardware. For easy swaps.

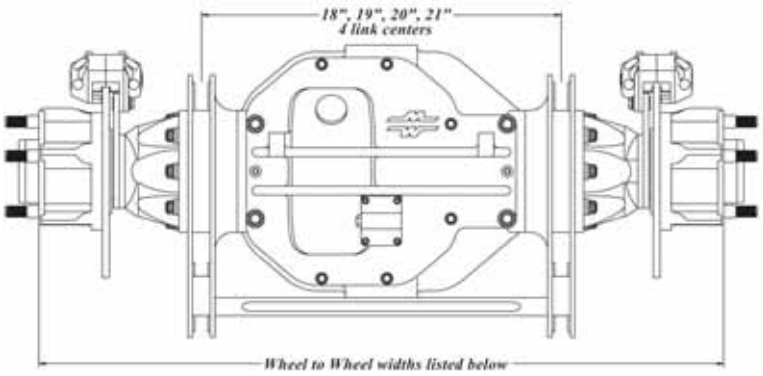
Snyder Motorsports A/FC: Over 330 runs on the original 11" ring and pinion and still going strong.

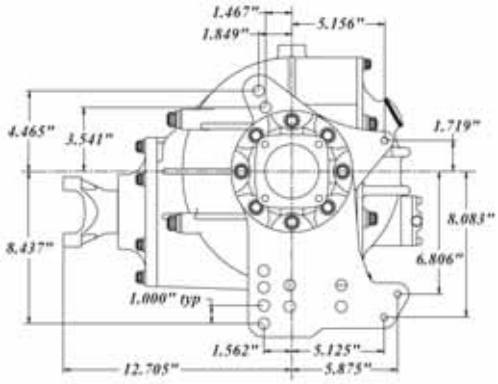
MW Modular 11" Pro 4-Link

Finally Pro Mod and Nitro Coupe racers have an option when it comes to rear end assemblies. Trying to build a 9" Ford to handle these cars is now a thing of the past. The new 11" Pro 4-link rear from Mark Williams represents the ultimate assembly for high horsepower 4-link and swing arm drag race cars such as Pro Mods and Nitro Coupes. At the heart is a rugged center module that is cast from the same tough aircraft alloy used in all MW cast aluminum components. It also incorporates the thru bolt design carried over from MW 9" Ford aluminum cases. The bolt pattern on the mounting faces on both sides of the center is the same as MW's highly successful 9" modular rear. This means, with slight modification, all the existing MW modular hardware such as 4 link brackets, lower tie bar, end bells and floater assembly will bolt directly to this new 11" assembly, simplifying a change over from a MW 9" modular. The gear set which features an 11" ring gear and 40 spline pinion shaft are produced exclusively for MW by Richmond Gear with most popular ratios currently available.



90075 Pro 4-Link 11" Floater Assembly





Modular 11" Pro 4-Link Assemblies

90070 Complete 11" Mod 4 Link Assembly 12446.00
Complete 90020 center with MW steel brake disc full floater assembly with lightened steel brakes, end bells and axles. (18" centers 35-1/2").

90075 Complete 11" Mod 4 Link Assembly 14680.00
Complete 90020 center with MW full floater assembly with MW carbon brakes, end bells and axles. (18" centers 35-1/2" wheel to wheel).

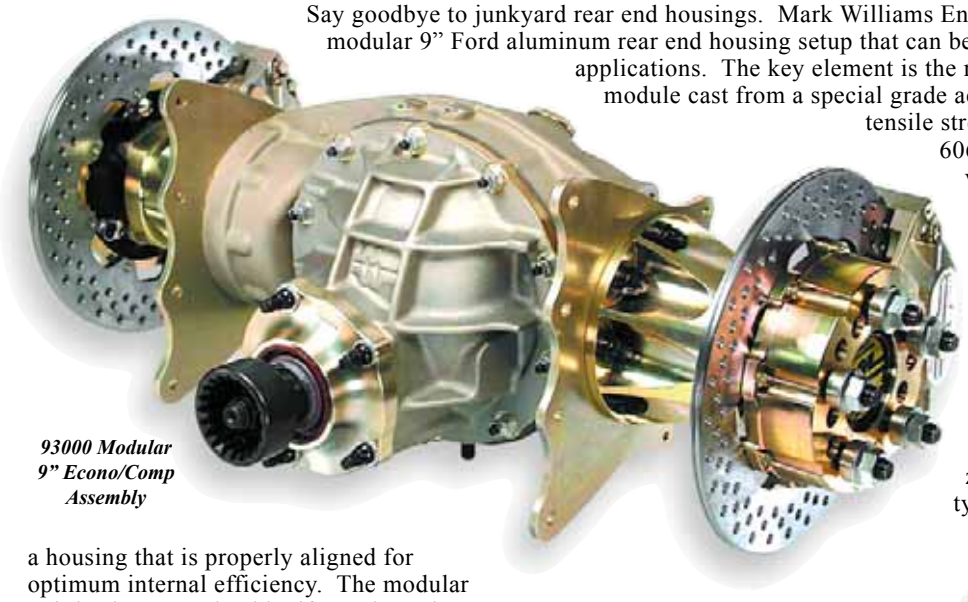
90020 11" Modular Center Section 8190.00
Fully assembled center casting with gears, spool, pinion support, yoke and hardware. For easy swaps.

91100 Lube Pump Assembly 594.00
Bolts to rear cover on solid or 4 link rear. Includes driveshaft and all plumbing. A must on Top Alcohol and Pro Mod cars.

Special Narrow Pro-Mod 4-Link

See charts on pages 52 and 53 for 4-link widths and floater spindle combinations. Special narrow steel 4-link as above can be special built. Call for pricing on special widths and combinations.

MW Modular 9" Econo/Comp



93000 Modular 9" Econo/Comp Assembly

Say goodbye to junkyard rear end housings. Mark Williams Enterprises has perfected an economical modular 9" Ford aluminum rear end housing setup that can be used for drag racing and street applications. The key element is the reinforced aluminum housing center module cast from a special grade aerospace alloy with an outstanding tensile strength of 60,000 psi (30% higher than 6061). The modular concept allows a variety of end bells and mounting brackets to suit your particular application. Price wise, the MW Modular stacks up favorably to the considerable re-working needed to OEM units or the labor intensive fabricated steel housings. But the most important consideration is that the MW Modular housing is a completely CNC machined assembly and is extremely accurate. There is zero stress from bending and welding typical to sheet metal rears. It assures you of a housing that is properly aligned for optimum internal efficiency. The modular unit is also upgrade-able, if, at a later date a class change requires full floating hubs or the width needs to be changed, the appropriate end bells can be bolted on, eliminating cutting and welding. The newest addition to our modular line is the Econo/Comp 4 link housing (*shown at right*). It incorporates special chromoly 4 link brackets and spacers along with a tubular lower tie bar. These new components make it easier than ever to convert a MW modular solid mount dragster housing to a 4 link set-up. Component interchange-ability is guaranteed with this precision unit.

92400 Econo/Comp 4-Link Housing

9" Econo/Comp Housings

92000 Econo/Comp 9" Solid Mount Housing 921.00
With 5/16" mounting brackets and standard end bells w/symmetrical brake mount pattern., (26" wide for 32 1/8" wheel to wheel width).

92000-24 24" Solid Housing (30-1/8" w/w) 1055.00

92000-25 25" Solid Housing (31-1/8" w/w) 997.00

92000-28 28" Solid Housing (34-1/8" w/w) 1203.00

92000-30 30" Solid Housing (36-1/8" w/w) 1265.00

92400 Econo/Comp 9" 4 Link Housing 1336.00
With chromoly 4 link brackets, tubular tie bar and standard end bells w/symmetrical brake mount pattern, (4-link centers 17" with a 33-3/4" wheel to wheel width).

92400-26 25 5/8" 4 Link Housing (31 3/4" w/w) . . .1470.00

92400-27 26 5/8" 4 Link Housing (32 3/4" w/w) . . .1412.00

92400-30 29 5/8" 4 Link Housing (35 3/4" w/w) . . .1618.00

92400-32 31 5/8" 4 Link Housing (37 3/4" w/w) . . .1680.00

9" Econo/Comp Assemblies

93000 Complete Econo/Comp Solid Rear 4012.00
Lightweight aluminum carrier, 35-spline aluminum spool, lightened standard Richmond gears, MW axles (gun-drilled and honed), bearings, drive studs, MW disc brake kit with drilled rotors, 92000 housing. Assembled weight 133 lbs.

93050 Complete Econo/Comp Solid Rear 6012.00
Same as 93000 but with MW carbon/carbon brakes. Assembled weight 121 lbs.

93400 Complete Econo/Comp 4 Link Rear 4512.00
Lightweight aluminum carrier, 35-spline aluminum spool, lightened standard Richmond gears, MW axles (gun-drilled and honed), bearings, drive studs, MW disc brake kit with drilled rotors, 92400 housing. Assembled weight 149 lbs.

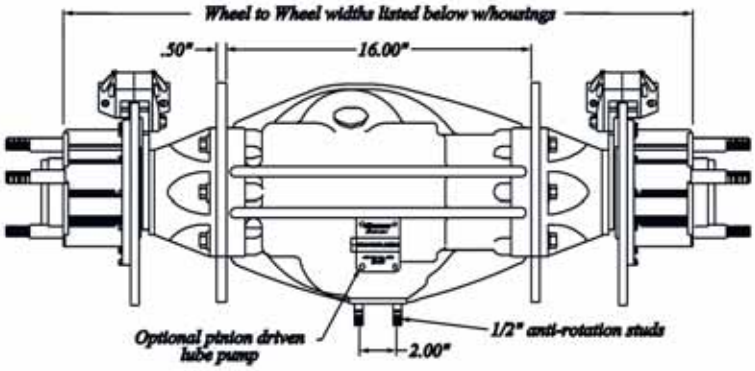
93450 Complete Econo/Comp 4 Link Rear 6512.00
Same as 93400 but with MW carbon/carbon brakes. Assembled weight 137 lbs.

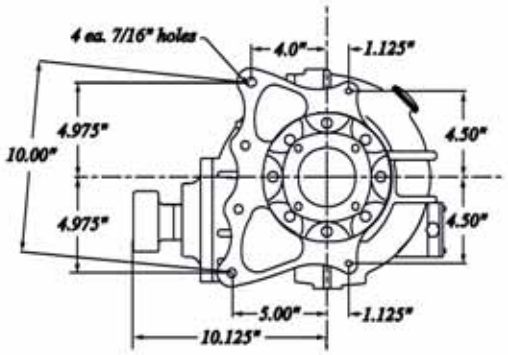
Mark Williams Enterprises®

MW Modular 9" Full Floater

MW's full floater 9" Ford Aluminum Modular assemblies meet the requirements of classes that must have full floating hubs. Complete assemblies, including a MW aluminum thirdmember, offer reliability and provide improved performance due to precise component alignment. Being a thirdmember type rear, it's a snap to change gear ratios. The MW Modular rears have successfully been run in everything from Top Fuel on down. Due to the limitations of the ring and pinion, the Modular is more suited for alcohol and Top Dragster applications. Thirdmembers are now available with 9-1/2" diameter ring gear (in select ratios) for added strength. The MW floater unit incorporates sealed ball bearings (self lubricating) for minimum drag. The Floater hubs are available with a 5" or 5-1/2" bolt circle. Complete rears include full floater assemblies with a one piece axle.(standard width only) and a large pinion thirdmember. 91050 uses Carbon/Carbon brakes for superior reliability and stopping power along with substantial weight savings.

91000 Modular 9" Full Floater Assembly





Modular 9" Floater Housings

94000-31 Modular Floating Housing w/Spindles . . .1634.00
Housing with spindles and 1/2" thick pocket-milled brackets (31 1/8" wheel to wheel).

94000-33 Modular Floating Housing w/Spindles . . .1640.00
Housing with spindles and 1/2" thick pocket-milled brackets (33 1/8" wheel to wheel). 50 lbs.

94000-37 Modular Floating Housing w/Spindles . . .1896.00
Housing with spindles and 1/2" thick pocket-milled brackets (37 1/8" wheel to wheel).

Modular 9" Floater Assemblies

91000 Full Floating Mod. Aluminum Rear 5524.00
Floater with 1/2" mount brackets for 5" x 5 or 5 1/2" x 5 B.C, complete 57010 thirdmember (any ratio), brake assembly with lightened discs, MW calipers, one-piece axle, width 33-1/8" wheel to wheel, assembly weight 164 lbs.

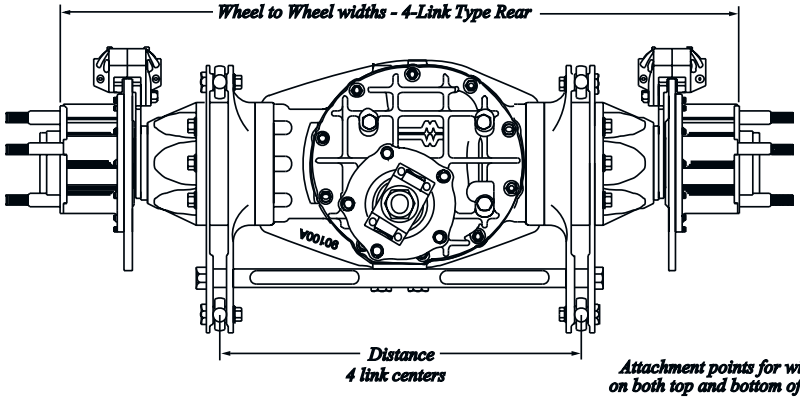
91050 Full Floating Mod. Aluminum Rear 8049.00
Same as 91000 but with MW Carbon/carbon brakes, assembly weight 152 lbs.

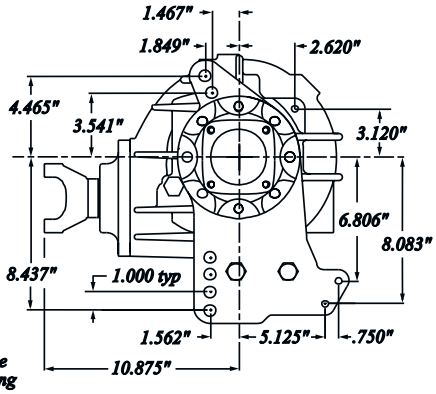
See pages 52 & 53 for pricing on non-standard width housings

MW Modular 9" Pro 4-Link

97000 Pro-4-Link 9" Assembly

The MW Modular 9" Pro 4-link housing is the Ultimate 9" for the suspended rear race car. All 4 link brackets are CNC machined from 7075 billet aircraft alloy aluminum. The layout of the 4-link attachment points is the same as used by the leading pro stock chassis builders with the 4-link tubes on 20" centers. Units are available in both floater and flange type axle configurations. Unique design features include indexing lugs on each 4-link bracket that positively lock inner and outer brackets to each other and to the housing. This insures perfect alignment of all components and eliminates the possibility of the housing and thirdmember shifting between the brackets. To further strengthen the assembly, an aluminum cross tie bar is used to secure the 4-link brackets to the bottom of the housing. The housing also has provisions for either upper or lower wishbone attachment along with shock and wheelie bar mounts. Holes in the 4-link brackets accommodate rod ends with 5/8"cross holes. Standard housing has a 37" wheel to wheel width and 20" 4 link centers. Others are available at an extra charge (see chart on page 52).





Attachment points for wishbone on both top and bottom of housing

9" Modular Pro 4-Link Housings

96000 Mod 4-Link Flange Axle Housing 2406.00
Modular housing, aluminum 4-link brackets 37" wheel to wheel, 20" 4-link centers for flange type axles. See chart on page 52 for other 4 link centers and wheel to wheel widths.(Other widthsavailable with extra charge).

98000 Mod 4-Link Full Floater Housing 2974.00
Modular Floater housing, aluminum 4-link brackets 37-1/2" wheel to wheel, 20" 4-link centers for Full Floater kit. See chart on page 52 for other 4 link centers and wheel widths.(Other widths available with extra charge)

9" Modular Pro 4-Link Assemblies

97000 Complete Modular 4-Link Flange Rear . . .5942.00
3.812 bore H-D aluminum thirdmember with 40 spline steel spool, 9" Pro-gears, 50500 gun drilled 40 spline flange axles, MW brakes with lightened rotors, 37" wheel to wheel and 20" 4 link centers standard. (Other widths available at extra charge) 160 Lbs.

97050 Complete Modular 4-Link Flange Rear . . .8186.00
Same as 97000 but with MW carbon/carbon brakes.

99000 Complete Modular 4-Link Floater Rear . . .6864.00
3.812 bore H-D aluminum thirdmember with 40 spline steel spool, 9" Pro-gears, gun drilled 40 spline axles, MW brakes with lightened rotors, 37-1/2" wheel to wheel and 20" 4 link centers standard. (Other widths available at extra charge) 185 Lbs

99050 Complete Modular 4-Link Rear 9388.00
Same as 99000 but with MW carbon/carbon brakes.

MW Modular 9" Steel Tube

The ever increasing versatility of the MW 9" Ford aluminum modular rear is evident in the assemblies on this page. All use the same cast aluminum center but utilize 3"chromoly axle tubes attached to either steel end bells or special aluminum end bells rather than the standard aluminum end bells. Steel tubes allow installation of 4 link or ladder bar brackets, spring pads, etc. With steel tubes, wider housing widths are possible. This opens up many new applications for the MW modular housing. Using steel end bells, 4 link housings can be built with MW laser cut 4 link brackets made from 3/16" thick 1018 mild steel plate. The 4-link attachment points on these brackets are the same as used by the leading pro stock chassis builders and accommodate rod ends with 5/8" hole in the ball. Other mounting holes for the adjustable shock mounts and wheelie bar mounts are 3/8"diameter. 4 link centers can be as narrow as 21". To add rigidity to the 4 link mounts, a 1" x 3" 1018 mild steel cross tube is used to tie the 4-link brackets to the bottom of the housing.

97400 Steel Tube 4-Link Assembly

Modular 9" Steel Tube Housings

95060 Steel Tube Modular Housing 1129.00
3" diameter tubes with steel end bells for street/strip use. Spring pad or suspension mount installation is additional.

95500 Steel Tube Housing w/Alum Bells 1395.00
3" diameter tubes with aluminum end bells for street use. Spring pad or suspension mount installation is additional.

96400 Steel Tube Modular 4-Link Housing 1748.00
Any width housing, any 4-Link center to centers (min. 21"), 3" X .250" wall 4130 steel tubes with steel end bells with choice of MW housing ends.

Modular 9" Steel Tube Assemblies

95500 Steel Tube Housing

The alternate method of attaching the steel tubes to the MW 90000-series modular aluminum center is fitting special aluminum end bells to the 3" chromoly tubes, which can be built to any length and with any MW housing end. This method is best suited for "Street Rod" applications giving the rear a more hi-tech look. Suspension, wheelie bar, and spring mounts can be attached to the tubes at the discretion of the builder just as with a normal steel 9" housing. The most obvious benefit is the ability to use the interchangeable, easy-to-maintain 9" Ford thirdmember.

95600 Steel Tube Modular Assembly 3711.00
With steel end bells and 4130 tubes, leaf spring pads, choice of housing ends, lightweight aluminum thirdmember with 31 spline locker, minimum of 34" housing width (No brakes). Street or Strip applications.

95000 Steel Tube Modular Street Assembly 3647.00
With aluminum end bells and 4130 tubes, leaf spring pads, choice of housing ends, lightweight aluminum thirdmember with 31 spline locker, minimum of 38" housing width (No brakes).

97400 Steel Tube Modular 4-Link Assembly 5032.00
Complete with Aluminum thru bolt case, 40 spline axles, lightweight steel spool, Richmond 9" Pro Gear, Steel 4-Link brackets, with tie bar, MW disc brakes, drive studs, 1350 series pinion yoke, any housing width, any width 4-Link centers. With 35 spline MasterLine axles 1/2" wheel studs & Iron thirdmember $4303.

The models listed are typical of three assemblies. We can build your rear to suite your individual requirements with a different thirdmember and axle combinations. Page 53 has dimensions for standard bolt pattern of the 4-Link brackets. Call for a quotation on a rear that meets your requirements.

MW Modular 12 Bolt Econo/Comp

MW's 12 bolt Econo/Comp modular aluminum housing is ideal for many dragster/altered applications. The center casting is only 14" wide. When used with standard end bells the housing width is 24". This gives a wheel to wheel width of 30 1/8" allowing for the narrow rear tread width that is popular today with a number of dragster chassis builders. It is also possible to purchase housings either narrower or wider. This is easily done through the use of different end bells. The 12 Bolt ring and pinion has also become popular due to its reduced internal friction. This improved efficiency frees up horsepower and becomes more beneficial in light weight cars or lower horsepower cars. A new addition to our modular 12 bolt line is the Econo/Comp 4 link housing (shown at left). It incorporates special chromoly 4 link brackets and spacers along with a tubular lower tie bar. These new components make it easier than ever to convert a MW modular solid mount dragster housing to a 4 link set-up. Another important factor is the weight of the assembly. At 122 lbs. with drilled steel rotors, the Modular 12 Bolt can easily save 10 lbs. over a 9" Ford. For the super weight conscience racer, additional weight savings of roughly 15 lbs. is possible through the use of an aluminum spool, lightened gear, and MW carbon/carbon disc brakes.

93012 Modular 12 Bolt Econo/Comp Assembly

92412 Econo/Comp 4-Link Housing

12 Bolt Econo/Comp Housings

92012 Econo/Comp 12 Bolt Housing 1145.00
With 5/16" mounting brackets and standard end bells w/symmetrical brake mount pattern., (24" wide for 30 1/8" wheel to wheel width). Other widths listed below.

92012-22 22" Solid Housing (28-1/8" w/w) 1279.00

92012-23 23" Solid Housing (29-1/8" w/w) 1221.00

92012-26 26" Solid Housing (30-1/8" w/w) 1427.00

92012-28 28" Solid Housing (31-1/8" w/w) 1489.00

92412 Econo/Comp 12 Bolt 4-Link Housing 1560.00
With chromoly 4 link brackets, tubular tie bar and standard end bells w/symmetrical brake mount pattern, (25 5/8" wide for 31 3/4" wheel to wheel width). Other widths listed below.

92412-24 23 5/8" 4 Link Housing (29-3/4" w/w) . . .1694.00

92412-25 24 5/8" 4 Link Housing (30-3/4" w/w) . . .1636.00

92412-28 27 5/8" 4 Link Housing (33-3/4" w/w) . . .1842.00

92412-30 29 5/8" 4 Link Housing (35-3/4" w/w) . . .1904.00

12 Bolt Econo/Comp Assemblies

93012 12 Bolt Econo/Comp Assemblly 4159.00
35 spline aluminum spool, lightened Richmond Pro ring and pinion gears, MW axles (gun drilled/honed), bearings, drive studs, MW disc brake kit with drilled rotors, 92012 solid mount housing. Assembled weight 122 lbs.

93052 12 Bolt Pro Econo/Comp Assembly 6159.00
Same as 93012 but with MW carbon/carbon brakes. Assembled weight 112 lbs.

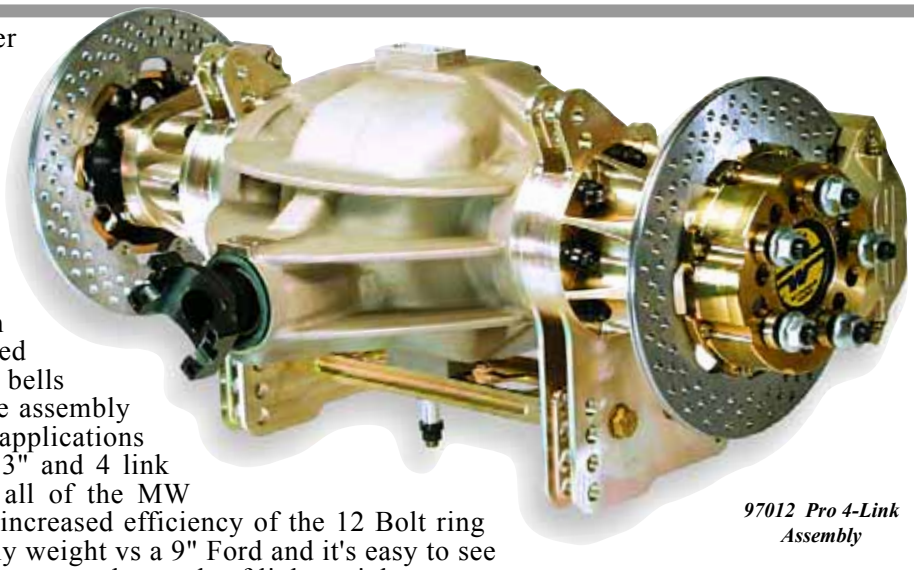
93412 12 Bolt Econo/Comp 4-Link Assembly 4574.00
35 spline aluminum spool, lightened Richmond Pro ring and pinion gears, MW axles (gun drilled/honed), bearings, drive studs, MW disc brake kit with drilled rotors, 92412 4 link housing. Assembled weight 138 lbs.

93452 12 Bolt Mod Econo/Comp Assembly 6574.00
Same as 93412 but with MW carbon/carbon brakes. Assembled weight 128 lbs.

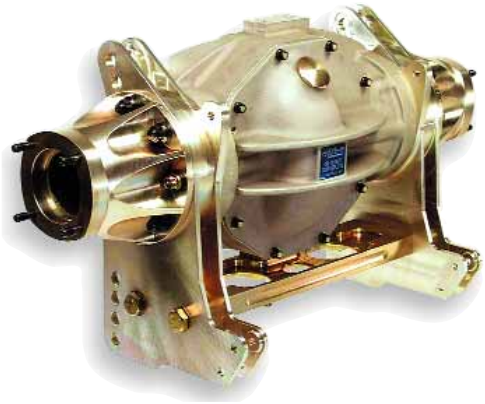
91212 12 Bolt Center Section Only 2342.00
Spare center set up with spool, Pro Gears, coupler or yoke,

MW Modular 12 Bolt Pro 4-Link

With the current trend in Super Comp toward suspended dragsters and altereds, the MW Modular 12 Bolt Pro 4 Link housing is the answer. The Pro 4 link housing offers many benefits over mounting a steel 12 bolt housing with suspension brackets. MW's innovative modular design allows for a wide range of housing configurations. Housing width and 4 link centers can be adjusted through the use of different end bells and/or spacers. The housing in the assembly pictured is perfect for dragster applications with a wheel to wheel width of 33" and 4 link centers at just 16". Add to this all of the MW refinements to the 12 Bolt design increased efficiency of the 12 Bolt ring and pinion, and the lighter assembly weight vs a 9" Ford and it's easy to see that the MW Modular 12 Bolt really meets the needs of light weight race cars.



97012 Pro 4-Link Assembly



96012 Pro 4-Link 12 Bolt Housing

Exclusive Features:

- Inspection/fill plug in cover, a drain hole/plug in bottom of housing
- Threaded spool-carrier adjustment
- Cover locks on inside edge and uses an O-ring seal to eliminate gaskets and leaks.
- Thru bolts into cover
- Caps supported by housing wall

12 Bolt Pro 4-Link Housings

96012 12 Bolt Pro 4-Link Housing 2593.00
Standard 35" wheel to wheel (28-7/8" housing) width, with aluminum billet 4-link brackets (18" centers) and aluminum end bells.

See pages 52 & 53 for a complete list of the housing widths and 4 link center combinations available using different end bells and/or spacers.

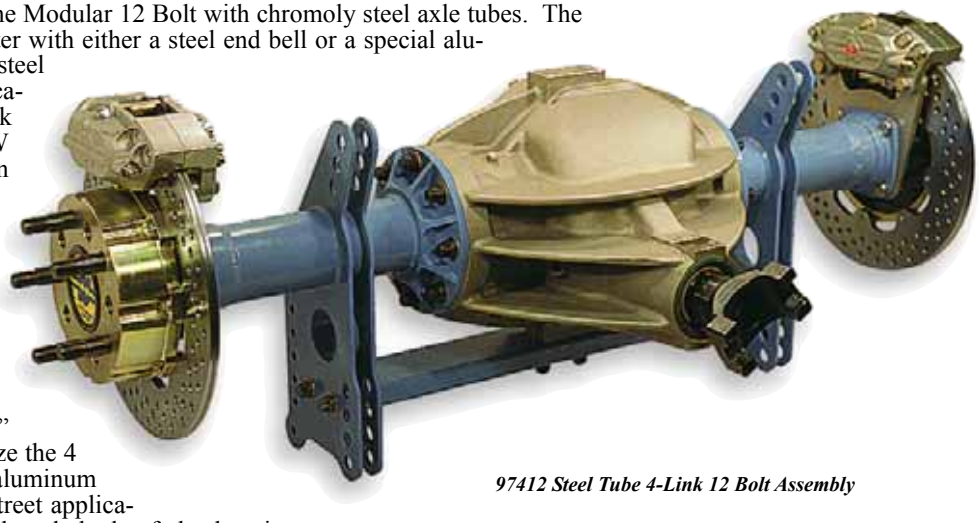
12 Bolt Pro 4-Link Assemblies

97012 12 Bolt Pro 4-Link Assembly 6006.00
With aluminum billet 4-link brackets, aluminum end bells, 35 spline aluminum spool, Richmond Pro-gears, gun-drilled axles, MW disc brakes with drilled rotors. Standard 35" wheel to wheel. 138 lbs.

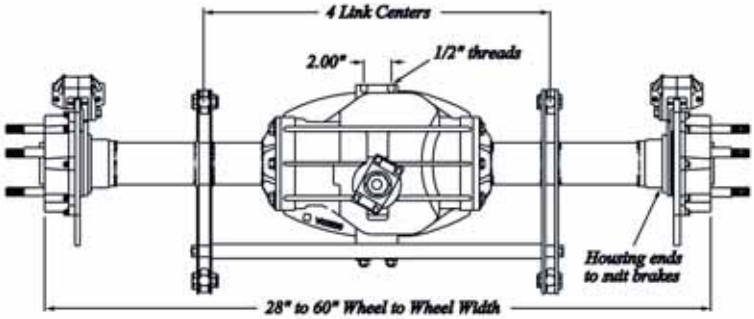
97512 12 Bolt Pro 4-Link Assembly 8006.00
Same assembly as 97012 shown at left but equipped with a MW carbon/carbon brake kit. 128 lbs.

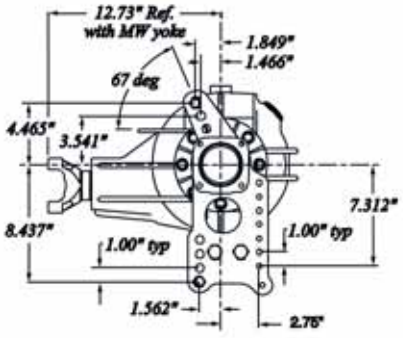
MW Modular 12 Bolt Steel Tube

As with the Modular 9", MW offers the Modular 12 Bolt with chromoly steel axle tubes. The steel tubes can be attached to the center with either a steel end bell or a special aluminum end bell. A housing built with steel end bells is ideal for drag race applications requiring ladder bar or 4 link mounts to be welded to the tubes. MW can supply the 4 link brackets (shown at right) which have 4 link layout the same as that used by leading pro stock chassis builders. These brackets can be installed on the centers of your choice. They are laser cut from 3/16" thick 1018 mild steel plate. The hole size for the rod ends is 5/8", other mounting holes for shock and wheelie bar mounts are 3/8" diameter. A 1" x 3" tubular steel tie bar is added to stabilize the 4 link brackets. Housings using the aluminum end bell method are better suited to street applications. This method adds to the high-tech look of the housing. Spring pads can be added for bolt in units.



97412 Steel Tube 4-Link 12 Bolt Assembly





12 Bolt Steel Tube Housings

95512 Steel Tube Housing w/Alum Bells 1619.00
3" chromoly tubes with aluminum end bells for street use.

95612 Steel Tube Housing w/Steel Bells 1353.00
3" chromoly tubes with steel end bells for street/strip use.

96412 12 Bolt Steel Tube 4-Link Housing 1972.00
Any width housing, any 4-Link center to center available. Includes main caps, adjusters, pinion bearing races, rear cover, and choice of housing end. See diagram above.

12 Bolt Steel Tube Assemblies

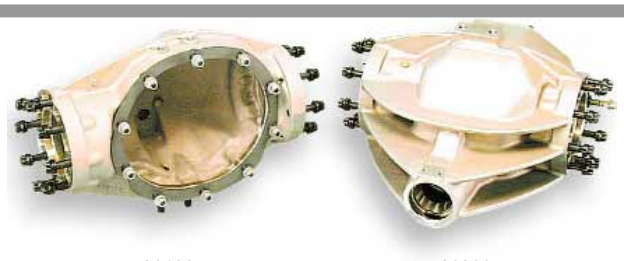
95012 12 Bolt Steel Tube Street Assembly 3123.00
*12 Bolt modular housing with **aluminum end bells** and housing ends to suit brakes, MasterLine axles 30 spline Eaton posi, MasterLine gears (3.08 - 4.88 ratios), 1350 pinion yoke, fully assembled. (less brakes)*

95412 12 Bolt Steel Tube Assembly 2857.00
*12 Bolt modular housing with **steel end bells** and housing ends to suit brakes, MasterLine axles 30 spline Eaton posi, MasterLine gears (3.08 - 4.88 ratios), 1350 pinion yoke, fully assembled. (less brakes)*

97412 12 Bolt Steel Tube 4-Link Assembly 4663.00
Complete with Hi-Torque 35 spline axles, lightweight steel spool, Richmond Pro Gear, Steel 4-Link brackets, with rectangular tie bar, MW disc brakes (Drilled Rotors), drive studs, 1350 pinion yoke, any desired housing width, any width 4-Link centers.

Mark Williams can also install customers supplied ladder bar or 4 link brackets, shock mounts, wheelie bar mounts, spring pads etc. on steel tube housings. Call for pricing and more information on a housing to fit your exact needs.

MW Modular Components



90100 90200

90100 9" Ford Modular Center 650.00
Includes all studs, nuts and washers for end bells and center section, filler cap, vent and pump block off plate. Specify the thickness of the end bells or 4-link brackets to determine the proper end bell stud.

90200 12 Bolt Main Modular Center 874.00
With all studs, nuts and washers for end bells, main caps, adjusters and cast rear cover with filler cap and vent. Specify the thickness of the end bells or 4-link brackets to determine the proper end bell stud.

Solid Mount and 4-Link Brackets

All modular brackets for solid mount applications are CNC machined from 7075-T6 billet aluminum plate. 1/2" brackets are pocket milled on both sides. Econo-Comp 4 link brackets are laser cut 1/8" 4130 and require the billet spacer listed below.

90012 1/2" Mount Bracket (11" Mod) (ea.) 130.00

90115 5/16" Mount Bracket (ea.) 68.00

90116 1/2" Mount Bracket (9" Mod.) (ea.) 125.00

90117 1/2" Mount Bracket, Blank (ea.) 90.00
14" X 11", hole 3" in, semi-finished plate for custom applications.

96015 1/8" Steel 4-Link Bracket (ea.) 35.00
For 1/2" rod end bolts, requires 96023 spacer listed below

12021 Front weld in chassis mount 22.50
for 93015 4-link bracket 1/8" 4130 (not shown)

96023 Spacer For Steel 4-Link Bracket 135.00
Aluminum spacer fits between 4 link brackets.(Not Shown)

90117 90012 90116 90115 96015

Fluid Pump Assembly

91100

Mark Williams 9" and 11" Modular rears are set up to accept a fluid pump to circulate rear end lubricant from the back of the housing forward to the pinion bearings and the gear contact area to extend bearing and ring and pinion life. Pump is driven off the rear of the pinion shaft. Pump assembly includes pump shaft, required fittings, braided hose, and fasteners.

91100 Pressure Lubrication Pump Assembly 594.00
Pump drive requires 3/8 hex in pinion shaft (see below).

91110 Broach Hex Drive in Pinion (labor only) 75.00

Spacers, Seals & Tail Light

90108 Rear Cover for Tail Light 37.00
Replaces standard pump block off plate.

90109 Tail Light 17.90
Must be used with 90108 cover plate above.

90127 End Bell Axle Seal 8.70
Fits into center casting before end bell is installed

96020 1/2" Thick Keyed Spacer* (ea.) 111.00

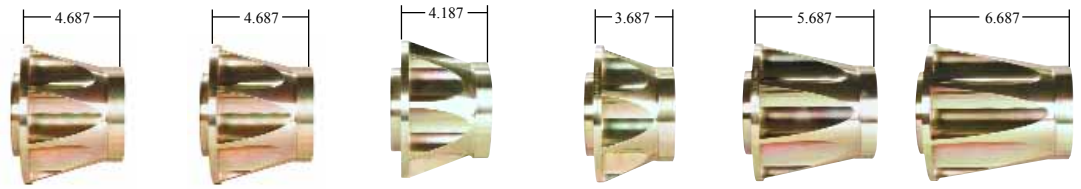
96022 1" Thick Keyed Spacer* (ea.) 159.00
**Keyed spacers can be used to change 4 link centers and/or housing width on modular housings. The 1" spacer can be trimmed down to 1/2" Requires special studs.*

90108

96022 96020 90127 90109

M/W Modular Configurations

Flange Axle End Bells



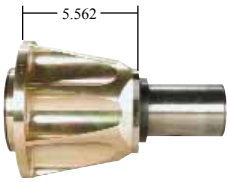
90110. . .143.00 EA	90118. . .210.00 EA	90122. . .181.00 EA	90124. . .210.00 EA	90140. . .284.00 EA	90150. . .315.00 EA
9" or 11" solid mount rear					
32 1/8" wheel to wheel	32 1/8" wheel to wheel	31 1/8" wheel to wheel	30 1/8" wheel to wheel	34 1/8" wheel to wheel	36 1/8" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
9" or 11" 4 link rear 18" centers					
35" wheel to wheel	35" wheel to wheel	34" wheel to wheel	33" wheel to wheel	37" wheel to wheel	39" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
9" or 11" 4 link rear 19" centers					
36" wheel to wheel	36" wheel to wheel	35" wheel to wheel	34" wheel to wheel	38" wheel to wheel	40" wheel to wheel
add 222.00	*add 356.00*	*add 298.00*	*add 356.00*	*add 504.00*	*add 566.00*
9" or 11" 4 link rear 20" centers					
37" wheel to wheel	37" wheel to wheel	36" wheel to wheel	35" wheel to wheel	39" wheel to wheel	41" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
9" or 11" 4 link rear 21" centers					
38" wheel to wheel	38" wheel to wheel	37" wheel to wheel	36" wheel to wheel	40" wheel to wheel	42" wheel to wheel
add 222.00	*add 356.00*	*add 298.00*	*add 356.00*	*add 504.00*	*add 566.00*
9" or 11" 4 link rear 22" centers					
39" wheel to wheel	39" wheel to wheel	38" wheel to wheel	37" wheel to wheel	41" wheel to wheel	43" wheel to wheel
add 318.00	*add 452.00*	*add 394.00*	*add 452.00*	*add 600.00*	*add 662.00*
12 Bolt solid mount rear					
30 1/8" wheel to wheel	30 1/8" wheel to wheel	29 1/8" wheel to wheel	28 1/8" wheel to wheel	32 1/8" wheel to wheel	34 1/8" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
12 Bolt 4 link rear 16" centers					
33" wheel to wheel	33" wheel to wheel	32" wheel to wheel	31" wheel to wheel	35" wheel to wheel	37" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
12 Bolt 4 link rear 17" centers					
34" wheel to wheel	34" wheel to wheel	33" wheel to wheel	32" wheel to wheel	36" wheel to wheel	38" wheel to wheel
add 222.00	*add 356.00*	*add 298.00*	*add 356.00*	*add 504.00*	*add 566.00*
12 Bolt 4 link rear 18" centers					
35" wheel to wheel	35" wheel to wheel	34" wheel to wheel	33" wheel to wheel	37" wheel to wheel	39" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
12 Bolt 4 link rear 19" centers					
36" wheel to wheel	36" wheel to wheel	35" wheel to wheel	34" wheel to wheel	38" wheel to wheel	40" wheel to wheel
add 222.00	*add 356.00*	*add 298.00*	*add 356.00*	*add 504.00*	*add 566.00*
12 Bolt 4 link rear 20" centers					
37" wheel to wheel	37" wheel to wheel	36" wheel to wheel	35" wheel to wheel	39" wheel to wheel	41" wheel to wheel
add 318.00	*add 452.00*	*add 394.00*	*add 452.00*	*add 600.00*	*add 662.00*
9" Econo 4 link rear 17 1/8" centers					
33-3/4" wheel to wheel	33-3/4" wheel to wheel	32-3/4" wheel to wheel	31-3/4" wheel to wheel	35-3/4" wheel to wheel	37-3/4" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*
12 Bolt Econo 4 link rear 15 1/8" centers					
31-3/4" wheel to wheel	31-3/4" wheel to wheel	30-3/4" wheel to wheel	29-3/4" wheel to wheel	33-3/4" wheel to wheel	35-3/4" wheel to wheel
no additional	*add 134.00*	*add 76.00*	*add 134.00*	*add 282.00*	*add 344.00*

The M/W Modular *rear can be configured for flange axles or floater hubs to meet any requirement. These charts list the most popular configurations. Changes from the base price of the assembly are also shown. In addition some of the modular rears used for front motor applications can use spacers between the housing and the mounting brackets to align the attachment point closer to the chassis rails.*

MW Modular Configurations

90123.....367.00 EA

90120.....370.00 EA

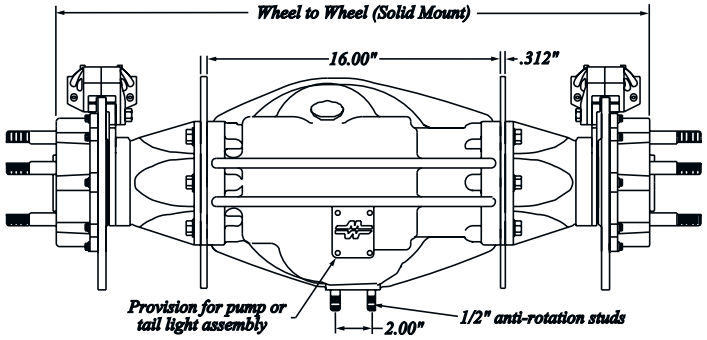


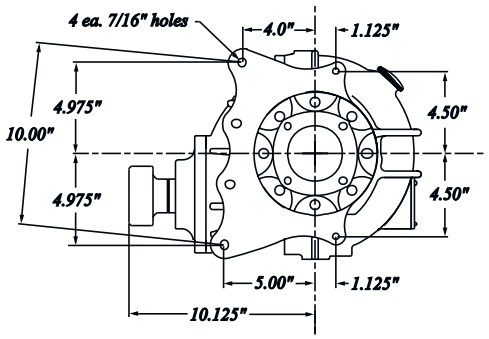
90121.....498.00 EA

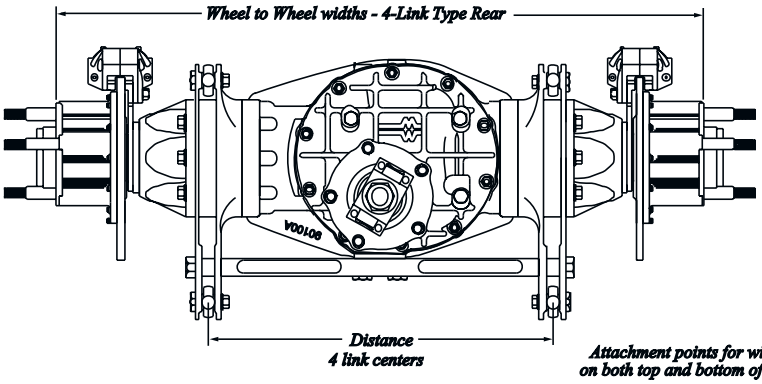
90141.....320.00 EA

Floater and Pro-Mod End Bells

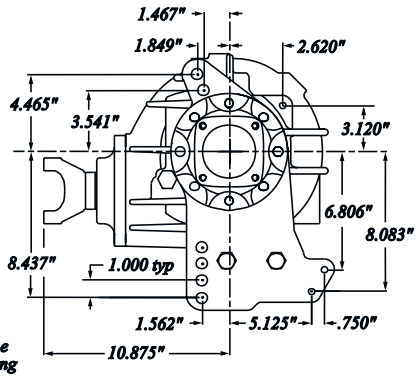
31 1/8" WHEEL TO WHEEL	33 1/8" WHEEL TO WHEEL	37 1/8" WHEEL TO WHEEL	34 1/4" WHEEL TO WHEEL	9" OR 11" SOLID MOUNT REAR
deduct 60.00	*no additional*	*add 256.00*	*deduct 100.00*	
33 1/2" WHEEL TO WHEEL	**35 1/2" WHEEL TO WHEEL**	**39 1/2" WHEEL TO WHEEL**	**36 1/8" WHEEL TO WHEEL**	**9" OR 11" 4 LINK REAR 18" CENTERS**
deduct 60.00	*no additional*	*add 256.00*	*deduct 100.00*	
34 1/2" WHEEL TO WHEEL	**36 1/2" WHEEL TO WHEEL**	**40 1/2" WHEEL TO WHEEL**	**37 1/8" WHEEL TO WHEEL**	**9" OR 11" 4 LINK REAR 19" CENTERS**
add 162.00	*add 222.00*	*add 478.00*	*deduct 122.00*	
35 1/2" WHEEL TO WHEEL	**37 1/2" WHEEL TO WHEEL**	**41 1/2" WHEEL TO WHEEL**	**38 1/8" WHEEL TO WHEEL**	**9" OR 11" 4 LINK REAR 20" CENTERS**
deduct 60.00	*no additional*	*add 256.00*	*deduct 100.00*	
36 1/2" WHEEL TO WHEEL	**38 1/2" WHEEL TO WHEEL**	**42 1/2" WHEEL TO WHEEL**	**39 1/8" WHEEL TO WHEEL**	**9" OR 11" 4 LINK REAR 21" CENTERS**
add 162.00	*add 222.00*	*add 478.00*	*deduct 122.00*	
37 1/2" WHEEL TO WHEEL	**39 1/2" WHEEL TO WHEEL**	**43 1/2" WHEEL TO WHEEL**	**40 1/8" WHEEL TO WHEEL**	**9" OR 11" 4 LINK REAR 22" CENTERS**
add 258.00	*add 318.00*	*add 574.00*	*add 218.00*	





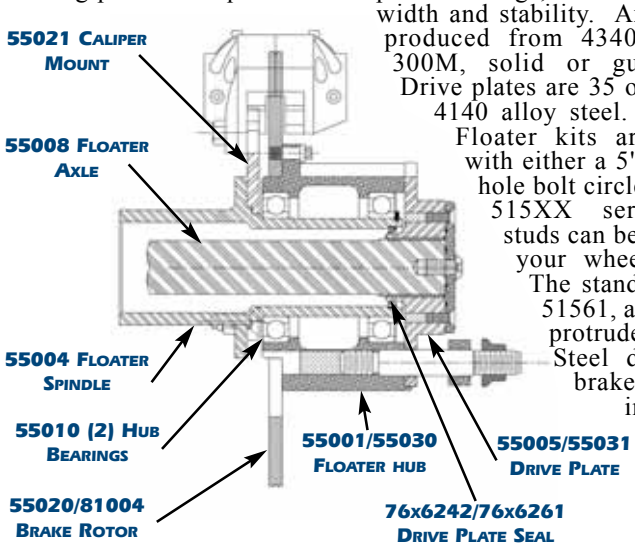


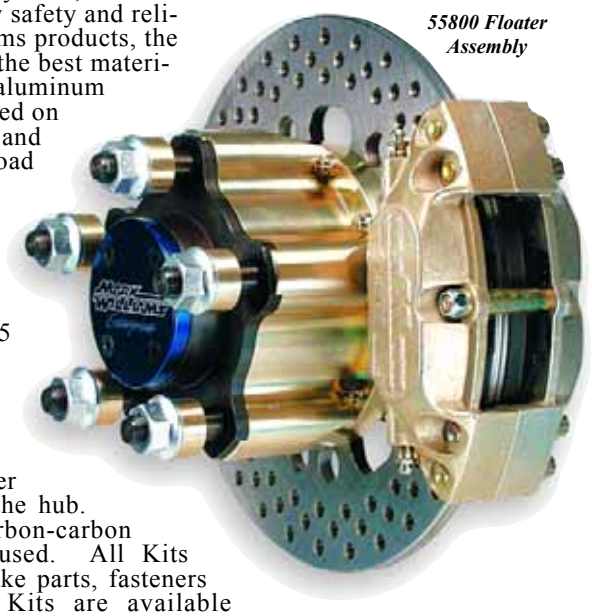
Attachment points for wishbone on both top and bottom of housing



Full Floater Assemblies

The Mark Williams Enterprises Full Floater assembly is used by many Fuel, Alcohol and Pro Modified racers. The MW Full Floater provides the necessary safety and reliability required in professional Drag Racing. As with all Mark Williams products, the MW floater is produced in-house on the latest CNC equipment, using the best materials available. The floater hubs are machined from aircraft alloy billet aluminum in house and utilize low drag sealed ball bearings. The hubs are retained on the spindle with an industrial snap ring, eliminating the threaded nut and bearing pre-load required with tapered bearings, and increasing the load width and stability. Axle shafts are produced from 4340 (std) or 300M, solid or gun drilled. Drive plates are 35 or 40 spline 4140 alloy steel. MW Full Floater kits are available with either a 5" or 5 1/2" X 5 hole bolt circles. Any of the 515XX series wheels studs can be used to suit your wheel thickness. The standard stud is a 51561, and the shoulder protrudes 1" out of the hub. Steel drilled or carbon-carbon brake rotors are used. All Kits include all brake parts, fasteners and seals. Kits are available without spindles in order to use the Modular housing that are normally purchased with spindles. Options include ceramic wheel bearings and dual calipers. Kits with spindles include the short 55004 spindle. 55035 long spindle is available as an upgrade. One piece axle shafts are optional. Contact a sales representative for available lengths.




55800 Floater Assembly

Standard Floater Kits

55600 Full Floater Hub Assembly 2475.00
35 spline axles, 5 x 5" bolt pattern.

55700 Full Floater Hub Assembly 2475.00
40 spline axles, 5 x 5" bolt pattern.

55750 Full Floater Hub Assembly 1990.00
40 spline axles, 5 x 5" bolt pattern. Less floater spindles.

55800 Full Floater Hub Assembly 2475.00
40 spline axles, 5 x 5 1/2" bolt pattern.

55850 Full Floater Hub Assembly 1990.00
40 spline axles, 5 x 5 1/2" bolt pattern. Less floater spindles.

Carbon/Carbon Floater Kits

55400 Full Floater Hub Assembly 4990.00
40 spline axles, 5 x 5" bolt pattern.

55450 Full Floater Hub Assembly 4514.00
40 spline axles, 5 x 5" bolt pattern. Less floater spindles.

55500 Full Floater Hub Assembly 4990.00
40 spline axles, 5 x 5 1/2" bolt pattern.

55550 Full Floater Hub Assembly 4514.00
40 spline axles, 5 x 5 1/2" bolt pattern. Less floater spindles.

Floater Kit Upgrade Options

Dual Caliper Option w/ Steel Rotors 350.00

Dual Caliper Option w/ Carbon Rotors 850.00

Titanium Wheel Studs 279.60

Aluminum Lug Nuts 84.00

One Piece Floater Shaft, check available lengths . . .166.00

300M Axle Shafts 351.00

Floater Axles (non-standard*) 31.00

Gundrilled Floater Axles (non-standard*) 126.00

Long Spindle Upgrade 234.00

**** Note: Axles included with floater kits that can ship from stock (28" to 38" wheel to wheel) will be supplied gundrilled at no additional charge. All others see pricing options.***

Floater Components

Mark Williams' unique ball bearing floater design, easily identified by the large snap ring that retains the hub. This very successful drag race design is race proven. We stock everything you need for repair and/or replacement, or to update your current floater assembly.

55001 MW Floater Hub for Steel Rotor (ea) 270.00
5" bolt circle, less bearings and wheel studs.

55004 Floater Spindle, Symmetrical Pattern (ea) . .238.00
Short spindle 7-7/16" over all length 3-1/32" length from flange.

55035 Floater Spindle, Long (ea) 355.00
Long spindle 12-916" over all length, 8-1/8" length from flange.

55005 MW 40 Spline Drive Plate 5" (ea) 164.00

55008 Floater Axle Shafts Stocked (pr) 349.00

55008C Floater Axle Shafts, to 20" Long (pr) 380.00

55008CG Floater Axle Shafts Gun-drilled (pr) 425.00

55008L Floater Axle Shafts, 20" to 34" Long (pr) . . .450.00

55008M Floater Axle Shafts, (pr) 700.00
300M material (custom made) up to 20".

55010 Floater Hub Bearing (ea) 38.50
Double sealed ball bearing, 2 per hub.

CB-55010 Floater Hub Bearing (ea) 239.00
Ceramic balls double sealed Ball Bearing .

55018 40 Spline Drive Plate Cover (ea) 33.00

55019 Floater Wheel Stud (ea) 7.50
5/8-18 The. 5" over all, 2-13/16 shoulder protrudes 1-13/16" from hub.

55020 Brake Rotor (ea) 145.00
10 hole mounting pattern, 11-3/4" dia. with lightening holes.

55021 Single Caliper Mount Bracket (ea) 51.10
For late symmetrical spindle, 11 3/4" rotor with a single caliper.

55023 Dual Caliper Mount Bracket (ea) 82.00
For late symmetrical spindle, 11 3/4" rotor with dual calipers.

55030 MW Floater Hub for Steel Rotor (ea) 285.00
5 1/2" bolt circle, less bearings and wheel studs.

55031 40 Spline Drive Plate, 5 1/2" (ea) 167.00

55060 MW Carbon/Carbon Floater Hub (ea) 406.00
5" bolt circle, less bearings and wheel studs.

55065 MW Carbon/Carbon Floater Hub (ea) 406.00
5 1/2" bolt circle, less bearings and wheel studs.

76X6242 35 Spline Drive Plate Seal (ea) 16.50

76X6261 40 Spline Drive Plate Seal (ea) 11.00

90120 Modular End Bell w/Floater Spindle 370.00
For 33 1/8" wheel to wheel on solid rear (standard).

90121 Modular End Bell w/Floater Spindle 498.00
For 37 1/8" wheel to wheel on solid rear.

90123 Modular End Bell w/Floater Spindle 367.00
For 31 1/8" wheel to wheel on solid rear.

The parts listed are for current kits. Components for older kits are available. The design has been updated to have interchange-ability with previous versions. Contact the sales department for the availability of parts not listed.

Billet Wheel Spacers

MW wheel spacers are available in 1/4" and 1/2" thicknesses and are produced from billet 7075-T651 alloy aluminum (not cast). All spacers are drilled for use with 11/16" diameter drive studs. All popular wheel bolt patterns are available. The 7304 and 7308 center hole clears a 3-1/16" register. The 7314 and 7318 clear a 3-1/2" floater drive plate.

7304 7308 7314 7318

7304 1/4" Thick Wheel Spacers (pr) 59.00
4-1/2", 4-3/4" & 5" x 5 hole patterns, for 11/16" drive studs.

7308 1/2" Thick Wheel Spacers (pr) 78.00
4-1/2", 4-3/4" & 5" x 5 hole patterns, for 11/16" drive studs.

7314 1/4" Thick Wheel Spacers (pr) 59.00
4-3/4", 5" & 5 1/2" x 5 hole patterns, for 11/16" drive studs.

7318 1/2" Thick Wheel Spacers (pr) 78.00
4-3/4", 5" & 5 1/2" x 5 hole patterns, for 11/16" drive studs.

Filler Caps and Bungs

MW offers two sizes of filler caps and weld bungs. Either suitable for many different applications, including rear end, valve cover, fuel tanks, etc. Filler cap weld bungs are available in steel or aluminum. Popular size fuel line aluminum weld bungs, drain plug w/bung and screw-in housing vents are also available.

2403 -6 Tank Weld Bung, (Aluminum), (3/8) 10.00

2404 -8 Tank Weld Bung, (Aluminum), (1/2) 11.30

5014 Rear Drain Fitting (3/8" pipe thread) 12.00

5015 Rear Filler Cap, Gold Anodized, (Alum) 10.50

5016 Rear Filler Weld Bung, (Steel) 9.00

5018 Rear Filler Weld Bung, (Aluminum) 7.50

5019 Vent Plug Rear Housing (1/4" pipe thread) . . .9.00

5020 Fuel Tank Weld Bung, (Aluminum) 10.50

5030 5020 5040 5022 5019 5021

5015 5018 5016 2404 2403 5014

5021 Vent Plug Rear Housing (1/8" pipe thread) . . .4.50

5022 -16 Fuel Line Weld Bung (Aluminum) 12.50

5030 Fuel Tank Cap (Aluminum) 24.00

5040 Fuel Tank Filler Weld Bung, (Steel) 12.00
Also used for a large rear filler/inspection port on rear

Housing Ends & Retainers

Mark Williams manufactures a full line of new housing ends. All MW housing ends are CNC machined from steel forgings and are designed to butt weld to the housing tube and match the bolt patterns of most popular brake assemblies. The exclusive Mark Williams 2" long housing end design (unless noted 1") includes an area in board of the axle bearing for a press in seal that eliminates possible gear oil leakage through the axle bearings. This extra length is designed to help eliminate distortion of the bearing bore from final welding. MW heavy duty retainers are laser cut from 1/4" thick steel and are available for all MW ends.

Symmetrical

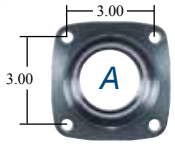
49580 Titanium Symmetrical (pr) . . . . . .P.O.R.
For all 3.150 O.D. bearings. 1" long. Titanium. fig. A

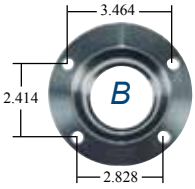
58580 Symmetrical 4130 (pr) 88.00
For all 3.150 O.D. bearings. 4130 heat treated fig. A

58580D Short Symmetrical (pr) 80.00
For all 3.150 O.D. bearings. 1" long. fig. A

58581 Short Symmetrical Taped (pr) 84.00
For all 3.150 O.D. bearings. 1" long. 3/8-24 threaded holes. fig. A

58585 Pro-Street Symmetrical (pr) 90.00
For 58506 Timken® unit bearings. fig. A





Olds/Pontiac

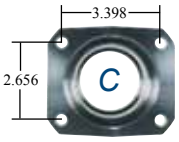
58500 Olds/Pontiac (pr) 72.50
For all 3.150 O.D. bearings. fig. B

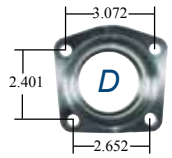
58500H Olds/Pontiac (pr) 72.50
For all 3.150 O.D. bearings. 1" long. fig. B

58501 Olds/Pontiac Retainers (pr) 24.00

58550 Olds/Pontiac (pr) 90.00
For 58506 Timken® unit bearings. fig. B

58590 Olds/Pontiac (pr) 90.00
For all 3.150 O.D. bearings. 1" long with 3/8-24 threaded holes. fig. B





Chevrolet

58400 Full Size GM (pr) 80.00
For all 3.150 O.D. bearings. fig. C

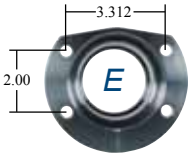
58450 Full Size GM (pr) 96.00
For 58506 Timken® unit bearings. fig. C

58410 Full Size GM Retainers (pr) 24.00

58230 Standard GM Retainers (pr) 24.00

58600 Standard GM (pr) 85.00
For all 3.150 O.D. bearings. fig. D

58560 Standard GM (pr) 112.00
For 58506 Timken® unit bearings. fig. D



Ford

57800 Small Ford (pr) 90.00
For all 3.150 O.D. bearings. fig. E

57801 Small Ford Retainers (pr) 24.00

57802 New Style Ford Retainers (pr) 24.00

57804 Large Ford Retainers (pr) 24.00

57805 Lincoln Retainer (pr) 24.00

57810 Small Ford (pr) 90.00
For 58506 Timken® unit bearings. fig. E

57820 Large Ford 1/2" Holes (pr) 90.00
For 58506 Timken® unit bearings. fig. F

57830 Large Ford 1/2" Holes (pr) 80.00
For all 3.150 O.D. bearings. fig. F

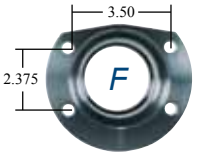
57840 Lincoln 3/8" Holes (pr) 90.00
For all 3.150 O.D. bearings. fig. F

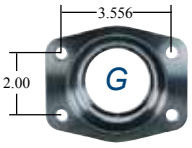
57850 Lincoln 3/8" Holes (pr) 80.00
For 58506 Timken® unit bearings. fig. F

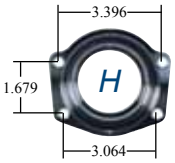
57860 New Style Ford (pr) 96.00
For all 3.150 O.D. bearings. fig. G

58510 8.8 Ford (pr) 114.00
For all 3.150 O.D. bearings. Includes 3/8" backing plate studs. fig. H

58511 8.8 Ford Retainers (pr) 24.00







Mopar

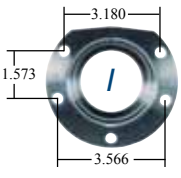
53184 Mopar Long(pr) 90.00
For 56001 bearings. For seal. fig. I

53185 Mopar Short (pr) 80.00
For 56001 bearings, 1" long, no seal. fig. I

53188 Mopar (pr) 120.00
For 58506 Timken® unit bearings. fig. I

53189 Mopar (pr) 90.00
For all 3.150 O.D. bearings. fig. I

56501 Mopar Retainers (pr) 24.00



Heavy Duty Housing Ends

To keep pace with the ever increasing loads put on rear axle bearings, Mark Williams has designed Heavy Duty housing end. These new ends accept a much larger, single or double row axle bearing that is capable of handling the radial and axial loads seen with these high horsepower cars. The HD series bearings (see page 5) have a larger O.D., 85mm (3.347") which requires modifying existing (or purchasing) caliper mounting brackets to accept the larger diameter. The I.D. is 45mm so they can be installed on axles built for standard 58505 bearings. Also the sealing arrangement is different with a seal in the caliper bracket, or in the housing bearing bore, or before the bearing in the housing end rather than in the bearing as in the past. All ends are drilled for the symmetrical bolt pattern.

58595 Ends for 85mm wide bearings w/Seal (pr) .175.00
For 58508 wide bearing only. 2.25" long with provision for inner axle

58597 Spherical Evolution 4 Housing ends 175.00
For spherical bearing, 4130 heat treated forging uses 58570 bolt kit.

58598 Ends for 85mm wide bearing w/o Seal (pr) .175.00
For 58508 bearing 1.50" long no provision for inner seal

58599 Housing Ends for 85mm Narrow bearing . . .175.00
4130 heat treated forging for 58509 bearing and 58570 bolt kit.

Bolt Kits & Seals

MW stocks both 3/8" and 1/2" backing plate bolt kits as well as the stud kit required for the new Pro Mod housing ends. 3/8" bolts feature quick start ends with serrations under the heads to hold them securely in the housing ends. 1/2" size are O.E. Ford type. All kits also include self locking nuts. MW offers 3 different inner axle seals for all MW 2" housing ends. These seals are designed to ride on the axle shaft just inboard of the axle bearing lock ring.

58514 Housing End Seal for 1.625 dia. Axle 6.50

58515 Housing End Seal for 1.774 dia. Axle 6.50

58516 Housing End Seal for 1.562 dia. Axle 7.10

58570 Backing Plate Bolt Kit (set of 8) 25.00
3/8" with nuts for MW housing ends except large Ford.

58570A Backing Plate Bolt Kit (set of 10) 31.25
For Mopar type ends that require 10 bolts.

58572 Caliper Bracket Stud Kit (set of 8) 35.40
3/8" studs, nuts and washers for Pro Mod housing ends or MW modular end bells.

58575 Backing Plate Bolt Kit (set of 8) 39.20
1/2" with nuts for large Ford ends

Housing Narrowing Tools

The Mark Williams housing alignment tools are the most accurate way to narrow a rear end housing. The alignment bar is a large 2" diameter that has been hard chromed and O.D. ground for durability and precise fit to all other components. Alignment sleeves and center rings are machined from 4140 steel, heat treated, then all O.D.s are ground and precision hard turned. All components are shipped in a wooden container that is ideal for storing everything.

300F Housing End Alignment Kit 430.00
2" diameter hard chromed alignment bar, 39 1/2" long, #303 alignment sleeve (1) for 3.150" O.D. and 2.835" O.D. bearings (small Ford) and choice of 1 pair center alignment rings. 65#

300M Housing End Alignment Kit 430.00
2" diameter hard chromed alignment bar, 39 1/2" long, #302 alignment sleeve (1) for 3.150" O.D. and 2.875" O.D. bearings (Mopar) and choice of 1 pair center alignment rings. 65#

302 Housing End Alignment Sleeve 210.00
For 3.150" and 2.875" O.D. axle bearings (stock Mopar ends). Also has shoulder for locating 3" x .250 tubes.

303 Housing End Alignment Sleeve 210.00
For 3.150" and 2.835" O.D. axle bearings (Mustang ends). Also has shoulder for locating 3" x .250 tubes.

304 Floater Spindle Alignment Sleeve 225.00
For M-W floater spindles.

305 Center Section Alignment Rings 120.00
Dana 60, 3.812" O.D.

306 Center Section Alignment Rings 100.00
Ford 9", 3.250" O.D.

307 Center Section Alignment Rings 100.00
12-bolt, 8.8" Ford and Ford 9", 3.062" O.D.

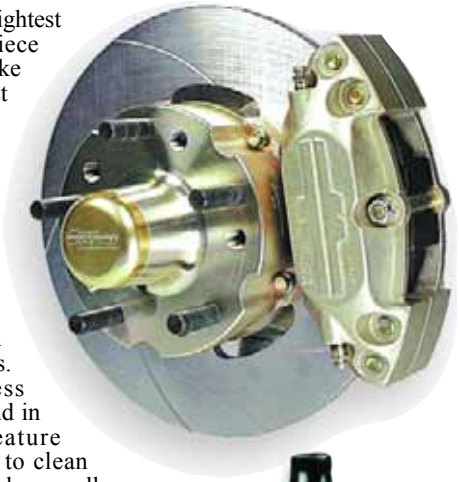
308 Center Section Alignment Rings 100.00
Mopar 8-3/4", 3.265" O.D.

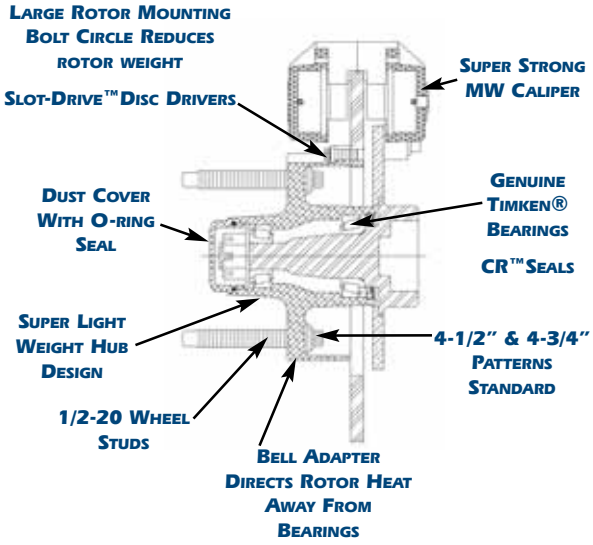
309 Center Section Alignment Rings 100.00
8" Ford, Small 9" Ford, GM 10 Bolt, 2.891" O.D.

310 Housing End Alignment Sleeve 210.00
For 3.150" and 3.349" O.D. axle bearings (H ends).

Front Disc Brake Kits

MW has redefined the front disc brake kit standard. The front kits are designed to be the lightest and simplest kits on the market today. This clean sheet design incorporates a one piece hub/brake hat produced from the same aircraft alloy aluminum that is used in MW brake calipers, with a tensile strength nearly 30% stronger than 6061 material that's used in most billet kits. The MW design also incorporates a large diameter rotor mounting pattern which reduces rotor weight. The larger mounting diameter also allows reduced fastener size with increased strength. This hub design directs the heat from the brake rotor away from the wheel bearings and allows the wheel (the largest heat sink) to absorb most of the heat before it can reach the bearings. The hubs are double drilled with 4-1/2" and 4-3/4" bolt patterns to fit the most popular wheels. 1/2-20 X 2" (3" available) wheel studs are standard as are the billet aluminum dust caps with o-ring seals. The steel rotors are stress relieved, double disc ground in MW's facility and feature cleaning grooves that act to clean the surface of the brake pads as well as indicate rotor wear. A new feature is the Slot-Drive™ disc drive system that reduces rotor warping. Every component in a Mark Williams kit has been designed specifically for each application, from the hub (to maintain the stock tread width as close as possible) to the caliper mounting brackets which are CNC machined from 5/16" thick 7075-T651 aluminum and feature steel threaded inserts for caliper mount bolts. You won't find a generic caliper mount with multiple mounting holes in a MW kit. The heart of all Mark Williams brake kits is the MW quick change caliper. The bridge strength of the MW caliper is superior to every other caliper on the market today due to the use of large 7/16" fasteners connecting the caliper halves and the use of a bridge bolt on the 4 piston caliper. Internal fluid porting eliminates external lines and allows calipers to be used on either side. The balance of each kit includes Timken® tapered roller bearings, CR™ inner seal, spindle nut and washer and all of the required fasteners. All of the MW front brake kits currently available are listed on the following page. If your application is not listed give us a call as new kits are being added all the time. We know that you won't find a better quality or functionally superior front brake system anywhere.





75250
Late Model
"F" Body Kit

Front Disc Integral Hub Brake Kits

Every Mark Williams front disc brake kit has been engineered for the easiest possible installation, but in order to keep the tread width as close to original as possible some spindles require modifications. GM front brake kits listed do require spindle modifications as well as other kits marked with an *. The installation-service bulletin included with each kit details the required modifications or MW can modify customers spindles and/or install the kit. Most other kits listed are bolt-on replacements and do not require spindle modifications prior to kit installation. To ensure the proper spindle is used the Hollander Interchange number is listed with each front brake kit. Some kits may require a spindle change.

Ford Kits

75300 Late Pinto/Mustang II 2 Piston Kit 870.00
'74-'78 Mustang II '74-'80 Pinto **Spindle #747*

75350 Late Pinto/Mustang II 4 Piston Kit 883.00
'74-'78 Mustang II '74-'80 Pinto **Spindle #747*

75400 Early Pinto 2 Piston Kit 870.00
'71-'72 Pinto (drum brakes) **Spindle #657*

75450 Early Pinto 4 Piston Kit 847.00
'71-'72 Pinto (drum brakes) **Spindle #657*

75460 Mustang 4 Piston Kit 880.00
'70 Mustang/Falcon/Fairlane ,'71-'74 Comet (drums) **Spindle #615*

75600 Early Mustang 2 Piston Kit 972.00
'67-'69 Mustang '66-'69 Comet (drum) **Spindle #552*

75650 Early Mustang 4 Piston Kit 950.00
'67-'69 Mustang '66-'69 Comet (drum) **Spindle #552*

75655 '64 Fairlane T/B 4 Piston Kit 949.00
'64-'65 Fairlane **Spindle #494*

75750 Late Mustang 4 Piston Kit* 825.00
'79 Mustang 4&6 cyl '80 All '81 some **Spindle #790*

75760 '78-81 Mustang 4 Piston Kit 1050.00
'79-'81 Mustang 4 & 6 cylinder **Spindle 1536*

75570 '87-'92 Mustang 4 Piston Kit 919.00
8 cylinder strut **strut # 1034*

75000-S Special Application Brake kits . . . . . .P.O.A
We can produce some special kits Priced On Application (P.O.A.)

General Motors Kits

75100 Early Camaro/Chevelle 2 Piston Kit 934.00
'67-'69 Camaro/Firebird '67-'72 Chevelle
*'68-'74 Nova (all drum spindles) *Spindle #622*

75150 Early Camaro/Chevelle 4 Piston Kit 907.00
'67-'69 Camaro/Firebird '67-'72 Chevelle
*'68-'74 Nova (all drum spindles)*Spindle #622*

75200 Late GM "F" Body 2 Piston Kit 1070.00
*'93-'00 Camaro/Firebird *Spindle #1019*

75250 Late GM "F" Body 4 Piston Kit 1098.00
*'93-'00 Camaro/Firebird *Spindle #1019*

75850 3rd Generation Camaro 4 Piston Kit 1038.00
*'82-'92 Camaro/Firebird *Spindle #823*

75870 Corvette 4 Piston Kit 1020.00
*'69-'82 Corvette '68-'72 Chevy Pass. w/disc brakes *Spindle #576*

75950 GM "G" Body/S-10 4 Piston Kit 882.00
'94-'00 Chevy S-10 '79-'87 Monte Carlo and Malibu
*'79-'87 Grand Prix *Spindle #1025*

Mopar Kits

75500 "A" Body 4 Piston Kit 934.00
'65-'72 Early Barracuda, Dart, Demon, Duster, Valiant (drum spindle)
Spindle #531

75550 "A" Body 4 Piston Kit 934.00
*'70-'72 Dart, Demon, Duster, Valiant (disc spindle) *Spindle #609*

75570 "E" Body 4 Piston Kit 1033.00
*'70-'74 Late Barracuda, Challenger (disc spindle) *spindle #609*

Racing Strut Hub Kits

75000 Strange Sportsman Strut 2 Piston Kit 883.00

75010 Santhuff Strut 4 Piston Kit 883.00

75030 Bickel Super Stock Strut 4 Piston Kit 934.00

75040 Bickel Strut 2 Piston Kit 960.00

Spindle Mount Kits

MW's floating rotor brake solves the installation problems associated with fixed rotor kits. Mark Williams now offers several kits that are direct bolt-on to Lamb or JBRC front struts. Others are designed for MW Anglia/P&S style front spindles plus the Strange adjustable Dragster/FC spindle. Both kits feature designs that uses a solid mounted billet aluminum 2 piston caliper, billet aluminum rotor adapter, and unique, patent pending, floating brake rotor (drilled steel or carbon). With this design, run-out on the back of the wheel is not as critical. MW spindles must be sent to the factory for bracket installation or are available new with the mounting tabs installed.

73000 MW Spindle Mount Kit 907.00
For MW front spindles. This kit requires spindles be sent to factory for bracket installation, part #31250

73100 MW Carbon Spindle Mount Kit 2895.00
For MW front spindles with carbon rotors and pads. This kit requires spindle bracket installation, part # 31250

73300 MW Lamb/JBRC Strut Kit 923.00
For Lamb or JBRC front struts with drilled steel rotors.

73400 MW Carbon Lamb/JBRC Strut Kit 2895.00
For Lamb or JBRC struts with carbon rotors and pads.

73500 MW Carbon Strange F/C Spindle 2895.00
Fits Strange Adjustable F/C Spindles with carbon rotors and pads welding for bracket mount installation

31250 Install Tabs On MW Spindle 100.00
Labor to install caliper mounting tabs on MW spindles

MAJOR NHRA SPONSOR
NHRA LUCAS OIL Drag Racing Series
2005 NHRA E.T. Bracket Series
IHRA MOTORSPORTS MAJOR SPONSOR

Rear Disc Brake Kits

81100

71225

Mark Williams rear disc brakes kits have been designed to be the strongest, truest running kits on the market. Every component, except linings, is manufactured in-house from the best materials available to assure optimum quality. Kits include special 5/16" thick 7075-T6 aluminum caliper mounting brackets, aluminum rotor "hats" that are drilled to accept MW 5/8" drive studs and designed to remain true for optimum stopping power. The brake rotors (solid or drilled steel or carbon) now feature the Slot-Drive™ attachment system that allows for rotor expansion and extends the rotor life. All required mounting hardware and the heart of the system a pair of MW 4 piston calipers with linings are included. MW calipers are exceptionally strong, compact, and engineered to provide optimum clearance but the most important characteristic of the calipers is their bridge strength. The limiting factor with regard to bridge strength on calipers of this type is the fastener strength. Even though the material used in MW calipers is nearly 30% stronger than billet 6061-T6 aluminum, material has little effect on the bridge strength. All MW calipers use four 7/16" diameter fasteners plus a 5/16" diameter bridge bolt and support bushing that make it superior to competitors' products whether billet or forged. Other important features of the MW caliper include enlarged 3/8" thread bleeder screws in both ends (no right and left hand calipers) with internal fluid passages eliminating external lines that are prone to damage. MW calipers can be used to upgrade existing JFZ, Wilwood, Strange, or Lamb kits.

Slot-Drive™ System

Ford Brake Kits

71525 Solid Steel Disc Brake Kit 797.00
For large Ford housing ends with 1/2" bolts.

71550 Drilled Steel Disc Brake Kit 797.00
For large Ford housing ends with 1/2" bolts.

71825 Solid Steel Disc Brake Kit 797.00
For Small Ford (Mustang) housing ends with 3/8" bolts.

71850 Drilled Steel Disc Brake Kit 797.00
For Small Ford (Mustang) housing ends with 3/8" bolts.

71325 Solid Steel Disc Brake Kit 797.00
For New Style Ford Ends with 3/8" bolts.

71350 Drilled Steel Disc Brake Kit 797.00
For New Style Ford Ends with 3/8" bolts.

Chevrolet Kits

71725 Solid Steel Disc Brake Kit 722.00
For GM mid-size housing ends.

71750 Drilled Steel Disc Brake Kit 722.00
For GM mid-size housing ends.

71925 Solid Steel Disc Brake Kit 722.00
For stock housing ends with MW "C" clip eliminator kit.

71950 Drilled Steel Disc Brake Kit 722.00
For stock housing ends with MW "C" clip eliminator kit.

Olds/Pontiac Kits

71125 Solid Steel Disc Brake Kit 722.00
For Olds housing ends installed in the stock position.

71150 Drilled Steel Disc Brake Kit 722.00
For Olds housing ends installed in the stock position.

Mopar Kits

71625 Solid Steel Disc Brake Kit 797.00
For Mopar housing ends. Caliper mounts require modifications when using MW 53189 ends.

71650 Drilled Steel Disc Brake Kit 797.00
For Mopar housing ends. Caliper mounts require modifications when using MW 53189 ends.

Symmetrical Kits

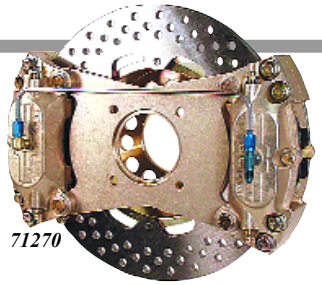
71225 Solid Steel Disc Brake Kit 722.00
Fits MW 58580 or Lamb symmetrical type housing ends. Order P/N 71230 for 3.347" dia. bearing housing ends.

71250 Drilled Steel Disc Brake Kit 722.00
Fits MW 58580 or Lamb symmetrical type housing ends. Order P/N 71255 for 3.347" dia. bearing housing ends.

71260 Solid Steel Disc Brake Kit 1072.00
Fits MW 58580 or Lamb housing ends. Dual calipers.

71270 Drilled Steel Disc Brake Kit 1072.00
Fits MW 58580 or Lamb housing ends. Dual calipers.

The latest addition to the MW line of rear brake kits is a dual caliper system. This set up, made popular in Super Stock Eliminator, is designed to give you the extra holding that you need on the starting line.



71270

Carbon/Carbon Brakes

MW Carbon/Carbon brakes offer the advantage of an extremely light-weight rotor with superior stopping ability. When compared to a standard kit with drilled steel rotors, a Carbon/Carbon brake kit can save you as much as 10 lbs of rotating weight. Carbon/Carbon brakes are unique because both the disc and friction pad are made of the same material and do not suffer brake fade at elevated operating temperatures as with normal rotors and friction materials. The square drive lug system allows for the expansion of the aluminum mounting hat without applying pressure to the rotor. MW brakes are produced from BFG 2D PAN knit Carbon/Carbon that is superior to the random chopped fiber material used by others. MW Carbon/Carbon kits include MW race proven 4 piston calipers with hard anodized pistons, carbon brake pads with stainless steel heat shields, billet aluminum mounting brackets, and all the required fasteners. Extensive race testing has proven the outstanding wear characteristics of the BFG Carbon/Carbon material. Brake Technology has changed dramatically over the past few years and Mark Williams Enterprises is in the forefront.

81200 Carbon/Carbon Brake Kit 2914.20

Fits MW 58580 or Lamb symmetrical type housing ends. 4-3/4" and 5" bolt circle. Saves 12 lbs. over standard brake kit.

81280 Carbon/Carbon Brake Kit 2914.20

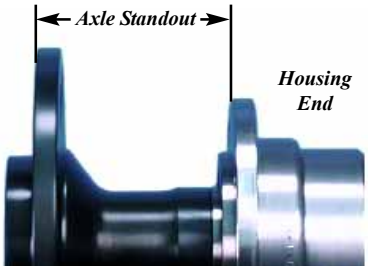
Fits Heavy Duty ends with 3.346 O.D. bearing 58595, 58598 and 58599 ends.

All Mark Williams 71000 series rear brake kits (see page 60) can be purchased as carbon/carbon for an additional $2192.00

Brake System Tech

Caliper Alignment, Clearance & Position

Axle stand out controls the alignment of the brake system and as a result is very critical. To check stand out first verify that the housing ends are perfectly aligned. Install axles and check axle standout (face of axle flange to face of housing end) as accurately as possible. See the chart below for stand out dimensions for MW brake kits. Stand out should be + .015 of the dimension listed. Shims are available to correct the alignment moving the disc outward .015". Misalignment can cause caliper mount deflection, one of the causes of a "spongy" pedal. Install wheels to make sure caliper to wheel clearance is adequate both radially and from outer face of the caliper to the inner face of the wheel. To bleed, the calipers must be positioned at 3 or 9 o'clock. This allows the bleeder to be at the highest point, ensuring that all air is removed from system.



Symmetrical ends	2.834"
Olds ends	2.834"
Large Ford ends	2.500"
Small Ford ends	2.500"
GM 10-12 Bolt ends	2.812"
Mopar ends	2.500"

Pedal Ratio & Master Cylinder

The master cylinder bore size influences the obtainable brake line pressure. Recommended master cylinder size when using two typical 4 piston calipers only in the rear is a single outlet, 7/8" bore master cylinder. If single piston front brakes are used in conjunction with two 4 piston calipers in the rear a dual outlet, tandem 1" bore master cylinder is recommended. When using 4 piston calipers front and rear a dual outlet, tandem 1-1/8" bore master cylinder is recommended. Mounting the master cylinder to a frame rail or roll bar is recommended to ensure a solid mount. With the correct master cylinder in place the pedal ratio must be great enough to produce 1200 psi system pressure under severe braking conditions. A pedal ratio verses line pressure calculator is available on the Mark Williams website, www.markwilliams.com. We recommend using a pressure gauge connected to the system to verify the maximum available pressure before running the car. If the desired pressure can not be easily attained the pedal ratio must be increased until the minimum pressure of 1000 psi is easily reached.

Brake Lines & Fluid

Aircraft AN-3 brake lines and fittings are recommended. Only stainless steel braided teflon hose, stainless or seamless steel tubing (3/16" x .028") should be used for brake lines. Lines should be secured to chassis rails to resist vibration and routed in such a way to avoid possible contact with wheels, tires and other moving parts. Joining hard line and braided line or "T"s should be done using a bulkhead fitting and a small tab welded to the chassis. Long runs should be done with hard tubing to avoid expansion of flexible line. The amount of flexible braided hose in the system should be kept to a minimum. See page 63 for AN -3 fittings and brake line. Use of DOT 4 or 5.1fluid with a high boiling point and lubrication for seals and pistons is recommended. Do not use (DOT5) silicone fluids.

Trouble Shooting

Spongy Pedal Poor Stopping:

A) Air in system. Bleed brakes, making sure that the bleed valve is the highest point.

B) Disc warped (saucer shaped). Replace or resurface rotors

C) Calipers not square with disc. Check housing end alignment, both concentricity and squareness.

D) Linings worn on taper. Make sure that caliper is centered over the rotor and the caliper bracket is not deflecting.

E) Master cylinder bore too large. Match master cylinder to system.

F) Master cylinder deflection. Stiffen master cylinder mounts

G) Pedal ratio wrong, low or high pressure

Brakes are locked up after run:

The piston in the master cylinder is not being allowed to return to the start location when released which maintains line pressure. Re-adjust the linkage so that the piston completely returns.

Excessive pad wear, disc shows excess heat:

A) System pressure is too low causing a longer pressure applied time to stop. Pressure needs to be high enough to allow wheel lock at any time. Check the ability of the system to generate 1200 PSI.
B) Pistons sticking in caliper, clean and overhaul calipers.

Maintenance:

Annual disassembly and cleaning of brake system recommended. Overhaul caliper (replace caliper o-rings).

IHRA Motorsports Major Sponsor
2005 NHRA E.T. Bracket Series
NHRA Lucas Oil Drag Racing Series
Major NHRA Sponsor

Brake Kit Components

All of the components that make up Mark Williams brake kits are available individually. The main components are listed below and on the following page. If there is a part that is not shown please call and a MW tech will help you find the parts.

2 & 4 Piston Calipers

MW calipers are all manufactured in house and are cast from the same alloy as the MW 9" Ford cases that have 30% more tensile strength than 6061 used in most billet calipers on the market. Pistons are machined from billet aluminum and have been hard coat anodized. The trick new 73002 2 piston caliper is machined from 7075-T6 billet aluminum.

73002 Billet 2 Piston Front Caliper (ea) 175.00
For MW floating rotor front brake kit, no linings.

81100 MW Quick Change Caliper (ea) 142.00
For 5/16" to 3/8" thick rotor, no linings.

81100PR MW Quick Change Calipers (pr) 320.00
For 5/16" to 3/8" thick rotor, with non-asbestos 81130 linings.

82100 MW Quick Change Caliper (ea) 150.50
For .812" thick vented rotor, no lining.

82110PR MW Quick Change Calipers (pr) 340.00
For .812" thick vented rotor, with non-asbestos 81130 linings.

83100 MW Single Piston Caliper (ea) 160.00
For 5/16" to 3/8" thick rotor, no linings.

83100PR MW Single Piston Calipers (pr) 357.00
For 5/16" to 3/8" thick rotor, with linings.

Brake Hats & Rotors

MW brake hats are CNC machined in house from a special aircraft alloy. All hats clear a 3.062" register and are machined to accept MW 5/8" drive studs. Hats locate on a 6.248" max. axle flange diameter.

71022 Brake Disc Hat (ea) 100.00
For 70000 series brakes. With 4 1/2", 4 3/4" and 5" patterns.

81001 Carbon Brake Disc Hat (ea) 166.40
For 80000 series outboard mount disc brake.

71002 Cast Iron Brake Rotor (ea) 117.00
.810" vented for 72000 series brake kit.

71005 Steel Brake Rotor (ea) 117.00
With lightening holes for 71000 series kit.

71007 Steel Brake Rotor (ea) 117.00
With cleaning grooves for 71000 series kit.

71009 .015" Rotor Shim 3.00
To move disc out to fine align caliper. (Not Shown)

73311 Steel Floating Brake Rotor (ea) 92.00
With lightening holes for 73000 (.325 thick) series kit.

73104 Carbon Floating Brake Rotor (ea) 810.00
For 73100 & 73400 brake kits.

75004 Steel Brake Front Rotor (ea) 117.00
With cleaning grooves. For 75000 series kit.

81004 Carbon Brake Rotor (ea) 810.00
For 81000 brake kit , 55400 & 55500 floater kits, .437 thick.

Brake Linings

9-707-150 Lining, Lamb Strut, Pre '85 (4 ea) 38.60

9-707-625 Lining, Lamb Strut Post '85 (4 ea) 38.60

73004 Lining, MW Front Caliper (ea) 18.00
For MW 2 piston billet front caliper in spindle mount kits.

81125 Hawk Brake Lining (ea) 15.00
For MW 81100, 82100 caliper cindered iron compound

81022 Carbon/Carbon Lining (ea) 141.00
Includes stainless steel backing plate, MW carbon brake system

81130 Ferodo Hi-Friction Lining (ea) 16.50
For MW 81100,81200 caliper, Ferodo non-asbestos high friction

81135 JFZ/Wilwood Lining, Hi-Friction (ea) 18.00

81136 Bushing for 81130 Linings, (ea) 1.50
Use with 81135 lining in JFZ or Wilwood calipers.

83120 Lining, 2 Piston Front Caliper (ea) 13.00

Brake System Components

Whatever your application MW has the correct master cylinder for the job. We stock single outlet cylinders for 2 caliper systems as well as the popular tandem, dual outlet master cylinders for 4 wheel braking systems.

9-882 Lamb "Stage Gauge," Brake Pressure 75.40
Recommended for all drag racing applications

9-888 Residual Pressure Valve 49.00
2 lb. Lamb for use with M-W,JFZ or Wilwood

9-1838A 1" Dual Master Cylinder 224.40

9-1839A 1 1/8" Dual Master Cylinder 260.00

74-750U 3/4" Tilton Master Cylinder Kit 102.30
Accepts side or flange mounting with remote or fixed reservoir and -3 outlet fitting.

74-875U 7/8" Tilton Master Cylinder Kit 102.30

74-100U 1" Tilton Master Cylinder Kit 102.30

74-1125U 1-1/8" Tilton Master Cylinder Kit 102.30

9-1841A Lamb 9/16" Banjo Fitting 26.00

9-1841B Lamb 1/2" Banjo Fitting 24.30

Caliper & Master Cylinder Parts

6446 Bleed Screw, 1/4" Thread *(ea)* 1.25

9402 Bleed Screw, 3/8" Thread *(ea)* 1.62

75099 Dust Cap Socket *(ea) (Front Brake)* 20.00

75002 Front Hub Dust Cap *(ea) (Front Brake)* . . .24.00

81101 MW Caliper Half, Inboard 77.55

811EX Rebuilt MW Caliper *(Exchange)* 79.00

81102 MW Caliper Half, Outboard 77.55

81104 MW Caliper Bridge Bushing *(ea)* 4.00

81103 Piston, For MW Caliper *(ea)* 12.64

81170 O-Ring Kit for One MW Caliper 8.20

83101 MW Caliper Half, Inboard 62.00

83102 MW Caliper Half, Outboard 62.00

1208811 Overhaul Kit-3/4" Airheart Cylinder 46.80

Brake Lines and Fittings

Correctly plumbing your brake system is very important to brake performance. Quality components are the first step in doing it right. AN-3 is the recommended size for a brake system and MW stocks everything you will need. *(Note flares must be 37°)*

0187X028 -3 Stainless Tubing *(ft)* . . .5.80
3/16" X .028" tube, for the long brake line runs

0300 -3 Stainless Hose *(ft)* 4.50
3/16" TFE brake line hose per foot

1100 -3 Straight Hose End 6.50

1110 -3 45 Degree Hose End 10.40

1120 -3 90 Degree Hose End 10.30

2048 -4 to -3 Straight Union . . .3.60

2050 -3 Straight Union 2.40

2060 -3 Union Tee 7.40

2083 1/8" Pipe Nipple 1.30

2187 -3 Tee Fitting 8.10
3/16" tee with 1/8" pipe on the side

2511 -3 Straight Adapter 1.40
3/16" hose end to 1/8" pipe (caliper fitting)

2610 -3 90 Degree Adapter . . .6.10
3/16" hose to 1/8" pipe 90 elbow

2769 -3 Bulkhead Straight 4.30

2815 -3 Bulkhead Tee 12.60
Bulkhead on the run.

2921 -3 Bolt For Banjo 2.70

2949 -3 Banjo Brake Adapter . .6.90

3554 -3 Tube Flair Nut, *(6)* 4.70

3556 -3 Bulkhead Nut, *(2)* 3.00

3642 -3 Banjo Gasket, *(2)* 3.70

3669 -3 Tube Sleeve, *(6)* 4.10

3750 Line Clamp-Hose 3/16 *(6)* 4.70

3755 Line Clamp-Tubing 1/4 *(6)* 3.00

10324-03 Inverted Flare Adapter . . .6.00
AN -3 to 3/16" inverted flare. For OEM lines.

10100-03 Inverted Flare Adapter . . .6.00
AN -3 to 10mm inverted flare. For OEM lines.

FM10324-03 Invert. Flare Adapter . . .8.00

Swedged Brake Lines

Order Line with (dash) end fitting for each end. Base line is 12" long add $4.50 for each additional foot length.

0300-1-1 Straight X Straight 12.00

0300-1-2 Straight X 45° 18.00

0300-1-3 Straight X 90° 18.00

0300-2-2 45° X 45° 24.50

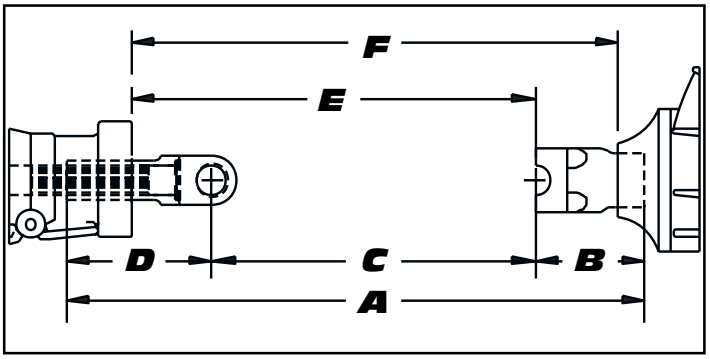
0300-2-3 90° X 90° 24.50

0300-3-3 90° X 90° 24.50

Driveshaft Assemblies

Many of the nation's leading drag racers rely on Mark Williams driveshafts and for good reason. MW has been building race winning driveshafts for more than 2 decades and offers a driveshaft for nearly every application. From the 4130 chromoly shafts capable of handling Pro Mod/Nitro Coupe power to the lightweight Duralcan® MMC aluminum shafts for Pro Stock, Comp, Super Stock or any application where rotating weight is a concern. Because all work, from fabrication to balancing, is done in-house at MW's plant you can be assured of unmatched quality and prompt delivery. A new addition to the MW driveshaft line up is a Carbon Fiber driveshaft assembly (see details on the following page). Add to this the fact that Mark Williams Enterprises is also NHRA's and IHRA's only major contingency sponsor for driveshaft assemblies (Chromoly, Duralcan® MMC and Carbon Fiber) and it is easy to see that there is no reason to run anything but the best driveshaft on the market. When placing an order for a Mark Williams driveshaft assembly please refer to the diagram below for the required dimensions. The "E" dimension is preferred but remember your 1350 series pinion yoke must be in place when measuring, (our pinion yoke is not the same length as stock yokes). If ordering by the "C" dimension, a MW transmission yoke must be used (trans yoke lengths may not be the same as a stock yoke) along with a 1350 series pinion yoke.

2005 NHRA E.T. Bracket Series



A End of trans yoke to end of pinion yoke. _____"

B End of pinion yoke to U joint center. _____"

C U joint center to U joint center. _____"

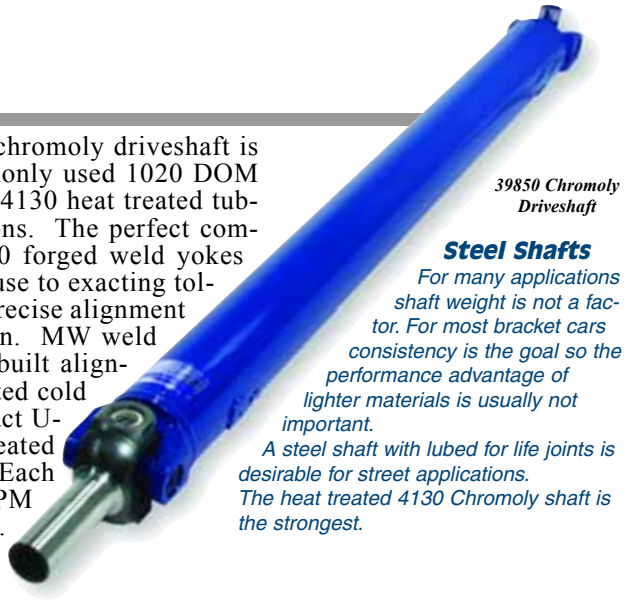
D End of trans yoke to U joint center. _____"

E Trans seal to U joint center. _____"

F Trans seal to pinion seal. _____"

Chromoly & Mild Steel

When it comes to a bulletproof driveline the Mark Williams chromoly driveshaft is the strongest. A Chromoly shaft is 75% stronger than commonly used 1020 DOM material. To ensure the quality of the material, the 3" X .083 4130 heat treated tubing used is manufactured to MW's own stringent specifications. The perfect companion to MW's chromoly tubing is the MW produced, 4130 forged weld yokes used in each assembly. These weld yokes are produced in-house to exacting tolerances to provide the proper press fit in the chromoly tube. Precise alignment or "phasing" of the weld yokes is critical to smooth operation. MW weld yokes and chromoly tubing are assembled using a specially built alignment/assembly fixture, then carefully joined using an automated cold wire TIG process. MW's exclusive solid 1350 series Hi-impact U-joints are then installed along with the forged 4340 heat treated transmission yoke (yoke must be purchased separately). Each assembly is High-Speed electronically spun balanced at a RPM that represents operating speed, to G30 industry tolerances. The finished product is a driveline capable of handling today's most powerful vehicles. (Prices are less transmission yoke.)



39850 Chromoly Driveshaft

Steel Shafts

For many applications shaft weight is not a factor. For most bracket cars consistency is the goal so the performance advantage of lighter materials is usually not important.

A steel shaft with lubed for life joints is desirable for street applications.

The heat treated 4130 Chromoly shaft is the strongest.

39650 Mild Steel Driveshaft Assembly 374.00
3-1/2" O.D. x .065 DOM mild steel shaft, Spicer weld yokes and lube for life 1350 series U-joints.

39640 Mild Steel Driveshaft Assembly 390.00
4" O.D. x .083 DOM mild steel shaft, Spicer weld yokes and lubed for life 1350 series U-joints.

39800 3" Chromoly Driveshaft Assembly 377.00
3" O.D. x .083 4130 chromoly shaft. MW 4130 forged steel weld yokes & exclusive solid Hi-Impact 1350 series U-joints.

39850 3-1/2" Chromoly Driveshaft 425.00
3-1/2" x .083" wall Hi-Impact U-Joints for Hi-Powered Nitrous cars.

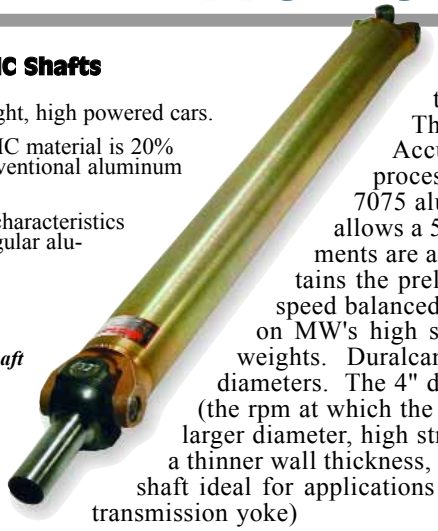
39860 4" Chromoly Driveshaft 475.00
Exclusive 4" x .062" wall 4130 Heat Treated, Hi-Impact Joints for high Powered extra long driveshafts

Caution: *Steel with the smaller diameters has the lowest critical speed properties. For long shafts it is necessary to use a large diameter for high RPM requirements. Check the speed chart before ordering*

Aluminum Accu-Bond™ Driveshafts

MMC Shafts

1) Best for lightweight, high powered cars.
2) Light weight MMC material is 20% stronger that conventional aluminum shafts.
3) Increased speed characteristics over steel and regular aluminum shafts



39935 MMC Aluminum Driveshaft

Mark Williams Accu-Bond™ MMC aluminum driveshafts are custom built with the super tough Duralcan® MMC aluminum tubing and fitted with special MW forged 7075-T6 end yokes. The end yokes are mated to the tubing using a patent pending Accu-Bond™ bonding process. By utilizing the Accu-Bond™ process this allows the end fittings to be produced from high grade 7075 aluminum increasing the ear strength (the normal weak link) plus allows a 50% weight reduction compared to a steel shaft. Other improvements are a cold forged precision joint with nylon thrust buttons that maintains the preload and eliminates U-joint thrust galling. All shafts are high-speed balanced to G30 specifications in relation to the actual operating speeds on MW's high speed balancer utilizing our unique system of bolt-on balance weights. Duralcan® MMC aluminum shafts are available in both 3 1/2" and 4" diameters. The 4" diameter should be used for longer shafts to avoid critical speed (the rpm at which the shaft wants to "jump rope") problems. The combination of the larger diameter, high strength, and stiffness of the Duralcan® MMC material allow for a thinner wall thickness, resulting in a very light assembly making the Duralcan® MMC shaft ideal for applications where weight and critical speed are an issue. (Prices are less transmission yoke)

39935 Accu-Bond™ MMC Driveshaft 558.00
3-1/2" O.D. x .110 Duralcan® aluminum tube, MW 7075-T6 end yokes and exclusive cold forged precision 1350 series U-joints.

39500 Accu-Bond™ MMC Driveshaft 582.00
4" O.D. x .100 Duralcan® aluminum tube, MW 7075-T6 end yokes and exclusive cold forged precision 1350 series U-joints.

Carbon Fiber Driveshafts

39100 Carbon Fiber Driveshaft

Carbon Fiber Shafts

1) Higher critical speed rating over MMC shafts
2) Can be used for extremely long shafts at high RPM.
3) Best power to shaft weight rating.

In keeping with the advances in driveline technology, Mark Williams Enterprises is now offering a new carbon fiber driveshaft assembly. The special Mark Williams aluminum end yokes are manufactured to extremely tight tolerances for a precise fit into to the carbon fiber tube. The end yokes are then installed in the carbon fiber tube using a proprietary bonding system. A custom built assembly fixture ensures perfect alignment or "phasing" of the end yokes during this process. MW's solid Spicer 1350 series high impact U-joints, which are standard with all Carbon Fiber assemblies, are installed along with the transmission yoke *(transmission yokes sold separately, see page 66 and 67)* and the assembly is electronically balanced using the same race proven bolt-on weight system used on the MW Duralcan® MMC aluminum driveshafts. The stiffness of the carbon fiber material allows for higher critical speeds thus making it ideal for longer applications such as Pro Stock Trucks etc. The MW Carbon Fiber driveshaft is the ultimate in weight savings and when running a Lenco or new G-Force transmission with a 16 spline output shaft, even greater weight savings are possible by using either an aluminum or titanium transmission yoke *(see page 67)*. (Price Less transmission yoke)

39100 Carbon Fiber Driveshaft 800.00
3.75" O.D. Carbon Fiber shaft, MW 7075-T6 aluminum end yokes and cold forged precision 1350 series U-joints.

To be eligible for Mark Williams contingency awards on MW Chromoly, Duralcan® MMC Aluminum, and Carbon Fiber driveshafts, the winner must submit proof of purchase and the serial number on the shaft, which must be used with a MW transmission slip yoke.

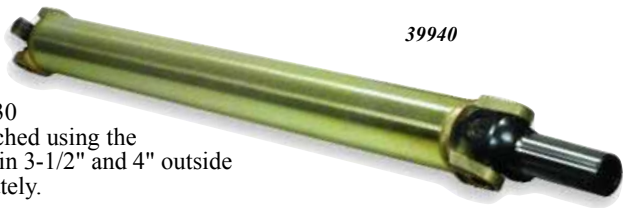
Driveshaft Testing

Our torsion testing ability is unparalleled in the industry. We are involved in special design and manufacturing processes for all types of driveline applications. Our in house torsion testing machine allows testing of all types of maximum torsion and cycle load tests. Each Accu-Bonded™ shaft is load and cycle tested to assure performance quality before shipping. A certificate of test accompanies each shaft. As a support service we will perform proof testing for any MW produced driveshaft free of charge.

Hi Speed Balancing.....See Page 69

Aluminum Gold-Fusion Driveshafts

The Gold-Fusion™ series driveshafts are produced from the conventional 6061-T6 aluminum. The weld yokes are forged and heat treated. The welding is performed on a specialized automatic MIG welding machine. The shaft features the cold forged lubed for life 1350 series universal joints. The shaft receives the gold chromate finish and is balanced to G30 specifications, factored for the operating RPM. Balance weights are attached using the bolt on system to eliminate welding in the shaft tube. Shafts are available in 3-1/2" and 4" outside diameter. Requires MW transmission yoke that must be purchased separately.



39940 3-1/2 Gold-Fusion™ Aluminum Shaft 525.00
With universals and balancing, trans (yoke not included)

39945 4" Gold-Fusion™ Aluminum Shaft 575.00
With universals and balancing, trans (yoke not included)

Pro-Mod Driveshaft Assemblies

The latest development for an Ultra-Strength driveshaft is the Mark Williams Enterprises 6K series driveshafts. The key to obtaining strengths greater that the standard 1350 universal joints is the new solid 6K MW joint. The joint is produced from billet Nickel-Chromium-Molybdenum steel that is precisely designed to obtain the maximum strength within the space limitations. The bearing cups are special alloy Aluminum Bronze and pressure lubricated. The special joints are designed to be mated to the Cross-Drive™ rear companion flange drive system. The new Cross-Drive™ system increases the failure strength of standard 1350 joints by approximately 500 foot pounds torque and applies the torque to the drive flanges verses 1/2 of the rear flange and U-bolts. With the 6K joint system the working stress level is adequate for 6000 foot pounds torque. The Cross-Drive™ system improves the shaft balance repeatability with the centering taking place with pilot diameters. The drive lug system is indexed with one wide key so the shaft is installed to the same clock angle every time. Four 7/16" attachment studs attach the shaft to the pinion flange with 6 point jet nuts for easy removal. The driveshaft materials are 3-1/2" 4130 heat treated tube with 4130 heat treated end fittings. The assembly is cold wire TIG welded and balanced to G30 specifications at a factored operating RPM. This new system is the first quantum strength improvement since Mark Williams Enterprises pioneered using chromoly driveshafts with 1350 joints and forged alloy steel transmission and differential yokes. Call for availability and pricing information.

39870 6K Cross-Drive™ Driveshaft . . . . . .T.B.A.
3-1/2" 6K Shaft with drive flange (trans yoke separate)

39049 Cross-Drive™ Rear Flange 35 Spline . . . . . .T.B.A.
9"-9-1/2" Ford 35 spline pinion flange

39050 Cross-Drive™ Rear Flange 40 Spline . . . . . .T.B.A.
11" Modular read pinion drive flange

Aluminum Driveshaft Cross-Drive™ Components

The Accu-Bond™ MMC driveshaft can benefit from the improved strength of the Cross-Drive™ companion flange system. By designing these components in aluminum alloy the weight difference is negligible but the improved centering is beneficial to creating a well balanced driveline system. With the current U-bolt retention system the balance can change every time you remove and reinstall the driveshaft. This system is beneficial for rapid driveshaft removals and installation, as there are no longer any loose universal joint caps and needle bearings to loose.

39949 Cross-Drive™ Shaft Flange . . . . . .T.B.A
Addition to Accu-Bond™ driveshafts

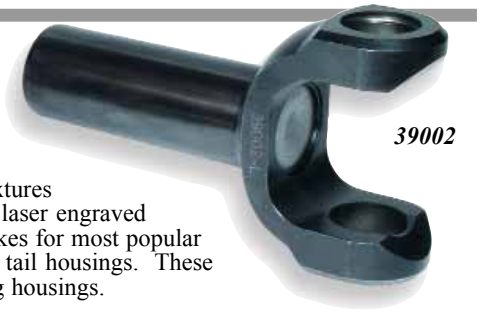
39947 Cross-Drive™ 9" Pinion Flange 28 Spline . . . . . .T.B.A
Aluminum 28 spline pinion flange

Billet Steel 1350 U-Bolt Kit

The new 2nd Gen™ alloy steel U-bolt kit is a result of information gained on our driveshaft Torsion testing machine. We found that the standard 3/8" 1350 U-bolt was prone to cycle failure when cycle testing at high torque levels. The one piece U-bolt was letting the joint rock out of the differential companion flange. By surrounding the joint cups a full 360° with support up to 500 additional foot pounds of torque was possible. These 2nd Gen™ U-bolt kits feature a bubble stud that locates on the rear flange bolt hole indexing the location. The straps are produced form a pre-heat treated Chromium-Molybdenum steel, the studs are 150K material with rolled threads. Sold as sets with accompanying 12 point reduced double hex nuts. Fits all current Mark Williams forged billet rear pinion yokes.

39112 2nd Gen™U-Bolt Kit 75.00
Fits all current MW pinion yokes with nuts

Transmission Yokes


39002

MW heavy duty transmission yokes have been designed to incorporate Spicer 1350 series U-joints and are forged from heat treated 4340 steel. All yokes are 100% machined in house on MW's state-of-the-art CNC machines. Special fixtures are used to guarantee that all machining is done in relationship to the spline pitch diameter. This assures concentricity and produces a yoke that is symmetrical and balanced for smooth operation. The yokes are then re-heat treated to over 200k PSI and U-joint cup bores are honed to exact limits and the bushing/seal surface is ground with special fixtures assuring concentricity with the spline pitch diameter. Like all MW product's they are laser engraved with part numbers and batch numbers that allow complete trace ability. MW builds yokes for most popular transmissions including special yokes designed to work with the latest needle bearing tail housings. These yokes have a hardness and special diameters that are compatible with the needle bearing housings.

39002 MW Chrysler Transmission Yoke 182.00
30 spline, for 1350 series U joint. Mopar, Doug Nash and Liberty trans. "D" = 6-1/8"

39004 MW Turbo 400 Transmission Yoke 182.00
32 spline, for 1350 series U joint. Turbo 400 and Super T-10 trans. "D" = 5-3/4"

39005 MW Powerglide Transmission Yoke 182.00
27 spline, for 1350 series U joint. Powerglide and Turbo 350 trans. "D" = 5-13/16"

39013 MW Lenco Transmission Yoke 182.00
32 spline, for 1350 series U joint. Lenco trans. "D" = 4"

39015 MW Lenco Transmission Yoke 182.00
16 spline, for 1350 series U joint. Lenco trans. "D" = 4"

39020 MW C-6 Ford Transmission Yoke 182.00
31 spline, for 1350 series U joint. C-6 and Toploader trans. "D" = 6-1/8"

39022 MW Ford C-4 Transmission Yoke 182.00
28 spline, for 1350 series U joint. C-4 trans. "D" = 5-13/16"

39031 MW 904 Torqueflight 182.00
25 Spline, for 1350 Series U joint, 904 Torqueflight, "D=6-1/8""

39040 MW G-Force Transmission Slip Yoke 182.00
16 spline, for 1350 series U joint. G-Force trans. "D" = 3 1/2"

Roller Bearing Tailhousing Yokes

These special MW yokes have the additional heat treating and proper O.D. to be compatible with the needle bearings used in the tail housings of many of the new transmissions. Produced for Jerico, Dedenbear and Liberty Transmissions.

39032 Hardened Transmission Slip Yoke 197.00
30 spline. Liberty trans. "D" = 6-1/8"

39034 Hardened Transmission Slip Yoke 197.00
32 spline. Jerico and G Force trans. "D" = 5-3/4"

39035 Hardened Transmission Slip Yoke 197.00
27 spline. Powerglide with needle bearing tailhousing. "D"= 5-13/16"

"Rapid Release" Yokes

The MW Rapid Release yokes can be a real time saver during those quick transmission changes. They allow the driveshaft to be disconnected at the transmission rather than at the pinion, plus the cap design prevents over tightening and possible damage to the U joint cups. These yokes accept the 1350 series Spicer U joint and are the lightest and most compact units of this type on the market. Each yoke comes with steel caps and fasteners. Care must be exercised not to mix U-joint caps and maintain indexing after shaft is balanced. MW built driveshafts with these yokes have identifying index marks.


39113
39110
39105

39102 Mopar Rapid Release Yoke 215.00
30 spline. Mopar, Doug Nash and Liberty trans. "D"=6-1/8"

39104 Turbo 400 Rapid Release Yoke 215.00
32 spline. Turbo 400 and Super T-10 trans. "D"=5-3/4"

39105 Powerglide Rapid Release Yoke 215.00
27 spline. Powerglide and Turbo 350 trans. "D"=5-13/16"

39113 Lenco Rapid Release Yoke 215.00
32 spline. Lenco trans. "D"=4"

39115 Lenco Rapid Release Yoke 215.00
16 spline. Lenco trans. "D"=4"

39120 Ford Rapid Release Yoke 215.00
31 spline. C-6 and Toploader trans. "D"=6-1/8"

39135 Dedenbear PG Rapid Release Yoke 215.00
27 spline. Powerglide trans. with Dedenbear tailhousing "D"=5-13/16"

39110 Replacement Steel Caps, *(pr)* 43.50

Pinion Yokes

39011

MW steel pinion yokes are CNC machined from heat treated 4340 steel forgings and they accept the Spicer 1350 series U-joint. Special tooling ensures that every yoke is machined concentric to the pinion spline for smooth operation. Yokes have provision for computer pick up rings available separately, (page 69). Every MW pinion yoke (except for our special NASCAR yokes) can use conventional 3/8" diameter U-bolts, or the new 2nd Gen™ alloy steel kit to retain the U-joint. (see pages. 69 and 66)

39003 MW 8.5" GM 10 Bolt Pinion Yoke 165.00
30 spline, for 1350 series U joint. "B" = 3-3/16"

39006 MW GM 12 Bolt Pinion Yoke *(long)* 165.00
30 spline, for 1350 series U joint. "B" = 3-7/8"

39038 MW GM 12 Bolt Pinion Yoke *(short)* 165.00
30 spline, for 1350 series U joint. "B" = 2-7/8" Recommended yoke

39008 MW 9" Ford Pinion Yoke, 28 spline 150.00
28 spline, for 1350 series U joint. "B" = 3-7/8". Note: 57604 shim required if yoke is used with stock support.

39011 MW 9" Ford Pinion Yoke, 35 spline 150.00
35 spline, for 1350 series U joint. "B" = 3-7/8"

39014 MW Dana 60 Pinion Yoke 165.00
29 spline, for 1350 series U joint. "B" = 3-1/32"

39016 MW 8-3/4" Mopar Pinion Yoke 180.00
10 spline, for 1350 series U joint. "B" = 3-1/2"

39018 MW '57-'64 Olds/Pontiac Pinion Yoke 180.00
13 spline, for 1350 series joint. "B" = 3.160"

39023 MW 8.8" Ford Pinion Yoke 165.00
30 spline, for 1350 series U joint. "B" = 3-9/32"

39037 MW 11" Rear 197.00
40 Spline, for 1350 Series U-Joint "B"=3.830"

39025 MW 9" Pinion Yoke 1330 series Joint 135.00
28 spline for MWsupport, for 1330 Ford joint 3-5/8 X 1-1/8" "B3=3-1/2

NASCAR Yoke With Pulley

39024 NASCAR Yoke w/Pulley 185.00
9" Ford 28-spline. "B"=3-7/8"

39027 Bolt-Strap Retaining Kit 6.20

39924 Aluminum Yoke w/ pulley 330.00
9" Ford 7075-T6 billet, 28-spline. "B"=3-7/8"


39024

MW NASCAR yokes are machined from 4340 forgings and designed to use Spicer U-joint straps. V-belt pulley to drive oil cooler pumps is standard. These yokes are designed for Daytona type pinion supports or MW's 57690 nodular iron ball bearing support (must be modified if used with any other MW support).

Billet Aluminum Yokes


39906 *39911* *39908*

All MW aluminum yokes are CNC machined from 7075-T6 billet material and hard coat anodized for maximum durability. 9" Ford pinion yokes include special splined hardened pinion nut washer.

39906 MW Aluminum 12 Bolt Pinion Yoke 295.00
30 spline, for 1350 series U joint. "B"= 3 7/8"

39908 MW Aluminum 9" Ford Pinion Yoke 295.00
28 spline, for 1350 series U joint. Includes special splined hardened washer. "B"= 3-7/8"

39911 MW Aluminum 9" Ford Pinion Yoke 295.00
35 spline, for 1350 series U joint. Includes special splined hardened washer. "B"= 3-7/8"

Billet Titanium Yokes

MW produces titanium pinion yokes for 9" Ford in 28 spline for standard pinion gears and 35 spline Pro-Gears. The strength of the titanium yoke is between the 4340 heat treated yoke and aluminum billet yoke. For cars that have high power requirements but are weight conscious, this is the part for you. The titanium yoke will accept the 2nd Gen™ Alloy Steel U-bolt replacement kit or standard 39010 kit.

49008 9" Ford Titanium Pinion Yoke 770.00
28-spline, standard pinion, 1350 joint, B=3-7/8"

49011 9" Ford Titanium Pinion Yoke 770.00
35-spline, large pinion gears, 1350 joint, B=3-7/8"


49011 *49008*

Driveshaft Components

Replacement parts for MW driveshafts such as 1350 series U joints, U bolts, even steel weld yokes are all kept in stock and available from Mark Williams Enterprises.

39001 Spicer 1350 Series Weld Yoke 29.00
For 3" x 0.83" wall tube

39009 Standard 1350 Series U-joint 25.50

39010 1350 Series Spicer U-Bolt Kit *(pr)* 11.00
With special 12 point nuts for wrench clearance

39017 MW Forged 1350 Series Weld Yoke 56.30
MW 4130 forged steel, heat treated for 3" x .083 tubing.

39029 Precision 1350 Series U-joint 35.50

39039 H.D. High Impact 1350 Series U-joint 41.00
Exclusive to MW, true solid non-greaseable U-joint

Computer Pickup Assembly

The MW computer pickup assembly provides driveshaft rpm data from the pinion. Compatible with most on board computer systems. CNC machined and black anodized these collars will accept 1 to 4 magnets. Magnets slip in from center, a plastic plug holds the magnet outward (included with magnet). The 57642 collar has 1.875" I.D. while the 57645 collar has a 2.187" I.D. Most MW yokes or couplers are designed to use one of these collars.

57640 Assembly Std Pinion *(collar & bracket)* 57.00

57641 Bracket for 9" Ford Thirdmember 15.00

57642 Magnet Ring *(std pinion)* 1.875" I.D. 41.00

57643 Magnet *(1/4" dia. x 1/4" long)* 2.50

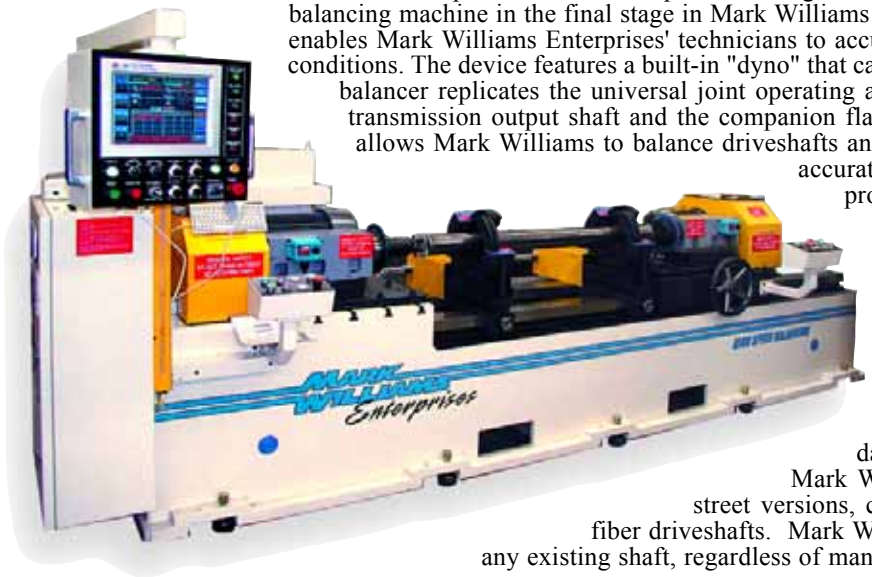
57644 Proximity Sensor Assembly 70.00

57645 Magnet Ring *(lrg pinion)* 2.187" I.D. 41.00

57646 Assembly Lrg. Pinion *(collar & bracket)* 57.00

90241 Bracket for 12 Bolt Modular Rear 15.00

Hi-Speed Balancing



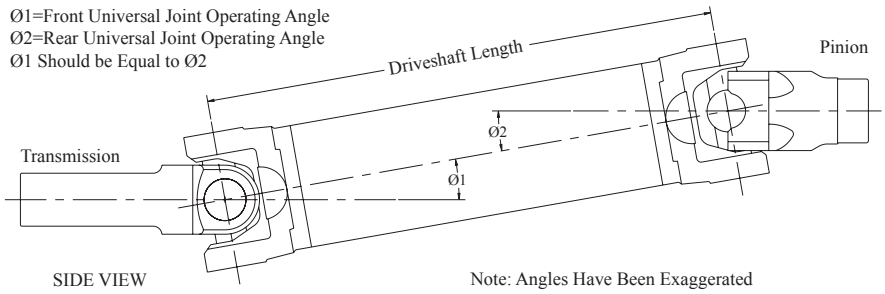
Mark Williams Enterprises has raised the bar where custom driveshaft quality and operational efficiency are concerned. The improvement is accomplished through the use of a highly sophisticated 10,000 RPM balancing machine in the final stage in Mark Williams Enterprises' manufacturing process. This enables Mark Williams Enterprises' technicians to accurately balance shafts at actual operating conditions. The device features a built-in "dyno" that can place loads on the shaft. In addition the balancer replicates the universal joint operating angles that commonly occur between the transmission output shaft and the companion flange of the differential. The new process allows Mark Williams to balance driveshafts and check the universal joint preload more accurately than is possible through conventional processes thus simulating actual running conditions. A High-Speed, load-simulated balanced driveshaft greatly benefits racers by reducing radial force power required to turn an eccentric shaft and by improving transmission and rear-end life through a reduction in those harmful radial forces. Remember... smooth power transfer is efficient power transfer. This new process is standard on all driveshafts manufactured by Mark Williams Enterprises including mild steel street versions, chromoly, aluminum (MMC) and carbon fiber driveshafts. Mark Williams will also precision speed-balance any existing shaft, regardless of manufacturer, for a nominal fee.

36999 High Speed Driveshaft Balance 75.00

Driveshaft Tips

There are a couple important factors that will ensure the best possible performance from your driveshaft assembly. One is U-joint operating angles and the other is shaft critical speed. Both are explained below. Use these tips to avoid common driveline mistakes.

Operating Angles



The driveline arrangement in most racing applications is known as a parallel, zero degree phasing driveshaft. In order to obtain the minimum power loss from the operation of the universal joints, two things must be addressed with regard to operating angles. First is making sure shaft centerlines are parallel. Second is the actual operating angle of the U-joints. The centerline of the engine/transmission (Ø1) should be kept as parallel as possible to the pinion centerline (Ø2). This ensures both U-joints are operating at the same angle. Keeping these centerlines parallel throughout the suspension travel would be ideal but is very hard to do. The type of rear suspension will have an effect on maintaining a parallel condition. A 4-link suspension system is the best when it comes to the pinion maintaining its angle through its travel up and down. Ladder bar and torque arm systems create unique operating angles as the suspension moves since they move from a single point. In any case, the pinion angle should be set to match the engine/trans angle with the car at its ride height by placing a digital level on a machined surface of the engine then on the pinion yoke. Adjust bars or shim accordingly. U-joint operating angles should be kept at a minimum. In general operating angles should be 2° or less for racing applications and should be within 1/2° of each other. Greater operating angles create a power loss and can cause vibration at high RPMs. Again a 4-link is the best at keeping the U-joints operating at the same angles. Increasing the operating angle will also affect the critical speed characteristics of a driveshaft. There is a general misunderstanding about "dropping the pinion down" several degrees. This is a practice that should be applied only to leaf spring cars without any traction control devices where springs can “wrap” and change pinion angle. This practice would not apply to 4-link, ladder bar or torque arm equipped cars. Failure to maintain matched and minimum operating angles increase erratic non-uniform output velocity from the driveshaft to the differential.

Critical Speed

MW Part Number	44”	46”	48”	50”	52”	54”	56”	58”	60”
39200 3.5” 6061 Alum.	10,609	9,632	8,784	8,044	7,393	6,818	6,308	5,852	5,445
39300 4” 6061 Alum.	12,124	11,010	10,043	9,198	8,455	7,799	7,216	6,696	6,230
39935 3.5” Bonded MMC	12,147	11,019	10,041	9,188	8,439	7,778	7,192	6,669	6,202
39500 4” Bonded MMC	13,007	11,790	10,737	9,819	9,013	8,303	7,674	7,113	6,612
39600 3” Mild Steel	9,114	8,264	7,527	6,885	6,322	5,825	5,384	4,991	4,640
39650 3.5” Mild Steel	10,521	9,549	8,705	7,968	7,322	6,750	6,243	5,792	5,387
39640 4” Mild Steel	11,820	10,735	9,793	8,970	8,246	7,607	7,039	6,532	6,078
39800 3” 4130 Steel	9,017	8,185	7,463	6,832	6,279	5,789	5,355	4,968	4,622
39850 3.5” 4130 Steel	10,408	9,454	8,626	7,901	7,265	6,702	6,202	5,756	5,357
39100 Carbon Fiber	13,705	12,438	11,339	10,380	9,537	8,793	8,133	7,544	7,017

Critical Speeds of MW Driveshafts (rpm)
Lengths are center to center.

Any rotating shaft will become dynamically unstable at certain speeds and create vibrations at an amplitude that will cause destruction. The shaft will go into a whirl or “jump rope” effect causing an imbalance that will vibrate violently and ultimately fail. In order to avoid these conditions all drivelines must operate within their critical speed limitations. The factors that determine the critical speed are the stiffness of the material, the diameter of the tubular member and the shaft length. Typically a larger diameter shaft has a higher critical speed than a smaller diameter shaft. The length of a shaft also has a great effect on its speed properties. The chart to the left shows general limits based on a 75% rating. Keeping shafts within these limits will assure smooth operation. Shafts operating higher than the speeds listed can expect vibration at some point.

Driveline Couplers

Mark Williams makes a complete line of driveline couplers for dragster, funny car, drag boat, pulling tractor, and other applications with solid mount rear ends that require direct connection or solid splined shafts. All couplers are made of 4140 aircraft alloy steel and hardened by MW's Austempering heat treat process. Splines are broached for a slip fit, while gear cutting operations are performed on special fixtures that locate on the spline pitch diameters to assure minimum total indicated run out. Coupler seal and/or bushing diameters are CNC ground to a smooth finish to assure proper fit and sealing of lubricants. All couplers receive a protective black oxide finish for extra durability. Double splined solid driveshafts and the original MW quick disconnect Powerglide couplers are also available for applications where the distance from the transmission to the rear end is too long for a standard male/female coupler.

Trans Couplers, Connectors & Lock Rings

40340 MW Ford C-4 Transmission Coupler 135.00
28 spline, male, Ford C-4 trans. 5-3/4" long

40350 MW Ford C-6 Transmission Coupler 115.00
31 spline, male, Ford C-6 trans. 5-3/4" long

40550 MW Mopar Transmission Coupler 115.00
30 spline, male, Jerico or Liberty trans. 5-3/4" long

40600 MW Lenco Transmission Coupler 82.00
16 spline, male, Lenco trans. 2-7/8" long

40601 Coupler Lock Ring *(aluminum)* 24.70
Fits 1 3/8" 16 or 32 spline trans output or splined shaft. 1 pc.

40602 Coupler Lock Ring *(steel)* 19.30
Fits 1 3/8" 16 or 32 spline trans output or splined shaft. 2 pc.

40603 Coupler Lock Ring *(aluminum)* 20.10
Fits 1 3/8" 16 or 32 spline trans output or splined shaft. 2 pc.

40605 Coupler Lock Ring *(steel)* 29.90
Fits 1 1/2" 35 spline trans output or splined shaft. 2 pc.

40610 MW Lenco Transmission Coupler 95.00
16 spline, male, Lenco trans. 3-7/8" long

40620 MW Lenco Transmission Coupler 82.00
16 spline, female, Lenco trans or 16 spline driveshaft.

40640 MW Lenco Transmission Coupler 82.00
32 spline, female, Lenco trans or 32 spline driveshaft.

40650 Male Coupler Ring Gear 52.00
20 tooth gear with 1.650 bore (for making special couplers).

40660 MW Lenco Transmission Coupler 105.00
35 spline, male, Lenco trans. 6" long

40700 MW Turbo 400 and B&J Trans Coupler 90.00
32 spline, male, Turbo 400 or B&J trans. 3-7/8" long

40711 MW Turbo 400 and B&J Trans Coupler 115.00
32 spline, male, Turbo 400 or B&J trans. 6-3/4" long

40780 MW Lenco Transmission Coupler 78.00
32 spline, male, Lenco trans or B&J trans. 3-7/8" long

40800 MW Powerglide Transmission Coupler 82.00
27 spline, male, Powerglide or 350 trans. 3-7/8" long

40805 MW Powerglide Transmission Coupler 82.00
27 spline, male for Dedenbear Tail Housing. 3-7/8" long

40810 MW Powerglide, Transmission Coupler 115.00
27 spline, male, Powerglide or 350 trans. 6 3/4" long

40820 MW Powerglide, Transmission Coupler 135.00
27 spline, male, Powerglide or 350 trans. 8" long

40900 Driveshaft Connector 45.00
16 spline, Lenco transmission and solid driveshafts.

40950 Driveshaft Connector 45.00
32 spline, Lenco transmission and solid driveshafts.

40951 Driveshaft Connector 49.50
32 spline, B & J transmission and solid driveshafts.

40960 Driveshaft Connector 65.00
35 spline, Lenco transmission and solid driveshafts.

Pinion Couplers

40000 MW 9" Ford Pinion Coupler 82.00
35 spline, female, 9" Ford large pinion.

40040 MW 9" Ford Pinion Coupler 130.00
40 spline, female, 9" Ford TF pinion.

40045 MW 11" Modular Pinion Coupler 130.00
40 spline, female, 11" Modular pinion.

40050 Blank Female Pinion Coupler 80.00
No internal splines, No heat treat

40100 MW 9" Ford Pinion Coupler 96.00
35 spline, male, 9" Ford large pinion.

40200 MW '49-'50 Olds-Pontiac Pinion Coupler 96.00
10 spline, female.

40250 MW '57-'64 Olds-Pontiac Pinion Coupler 96.00
13 spline, female.

40300 MW 9" Ford Pinion Coupler 82.00
28 spline, female, 9" Ford standard pinion.

40400 MW Dana 60 Pinion Coupler 96.00
29 spline, female.

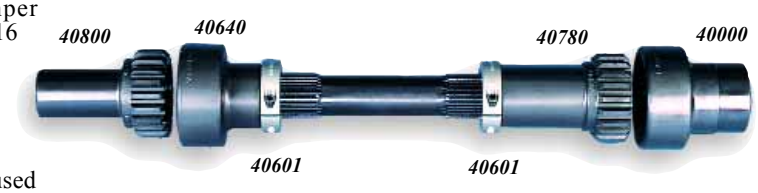
40500 MW 8-3/4" Mopar Pinion Coupler 82.00
10 spline, female.

40630 MW Quick Change Pinion Coupler 96.00
10 spline, female.

40750 MW 12-Bolt Chevrolet Pinion Coupler 96.00
30 spline, female.

Solid Driveshafts

MW solid driveshafts are designed to be used in vehicles with solid mounted rear ends or where a single coupler is not long enough. These shafts are available in lengths from 6" to 28" long. All shafts are machined out of 4340 alloy steel. The splines are hobbed, micro polished, and then heat treated with MW's austemper process for strength and ductility. The splines on 1 3/8"-16 spline shafts are O.D. ground after heat treat to assure a perfect fit. Finally all shafts receive a black oxide finish. Shafts are available with SAE 1 3/8"-16, 1-3/8"-32 spline and 1 1/2"-35 splines. Both ends have 4 full inches of spline and can be shortened up to 2" on each end. Couplers and splined shafts should not be used unless perfect alignment is assured. MW can also build custom solid driveshafts to your specs up to 34" in length.



Typical Powerglide to 9" Ford set-up with 32 spline shaft

16 Spline Driveshafts

41000-06 F/C Driveshaft, 16 Spline 6" Long 110.00
41000-08 F/C Driveshaft, 16 Spline 8" Long 160.00
41000-12 F/C Driveshaft, 16 Spline 12" Long 190.00
41000-14 F/C Driveshaft, 16 Spline 14" Long 190.00
41000-16 F/C Driveshaft, 16 Spline 16" Long 200.00
41000-20 F/C Driveshaft, 16 Spline 20" Long 200.00
41100-24 F/C Driveshaft, 16 Spline 24" Long 200.00
41100-28 F/C Driveshaft, 16 Spline 28" Long 210.00

32 Spline Driveshafts

41050-06 F/C Driveshaft, 32 Spline 6" Long 100.00
41050-08 F/C Driveshaft, 32 Spline 8" Long 140.00
41050-12 F/C Driveshaft, 32 Spline 12" Long 140.00
41050-16 F/C Driveshaft, 32 Spline 16" Long 155.00
41050-20 F/C Driveshaft, 32 Spline 20" Long 160.00
41150-24 F/C Driveshaft, 32 Spline 24" Long 200.00
41150-28 F/C Driveshaft, 32 Spline 28" Long 210.00

35 Spline Driveshafts

41060-06 F/C Driveshaft, 35 Spline 6" Long 100.00
41060-24 F/C Driveshaft, 35 Spline 24" Long 200.00
41160-28 F/C Driveshaft, 35 Spline 28" Long 210.00
41160-32 F/C Driveshaft, 35 Spline 32" Long 230.00

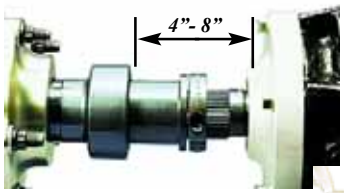
Custom Driveshafts

41100-SPEC Custom solid driveshaft . . . . . .275.00 *Supply length and spline requirements. 34" max. overall length.*

Quick Disconnect Powerglide Coupler

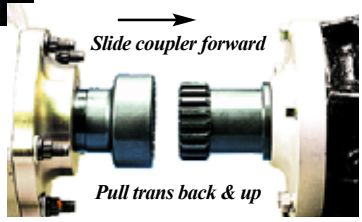
This innovative MW original design allows transmission removal without disturbing the engine or rear end. Perfect for Comp and Super Comp dragsters. ***Powerglide only.***

40830 MW Quick Disconnect Coupler 177.00
Requires 4" from trans seal to pinion coupler.
40840 MW Quick Disconnect Coupler *(Long)* 199.00
Requires 4" - 6" from trans seal to pinion coupler.
40850 MW Q/D Coupler for Dedenbear 177.00
Requires 4" from trans seal to pinion coupler.
40860 MW Q/D Coupler 219.00
Requires 6"-8" from trans seal to pinion coupler.
40831 Transmission Sleeve *(short)* 105.00
40832 Male Gear Half 65.00
40835 Transmission Sleeve *(long)* 140.00
40836 Steel Lock Ring 25.00



With coupler installed and lock ring in place, a gap (approx 1/8") is left between lock ring and coupler to avoid binding as the chassis works.

When removing the transmission, remove the lock ring and slide coupler forward to the back of the transmission. This allows the transmission to be moved back and off the dowel pins of the engine.



40837 Transmission Sleeve *(Dedenbear)* 105.00
40839 Long Male Gear Half 85.00

Steering Components

Mark Williams manufactures or stocks most of the components required to complete the steering assembly. From steering wheels and quick disconnect hubs through U-joints and linkage to front axles and spindles MW has the quality pieces to do the job right.

Quick Release Steering Hubs


10070


10020


10025


10029/10039


10080


10060

Drivers of virtually any type race car can benefit from these superbly engineered hubs from MW. Not only do they make it easy for drivers to get in and out of their cars under normal conditions, but they're invaluable in emergency situations. One major difference between MW Quick release hubs and most others on the market is the close tolerance between the splines in the hub and the splined mounting sleeve. This eliminates annoying "slop" common with hex style hubs and contributes to unsurpassed driver feel. All hubs incorporate a positive ball/detent lock, while the sliding collar's shape facilitates easy "two finger" operation. The chromoly 1" x 48-splined sleeve (with one tooth omitted for indexing purposes) can easily be welded or bolted to any 3/4" O.D. steering shaft. Optional stainless sleeves are available. Hubs are CNC machined from billet 7075 aluminum and black hard coat anodized for durability. The 5 hole Grant GT hub includes "horn button" with MW logo. This adds to the professional appearance, while also preventing the shaft from coming through the wheel in the event of an accident.


NEW!

10050

10020 Q/R Hub Dragster & F/C 85.00
For MW wheels, 4 holes, 3/16" holes, .75 x 1.65

10025 Q/R Hub 122.00
5-Hole Grant GT Pattern, 3/16" hole, 5 x 2.86 B.C.

10029 Splined Sleeve, Bolt on 25.00

10039 Splined Sleeve, Bolt on, *(Stainless steel)* 27.00

10050 Q/R Hub 122.00
6-Hole Sparco/Momo Pattern. 3/16" holes, 2.755" (70mm) B.C

10060 Q/R Steering Hub 96.00
3 hole Don Long style, 10-32 thd., 3 holes on 1.375 B.C..

10070 Q/R Hub 100.50
Oval track, 3 hole x 1/4" threads on 1.75 B.C.

10080 Q/R Hub,Universal 88.50
Blank 2.45" diameter flange.

30112 1/4" Cross Bolt and Nut 7.50
**Splined sleeve and wheel mounting hardware are included with each hub.*

MW Dragster Steering Wheels


10035 & 10048

MW Dragster/FC steering wheels are fully CNC machined from 3/16" aluminum. Main wheel is fully polished inside and out with your choice of anodized or polished grips. MW wheels are approximately 7 5/8" wide and 7 1/8" deep and drilled to match steering hub #10020 or D5 mount.

10035 Dragster/FC Type Steering Wheel . .96.00
With polished, red, blue, black or gold anodized aluminum grips installed.

10045 Switch Panel 45.00
Brushed Aluminum (no holes)

10046 Switch Panel 45.00
Brushed Aluminum, with Button Holes

10047 Switch Panel 45.00
Black Aluminum (no holes)

10046 Switch Panel 45.00
Black Aluminum, with Button Holes

**** Mounting holes must be drilled in steering wheels***

Steering Wheel and Brake Grips

MW steering wheel and brake handle grips are all CNC machined and fully polished and anodized. Brake handle grips fit either MW brake levers or one you fabricate on your own. Available in red, blue, black or gold anodized finish as well as polished aluminum. The MW logo is laser engraved on the inner grip. Includes attachment rivets.

10033 Steering Wheel Grips *(set of 4)* . . .55.00
Specify color or polished.

10037 Brake Handle Grips *(set of 2)* 30.00
Specify color or polished.

Steering Components

712 13 3/4" Grant "D" Shape Steering Wheel 90.80
Black grip, black spokes. Uses 10025 quick release hub.

713-4 10" Grant "D" Shape Steering Wheel 97.00
Black suede grip, silver spokes. Uses 10060 quick release hub. Dragster/Altered applications. Not legal for door cars.

763-1 13" Grant Steering Wheel 72.00
Black grip, silver spokes. Uses 10025 quick release hub.

773 13" Grant Steering Wheel 79.50
Black Grip, black spokes. Uses 10025 quick release hub.

778 13" Grant Steering Wheel 79.50
Red grip, black spokes. Uses 10025 quick release hub.

781 13" Grant Steering Wheel 79.50
Blue grip, black spokes. Uses 10025 quick release hub.

Steering Boxes

MW stocks a billet Funny Car type steering box for front-engine applications and rack and pinion steering boxes for rear engine dragsters. Racks are available in 10" or 15" widths and in either steel or aluminum. (add "A" to part number for aluminum rack).

30100 Rack and Pinion 390.00
15" rack with 6" of travel

30200 Standard Steering, 10:1 Ratio 390.00
Standard unit for F/C and Altered race cars

30300 Standard Steering, 10:1 Ratio 390.00
With short stub Pitman shaft

30400 Rack and Pinion 390.00
10" rack with 6" of travel

MW Front Spindles

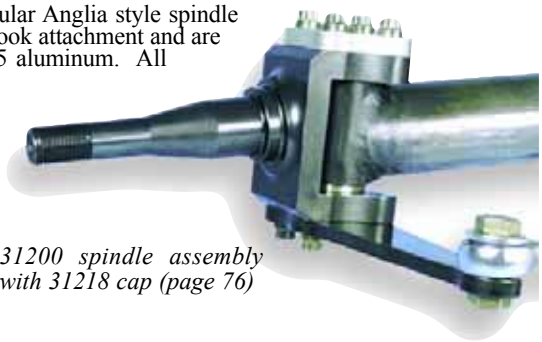
MW front spindles are manufactured from 4130 steel forgings and accept the popular Anglia style spindle mount wheels. All spindles are drilled top and bottom for a steering arm or a tow hook attachment and are black oxided. Steering arms are profile milled from 1/4" 4130 steel or 1/4" 7075 aluminum. All assemblies include spindle castle nuts, washers, and cotter pins.

31200 MW Front Spindle Assembly *(pr)* 370.00
For applications requiring 2 steering arms. Specify 4", 5" or 6" arms.

31210 MW Front Spindle Assembly *(pr)* 389.00
For applications requiring 3 steering arms. Specify 4", 5" or 6" arms.

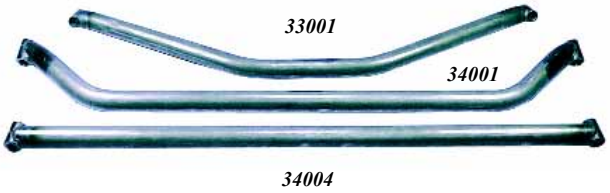
31230 MW Front Spindle Assembly *(pr)* 333.00
With king pins. No steering arms.

31250 Install Mount Tab 48.00
Labor for 73000 front brake kit.



31200 spindle assembly with 31218 cap (page 76)

Tubular Front Axles



33001 Dragster Axle 182.00
6" drop, 39" centers, 6" flat, 1-1/2 x .120 4130 tube

33002 Dragster Axle 172.00
5" drop, 39" centers, 6" flat, 1-1/2 x .120 4130 tube

33003 Dragster Axle 188.00
5" drop, 39" centers, 20" flat, 1-1/2 x .120 4130 tube

Mark Williams tubular front axles are built from 4130N chromoly tubing. King pin bosses are tig welded using a special precision fixture to maintain correct king pin angle then king pin bores are reamed after final welding.

33005 Dragster Axle 172.00
6" drop, 36" centers, 6" flat, 1-1/2 x .120 4130 tube

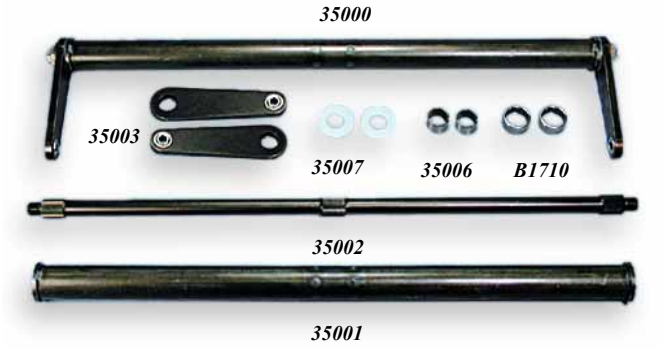
34001 Funny Car/Altered Axle 225.00
5" drop, 42" centers, 1-5/8 x .188 4130 tube

34002 Funny Car/Altered Axle 225.00
3" drop, 40" centers, 1-5/8 x .188 4130 tube

34004 Funny Car/Altered Axle 152.00
40" centers straight, 1-5/8 x .188 4130 tube

Torsion Assembly

The MW universal torsion bar assembly is designed for use on either a Funny Car or Altered chassis, and has a 26" span with 5 inch arms. The housing is 1-1/2" x .065 diameter 4130 chromoly tubing, while the torsion bar is machined from 4140 steel. Extra fine adjustments are possible through the use of 7/8"-48-spline serrations on the torsion bar and arms. The torsion arm load is carried by Torrington® needle bearings. Plus complete freedom of axle movement is assured through the use of 3/8" spherical bearings swedged in the torsion arms.



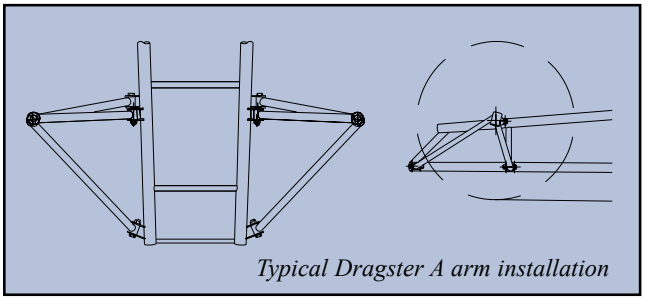
35000	Funny Car/Altered Torsion Assembly	.364.00
35001	Torsion Tube Housing for #35000	.105.00
35002	Torsion Bar for #35000	.105.00
35003	Torsion Arm w/Bearing for #35000 *(ea)*	.57.60
35006	Torsion Splined Race for #35000 *(ea)*	.20.00
35007	Washer, nylon for #35000 *(ea)*	.2.60
35300	Front Engine Dragster Torsion Assy	.275.00
B1710	Torrington Bearing for #35000 *(ea)*	.12.30

Mark Williams has reproduced the dragster torsion assembly that was used in the '60's. The bar is produced from ½" hex and has 7/8-48 serrated buttons on the ends for height adjustment. The splined button is hardened as well as the end flange in the tube, to retard wear a small grease hole allows lubrication of the moving parts. This is the same dimensionally, as was used for Woody Gilmore and Mark Williams front engine cars.

35300 Dragster Torsion Bar 275.00

20" centers 6-3/8" long arm 1-3/8" Dia housing

A-Arm Front End Kits

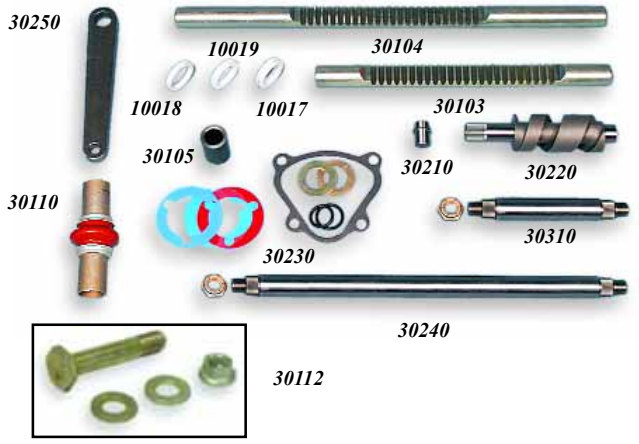

Typical Dragster A arm installation

The advantages of an A-arm setup include lighter weight, increased rigidity, and contemporary styling. Both kits feature a bolt on A-arm design. The 33600 A-arm jig fixture was developed to simplify the A-arm installation even when building in the 2" maximum allowable amount of wheelbase offset.

34500	F/C Altered A-Arm Front End Kit	.168.00
33500	Dragster A-Arm Front End Kit	.162.00
33600	A-Arm Jig Fixture (see photo page 83)	.197.00

Steering Box Repair Parts

MW stocks most repair parts for MW rack & pinion , P&S (TAK) and SPE and Funny Car style steering boxes, including racks, pitman arms, etc.



10017	Teflon Bearing, 3/4" Shaft, .125 Groove	.10.00
	All teflon bearings are used to support steering shafts in brackets	
10018	Teflon Bearing, 7/8" Shaft, .062 Groove	.10.00
10019	Teflon Bearing, 3/4" Shaft, .062 Groove	.10.00
30103	Rack For R&P Steering, 15" Travel	.75.74
30104	Rack for R&P Steering, 10" Travel	.126.00
30105	Splined Bushing, P&S Steering	.10.00
30110	Steering Universal Joint for 3/4" Tube w/boot	100.90
30112	1/4" Steering Cross Bolt and Nut Kit	.7.50
	NAS shoulder bolt for pinning 30110 steering universal with jet nut	
30210	Sector Pin for P&S F/C Steering (30200)	.11.12
30220	Cam for P&S Steering (30200)	.88.00
30230	Gasket Set for P&S F/C Steering (30200)	.22.80
30240	Cross Shaft for P&S F/C Steering (30200)	.45.00
30250	Pitman Arm for P&S Steering, 5"	.26.00
30310	Short Cross Shaft for P&S F/C Steering	.45.00

Spindle Components

Mark Williams Enterprises carries a complete line of parts for popular front spindles. This includes king pin kits with bushings for MW as well as P&S front spindles, wheel bearings, spindle nuts etc. All MW steering arms, caps and tow hooks include mounting bolts.

31202 King Pin for MW Spindle, *(ea)* 11.50

31203 5" Arm for MW Spindle, *(ea)* 26.00

31204 Bushing for MW Spindle, *(ea)* 6.00

31205 Brass Thrust Washers for Spindles, *(pr)* 6.25

31206 Teflon Thrust Washers for Spindles, *(pr)* 8.50

31207 Bushing for late P-S Spindle, *(ea)* 7.80

31208 5" Arm for P-S Spindles, *(ea)* 22.00

31209 6" Arm for P-S Spindles 22.00

31211 P-S King Pin & Bushing Kit *(Late Type)* 52.00
Bushings stick out of spindle, arms have hole for bushing

31212 MW King Pin & Bushing Kit 49.00

31213 P-S King Pin & Bushing Kit *(Early Type)* 41.00
Bushings are flush with spindle

31214 Spindle Nut & Washer Kit, *(pr)* 4.25

31215 4" Arm for MW Spindle, Steel, *(ea)* 24.00

31216 4" Arm for MW Spindle, Aluminum, *(ea)* 27.50

31217 6" Arm for MW Spindle, *(ea)* 32.00

31218 Spindle Cap, *(ea)* 22.00
Secures King Pin bushing or for spindle without arms

31219 5" Arm for MW Spindle, Aluminum, *(ea)* 32.00

31220 MW Spindle with bushings, Steel *(ea)* 169.00

31221 Spindle Cap w/Tow Hook *(ea)* 30.00

32000 King Pin Boss, *(pr)* 42.00
1" O.D. x 1-3/4" long, 4130, heat treated

32200 King Pin Boss, *(pr)* 45.00
1-1/4" O.D. x 1-3/4" long, 4130, heat treated

601-0242 Spindle Mount Bearing Kit *(1 Wheel)* 44.00
For Centerline or Weld Wheels, includes seal

Tires, Wheels and Guards

Mark Williams carries a limited inventory of dragster and funny car front wheels and tires, including Center Line Convo-Pro or Weld AlumaStar spindle mount wheels, lightweight wire wheels, wire wheel light guard discs in a rainbow of colors, and Goodyear tires. MW guard discs are spun aluminum with a slight conical shape that allows them to fit against the spokes on the wire wheels. Guard discs are polished prior to anodizing and include mounting hardware.

1121 2.25" x 17" Front Tire *(ea)* 189.00
Goodyear Frontrunner. 22" tall

7072 Light Guard Disc, for Wire Wheel *(Blue)* 32.00

7075 Replacement Mounting Bracket, *(ea)* 1.30

7076 Light Guard Disc, for Wire Wheel *(Plain)* 26.50

7078 Light Guard Disc, for Wire Wheel *(Gold)* 32.00

36930 Wire Wheel, Steel Rim 17" *(ea)* . . . . . .CALL
Wheel weight with Goodyear tire and tube 11.2 lbs (ea)

D5350 3.5" x 15" CenterLine Convo-Pro *(ea)* 297.00
Spindle mount, F/C or Altered, includes bearings, 14.15 lbs

D7160 2.50" x 17" CenterLine Convo-Pro *(ea)* 324.10
Spindle mount for Dragster, includes bearings

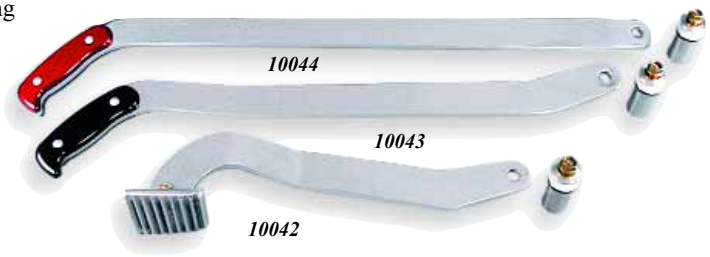
Levers Pedals and Controls

MW brake levers and clutch/brake pedal are all CNC machined from 1/4" 7075-T651 aluminum plate and fully polished to a bright luster. Both brake levers have anodized aluminum grips installed (red, blue, black, gold or polished). Clutch/brake pedal features bolt-on foot pad with grooved non-slip surface. All include mounting stud #10040 (see below).

10042 Brake/Clutch Pedal 90.00
With bolt on foot pad.

10043 Dragster Brake Lever 115.00
Specify color of aluminum grips.

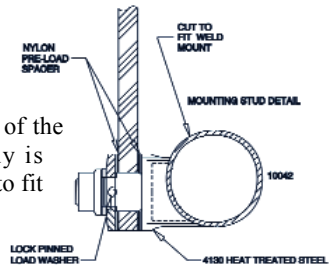
10044 Funny Car Brake Lever 120.00
Specify color of anodized aluminum grips.



Lever/Pedal Mounting Stud


10040

This unique assembly makes mounting controls such as brake levers and/or pedals simple. The use of a keyed aluminum washer along with teflon washers on each side of the lever allows the tension to be adjusted without the possibility of the nut loosening during use. The main body is machined from 4130 alloy steel and can be cut to fit against chassis rail *(as shown)*.

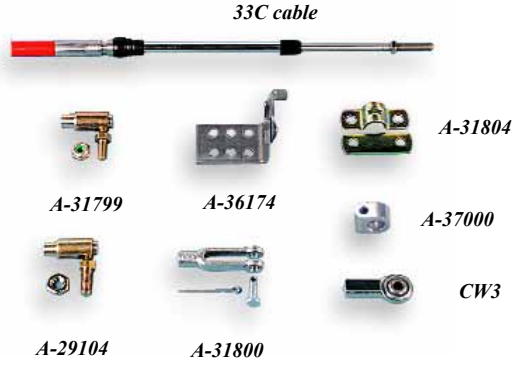


10040 Lever/Pedal Mounting Stud Assembly 28.00

Morse Control Cables

Morse control cables have been the standard for many years and are ideal for operating your throttle, fuel shut-off, shifter/reverser or chute release. MW stocks 3 foot to 14 foot cables and most of the common end fittings and clamps, both standard and quick release.

33C-3 3' Morse Push/Pull Cable 36.10
33C-4 4' Morse Push/Pull Cable 34.50
33C-5 5' Morse Push/Pull Cable 36.20
33C-6 6' Morse Push/Pull Cable 37.40
33C-7 7' Morse Push/Pull Cable 38.40
33C-8 8' Morse Push/Pull Cable 39.60
33C-9 9' Morse Push/Pull Cable 39.60
33C-10 10' Morse Push/Pull Cable 40.40
33C-11 11' Morse Push/Pull Cable 41.60
33C-12 12' Morse Push/Pull Cable 42.70
33C-13 13' Morse Push/Pull Cable 43.70
33C-14 14' Morse Push/Pull Cable 43.70



Cable Accessories

A-29104 Quick Release Rod End, 1/4-28 thread . . .10.50
A-31799 Quick Release Rod End, 10-32 thread 11.50
A-31800 Clevis,10-32 thread 9.90
A-31804 Clamp & Shim 6.00
A-36174 Quick Release Clamp 10.00
A-37000 Clamp, Aluminum Morse Cable 10.00
CW3 3/16 Female Rod End 4.50

Rod Ends & Clevises

Most race car projects will need linkage of some kind. Items such as clutch linkage, suspension bars, etc. will require the use of spherical rod ends or threaded/weld-in clevises or weld-in tube adapters or all of the above and Mark Williams is your source for all of them.

Chromoly Rod Ends

RXAM10T

MW recommends the use of chromoly rod ends in high stress applications such as suspension components and steering linkage. All of the Aurora® 4130 chromoly rod ends listed here are a 3 piece design. These rod ends feature a 4130 steel body with a hardened steel ball and race installed.

AM6	3/8-24 4130 Male Rod End	.18.60
AB6	3/8-24 4130 Male Left Hand Rod End	.18.80
AM7	7/16-20 4130 Male Rod End	.22.90
AB7	7/16-20 4130 Male Left Hand Rod End	.23.10
AM8	1/2-20 4130 Male Rod End	.27.70
AB8	1/2-20 4130 Male Left Hand Rod End	.27.70
AM10	5/8-18 4130 Male Rod End	.37.20
AB10	5/8-18 4130 Male Left Hand Rod End	.37.40
AM12	3/4-16 4130 Male Rod End	.53.10
AB12	3/4-16 4130 Male Left Hand Rod End	.53.30
RAM6T	3/8-24 4130 Rod End	.36.60
	Right hand thread, nickel plated and teflon lined.	
RXAB10T	3/4-16 4130 Male Rod End	.73.50
	5/8" ball. left hand thread, nickel plated and teflon lined.	
RXAM10T	3/4-16 4130 Male Rod End	.73.50
	5/8" ball. right hand thread, nickel plated and teflon lined.	
RAB12T	3/4-16 4130 Male Rod End	.79.00
	Left hand thread, nickel plated and teflon lined.	
RAM12T	3/4-16 4130 Male Rod End	.79.00
	Right hand thread, nickel plated and teflon lined.	
XAB6	7/16-20 4130 Male Rod End	.23.20
	3/8 ball, left hand thread.	
XAM6	7/16-20 4130 Male Rod End	.23.10
	3/8 ball, right hand thread.	
XAB10	3/4-16 4130 Male Rod End	.53.30
	5/8 ball, left hand thread.	
XAM10	3/4-16 4130 Male Rod End	.53.10
	5/8 ball, right hand thread.	

Mild Steel Rod Ends

CM3	10-32 Male Rod End	.4.70
CW3	10-32 Female Rod End	.4.50
CW4	1/4-28Female Rod End	.4.80
CM5	5/16-24 Male Rod End	.5.30
CB5	5/16-24 Left Hand Male Rod End	.5.50
CW5	5/16-24 Female Rod End	.4.80
CM6	3/8-24 Male Rod End	.6.00
CB6	3/8-24 Male Left Hand Rod End	.6.20
CM7	7/16-20 Male Rod End	.7.10
CB7	7/16-20 Male Left Hand Rod End	.7.30
CM8	1/2-20 Male Rod End	.9.60
CB8	1/2-20 Male Left Hand Rod End	.9.80

Mark Williams Enterprises stocks a complete line of mild steel Aurora® spherical rod ends. The mild steel rod ends listed here are a 2 piece design and are ideal for applications such as throttle, shifter, clutch linkage, and other light duty applications.

CM10

CM10	5/8-18 Male Rod End	.13.20
CB10	5/8-18 Male Left Hand Rod End	.13.40
CB12	3/4-16 Male Left Hand Rod End	.18.20
CM12	3/4-16 Male Rod End	.18.00
XM10	3/4-16 Male Rod End	.30.10
	3/4-16 Thread on shank with 5/8" hole in ball.	
XB10	3/4-16 Male Left Hand End	.30.30
	3/4-16 Thread on shank with 5/8" hole in ball.	

Threaded Clevises

Mark Williams threaded clevises are ideal for wing adjuster struts, wheelie bars, and brake linkage. All clevises are CNC machined in house to maintain MW's high quality standards. All clevises except the 5/8 clevis are available in 4130 alloy steel material.

21006

20504	Threaded Clevis, 5/16-24 Thread	.21.20
	3/16" slot, 1/4" hole, 4130 alloy steel, 125,000 psi tensile	
20605	Threaded Clevis, 3/8-24 Thread	.22.80
	3/16" slot, 5/16" hole, 4130 alloy steel, 125,000 psi tensile	
20805	Threaded Clevis, 1/2-20 Thread	.28.00
	1/4" slot, 5/16" hole, 4130 steel, 125,000 psi tensile	
21006	Threaded Clevis, 5/8-18 Thread	.35.00
	3/8" slot, 3/8" hole, 1018 mild steel, 67,000 psi tensile	

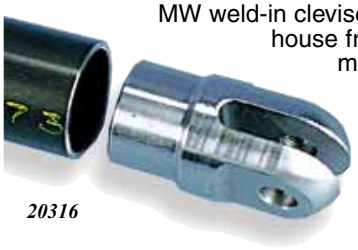
Tube Adapters & Clevises

MW weld in tube adapters make fabricating linkage, struts, or any application that requires joining a male rod end or threaded clevis to chromoly tubing a snap. All MW tube adapters are CNC machined and lead screw tapped to ensure a precise and square thread and the correct fit into the chromoly tubing shown in each description.

10510	Tube Adapter, 5/16-24 to 5/8 x .058	5.60
10510L	Tube Adapter, 5/16-24 L.H. to 5/8 x .058	5.60
10610	Tube Adapter, 3/8-24 to 5/8 x .058	5.60
10610L	Tube Adapter, 3/8-24 L.H. to 5/8 x .058	6.10
10612	Tube Adapter, 3/8-24 to 3/4 x .058	6.10
10612L	Tube Adapter, 3/8-24 L.H. to 3/4 x .058	5.80
10614	Tube Adapter, 3/8-24 to 7/8 x .058	6.00
10614L	Tube Adapter, 3/8-24 L.H. to 7/8 x .058	6.00
10714	Tube Adapter, 7/16-20 to 7/8 x .058	6.00
10714L	Tube Adapter, 7/16-20 L.H. to 7/8 x .058	6.00
10814	Tube Adapter, 1/2-20 to 7/8 x .058	6.00
10814L	Tube Adapter, 1/2-20 L.H. to 7/8 x .058	6.00
10816	Tube Adapter, 1/2-20 to 1 x .058	6.80
10816L	Tube Adapter, 1/2-20 L.H. to 1 x .058	6.80
11016	Tube Adapter, 5/8-18 to 1 x .058	6.80
11016L	Tube Adapter, 5/8-18 L.H. to 1 x .058	6.80
11018	Tube Adapter, 5/8-18 to 1 1/8 x .083	7.50
11018L	Tube Adapter, 5/8-18 L.H. to 1 1/8 x .083	7.50
11218	Tube Adapter, 3/4-16 to 1 1/8 x .083	7.50
11218L	Tube Adapter, 3/4-16 L.H. to 1 1/8 x .083	7.50

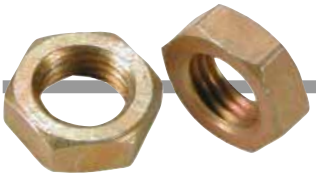
11220	Tube Adapter, 3/4-16 to 1 1/4 x .058	8.70
11220L	Tube Adapter, 3/4-16 L.H. to 1 1/4 .058	8.70
11221	Tube Adapter, 3/4-16 Thread	8.70
	For 1-1/4 x .095 tubing, for 4-link rear suspension	
11221L	Tube Adapter, 3/4-16 L.H. Thread	10.00
	For 1-1/4 x .095 tubing, hex wrench driver for 4-link	

Weld-In Clevises



MW weld-in clevises are manufactured in-house from 4130 steel on CNC machinery. All are designed with a step down diameter for a precise fit in the chromoly tubing listed. MW weld-in clevises work great for wing struts, wheelie bars etc. See page 81 for tabs that can be used.

20210	5/8" Weld Clevis	12.00
	Fits 5/8" x .058 tubing and 1/8" thick bracket. 1/4" hole.	
20312	3/4" Weld Clevis	13.50
	Fits 3/4" x.058 tubing and 3/16" thick bracket. 5/16" hole.	
20314	7/8" Weld Clevis	14.25
	Fits 7/8" x.058 tubing and 3/16" thick bracket. 5/16" hole.	
20316	1" Weld Clevis	15.75
	Fits 1" x.058 tubing and 3/16" thick bracket. 5/16" hole.	
20416	1" Weld Clevis	17.25
	Fits 1" x.058 tubing and 1/4" thick bracket. 5/16" hole.	



Aircraft Jam-Nuts

Jam nuts are half the thickness and weight of standard nuts and are ideal for use on steering and suspension linkage or other applications that use rod ends or threaded clevises. These jam nuts are Yellow Cad plated. Sold only in package quantities shown below.

N5R	5/16-24 R.H. Jam Nuts, *(6 pcs)*	4.90
N5L	5/16-24 L.H. Jam Nuts, *(6 pcs)*	7.20
N6R	3/8-24 R.H. Jam Nuts, *(6 pcs)*	4.70
N6L	3/8-24 L.H. Jam Nuts, *(6 pcs)*	6.00
N7R	7/16-20 R.H. Jam Nuts, *(6 pcs)*	5.40
N7L	7/16-20 L.H. Jam Nuts, *(6 pcs)*	9.80
N8R	1/2-20 R.H. Jam Nuts, *(6 pcs)*	7.20
N8L	1/2-20 L.H. Jam Nuts, *(6 pcs)*	14.30
N10R	5/8-18 R.H. Jam Nuts, *(4 pcs)*	8.40
N10L	5/8-18 L.H. Jam Nuts, *(4 pcs)*	15.90
N12R	3/4-16 R.H. Jam Nuts, *(4 pcs)*	10.60
N12L	3/4-16 L.H. Jam Nuts, *(4 pcs)*	33.20

Suspension, Mono-Shock Rocker System

This is the same unique mono-shock system that's a part of our 4-link dragster chassis kit. This design utilizes a single coil over shock and combines the functions of actuating the shock and an anti-roll bar in one assembly. 12010 assembly as shown is with optional shock and spring which are sold separately. Three different spring rates are available to suit different engine combinations.

12010 Rocker Assembly shown with available coil over

12010	Rocker Suspension Assembly (less shock)	.660.80
12011	Splined Outer Rocker Arm (ea)	.85.00
12017	Delrin® Shaft Bushing (ea)	.20.00
12015	Adjuster Link, no rod ends (ea)	.22.00
12019-1	Double Adjustable Shock (5" stroke no spring)	.352.00
12019-2	Coil Over Hardware Kit (required for shock)	.34.60
12019-225	Coil Spring (225#)	.50.20
12019-275	Coil Spring (275#)	.50.20
12019-400	Coil Spring (400#)	.50.20

4-Link & Wishbone Kits

12020

Mark Williams 4 link and wishbone kits include everything required to complete a standard 4 link rear suspension from the chassis to the housing. All kits include Aurora 4130 rod ends, jam nuts, tube adapters, NAS aircraft bolts and locking jam nuts, and chromoly tubing. Both 4 link kits also include chromoly front chassis brackets.

12030

12020 Dragster/Altered 4 Link Kit 600.00
Kit uses 1-1/8" x .083 tubing & 5/8 x 5/8 rod ends.

12021 Dragster Front 4 Link Bracket *(ea)* 22.50

12030 Dragster/Altered Wishbone Kit *(ea)* 179.00

97100 4 Link Kit for 96000/97000 Housing 760.00
Kit uses 1-1/4" x .095 tubing & 5/8 x 3/4 rod ends (pictured).

97150 Front Chassis 4 Link Bracket *(ea)* 30.00

Titanium 4-Link Bolt Kit

Upgrade the MW 97100 4-link kit with a titanium bolt kit. Kit Includes 5/8-18 X 1.668" long bolts, 5/8-18 X 2.043" long bolts, AN jam nuts, and washers. This upgrade saves 3/4 lb. over steel bolts.

97200 Titanium 4-Link Bolt Kit 160.00
(Add 96.00 to 4-link kits for titanium upgrade)

97200

Anti-Roll Assembly

MW's Anti-Roll assembly features splined 7075 aluminum outer arms, a heavy wall 1-1/4" chromoly shaft or 3" diameter tube bar. The splined arms eliminate the possibility of oblong holes which are typical of a thru bolt design. The arms have a clevis design and accept 3/8" rod ends. The 3" tubular bar is stiffer that the straight 1-1/4" bar, and has the advantage of being built in any width. The spherical self aligning aluminum and Delrin® bearing blocks are available separately.

35100 MW Anti-Roll Assembly 335.00
5" or 6" arms. 18" centers. 1-1/4 x .188 tube (custom widths available)

35103 Spherical Bearing w/ weld in brackets (one) 110.10
Aluminum housing and inner race self aligns without binding (2 required)

35105 3" Tubular Anti Roll Center Tube Assy. 425.00
3" center tube assy., with 35103 bearings, specify 5" or 6" arms & width.

35100

35105

35103

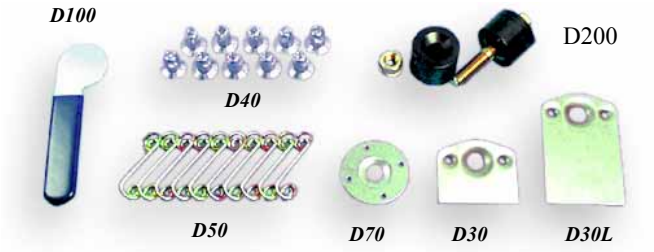
Chassis Brackets & Tabs

All of the MW brackets and tabs listed below are manufactured from 1/8" thick 4130N chromoly steel, except for 10010 and 15010 which are 3/16" thick and D5 which is 1/16" thick chromoly.

10010	Mounting Tab for Clevis *(5/16" hole)*	.3.64
15004	F/C Steering Box Mount Bracket	.7.15
15010	Torsion Mounting Brackets, *(set of 4)*	.43.00
D11	Anti-Rotation Tab *(3/8" Hole)*	.3.03
D12	Chassis Radius Rod Mount Bracket	.4.24
D1A	Small Motor Mount Tab *(3/8" Hole)*	.3.37
D2	Large Flat Mount Tab *(3/8" Hole)*	.1.82
D20	Large Motor Mount Tab *(no hole)*	.9.20
D21	Small Flat Mounting Tab *(3/8" Hole)*	.1.51
D26	Weld-In Clevis for 7/8" Tube *For 3/8" rod end*	.2.66
D5	Steering Wheel Mount Plate	.3.00

Dzus Fasteners & Tools

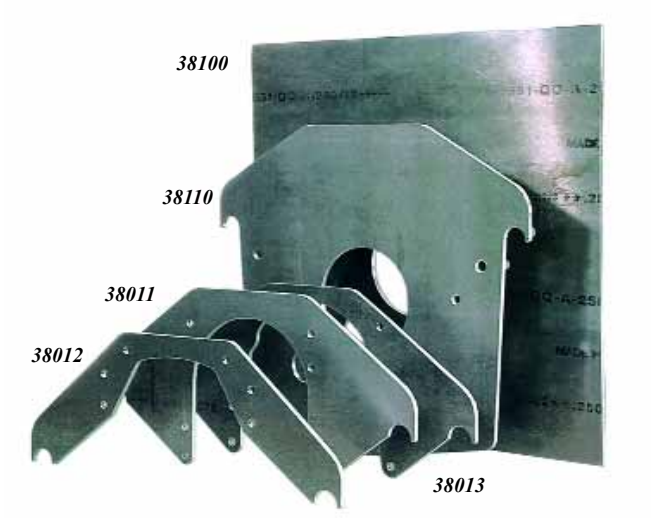
Dzus fasteners are the most widely accepted method of securely attaching aluminum body panels, fiberglass panels, seats, etc. MW stocks the popular buttons, springs, tabs and panel doublers along with the proper dimpling and installation tools and button wrench.



D30	Dzus Mounting Tab, (ea)	..80
D30-100	Dzus Mount Tabs, (pack of 100)	.51.60
D30L	Dzus Mounting Tab, 3" Long	..98
D40	Dzus Buttons, Steel (10 ea.)	.14.20
D40-100	Dzus Buttons, (pack of 100)	.106.50
D50	Dzus Springs, (pack of 10)	.6.00
D50-100	Dzus Springs, (pack of 100)	.43.50
D70	Panel Doubler (Round)	.1.02
D100	Dzus Button Wrench	.8.80
D200	Dzus Dimpling Tool	.15.40

Engine Mounting Plates

All MW engine mounting plates are manufactured from 1/4" thick 7075-T651 aluminum plate and CNC machined with common crankshaft centerlines to ensure exact fit and interchangeability even from one engine make to another. Blank plates are also available.



38010	Engine Mount Plate *12" x 24" Front blank. 1/4" thick (no holes)*	.62.50
38011	Front Engine Mount Plate *Small block Chevrolet for Dragster & Funny Car. 1/4" thick.*	.104.00
38012	Front Engine Mount Plate *Late Model Chrysler for Dragster and Funny Car. 1/4" thick.*	.90.00
38013	Front Engine Mount Plate *Big block Chevrolet for Dragster & Funny Car. 1/4" thick.*	.90.00
38100	Rear Engine Mount Plate *24" x 24" blank with crank and vent holes and choice of dowel pin holes. 1/4" thick.*	.147.50
38110	Rear Engine Mount Plate *For Dragster with crank and vent holes. Milled for 1 1/4" tube size. Choice of dowel pin holes. 1/4" thick.*	.182.00
38115	Rear Engine Mount Plate *For Funny Car and Altered with crank and vent holes. Milled for 1 1/2" tube size. Choice of dowel pin holes. Top must be profiled. 1/4" thick.*	.182.00

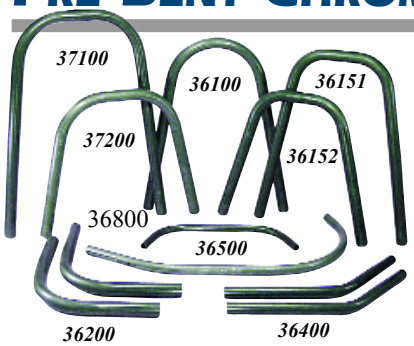
Chromoly Tubing & Plate

All MW 4130 tubing is certified aircraft quality material that meets 6736 specifications. Small quantities of under a 100' are sold at the cut price. Large quantities of 100' or more are sold at the 100' price. Different tubing sizes can be combined to produce an order of more than 100' but they must be full lengths. Full lengths can be anywhere from 17' - 24'.

Part#	Description	lbs./ft	cut	100'
0375x058	3/8 x .058 Tube	.20	3.60	2.70
0500X058	1/2 X .058 Tube	.27	3.60	2.70
0625X058	5/8x .058 Tube	.35	3.90	2.90
0750X058	3/4 X .058 Tube	.43	4.20	3.15
0875X058	7/8 x .058 Tube	.51	4.50	3.40
1000X058	1 X .058 Tube	.58	4.50	3.40
1125X058	1 1/8 x .058 Tube	.66	4.80	3.60
1125X083	1 1/8 x .083 Tube	.92	9.60	7.20
1250X058	1 1/4 x .058 Tube	.74	4.90	3.70
1250X083	1 1/4 x .083 Tube	1.03	9.60	7.20
1250X095	1 1/4 x .095 Tube	1.17	9.60	7.20
1375X058	1 3/8 x .058 Tube	.82	5.80	4.35
1375X065	1 3/8 x .065 Tube	.91	9.20	6.90
1375X095	1 3/8 x .095 Tube	1.30	10.20	7.65
1500X058	1 1/2 x .058 Tube	.89	6.70	5.00
1500X065	1 1/2 x .065 Tube	1.00	5.80	4.35
1500X120	1 1/2 x .120 Tube	1.77	10.70	8.00
1625X083	1 5/8 x .083 Tube	1.37	8.50	6.25
1625X188	1 5/8 x .188 Tube	2.88	18.00	13.50
1750X1000	1 3/4 x 1 x .065	1.15	13.14	
3000X250	3 x .250 Tube	7.34	30.50	
3250X250	3 1/4 x .250 Tube	8.01	41.70	

4130-062	Sheet Steel, 4130 1/16" Thick 9" X 12"	19.00
4130-125	Sheet Steel, 4130 1/8" Thick 9" x 18"	.41.10
4130-125S	Sheet Steel, 4130 1/8" Thick, 9" X 12"	.29.00
4130-187	Sheet Steel, 4130 3/16" Thick 9" x 18"	.75.70
4130-250	Sheet Steel, 4130 1/4" Thick 9" X 18"	.77.10

Pre-Bent Chromoly Tubing



MW's stock of pre bent tubing includes, roll bars, shoulder hoops, dragster frame rails etc. These items are all mandrel bent in-house and designed for the professional or the do-it-yourself chassis builder.

12041 Driveshaft Loop *(2 pcs)* 53.40
7/8 x .058 4130 tube. 180° bends. 5" wide inside.

36050 1 5/8" Dragster Bend Package 360.00
Roll bar, secondary roll bar, back braces and shoulder hoop.

36060 1 1/2" Dragster Bend Package 328.00
Roll bar, secondary roll bar, back braces and shoulder hoop.

36100 Dragster Roll Bar *(single bend)* 62.00
24" tall x 19 1/2" centers, 1-5/8 x .083 4130 tube.

36151 Double Bend Dragster Roll Bar 79.00
24" tall x 19 1/2 centers, 1-5/8 x .083 4130 tube, 2 bends.

36152 Double Bend Drag Secondary Roll Bar 72.00
19" tall x 19 1/2" centers 1-5/8 x .083 4130 tube, 2 bends.

36155 Helmet Guard Tubes *(pr)* 35.30
1 x .058 4130 tube, 2 bends. Now mandatory.

36161 Double Bend Dragster Roll Bar 67.00
24" tall x 19 1/2" centers, 1-1/2 x .065 4130 tube, 2 bends.

36162 Double Bend Drag Secondary Roll Bar 62.00
19" tall 19 1/2" centers 1-1/2 x .065 4130 tube, 2 bends.

36171 Double Bend Dragster Roll Bar *(6" radius)* . .68.00
24" tall x 19 1/2" centers, 1-1/2 x .065 4130 tube, 2 bends.

36172 Double Bend Drag Sec. Roll Bar *(6" radius)* .65.00
19" tall 19 1/2" centers 1-1/2 x .065 4130 tube, 2 bends.

36200 Dragster Roll Bar Back Brace 39.00
14" tall x 16" deep, 90 degree bend, 1 5/8 x .083 4130 tube.

36260 Dragster Roll Bar Back Brace 34.00
14" tall x 16" deep, 90 degree bend, 1 1/2 x .065 4130 tube.

36300 Dragster Shoulder Hoop 131.00
19" inside x 72" tall, 1 1/2 x .058 4130 tube.

36350 Dragster Shoulder Hoop 89.00
19" inside x 36" tall, 1 1/2 x .058 4130 tube.

36360 F.E. Dragster Shoulder Hoop *(2pc)* 140.00
Up to 22" inside x 82" tall, 1 1/2 x .058 4130 tube.

36370 F.E. Dragster Lower Hoop 135.00
17" inside, 1 3/8 x .058 4130 tube w/kick up bends.

36400 Dragster Support Tube 41.00
Upper to lower rail 1 3/8 x .095 4130 tube.

36500 Dragster Seat Former 59.00
1 1/4 x .058 4130 tube.

36800 Steering Mount Cross Tube 32.00
1" x .058 4130 tube.

37000 Funny Car Bend Package 371.00
Roll bar, secondary roll bar, 2 back braces & shoulder hoop.

37100 Funny Car Roll Bar 86.00
29" tall x 21 1/2" centers, 1 5/8 x .083 4130 tube.

37200 Funny Car Secondary Roll Bar 73.00
19 1/2" tall x 21 1/2" centers, 1 5/8 x .083 4130 tube.

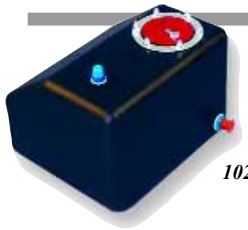
37400 Funny Car Shoulder Hoop 134.00
20" inside x 74" tall, 1 1/2 x .058 4130 tube.

Tail Lights & Chassis Tools

MW now offers two tail light assemblies. One unit is for the MW 9" aluminum modular rear end housing, which replaces the standard pump cover. The other light is for use on cars that do not have a modular housing. The Quay LED tail light is designed to easily slip into the end of a 1-1/4" x 058 frame rail.

90108	Rear Pump for Cover Tail Light	37.00
90109	Tail Light for 90108	17.90
QTL	Frame Rail Tail Light	69.70

Jaz Fuel Cell



MW offers a JAZ fuel cell for use with dragsters or altereds. They are rotationally molded polyethylene and have foam fillers. They feature a positive locking aircraft style cap, -8 fuel outlet, and -6 vent fittings. Additional fittings can easily be added. The dimensions are 8" tall x 11"deep x 11-1/2" wide.

10204	JAZ 4 Gallon Fuel Cell	125.50

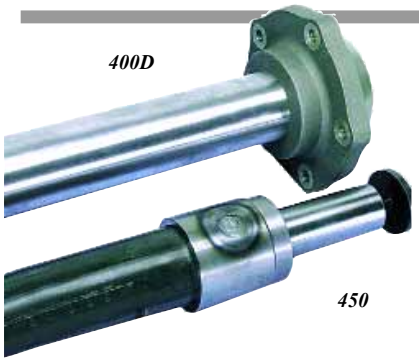
Engine Mount Clamps

These aircraft quality T bolt style clamps are made from stainless steel and meet requirements for securing saddle type motor mounts or other components that need to be clamped to chassis frame rails. For tubing diameters from 1-1/4" up to 1-1/2" diameter.

D150	Motor Mount Clamp, 1-1/2" (ea)	6.00

Fits 1-1/4" to 1-1/2" diameter tubing.

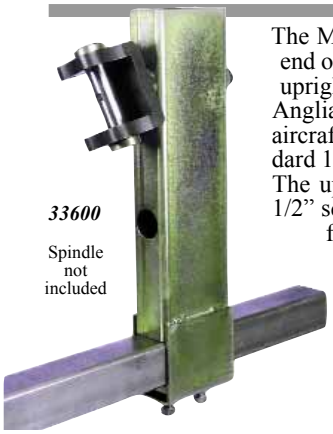
Driveline Alignment Bars



The Mark Williams 9" alignment bar is manufactured from 2-1/2" diameter heavy wall D.O.M. tubing with a CNC machined aluminum flange attached to one end. This aluminum flange bolts directly to the front of a 9" Ford thirdmember case in place of pinion support and allows for perfect alignment between rear end and engine. With an overall length of 80" this bar can be used for dragster as well as funny car/altered chassis construction. The 12 bolt alignment bar uses a steel pilot that is inserted into the seal bore along with a standard rear pinion bearing (not supplied) to align the bar in the center section. Works with stock and MW modular 12 bolt rears.

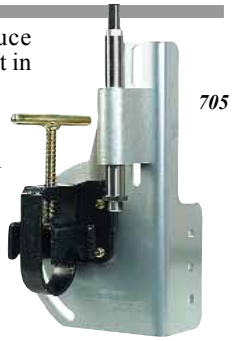
400D	9" Ford Driveline Alignment Bar	220.00
450	12 Bolt Driveline Alignment Bar	259.60

A-Arm Jig Tube Fiting Tools



The MW A-Arm jig simplifies installing an a-arm front end on a dragster or funny car chassis. The 2 adjustable uprights have two mounting positions for MW, P&S, or Anglia type front spindles. The lower position is for 5" aircraft wheels and the upper position is for either standard 17" dragster or 15" FC spindle mount front wheels. The uprights can be positioned anywhere along the 1-1/2" square cross tube *(included)* to produce the desired front end tread width.

This tool will help you produce tight fitting joints that will result in better welds and a nicer finished product. A standard Bi-Metal hole saw is all that's needed. The unit can be used with a drill press or a 1/2" drill motor.



705	Tubing Notcher	154.60
33600	A-Arm Fixture	197.00

Digital Level & Promo Items

500-DLX Rail and Module

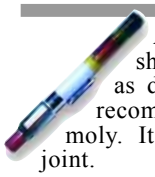
500-1 Module Only

The Smart Level features a LCD digital readout that displays angles from 0 to 90 degrees in tenth of a degree increments. The unit even works upside-down. The center module (about 7" long) can be used alone to measure pinion angle, 4-link bars, wings, etc. It can also be used with the companion 24" or 48" rail for chassis construction, etc. With the reasonable cost this tool is a must for any serious racers and/or chassis builder!

500-DLX Smart Level Digital Level 118.60
Digital liquid crystal display, with 24" rail

500-1	Smart Level Module	.103.00
500R-48	48" Rail (less module)	.35.70

Welding Filler Rod & Temp Stick



A temp stick along with an oxy-acetylene torch should be used to normalize critical weld areas such as drivers compartment, rear end mounts etc. MW recommends Oxweld 65 filler rod for tig welding chro-moly. It is a triple deoxidizer for a clean and ductile weld joint.

10008	Temperature Stick Indicator	.16.00
	1050 degrees.	
65-062	1/16" Oxweld 65 Welding Filler Rod	.6.40/lb
65-093	3/32" Oxweld 65 Welding Filler Rod	.6.00/lb

Magnaflux Spotcheck

The Magnaflux Spotcheck Jr. kit allows metal parts to be easily checked for cracks and leaks that may not be visible to the naked eye. Color coded packaging makes this simple die penetrant process extremely easy.

MFS-1 Magnaflux Spotcheck Jr 72.20
Die penetrate crack and leak detection kit.

MFS-1

Promotional Items

Pro-Stock

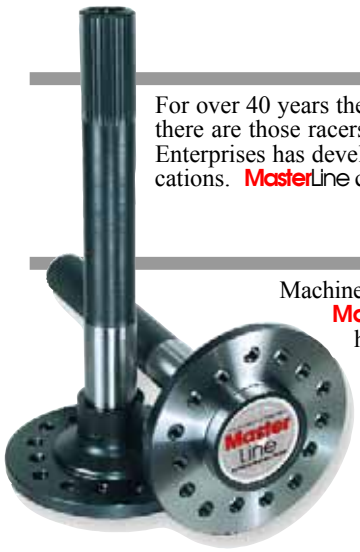
Funny Car

Pro Mod

Super Stock

CAL	MW Gear Ratio Calculator	.3.00
CAPMW	MW Cap (request grey or blue)	.7.50
CLOCK	MW Wall Clock (not shown)	.16.50
DEC	MW Round Decal	.1.00
DEC-DS	MW Driveshaft Decal *(die cut)*	.1.00
DEC-DB	MW Disc Brake Decal *(die cut)*	.1.00
DEC-TR	MW Trailer Decal *(large die cut)*	.3.75
ML-DEC	MasterLine Round Decal	.1.00
TM	MW cotton T-shirt, Medium (choose design)	15.00
TL	MW cotton T-shirt, Large (choose design)	.15.00
TXL	MW cotton T-shirt, X Large (choose design)	15.00

MasterLine



For over 40 years the name "Mark Williams" has been synonymous with the ultimate in quality and reliability. But there are those racers who feel their combination doesn't require the "ultimate". With this in mind Mark Williams Enterprises has developed the MasterLine series of driveline components for Street and Strip (10 sec. and up) applications. MasterLine components include axles, bearings, spools, gear sets, and nodular iron 9" Ford cases.

MasterLine Axles

Machined from special high Manganese steel forgings, MasterLine axles are ideal for cars as quick as 9.90. MasterLine axles are all custom CNC machined to length. They feature thick flanges, 1/2" -20 threaded holes in the three most popular bolt patterns, (upgrade to 5/8 is available), any spline up to 35, true involute form hobbed splines (before heat treating), an in house double heat treat, precision ground bearing journals to ensure the correct press fit of axle bearings, and adjustable bearing seats to allow precise brake system alignment. Plus, MasterLine axles are included in Mark Williams contingency program.

ML-400 MasterLine Axles (pr) 322.00
Options: Upgrade to 5/8" studs *24.00/pattern*
Turn special flange O.D *24.00*

MasterLine Spools

MasterLine spools are CNC machined from alloy steel forgings and heat treated in-house. Plus, the bearing journals and ring gear flange are precision ground. All have Mark Williams 35 spline.

ML-132 8.8 Ford 35 spline spool 189.00
ML-140 9" Ford w/2.893" or 3.062" bores 189.00
ML-146 9" Ford w/3.250" bores 189.00
ML-160 12 Bolt Chevrolet 189.00

MasterLine Bearings

MasterLine bearings are sealed and feature a 1.562" I.D. and an "O" ring around the outside of the bearing to eliminate the need for an inner housing seal. Available for large and small Ford, Olds/Pont, Mopar and GM 10 &12 Bolt C-clip eliminator kit.

ML-001 Mopar axle bearings, 2.875" O.D. (pr) 72.00
ML-250 Small GM "C" clip eliminator kit 129.00
ML-507 Ford/Olds axle bearings, 3.150" O.D. (pr) . . .72.00
ML-803 Mustang axle bearings, 2.835" O.D. (pr) 70.00

MasterLine Gears

MasterLine gears are privately labeled for MW by one of the industry leaders. Popular 9" Ford, and 10 and 12 bolt GM ratios are available. This is a short list of popular MasterLine gears. We carry several other price competitive lines call to check on the one you need.

9" Ford

A350F9 3.50 . . . . . .133.00
B389F9 3.89 . . . . . .133.00
C411F9 4.11 . . . . . .133.00
D456F9 4.56 . . . . . .133.00
E486F9 4.86 . . . . . .133.00
F514F9 5.14 . . . . . .133.00
G543F9 5.43 . . . . . .133.00
H567F9 5.67 . . . . . .133.00
I583F9 5.83 . . . . . .133.00
J600F9 6.00 . . . . . .133.00
K620F9 6.20 . . . . . .133.00
L650F9 6.50 . . . . . .133.00

GM 7.5 10 Bolt

M373 GM7.5 . . . . . .133.00
3.73 7.5" 10 Bolt 3 series
N373 GM7.5T 133.00
3.73 7.5" 10 Bolt 2 series
O410 GM7.5 . . . . . .133.00
4.10 7.5" 10 Bolt 3 series
P410 GM7.5T 133.00
4.10 7.5" 10 Bolt 2 series

GM 8.2 10 Bolt

Q411 GM8.2 . . . . . .133.00
4.11 8.2 10 Bolt 3 series

GM 8.5 10 Bolt

R342 GM8.5 . . . . . .133.00
3.42 8.5 10 Bolt 3 series
S373 GM8.5 . . . . . .133.00
3.73 8.5 10 Bolt 3 series
T390 GM8.5 . . . . . .133.00
3.90 8.5 10 Bolt 3 series
U410 GM8.5 . . . . . .133.00
4.10 8.5 10 Bolt 3 series
V456 GM8.5 . . . . . .133.00
4.56 8.5 10 Bolt 3 series

GM 12 Bolt Passenger

W373 12 Bolt 133.00
3.73 12 Bolt Passenger 3 series
Y410 12Bolt 133.00
4.10 12 Bolt Passenger 4 series
ZX456 12Bolt 133.00
4.56 12 Bolt Passenger 4 series

MasterLine THIRDMEMBERS

MasterLine thirdmembers are assembled at Mark Williams Ent. using a tough MasterLine nodular iron case, Timken® bearings, a MW aluminum pinion (not in photo) support, and a MW 1330 series pinion yoke. MasterLine thirdmembers are shipped ready to run (following recommended ring & pinion break-in). *See page 85 for available MasterLine gear ratios.* *Richmond gears also available at additional cost.*

ML-904 Posi-traction thirdmember assembly 1487.30
MasterLine nodular iron case, 31 spline Ford Motorsports posi, choice of gear ratio.*

ML-905 Locker thirdmember assembly 1655.00
MasterLine nodular iron case, 31 spline Detroit Locker®, choice of gear ratio.*

ML-906 Thirdmember assembly with spool 1296.00
MasterLine nodular iron case, 35 spline MasterLine spool, choice of gear ratio.*

MasterLine DRIVESHAFTS

MasterLine driveshafts are custom built from 3" x .083 DOM mild steel tubing with Spicer 1350 series weld yokes and Spicer precision 1350 series U joints. Special assembly fixtures guarantee proper weld yoke phasing during assembly. Every shaft is electronically balanced with the transmission yoke installed to ensure vibration-free operation. Prices includes the billet 4340 transmission yoke.

ML-39200

ML-39300

ML-600 3" x .083 mild steel driveshaft 396.00
Any length with U joints Includes trans yoke

ML-39200 3.5" x .125" 6061 Aluminum Shaft 489.00
Any length with U joints. Includes Yoke

ML-39300 4" x .125" 6061 Aluminum Shaft 569.00
Any length with U joints. Includes Yoke

MasterLine PACKAGES

MasterLine packages include a pair of MasterLine axles, posi unit or spool, "C" clip eliminator kit or axle bearings and 1/2" wheel studs. (5/8" wheel stud upgrade $94.00)

ML-KO7
9" Ford package

ML-K01 8.8 Ford 31 spline posi package 1054.00
Axles, Eaton® posi unit, "C" clip kit and 1/2" studs.

ML-K03 8.8 Ford 35 spline spool package 932.00
Axles, spool, "C" clip kit and 1/2" studs.

ML-K04 12 Bolt 30 spline posi package 942.00
Axles, Eaton® posi unit, "C" clip kit and 1/2" studs.

ML-K06 12 Bolt 35 spline spool package 699.00
Axles, spool, "C" clip kit and 1/2" studs.

ML-K07 9" Ford 35 spline spool package 610.00
Axles, spool, axle bearings and 1/2" studs.

ML-K08 9" Ford 31 spline posi package 878.00
Axles, Motorsports posi, large wheel bearings and 1/2" wheel studs

MasterLine CASES

MasterLine nodular cases feature tough nodular iron castings that are CNC machined, billet steel main caps and bearing adjusters, and extra reinforced pilot bearing area. (3/8" pinion support studs are available)

ML-460 Nodular iron case w/3.062" bores 329.00
Steel caps and billet adjusters, adjuster locks

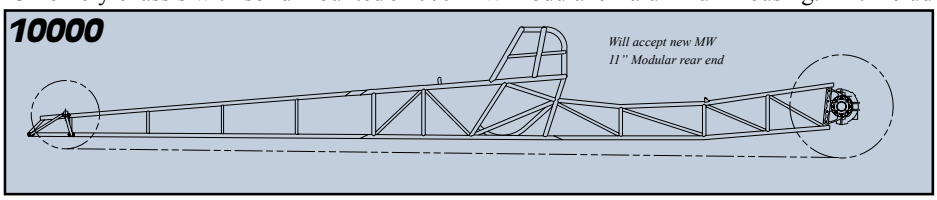
ML-470 Nodular iron case w/3.250" bores 329.00
Steel caps and billet adjusters, adjuster locks

Chassis Kits

For those drag racers with the ability and persistence to build a race car from scratch, a Mark Williams "kit car" is certainly the way to start the process. Kits are available for either front or rear engine dragster and funny car/altered configurations. Each kit has been engineered to provide both race-winning performance and incomparable safety. All Mark Williams chassis kits conform to the appropriate SFI (SEMA Foundation. Inc.) specifications. Since their introduction, MW kit cars have proven to be very competitive in various classes ranging from Econo Altered to Alcohol dragsters. One MW kit car even has won a World Championship. Experienced racers will tell you that there's a lot more to a tube-chassis car than meets the eye. That's why often times one car "works" better than another even though they may appear to be similar. It's the subtle differences that count and MW gives you the winning advantage.

Solid Rear Engine Dragster Kit

Chromoly chassis with solid mounted 92000 MW modular 9" aluminum housing. Kit includes complete steering with rack and pinion box, engine mounting plates and all the pre bent and straight tubing to build a chassis that meets the current SFI 2.3K chassis specs. Supercharged applications will require a full floater housing which will add 754.00



10000 . . . . . .4250.00

1000X	Choice of chassis print
10003	Chassis Construction Video
10012	7/16"x 1" x 1" bushings, rear end upright
10020	Quick disconnect steering hub
10035	Dragster/FC steering wheel
15012	Bushing, welds to D20 tabs *(2 ea)*
30100	MW rack & pinion steering
30155	MW Dragster steering linkage kit
30160	MW Dragster steering column kit
31200	MW spindles with 2 arms *(pr)*
33500	A-Arm front end kit
33600	A-Arm fixture

36060 cage	Dragster bend package w/6 point
36155	Helmet Guard Tubes *(1 pr)*
36400	Upper/lower rail support *(2 ea)*
36500	Seat former tube *(1 ea)*
36800	Steering mount tube *(1 ea)*
36600	Upper engine rails *(2 ea)*
36700	Lower engine rails *(2 ea)*
38110	Milled engine plate, choice of dowels
380XX	Choice of milled front engine plate
4130-062	4130 1/16" sheet 9"x12" *(1 ea)*
4130-125	1/8" 4130 sheet 9" x 18" *(1 ea)*
65-062	1/16" dia. welding rod *(5 lbs)*

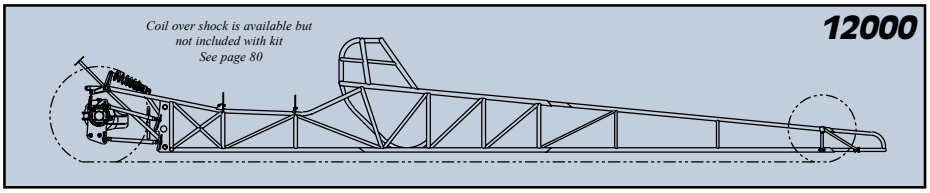
92000	26" MW Modular aluminum housing
D1A	Small engine mount tabs *(4 ea)*
D20	Large engine mount tabs *(2 ea)*
4'	1/2" x .058, 4130 tube
6'	5/8 x .058, 4130 tube
40'	3/4" x .058, 4130 tube
40'	7/8" x ,058, 4130 tube
8'	1" x .058, 4130 tube
7'	1-1/8" x .058, 4130 tube
60'	1-1/4" x .058, 4130 tube
20'	3/8" x .058, 4130 tube
2'	1" x 1-3/4" x .065, 4130 tube

10001 Dragster Blueprint, Alcohol Style . . . . . .50.00 11001 Dragster Blueprint-Super Comp Style 50.00

10003 Dragster Chassis Construction Video *(Covers solid dragster chassis construction only)* 90.00

4-Link Engine Dragster Kit

Chromoly chassis with unique monoshock rear suspension and MW modular 12 bolt housing w/billet aluminum 4 link brackets. Kit includes monoshock rocker shaft and arms, 4-link and wishbone kits, complete steering with rack and pinion box, engine mounting plates and all the pre bent and straight tubing to build a chassis that meets the current SFI 2.5 chassis specs.



12000. . . . . .7296.00

10020	Quick disconnect steering hub
10035	Dragster/FC steering wheel
12001	4 link Dragster chassis print
30100	MW rack & pinion steering
30155	MW Dragster steering linkage kit
30160	MW Dragster steering column kit
31200	MW spindles with 2 arms (pr)
33500	A-Arm front end kit
33600	Front end jig kit
36060	Dragster bend pkg w/6 point cage
36155	Helmet Guard Tubes (1 pr)

36500	Seat former tube (1 ea)
36800	Steering mount tube (1 ea)
36600	2 pc upper engine rails (2 ea)
38110	Milled engine plate, choice of dowels
380XX	Choice of milled front engine plate
65-062	1/16" dia. welding rod (5 lbs.)
96012	MW Modular 12 Bolt 4 link housing
12010	Monoshock/Anti-roll rocker assembly
12020	4 link kit w/rod ends and jam nuts
12021	Chassis 4 link mounting plates (4)
12030	Wishbone kit w/rod ends & jam nuts

D1A	Small engine mount tabs (8 ea)
D20	Large engine mount tabs (2 ea)
4'	1/2" x .058, 4130 tube
6'	5/8 x .058, 4130 tube
40'	3/4" x .058, 4130 tube
40'	7/8" x ,058, 4130 tube
8'	1" x .058, 4130 tube
7'	1 1/8" x .058, 4130 tube
60'	1 1/4" x .058, 4130 tube
20'	1 3/8" x .058, 4130 tube

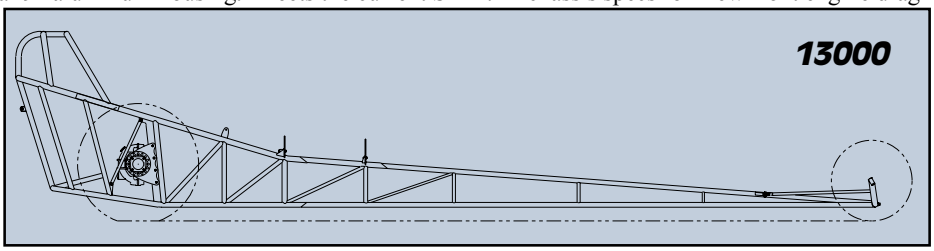
12001 Dragster Blueprint, 4-Link Suspension 50.00

Chassis Kits

Component and materials lists for each MW chassis kit are shown on these pages. These kits include all of the tubing necessary to build a basic chassis including all of the tube bends. All tubing requires cutting and fitting. For a preview of what's involved in building an MW kit car, working prints ($50 ea.) and a chassis construction video ($90) are available from Mark Williams. All Mark Williams chassis prints are produced on a color plotter using heavy weight paper that won't fade over time like blueprints will. This ensures a high quality, long lasting, and easy to read set of prints. Any of the prints can also be laminated for $5 per sheet. The cost of the print and/or video will be credited toward a kit car purchase. Other components such as axles, brakes, thirdmember, etc. required to complete a "rolling chassis" that fits your exact needs can be found elsewhere in this catalog.

Front Engine Dragster Kit

Chromoly chassis with 92000 MW modular 9" aluminum housing. Meets the current SFI 2.2B chassis specs for new front engine dragsters (6.29 and quicker). Kit includes complete steering with standard box, engine mounting plates and all the pre bent and straight tubing to build a basic chassis. Supercharged applications will require a full floater housing. Call for additonal charges.



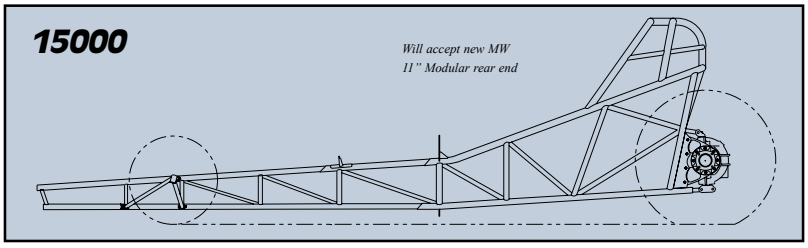
13000. . . . . 4117.00

10020	Quick release steering hub	33005	Dragster front axle, 36" centers	D1A	Small engine mount tabs (6 ea)
10035	Drag/FC steering wheel	33xxx	Radius rod kit	D20	Large engine mount tabs (2 ea)
10612	Tube adapter 3/8-24 to 3/4 (4 ea)	36155	Helmet Guard Tubes (1 pr)	D26	Weld in clevis
10612L	Tube adapter 3/8-24 LH to 3/4 (2 ea)	38000	Front engine dragster bend package	12'	5/8" x .058, 4130 tube
15004	Steering box mount	380xx	Choice of milled front engine plate	40'	3/4" x .058, 4130 tube
15012	Bushing, welds to D20 tabs (2 ea)	38115	Milled rear engine plate	10'	7/8" X .058, 4130 tube
13001	Front Engine dragster blueprint	65-062	1/16" dia. welding rod (5 lbs)	1'	1" x .058, 4130 tube
15060	Housing mounting bracket (2 ea)	92000-30	Modular 9" housing, 30" wide	14'	1 1/8" x .058, 4130 tube
30200	P&S standard steering box	96022	1" spacer for modular housing (2 ea)	70'	1 1/4" x .058, 4130 tube
30260	MW FC/Altered steering column kit	AM6	3/8 Chromoly rod end (4 ea)	15'	1 3/8" x .058, 4130 tube
31210	MW spindles w/3-arms	AB6	3/8 LH Chromoly rod end (2 ea)	5'	1 3/8" x .095, 4130 tube

13001 Front Engine Dragster Blueprint 50.00

Funny Car/Altered Kit

Chromoly chassis with 92000 MW modular 9" aluminum housing. Kit includes complete steering with standard box, engine mounting plates and all the pre bent and straight tubing to build a basic chassis that will meet the current SFI 10.1D chassis specs for new funny car/altereds. When built to print chassis can be certified for any class up to Nitro Funny Car. Supercharged applications will require a full floater housing Call for additional charges.



15000 . . . . . .3850.00

10020	Quick release steering hub	34500	F/C A-Arm front end kit	D20	Large engine mount tabs *(2 ea)*
10035	Drag/FC steering wheel	33600	F/C A-Arm jig kit	20'	1/2" x .058, 4130 tube
15004	Steering box mount	36155	Helmet Guard Tubes *(1 pr)*	6'	5/8" x .058, 4130 tube
15012	Bushing, welds to D20 tabs *(2 ea)*	37000	Funny Car roll bar bend package	20'	3/4" x .058, 4130 tube
15101	Altered/Funny car blueprint	380XX	Choice of milled front engine plate	20'	7/8" X .058, 4130 tube
15060	Housing mounting bracket *(2 ea)*	38115	Milled rear engine plate	10'	1" x .058, 4130 tube
30200	P&S standard steering box	550-019	1 3/8" expansion plug *(4 ea)*	20'	1 1/8" x .058, 4130 tube
30255	MW FC/Altered steering linkage kit	65-062	1/16" dia. welding rod *(5 lbs)*	60'	1 1/4" x .058, 4130 tube
30260	MW FC/Altered steering column kit	92000	Modular housing, 26" wide	20'	1 3/8" x .058, 4130 tube
31210	MW spindles w/3-arms	D1A	Small engine mount tabs *(4 ea)*	6'	1 3/8" x .095, 4130 tube

15101 FunnyCar/Altered Blueprint 50.00

All kits FOB Louisville, Colorado. Approximate shipping weight 300 lbs. (Truck freight)