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 C.O.D. 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. MWE does not allow returns after 90 days.

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

MARK WILLIAMS Enterprises®

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 30 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

Mark Williams Exclusive!

MW has created a special form to verify all custom axle orders. Within two days of placing your order you will receive a 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.

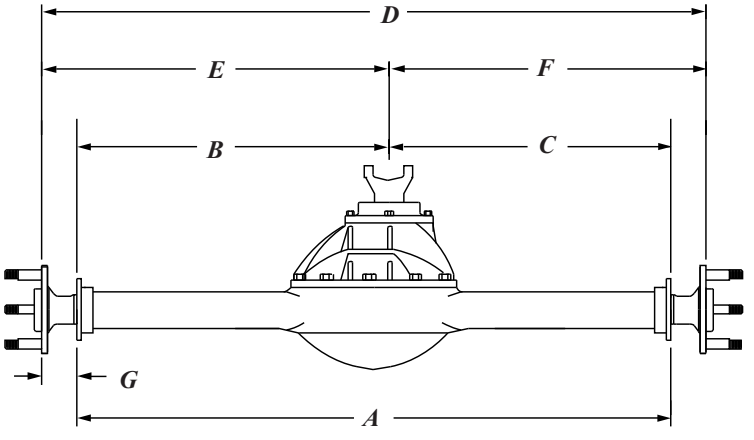
PRIORITY-Service

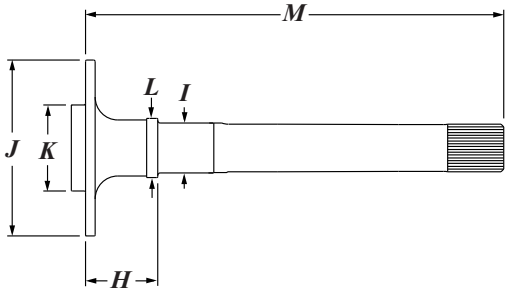
For those racers who need axles in a big hurry, Mark Williams Enterprises offers priority service for a nominal extra charge. Axles purchased under these terms are guaranteed to ship within 5 WORKING DAYS for an additional charge of $100.00

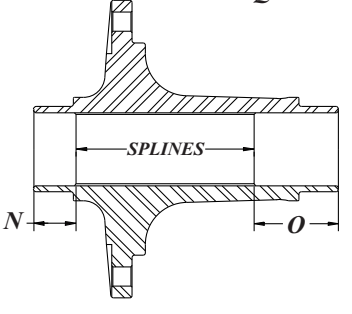
Mark Williams Enterprises, Inc. warrants against breakage of our special 35 or 40-spline spool combination axles for a period of five years. *UNDER NO CIRCUMSTANCES WILL MARK WILLIAMS ENTERPRISES, INC. BE HELD RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN CONNECTION WITH, THE 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.

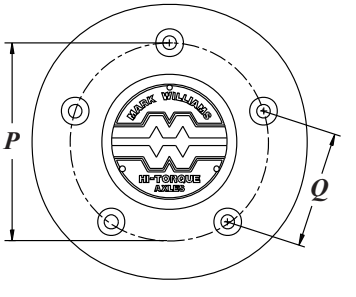
How To Order Axles

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 > Service Bulletins , click > SB0077.pdf.









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 . . . . . .696.00 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 . . . . . .798.00 pair

SUPERLIGHT 40 SPLINE "HI-TORQUE" AXLES: The next step in the high strength light weight axles would be the Mark Williams SUPERLIGHT 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 . . . . . .853.00 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 SUPERLIGHT axles. The use of aircraft 300M alloy forgings make it possible to enlarge the diameter of the gun drill bore to 1" 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 . . . . . .1252.50 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) . .111.71
2.875" O.D., 1.562" I.D. for stock ends w/spiral lock.

57803 Small Ford Axle Bearings(pr) 91.55
2.835"stock O.D. with larger than stock 1.562" I.D. stock Mustang end.

58503 Axle Bearings, 1-17/32" (pr) 86.60
Sealed bearings 3.150" O.D.,1.532" I.D. stock Ford/Olds size.

58504 Axle Bearings, 1-5/8" (pr) 104.00
Sealed bearings 3.150" O.D.,1.625" I.D. used for C-Clip eliminator.

58505 Axle Bearings, 45 mm (pr) 114.00
Sealed bearings 3.150" O.D., 1.774" I.D. used for 40 spline axles

CB-58505 Axle Bearings, 45 mm (pr) 546.00
Ceramic bearings, Sealed bearings 3.150" O.D., 1.774" I.D.

58507 Axle Bearings, 1-9/16"(pr) 98.77
Sealed bearings 3.150" O.D., 1.564" I.D.

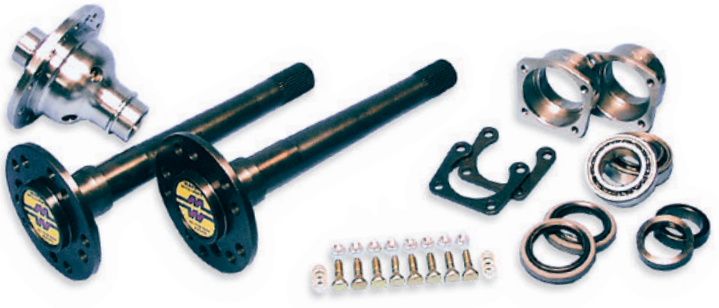
58508 Axle Bearings, 3.347 X 45 mm, wide (pr) . .303.00
Double row sealed ball bearings 3.347" O.D., 45 mm I.D. For 58595/58598 Heavy Duty Symmetrical ends (o-ring is in housing end).

58509 Axle Bearings, 3.347 45mm I.D. narrow (pr)217.54
Narrow bearing for 58599 Symmetrical Pro-Stock ends.

58519 Axle Bearings.3.347 x 45mm, wide (pr) 300.75
Wide single row bearings for deep 58595/58598 Heavy-Duty ends.

CB-58509 Axle Bearings,3.347 x 45mm (pr) 624.48
Ceramic bearings, narrow, for 58599 Symmetrical Pro-Stock ends

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) 696.00
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

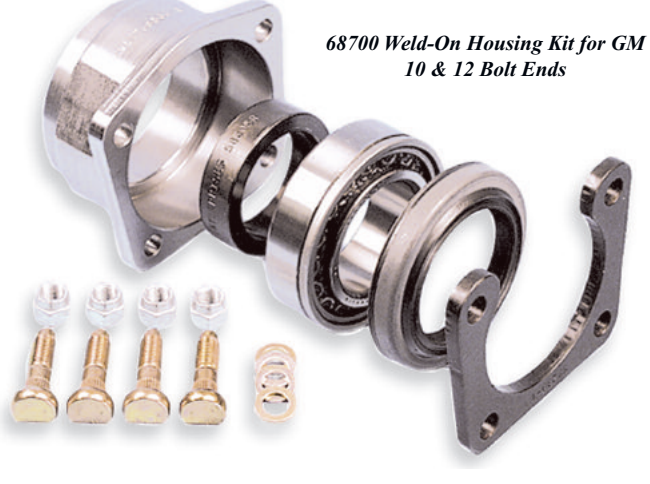
MW's Pro Street axle bearing features a large 45mm (1.774") I.D. and is unique in that it can take thrust in either direction. This tapered roller bearing exceeds the radial capacity of common O.E.M. ball and roller bearings. Axle bearing assembly includes bearings, seals and MW produced press on bearing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

58506S Unit Axle Bearing Assembly (pr) 256.00
For MW Pro Street Axles, Timken® unit bearings with seals and press on lock rings.

58506S

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



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

58780 Housing End Kit, Disc Brakes 421.00
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 436.89
For Mopar brakes. Includes Timken® bearings, retainers, seals and backing plate bolts.

67700 Housing End Kit, Small Ford 435.07
For small Ford brakes. Includes Timken® bearings, retainers, seals and backing plate bolts

67750 Housing End Kit, Large Ford 476.98
For large Ford brakes (w/1/2" bolts). Includes Timken® bearings, retainers, seals and backing plate bolts.

68700 Housing End Kit, Small GM 477.00
For GM small brakes (Camaro, Chevelle, Nova). Includes Timken® bearings, retainers, seals and backing plate bolts.

67870 Housing End Kit, New Style Ford 447.00
For New Style Ford. Includes Timken® bearings, retainers, seals and backing plate bolts..

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 286.90
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 312.06
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 374.76
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.


68800

Housing End Seals and Backing Plate Bolt Kits

An Exclusive benefit of using MW Housing ends is the ability to utilize a inboard seal. No more fighting with leaking wheel bearing by installing these seals.

MW offers 3 different inner axle seals for all MW 2" long housing ends. These seals are designed to ride on the axle shaft just inboard of the axle bearing lock ring.

MW stocks both 3/8" and 1/2" backing plate bolt kits as well as the stud kit required for the HD 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 special modified fasteners. All kits also include self locking nuts.


58515


58514


58516


58572


58570


58575

58514 Housing End Seal for 1.625 dia. Axle 16.89

58515 Housing End Seal for 1.774 dia. Axle 17.25

58516 Housing End Seal for 1.562 dia. Axle 16.65

58570 Backing Plate Bolt Kit (set of 8) 39.00
3/8" with nuts for MW housing ends (except large old style Ford

58570A Backing Plate Bolt Kit (set of 10) 41.25
For Mopar type ends that require 10 bolts.

58572 Housing End Stud Kit (set of 8) 51.00
3/8" studs, nuts and washers for Pro Mod housing ends or MW modular end bells.

58575 Backing Plate Bolt Kit (set of 8) 35.00
1/2" with nuts for large Ford ends

Pro Street Lockers

MW offers a Locker type differential that accepts larger than stock spline 1.5" diameter 35-spline axles for the 9" Ford rears. Axles must be manufactured specifically for this Locker. The spline and length are different from the MW spool spline.

We also offer a 40 spline locker for the Dana 60™ rears. The spline and location is the same as the MW 40 spline spool axles.

187S-35C 35 spline, Locker, 9" 3.25 Ford Case 854.00
Requires 3.250 or 3.812 bore case.

225S-40A 40 spline, Locker, Dana 60™ 3.73-4.10 Ratio 699.00

225S-40B 40 spline, Locker, Dana 60™ 4.56-7.17 Ratio 699.00


225S-40A


187S-35C

Wheel Stud Kits

MW drive studs are recommended in all drag racing applications using after-market wheels. The Drive Stud is designed so the 11/16" dia. shoulder on the stud is used to center the wheel, rather than the lug nut used 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) 154.00
A=3-1/2" B=1-3/16" C=1-1/2" D=13/16"

51540 Drive Studs 11/16" dia. (complete set) 154.00
A=2-11/16" B=1" C=7/8" D=13/16"

51560 Drive Studs 11/16" dia. (complete set) 154.00
A=4" B=1-3/16" C=2" D=13/16"

51580 Drive Studs 11/16" dia. (complete set) 154.00
A=2-7/8" B=7/8" C=1-3/16" D=13/16"

51590 Drive Studs 11/16" dia. (complete set) 154.00
A=3-7/16" B=7/8" C=1-3/4" D=13/16"

Drive Stud Kit w/ MW Aluminum Lug Nuts 250.80
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 462.00
A=2-11/16" B=1.00" C=7/8". Save 1.2 lb (Specify nut)

41560 Titanium Drive Studs 11/16" Dia 473.00
A=4" B=1 3/16" C=2" Save 1.2 lb (Specify nut)

41580 Titanium Drive Studs 11/16" Dia 462.00
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. The stud features and a small quick start on the threaded end. 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 help prevent the threads from wedging on the imperfect threads by the head.

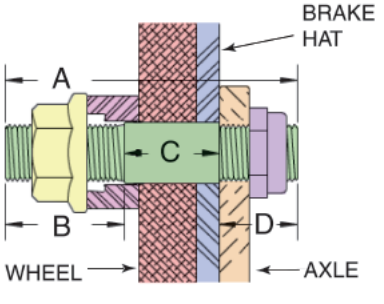
51200 1/2-20 x 3-1/2" Wheel Studs, 12 point head (10) 75.00

51250 1/2-20 x 2" Wheel Studs, Allen head (10) 38.90

51255 1/2-20 x 2" Wheel Studs, 12 point head (10) 67.50

51260 5/8-18 Grand National Axle Studs, (10) 193.00
Threaded to head (2-5/8" overall length.) 2" of thread

51270 5/8-11 Grand National Axle Studs, (10) not shown 87.99
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 ordered with 5/8"-11 threads.

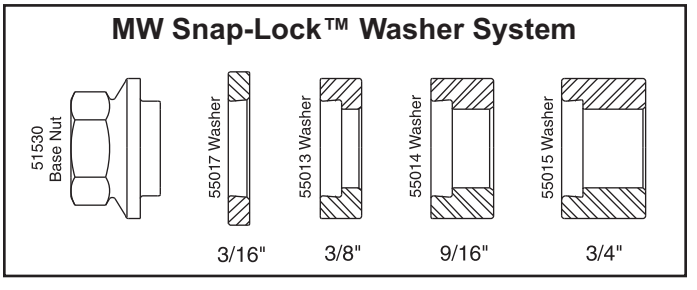


Selecting the Proper Drive Studs

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

With our Mark Williams stud nuts, an aluminum spacer washer attaches with a SnapLock™ 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 (3/16" to 3/4") to compensate for different wheel and brake hat combinations. 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 thin aluminum washers and are standard nuts in MW titanium drive stud kits.



51530 Steel MW Snap-Lock™ Base Nut 5.03
Replaces old 55016 standard flange steel nut

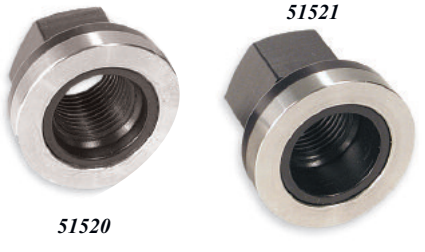
55017 Aluminum Washer, Snap-Lock™3/16" 3.43
For use with MW base nut, stainless or standard nut, 3/16" thick.

55013 Aluminum Washer Snap-Lock™3/8" 3.95
For use with MW Stainless Steel or 51530 nut, 3/8" thick.

55014 Aluminum Washer, Snap-Lock™ 9/16" 4.25
For use with MW base nut ,stainless or standard nut, 9/16" thick.

55015 Aluminum Washer, Snap-Lock™ 3/4" 6.41
For use with MW base nut, aluminum or standard nut, 3/4" thick.

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 anodized hard coat finish. The integral aluminum 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) 15.95
1/8" grip, threads relieved 1/8" on wheel side of nut

51521 Encapsulated MW Nut, 3/8" grip (ea) 15.95
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 or other parts. This type of system eliminates possible damage to either the threads or stud shoulder that can happen without the proper installations tools.

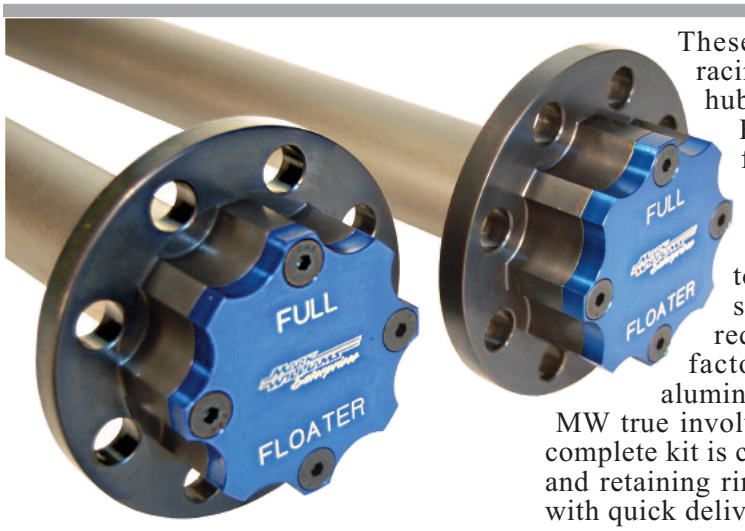
600-H Housing for stud install collet 125.00
600-1 5/8-18 stud install collet 59.00
600-2 1/2-20 stud install collet 59.00
600-3 7/16-20 stud install collet 59.00
600-4 3/8-24 stud install collet 59.00
600-5 5/16-24 stud install collet 59.00

Safety Wire and Pliers

Use with any drilled bolt head to provide vibration proof positive bolt retention. MW 9" & 12 Bolt ring gear bolts are drilled for safety wire locks. Pliers are a Quality Made in America Tool.

300-1 Safety Wire, 1 lb, .032 stainless . . .19.62
300-2 Safety Wire Twist Pliers 9" 92.00

Off Road Drive Plate Axles



These axles are designed for off road and circle track racing applications with Wide 5 (3/4 to 1 ton truck type hubs), Dana 60/70 (and most Dana 80) hubs, and 14-Bolt style full floating hubs. The 40-spline drive flanges are manufactured using aircraft quality alloy steel and are heat-treated and black oxide coated. The axles are available in standard 4340 steel or high strength 300M steel. Both receive shot peening to increase the durability and longevity. The center section spline is available for any spool / carrier requirements. These parts are designed to work with factory axle hub bolts or studs. Covers are anodized aluminum with low-profile sealing o-rings. All sets feature MW true involute splines, and are heat-treated, and polished. The complete kit is comprised of shafts, flanges, caps, fasteners, o-rings, and retaining rings. Custom produced for each specific application with quick delivery.

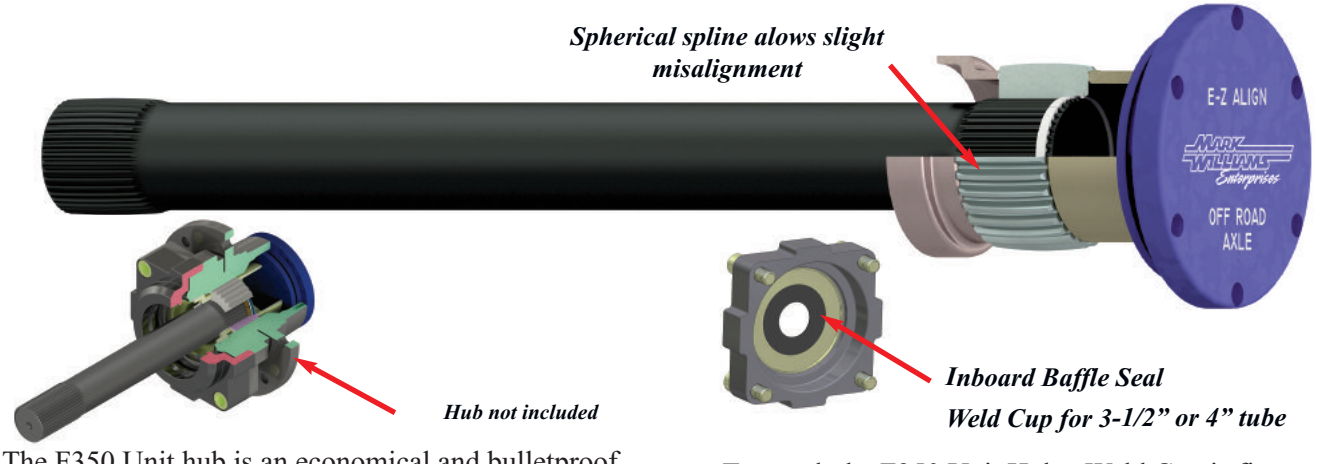
50250 Truck Floater Axles 14 Bolt Drive Flange .1590.00
Austempered & Shot Peened 4340 40 (Spline drive flange) (1/2" bolt)

50260 Truck Floater Axles 14 Bolt Drive Flange . . .1990.00
300M material & Shot Peened 40 (Spline drive flange) (1/2" bolts)

50270 Truck Floater Axles Dana 60/ 70 Flange . . .1590.00
Austempered & Shot Peened 4340 Dana 60 type flange 7/16" (bolt)

50280 Truck Floater Axles Dana 60/ 70 Flange . .1990 .00
300M material & Shot Peened 40 (Spline drive flange) (7/16" bolts)

E-Z Align Axle Drive Assemblies



The F350 Unit hub is an economical and bulletproof way to upgrade from a conventional truck floater. MW offers axles with the Donut Spline Adapter and cover that are made to fit the OEM hub. Our EZ-Align splines are manufactured with a slight crown that allows some misalignment without bowing the axle shaft. This bowing creates forces on the housing's center section that will eventually destroy gears and bearings.

To attach the F350 Unit Hub a Weld Cup is first welded to the housing for the Hub to bolt on. Weld Cups are available for 3-1/2" and 4.0" tube housings. Similar to a traditional housing end, cut the OEM housing spindle is removed and the cup is welded on to the axle tube. The end comes with a baffle seal to retain the lube in the housing.

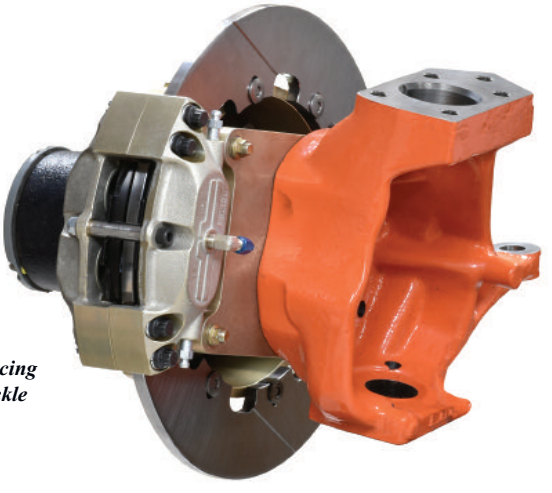
50255 Axles, F350 Hub, EZ-Align Donut & Cover 1560.00
Through Hardened 4340 (Any center spline to match spool)

50290 Weld Cup for F350 Hub 3-1/2" (ea) 310.00
Alloy steel for 3-1/2" tube (with baffle seal)

50265 Axles, F350 Hub, EZ-Align Donut & Cover 2315.00
300M Aircraft Alloy (Any center spline to match spool)

50295 Weld Cup for F350 Hub 4.0" (ea) 310.00
Alloy steel for 4" tube (with baffle seal)

Rock Crawler Disc Brake Kits



75910 Kit on Reid Racing Ford King Pin Knuckle

MW Disc Brake Kits are produced with attention to the details. We have used a larger 14” diameter rotor to increase the holding power. The brake rotors are produced from abrasive resistant steel that is double disc ground to be flat and parallel. The Slot Drive™ rotor attachment system is a major improvement for prolonging brake rotor life. This system allows the Disc to expand and contract with the disc temperature without putting stress on the attachment fasteners. Disc cupping common to competitors product is eliminated with this exclusive attachment method.

MW calipers are exceptionally strong, compact, with superior bridge strength over similar products. The material used in MW calipers is stronger than common 6061 aluminum billet calipers. MW calipers use four 7/16" diameter body fasteners plus a 5/16" diameter bridge bolt that increases the calipers rigidity. The design advantages create significant increases in holding power. MW calipers utilize a 3/8” hex bleeder screws in each end, no right and left hand calipers. That feature allows the MW Caliper to be mounted is many clock positions and bled without removing. Internal fluid passages eliminate external damage prone lines.

All the Caliper mount brackets are billet 7075-T6 aluminum, Adapter rotor "hats" are produced from proprietary alloy aluminum, drilled to accommodate matching hub patterns. The 71900 kits for the F350 unit hub will accommodate the existing 170 mm metric and 6-1/2 x 8 hole inch patterns. All the required mounting hardware and MW calipers with linings are included.

75900 Brake Kit, F350 Front Knuckle 1625.00
2005 or later F350 or Reid Racing front knuckle

75905 Brake Kit, F450 F550 Front Knuckle 1625.00
2005 and later F450

75910 Brake Kit, Ford King Pin Knuckle 1625.00
1975 to mid 1991 Ford Kingpin Knuckle

75915 Chevrolet King Pin Knuckle 1625.00
1977 to mid 1991

Unit Hub & Rear Disc Brake Kits

71900 Brake Kit, Unit Hub 1625.00
For use with Timken F350 Unit hubs in conjuction with the 50290 or 50295 weld cup. Adaptor has 6-1/2 x 8 hole and 170mm x 8 hole pattern.

71905 GM 14 Bolt Rear Brake kit 1625.00
Mounts to the original 14 bolt hub with the original 14 Bolt rear backing plate mount. Kit is shown with 50250 axle drive plate kit.

Classic Racing Corvette Parts

Mark Williams has expanded into the Corvette replacement parts for the serious racer. We have engineered several new products that increase the strength and reliability for the C2 and through C4 series Corvette drivelines. The most vulnerable parts for the C2 and C3 are from the use of the 17-spline axles in both wheel hubs and the inboard flange yokes. We've increased the spline size in both of these components to a larger and modern 30-spline design. The larger spline profile greatly increases strength. The axles feature forged 300M materials, and with in-house heat-treating and shot peening a truly dependable part has been created. We are committed to producing the highest quality parts for the serious vintage Corvette racers

Corvette C2 and C3 Axle Hub Kits

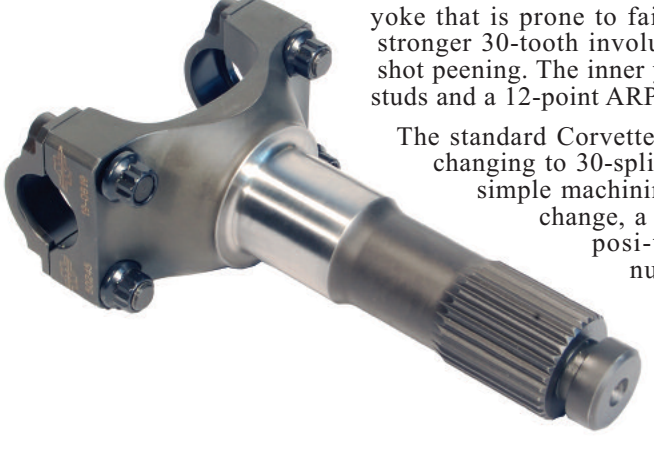
This kit for C2/C3 ('63-'82) Corvettes improves the yoke-shaft torsional strength by upgrading the spline to a more modern and stronger 31 tooth involute profile. The axle flange (spindle), is produced from a 4340 aircraft alloy forging. The flange (spindle) is double heat-treated for improved ultimate strength and shot peened for improved cycle life.

The universal joint yoke replaces the two parts of the original design, eliminating the 4-bolt flange. The splined yoke is through hardened steel and features removable heat-treated billet caps that simplify installation. The universal joint cap is attached with ARP fasteners and the bolt heads are drilled for safety wire locking. The axle-shaft features a 1"- 20 thread that increases the strength of the entire system. The axles come installed with 1/2"-20 x 3" ARP wheel studs that feature a nut-aligning quick start. 2" long studs are an option. Studs are installed with a threaded connection into the axle flange. The flanges have a second pattern with 5/16"-18 threads that can be used to secure the brake disc. The kit comes with all the parts required for assembly, including Timken® bearings and SKF-CR seals. Sold as a kit for both sides. Installation and service instructions can be found on our website, Service Bulletin #0115.

50230-KIT Corvette C2-C3 Rear Axle Wheel Hub 3164.00

Complete Next-Step rear wheel kit with standard length axle shafts and 1350 series universal joints. 3" or optional 2" long 1/2-20 wheel studs. Machining of the bearing preload spacer is required for proper pre-load.

Corvette C2 and C3 Rear Inboard Yoke Shafts



The C2 and C3 Corvette's differential comes from the factory with a 17-spline inboard flange yoke that is prone to failure. This super strong 300M version has the spline updated to a stronger 30-tooth involute profile. It features through hardening heat-treating process and shot peening. The inner yoke shaft features a billet u-joint cap (p/n 50237) that attaches with studs and a 12-point ARP nut.

The standard Corvette posi-traction is modified by slightly increasing the bore size, and changing to 30-spline axle gears that are common to 12-bolt GM posi-traction units. A simple machining operation to the original posi-traction case is required. With this change, a standard GM C-clip is used to retain the yoke shafts. New Eaton™ posi-traction units with all required modifications are available, part number 19670-MOD. Kit price is per pair. Installation and service instructions can be found on our website, Service Bulletin #0111.

NOTE These yoke shafts WILL NOT work with C2/C3 Corvettes that have been modified to use a GM 12-Bolt posi & special gear (eg. Tom's). For those 12-Bolt modified Corvettes, use p/n 50248-KIT, which includes the driver's side (p/n 50248) and passenger's side (p/n 50249) inner yoke shafts.

50245-KIT Corvette C2-C3 Rear Inner Yoke Shaft Kit (pair) 2100.00

Replaces the factory 17-spline differential yoke axle shaft. Must use 30 spline axle gears originally used in the 12 bolt GM differental. Modifications are required to the Posi-Traction carrier in order to clear the large splines.

Yoke Shafts for 12 Bolt Conversion

Many owners have chosen to upgrade the rear by modifying a stock Corvette case to use a GM 12-Bolt Posi and gear, but some of these systems still use the cast bolt-on universal flange yoke. Our one-piece, super strong 300M inner yoke shafts eliminate the bolted connection and significantly increase the strength and quality compared to OEM parts. The splines have been updated to a stronger 12-Bolt 30-tooth involute profile. They are produced with our in house through hardening heat-treating process and shot peened. The inner yoke shafts includes billet u-joint caps (p/n 50237) that attach with studs and 12-point ARP nuts.

A standard GM c-clip is used to retain the yoke shafts. MW Sold as a pair.

50248-KIT Inner Yoke Shafts for 12 Bolt Posi 2100.00
Yoke Shafts for C2-C3 Corvettes that use the Tom's Differentials Modified 12 Bolt Post-Traction and special ring and pinion. Mates to 1350 series universal joint half shafts.

***NOTE** This kit will only work with C2/C3 Corvettes that have been modified to use a GM 12-Bolt posi & gear. If your Corvette has a stock differential, use p/n 50245-KIT inner yoke shafts.*

Corvette C2-C3 Billet Posi-Traction Case

ACG-30

50247

ACG-30-3

SF58922 Kit

C2-C3 Replacement Case for the Eaton™ 19670 Posi-Traction This solves the problem with cracked and failed cases while increasing gear life.The case is produced from through hardened alloy steel and shot peened. Includes a special ACG-030-3 pin

The case uses 12 Bolt GM side and spider gears kit SF58922, For - use with 50245-KIT Inner Yoke Shafts. (page 10).

ACG-030 Billet Posi Traction Case 4200.00
Produced from billet aircraft quality materials thru hardened heat treated

50247 C-CLIP Machinable for Thickness 23.00
Used to fine tune the C-Clip axle to the Spider Pin. Required if using 30 Spline Axles and Spider Gears

SF58922 30 Spline Interal Axle Gear Kit 175.00
With Shot Peen Treatment and Supra-Fin finishing .

ACG-030-3 Spider Pin 54.00
4140 Case Hardened pin for 12 Bolt spider gear . Can be used with reworked cast iron case by enlarging the spider pin bores to slip fit.with this pin.

Corvette C4 Rear Hub Yoke Shaft

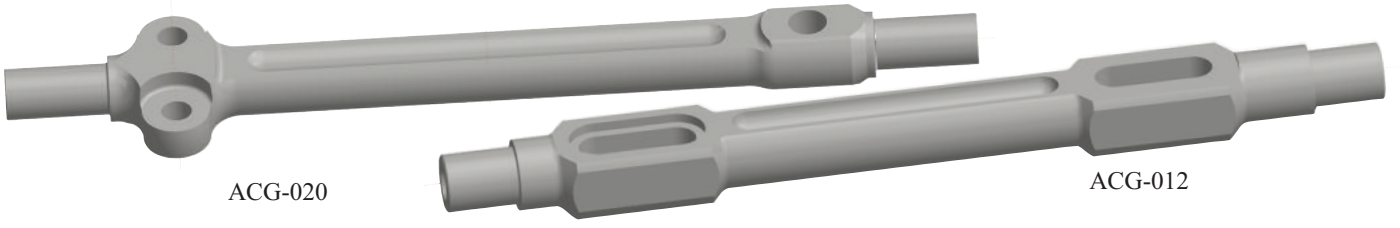
50510G

This is an upgrade for the C4 (1988 - 1996) Corvette rear wheel hub shaft yoke that is prone to failure. We have increased the spline to 32-tooth, and upgraded the material to 300M aircraft alloy steel. Then, thru hardened heat-treated in house for maximum strength. The shaft is shot peened and comes with the an enlarged 1"-20 flange nut, billet u-joint caps, spacer and washers.

No need to send in your old hubs for rework. The kit comes with new Timken™ hubs with 32 splines and metric press in studs. Everything that is required for a bolt in installation. Installation and service instructions can be found on our website, Service Bulletin #0117.

50225-KIT C4 Rear wheel Hub Kit (pair) 2896.00
32 Spline C4 Hub-Yoke Upgrade kit

Corvette C2 and C3 Control Pivot Shaft



ACG-020

ACG-012

ACG-020 Control Arm Shaft Lower ea . . . . . .487.00 ACG-012 Control Arm Shaft Upper ea 365.00

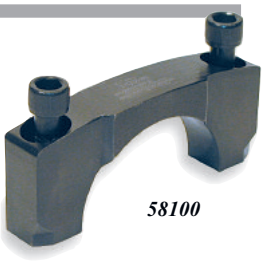
Designed to replace the original low carbon GM part, the ACG-020 is made from billet 4140 steel and heat treated with the M/W Austempering process and shot peened. Journals for lower pivot bushings have a 7/16-20 thread upper have 3/8-24 thread. The lower control mounting surface is raised approximately 1/8" for a slight improvement in the roll center. Priced each.

NOTE: A Spherical Bearing and hardware kit is available from ACG Enterprises e-mail: c_geatches@sbcglobal.net

Corvette C2 and C3 Differental Parts

One of the most common causes of Corvette rear end component failure can be traced to the stock rear end caps. To cure this problem, MW makes a replacement cap from billet steel with an increased cross section and heat treated grade 8 hardware (included). Precision measuring of the cap bore and milling of cap parting line is required to install. Normally, only the driver's side cap has to be replaced, but most customers replace both. Check out the cap installation instructions (Service Bulletin #0007) on our website. Not a returnable part after it is installed.

58100 Differental Cap C2-C3 Corvette 70.00



58100

Pinion Yoke and Half Shafts

39038

Replace the weak 1310 series factory Pinion Yoke with 1350 series u-joints. Manufactured from high strength, heat treated 4340 steel. All machining is done in relationship to the spline pitch diameter to ensure each yoke is symmetrical for balance and smooth operation. Designed to use the 2nd generation alloy steel cap kit for added strength or standard u-bolts. - Sold separately. 58918 nut and washer kit required.

39038 Pinion Yoke, 1350 Joint 204.00

U-Bolt kit sold separate 39010 or 39112

39810

This C2/C3 Corvette rear axle half shaft features MW 4130 forged steel weld yokes, 1350 series non-greaseable, lubed for life universal joints. 3" O.D. x .083" heat-treated chromium-molybdenum tube with 13-7/8" centers. (Other lengths can be produced at the same cost.) Cold wire TIG welded . Sold AS A PAIR

39810 Half Shaft C2-C3 Corvette (pr) 885.00

4130 Tube and End Fitting with Spicer Joints

Billet Caps, Nuts and Spacers

39112

These 2nd generation U-bolt (cap) kits feature a bubble stud that locates on the rear flange bolt hole indexing the location. The straps are produced from heat treated chromium-molybdenum steel.

39112 2nd Gen U-Bolt Kit 97.00

58918 Kit

58914

The Pinion attachment of the Corvette Needs a little help in maintaining the preload setting and making sure the pinion nut is secure. The Billet Nut and Solid Preload Spacer fits the bill.

58918 Pinion Nut & Washer Kit 38.75

Required on 39038 pinion yoke.

58914 Preload Spacer 47.00

Hardened 4140 with length to machine for preload

Corvette C5 CV Axle Shafts

50220 Axle Shafts are Manufactured from 300M aircraft steel and Shot Peened. These shafts have been designed to handle the rigors of any high powered application. Applications for the 1997-2004 C5 Corvette. These axle shafts that attach to the constant velocity (CV) joints. Corvette rear. Axle shafts are sold in pairs.

50220 C5 Axle Shafts for CV Joints (pair) 972.50
300M Heat treated and shot peened

50210 Left Hand axle shaft is available. Produced from 300M aircraft steer and shot peened.Intermediate shafts are sold as singles. If you have a strong Corvette, this is the differential output shafts that you need to put reliable power to the ground.

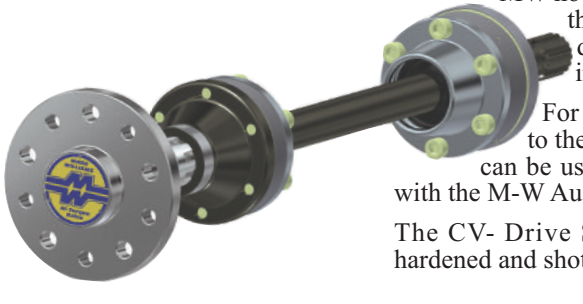
50210 C5 Intermediate Shaft 402.00
300M Heat Treated and Shot Peened

Jaguar XK and XJ Rear Hub

This assembly is designed to be a bolt-in conversion to solve breakage issues associated with the OEM 10-spline shafts by converting to a 31-tooth involute spline profile. It utilizes the original bearings and seals. The kit comes with all parts necessary for the conversion, including several thicknesses of preload shims for the proper tapered roller bearing preload. The yoke-shaft is made from a 300M aircraft alloy forging that has been heat-treated and shot peened for improved cycle life, and features removable caps that simplify the installation. The universal joint cap attachment fasteners are drilled for safety wire locking. The yoke-shaft features a 1”-20 thread that increases strength. The hub is 4340 steel that is through-hardened heat treated with our austempering process. Wheel studs are an ARP product with a quick-start nut-aligning feature. Installation - Service instructions can be found on Service Bulletin #0114.

JAG-1000 JAG Rear Axle Hub Assembly 3700.00
Bolt in Kit for both sides, Utilizes OE 1410 size universal joints

Pantera Axles and CV Conversion



MW now has CV Joint conversion kit for Ford Pantera. This series 15 CV kit replaces the original U-Joint style half-shafts. Enjoy all the benefits of a CV joint style design, including, better handling, smoother operation, less binding, and an increased range of motion.

For a truly superior axle assembly, we have added a wheel and brake disc register to the axle. The CV to axle Flanges are compatible with the original half shafts and can be used for the CV upgrade. All stub axles are produced from 4340 heat treated with the M-W Austempering process.

The CV- Drive Shaft is produced from 300M, hardened and shot peened.

P-6000 Half-Shaft CV Conversion Kit 4317.75
Includes everything you need to convert to CV Joints.

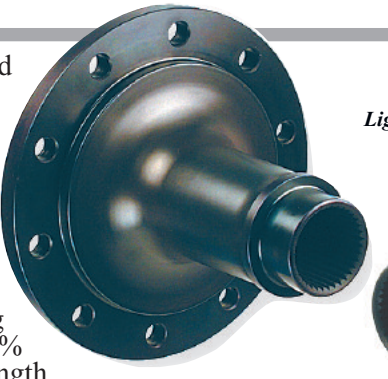
50510 Pantera Stub Axles (Pair) 1115.00
4340 8 spline stub axles per pair. Replacement axle with extended register for wheel and disc brake register.

50510

Steel Spools

All Mark Williams steel spools are precision machined from 4140 steel forgings and through hardened. The final grinding operation also ensures a near-zero runout on the ring mounting surface. MW spools also have an increased cross-section under the ring gear register to prevent ring gear deflection.

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.



53140
Standard Weight

53137
Lightweight

Standard Steel Spools

53120 35 Spline 8" Ford Spool 310.00
MW 35 spline. 10.5 lbs.

53132 35 Spline 8.8" Ford Spool 310.00
MW 35 spline. 14 lbs. Must use 57900 ring gear bolts.

53136 40 Spline 9" Ford Spool 310.00
For 3.250" bore case, requires 45 mm bore wheel bearing and matching housing ends. 11 lbs.

53140 35 Spline 9" Ford Spool 310.00
MW 35 spline. For stock 2.893" or 3.062" case. 11 lbs.

53144 31 Spline 9" Ford Spool 310.00
Stock type 31-spline. 12 lbs.

53146 35 Spline 9" Ford Spool 310.00
MW 35 spline For 3.250" bore case. 12 lbs.

53130 35 Spline 8.5 GM 10-Bolt Spool.* 310.00
MW 35 spline. For 1970 or later. 14 lbs.

53160 35 Spline 12 Bolt Chevrolet Spool * 310.00
MW 35 spline. 14 lbs.

53164 30 Spline 12-Bolt Chevrolet Spool * 310.00
Stock type 30 spline. 14 lbs. (limited stock)

53180 35 Spline 8-3/4" Mopar Spool 341.00
MW 35 spline. 14 lbs.

53186 30 Spline 8-3/4" Mopar Spool 341.00
Stock type 30 spline. 14 lbs.

53150 57-64 Olds-Pontiac 35 Spline 549.00
Stock type 35 MW spline. 14.2 lbs.

14B-SPL-30 14 Bolt GM 30 stock spline 549.00
Stock type 30 spline. 24.7 lbs.

14B-SPL-40 14 Bolt GM 40 spline 549.00
40 spline requires aftermarket spindles with increased bore 24.7 lbs.

14B-SPL-35 14 Bolt GM 35 Dana spline 549.00
Dana 35 spline . 24.7 lbs.

**** Requires C-Clip Eliminator kit or other axle retention method***

Lightweight Steel Spools

D1554F33 33 Spline 9" Ford Spool 319.00
Strange Engineering spool (not profiled)

53125 40 Spline 9" Ford Lightweight Spool 365.00
For 3.812" case bore and 1/2" ring gear bolts. 9.7 lbs

53127 40 Spline 9" Ford Lightweight Spool 365.00
For 3.812" bore case and 7/16" ring gear bolts. 9.7 lbs

53129 40 Spline Modular 12 Bolt LW Spool 365.00
MW 40 spline. 12.5 lbs.

53134 35 Spline 8.8 Ford Lightweight Spool 365.00
MW 35 spline. Must use 57900 ring gear bolts 11 lbs.

53137 40 Spline 9" Ford Lightweight Spool 365.00
For 3.250" bore case. 8.5 lbs.

53138 35 Spline 9" Ford Lightweight Spool 365.00
Summers Bros. type for 3.250" bore case. 9 lbs.

53145 35 Spline 9" Ford Lightweight Spool 365.00
MW 35 spline for 2.983 or 3.062 bore case. 8.75 lbs.

53147 35 Spline 9" Ford Lightweight Spool 365.00
Strange type for 3.250" bore case. 10.5 lbs.

53148 35 Spline 9" Ford Lightweight Spool 365.00
MW 35 spline for 3.250" case. 9 lbs.

53165 35 Spline12-Bolt Chevy LW Spool * 365.00
MW 35 spline. 11 lbs.

53175 35 Spline Dana 60 Lightweight Spool 549.00
MW 35 spline. 17 lbs.

53177 40 Spline Dana 60 Lightweight Spool 549.00
Requires 58505 bearings and proper housing ends. 16 lbs.

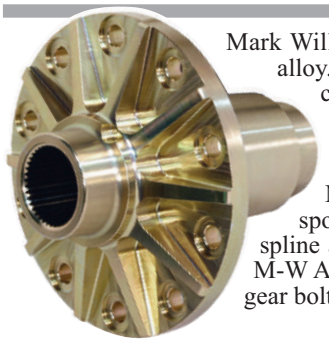
53187 35 Spline 8 3/4 Mopar LW Spool 365.00
MW 35 spline. 12.5 lbs.

53196 40 Spline 9" Ford Lightweight Spool 398.00
MW 40 Spline, 4.000" Bore Case. 10.16 lbs.

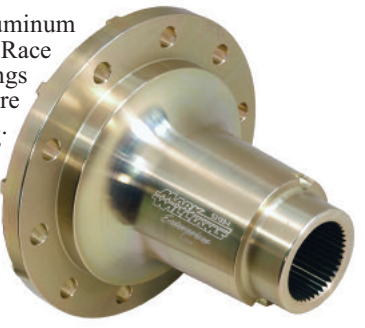
53265 35 Spline 12-Bolt Lightweight Spool* 365.00
MW 35 spline 3.250" bore carrier 11.1 lbs.

**** Requires C-Clip Eliminator kit or other axle retention method***

Aluminum Spools



Mark Williams offers spools manufactured from High Strength forged aluminum alloy. M-W aluminum spools are being used successfully in all Drag Race classes. They are machined from 7075-T6 aluminum alloy forgings and finished with the MW Gold Coat process. Aluminum spools are approximately half the weight of the profile milled steel spools. The 40-spline spools are available for 9" thru 10" Fords, 12" Modular as well as Dana 60 rears. Aluminum 9" Ford 40 spline spools must be used in a case with a 3.812" or 4.00" bore. The 35-spline aluminum 9" Ford spool requires a case with a 3.250" bore. All M-W Aluminum spools come with hardened washers used under the ring gear bolts to prevent deterioration of the bolt seat.



53133 9" Ford Aluminum Spool 473.00
MW 40 spline, for 3.812 bore case. 4.7 lbs

53135 9" Ford Aluminum Spool 473.00
MW 35 spline, for 3.250" bore case. 4.9 lbs.

53153 Olds/Pont '57-64 Aluminum Spool 550.00
35 Spline MW Spline 2.00 ID Bearing with hard bolt seat washers

53158 12-Bolt Aluminum Spool 654.00
**MW 35 spline, housing must be bored to 3.250". Includes 58925 shim kit and 53161A bearing kit. 5.3 lbs.*

53149 9" Ford Aluminum Spool 473.00
Strange 35 spline type, for 3.250" bore case. 4.9 lbs.

53166 12-Bolt Modular Aluminum Spool 473.00
MW 35 spline for 12-bolt modular housing, weight 5.2 lbs.

53174 Dana 60 Aluminum Spool 599.00
MW 40 spline, 45mm bore axle bearings and proper housing ends required. 8 lbs.

53179 8-3/4" Mopar Aluminum Spool 594.40
MW 35-spline, weight 5.2 lbs.

53104 12" Aluminum Spool 40 spline 776.00
4 series 3.70 to 5.83 ratio weight 11.8 lbs.

53108 12" Aluminum Spool 40 spline 776.00
3 series 2.91 to 3.20 ratio weight 11.8 lbs.

Locking Carriers

187S-13A

187S-17B

225S-40A

187S-35C

LOCKING DIFFERENTIALS are 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.

187S-13A 9" Ford 28 spline Locker 781.76

187S-17B 9" Ford 31 spline Locker 781.76

187S-35C 9" Ford 35 spline Locker 854.00
Nodular iron housing. Requires 3.250" bore case.

225S-23A Dana 60 Detroit Locker® 756.00
35 Spline for 4.56-7.17 ratio gears.

225S-40A Dana 60 Locker 699.00
40 Spline for 3.73-4.10 ratio gears

225S-40B Dana 60 Locker 699.00
40 Spline for 4.88-7.17 ratio gears

Billet Differential Carriers

C2-C3 Corvette

Modular 12"

MW manufactures steel billet Open and Posi-Traction carriers are made from 4140 chromoly. Carriers are available for the C2-C3 Corvette Eaton™ Posi that utilizes 12 Bolt interal axle and spider gears with a 30 tooth spline.

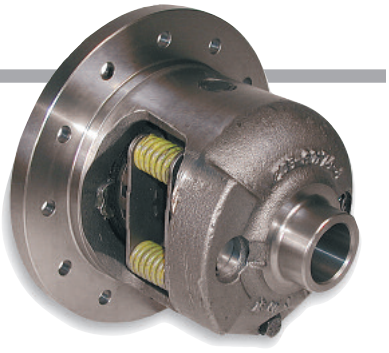
The 12" Modular Rear carrier features a 4 pinion spider gear design and is available with 40 or 35 spline axle side gears. The 12" carrier is also available for 2.91 and 3.20 ratios and 3.73 thru 5.83 ratios.

90030 Modular 12" Open Carrier, 40 spline 3240.00
Special 4140 billet housing and spider gears for 2.91-3.20 ratio gears.

90034 Modular 12" Open Carrier, 40 spline 3240.00
Special 4140 billet housing and spider gears for 3.73-5.83 ratio gears.

ACG-030 C2-C3 Posi-Traction Case 4200.00
4140 billet housing Replacement for 19670 Eaton (tm) Posi-Traction. Internal parts not included, but comes with spider pin.

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.

57311 9" Ford Posi-Traction 402.00
31 spline clutch O.E. type posi-traction.

19510 12 Bolt Eaton™ Posi-Traction 504.45
30 spline with 800 lb clutch preload. For 3.90-6.14 ratios.

19554 12 Bolt Eaton™ Posi-Traction (Series 3) . . .589.20
30 spline with 400 lb clutch preload. For 3.08 to 4.10 ratios.

19555 12 Bolt Eaton™ Posi-Traction 648.40
30 spline with 400 lb clutch preload. For 4.10 to 6.14 ratios.

19556 12 Bolt Eaton™ Truck Posi-Traction 648.46
400lb preload unit, 30-spline for 3.73 to 5.38 ratio.

19557 8.5 10 Bolt Eaton™ Posi-Traction 509.91
28 spline with 400 lb clutch preload. For 2.73 to 5.57 ratios.

19588 8.8 Ford Eaton™ Posi-Traction 615.63
31 spline with 400 lb clutch preload. For 3.08 and up ratios.

19603 8.2" GM Eaton™ Posi-Traction 510.32
28 spline with 400 lb clutch preload. For 3.08 and up ratios.

19670 Corvette C2-C3 Eaton™ Posi-Traction 510.32
17 spline with 400 lb clutch preload. For 3.08 -3.90 ratios.

Bearings 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 are manufactured with a ground shoulder to drive against, while the 12 point bolt heads are drilled to accept aircraft type safety wire. This method reduces the chance of the ring gear bolts "backing out".

FORD SPOOL MATING PARTS

53121 8" Ford Spool Bearings 52.36

53124 9" Ford Spool Bearings 3.812 O.D. 89.04

53126 9" Ford Spool Bearings 3.812 O.D. 184.00
To use a spool with 2" dia. journals in a 3.812 case

53131 8" Ford and 8.5" 10-Bolt Spool Bearings . .52.36

53141 9" Ford Spool Bearings, 2.893" O.D. 52.36

53142 9" Ford Spool Bearings, 3.062" O.D. 61.48

53143 9" Ford Spool Bearings, 3.250" O.D. 60.32

53197 9" Ford Spool Bearings, 4" OD Tapered .228.50

53210 9" Ford Spool Bearings 3.812 O.D. 172.24
Angular contact for 2.25 id x 3.812 od

53220 9" Ford Spool Bearings 4.00 O.D. 210.00
Angular contact for 2.25 id x 4.000 od

57510 Spool Shim Adapter, (pr) 48.15
To use a spool with 1.7" dia. journals in a 3.250" case

57570 Adjuster Adapter,(pr) 106.00
To adapt a 3.062" bearing to 3.250" bore case. MW case ONLY

57900 9" Ring Gear Bolt Set. 48.00
7/16"-20 threads, 12 point 3/4 hex, safety wire hole

57920 9" Ford Ring Gear Bolt Set 1/2-20 . . . . . .82.10

57940 Thin 9" Ford Ring Gear Bolt Set 1/2-20 . .82.10

GM SPOOL MATING PARTS

53151 '57-64 Olds/Pontiac Spool Bearings 72.31

53157 GM 12 Bolt Inner Carrier Shim, (ea) 30.00

53161 GM 12 Bolt Spool Bearings 72.36

53161A GM 12 Bolt Spool Bearings (for 53158) . .82.52

58900 MW G.M.12 Bolt Ring Gear Bolt Set 44.41

DANA 60 AND 8-3/4 MOPAR MATING PARTS

53171 Dana 60 Spool Bearings 99.00

56900 Dana 60 Ring Gear Bolt kit 40.00

53181 8-3/4" Mopar Spool Bearings 72.36

53900 8-3/4" Mopar Ring Gear Bolts 35.00

Ring and Pinion Gears

Mark Williams Enterprises, Inc. is one of the nation's largest warehouse distributors for several manufacturers. At any given time, you'll find hundreds of 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 listing of ring and pinion sets available at the publication time. Different vendors may introduce any additional ratios following this publication. Call 800-525-1963 for availability and pricing on items not listed.

•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.

"Increased Size Pro" Gears

These 9", 9 1/2" and 10" Ford gears are built specifically for ultra high horsepower drag racing applications from 9310 material. All available ratios (2.91 to 4.86) most have a large 35 spline shaft.

9" Ford Gear Notes

Case Clearance

While many new 9" gears are now manufactured for case 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. A gauge tool is available (57486) that checks the profile and gauges the interfering material if necessary.

Lubrication Depending on the housing capacity recommend using three to four quarts of MW-Torco GL-6 racing gear oil, SAE 85w140, Part number 55-0030, 1qt., The lube level should up to the pinion center. This is a non-synthetic lube with additional extreme pressure additives to prevent galling. We do not recommend synthetic lubricants for Drag Race applications. Oval Track applications require a baffle to prevent all the lube from becoming built up in the right axle housing tube. Our rear end filler bung and cap, part numbers 5015 & 5016 installed in the top of the housing make it easy to fill.

Pinion Bearing

If using a stock Ford front pinion bearing support, it must be the unit that has the HM89443 rear cone. Some standard pinion Pro Gears must use a HM89444 rear cone. This bearing has a larger radius that matches the increased radius in the pinion. Do not use the OEM pinion support with the M-88048 rear bearing. It will not stand the load and will fail destroying the gear set.

Recommended Pinion Supports

The recommended pinion support is our heavy duty Taper/Taper support part numbers 57620 for 28-spline input, or 57630 for 35-spline input. Both use larger Timken® bearings front and rear. The next step is the Ball/Taper support that has a lower preload and is capable of much higher RPM. Our tests have shown that this bearing combination has less pinion deflection than the double Timken® bearing units. This unit utilizes a Timken® front bearing with a angular contact bearing in the rear. The standard 28-spline pinion uses part number 57670 and the 35-spline pinion is 57680. The top on the line is our double angular contact 476XX series support utilizes two angular contact ball bearings for minimum drag and high RPM applications. An option for either of the units is a ceramic ball bearing option that is lighter and reduces the rolling friction. The 10" Ford gears require a 47679 or 57679 support as the mounting distance is greater.

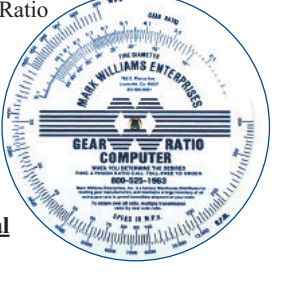
Double Angular Ball Bearing Support

The low friction 57022 32-spline input third members utilize a dual angular contact bearings in the pinion support, optionally with ceramic balls for further friction reduction. Additionally we now have a new series of pinion supports that have dual ball bearings with 28-splines (P/N 47675) and 35-splines (P/N 47680). Any of these supports can have the ceramic ball upgrade.

What Size Gear 9", 9-1/2" or 10"

Over the years we have strived to increase the durability for the 9" Ford type differential. In the early days the standard 9" diameter 8620 alloy ring and pinions were the only choice. Then the 9310 alloys were introduced with improved gear life. The next problem was twisting the pinion spline in two the with the Top Fuel cars of the day. Increasing the input spline to 35-splines solved that problem. The gears needed a size increase so the gear pitch diameter was increased a 9-1/2" patter. It's to be noted that the physical diameter of the ring gear is 9-1/4" Some of the edge material was removed to fit in the current aftermarket housings. The latest change is increasing the pitch diameter pattern to a 10" pattern. The actual ring gear measures 9-7/16" diameter. Another improvement was to change the balance of the ring gear tooth thickness to pinion gear thickness to balance the stresses. The pinion support for the 10" ring and pinions is different from the 9"-9-1/2" gears. This is to accommodate the larger distance from the ring gear center to the rear pinion bearing (mounting distance) on the larger 10" pattern.

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. Ratios can also be calculated on our web site at **www.markwilliams.com** click> **Technical** then click> **Calculators**.

9" Ford Gears

8620 Street/Oval Track Gears *'57-'73 Passenger Car - 'and Aftermarket Thirdmenbers*

DUE TO THE VOLATILITY IN THE RACING RING AND PINION MARKET, PLEASE CHECK WITH OUR SALES DEPARTMENT TO CONFIRM PRICE AND AVAILABILITY

429-0121	**2.91** 9" Ford Richmond Gear	.262.78
F890300	**3.00** 9" Ford Motive Gear	.334.25
629-0284	**3.25** 9" Ford Richmond Gear	.262.78
F890325	**3.25** 9" Ford Motive Gear	.307.50
429-0027	**3.50** 9" Ford Richmond Gear	.323.83
629-0195	**3.55** 9" Ford Richmond Gear	.280.65
629-0361	**3.70** 9" Ford Richmond Gear	.311.67
F890370	**3.70** 9" Ford Motive Gear	.314.84
F890389	**3.89** 9" Ford Motive Gear	.323.17
629-0177	**3.89** 9" Ford Richmond Gear	.220.96
F890411	**4.11** 9" Ford Motive Gear	.315.22
F890430	**4.30** 9" Ford Richmond Gear	.361.38
629-0161	**4.33** 9" Ford Richmond Gear	.348.99
629-0185	**4.56** 9" Ford Richmond Gear	.311.66
F890457	**4.57** 9" Ford Motive Gear	.323.04
629-0379	**4.63** 9" Ford Richmond Gear	.407.41
F890486	**4.86** 9" Ford Richmond Gear	.334.63
629-0067	**4.86** 9" Ford Richmond Gear	.350.98
F890500	**5.00** 9" Ford Motive Gear	.356.29
629-0360	**5.00** 9" Ford Richmond Gear	.376.64
F890514	**5.14** 9" Ford Motive Gear	.334.39
629-0068	**5.14** 9" Ford Richmond Gear	.350.82
F890529	**5.29** 9" Ford Motive Gear	.277.02
629-0270	**5.29** 9" Ford Richmond Gear	.302.96
F890543	**5.43** 9" Ford Motive Gear	.269.94
629-0069	**5.43** 9" Ford Richmond Gear	.283.72
F890567	**5.67** 9" Ford Motive Gear	.349.44
629-0070	**5.67** 9" Ford Richmond Gear	.349.44
F890583	**5.83** 9" Ford Motive Gear	.349.44
629-0288	**5.83** 9" Ford Richmond Gear	.356.56
F890600	**6.00** 9" Ford Motive Gear	.331.82
629-0199	**6.00** 9" Ford Richmond Gear	.349.11
F890620	**6.20** 9" Ford Motive Gear	.214.62
629-0290	**6.20** 9" Ford Richmond Gear	.387.82
F890633	**6.33** 9" Ford Motive Gear	.369.77
629-0276	**6.33** 9" Ford Richmond Gear	.387.82
F890650	**6.50** 9" Ford Motive Gear	.349.29
629-0197	**6.50** 9" Ford Richmond Gear	.387.82

9" Ford Pro Gears

9310 Drag Race Standard and Large Pinion 9" Pro Gears

Small Pinion is 1.313" dia. pinion stem 28 spline pinion
Large Pinion is 1.875 rear 1.500 from bearing 35 spline pinion

729-0001	**3.40** 9" Ford Richmond Pro LP 9310	.582.74
729-0002	**3.50** 9" Ford Richmond Pro LP 9310	.526.80
729-0003	**3.60** 9" Ford Richmond Pro LP 9310	.573.29
F990370BP	**3.70** 9" Ford Motive BP 9310	.635.10
F990389BP	**3.89** 9" Ford Motive BP 9310	.503.37
729-0043	**3.89** 9" Ford Richmond Pro LP 9310	.559.32
F990429SP	**4.29** 9" Ford Motive Small Pinion 9310	.659.74
729-0079	**4.29** 9" Ford Richmond Pro LP 9310	.529.95
729-0080	**4.57** 9" Ford Richmond Pro LP 9310	.529.95
F990457SP	**4.57** 9" Ford Motive Small Pinion 9310	.659.74
F990471SP	**4.71** 9" Ford Motive Small Pinion 9310	.581.56
729-0070	**4.71** 9" Ford Richmond Pro LP 9310	.490.54
F990486BP	**4.86** 9" Ford Motive BP 9310	.467.38
729-0066	**4.86** 9" Ford Richmond Small Pro 9310	.465.64
729-0078	**5.00** 9" Ford Richmond Small Pro 9310	.445.41
F990514SP	**5.14** 9" Ford Motive Small Pinion 9310	.501.99
729-0017	**5.14** 9" Ford Richmond Small Pro 9310	.412.96
729-0069	**5.29** 9" Ford Richmond Small Pro 9310	562.77
F990543SP	**5.43** 9" Ford Motive Small Pinion 9310	.501.99
729-0005	**5.43** 9" Ford Richmond Small Pro 9310	.537.47
F990567SP	**5.67** 9" Ford Motive Small Pinion 9310	.450.02
729-0007	**5.67** 9" Ford Richmond Small Pro 9310	.468.53
729-0019	**5.83** 9" Ford Richmond Small Pro 9310	.544.32
729-0023	**6.20** 9" Ford Richmond Small Pro 9310	.410.76
729-0054	**6.50** 9" Ford Richmond Small Pro 9310	.505.03

9-1/2" Ford Pro Gears

9310 Drag Race Large Pinion 9-1/2" Pro Gears

1.875" dia. pinion stem 35 spline pinion (unless noted otherwise noted))

DUE TO THE VOLATILITY IN THE RACING RING AND PINION MARKET, PLEASE CHECK WITH OUR SALES DEPARTMENT TO CONFIRM PRICE AND AVAILABILITY

U9.5F-3.25	**3.25**	9-1/2" Ford Toms Large Pinion	.990.00
U9.5F-3.40	**3.40**	9-1/2" Ford Toms Large Pinion	.990.00
U9.5F-3.60	**3.60**	9-1/2" Ford US-Toms Large Pinion	.990.00
U9.5F-3.70	**3.70**	9-1/2" Ford US-Toms Large Pinion	.990.00
729-0097	**4.11**	9-1/2" Ford Richmond Large Pinion	.713.95
07-995429	**4.29**	9-1/2" Ford US Gear Large Pinion	.449.47
729-0098	**4.29**	9-1/2" Ford Richmond Large Pinion	.721.54
U9.5F-4.86	**4.86**	9-1/2" Ford US-Toms Large Pinion	.990.00
U9.5F-5.14	**5.14**	9-1/2" Ford US-Toms Large Pinion	.990.00
729-0108	**5.00**	9-1/2" Ford Richmond Std. Pinion *28 spline standard pinion*	.683.15
729-0110	**5.11**	9-1/2" Ford Richmond Std. Pinion *28 spline standard pinion*	.744.44
729-0108	**5.00**	9-1/2" Ford Richmond Std. Pinion *28 spline standard pinion*	.683.15

9-1/2" MWE Low Friction Ford Gears

9310 Pro Stock 32 Spline Input

As used in the MW Low Friction 57022 Thirdmembers 45mm rear pinion bearing ID, 32 spline pinion. These gears are manufactured for MW by Velvet Drive, the original manufacturer for Richmond brand gears. The quality is the same as pre 2002 Richmond brand gears. The gears can be used in a Differential with the MW ball taper support with different spacers and a 32 spline pinion yoke. See catalog page 29 for the matching pinion support. These gears are available with Shot Peening and Supra-Fin finishing options (SFL).

MWE-511-	**5.11**	9-1/2" Low Friction Gear	.877.00
MWE-514	**5.14**	9-1/2" Low Friction Gear	.877.00
MWE-517	**5.17**	9-1/2" Low Friction Gear	.877.00
MWE-520	**5.20**	9-1/2" Low Friction Gear	.877.00
MWE-525	**5.25**	9-1/2" Low Friction Gear	.877.00
MWE-529	**5.29**	9-1/2" Low Friction Gear	.877.00
MWE-538	**5.38**	9-1/2" Low Friction Gear	.877.00
MWE-550	**5.50**	9-1/2" Low Friction Gear	.877.00

10" Ford Pro Gears

9310 10" Pitch Diameter Development (9.43 Physical Ring Diameter)

The latest strength improvement for the 9" Ford rears. Requires matching case and pinion front bearing support. Can be used in most 9" Housings with extra clearance modifications. All have 35 spline input and 1/2" ring gear bolts. Fits 9" spools for 1/2" ring gear bolts.

T10-370	**3.70**	10" Ford Tom's Gear	.1219.25
T10-389	**3.89**	10" Ford Tom's Gear	.1219.25
T10-411	**4.11**	10" Ford Tom's Gear	.1219.25
F910411	**4.11**	10" Ford Motive Gear	.1460.76
T10-429	**4.29**	10" Ford Tom's Gear	.1219.25
F910429	**4.29**	10" Ford Motive Gear	.1446.79
T10-457	**4.57**	10" Ford Tom's Gear	.1219.25
F910457	**4.71**	10" Ford Motive Gear	.1446.79
T10-500	**5.00**	10" Ford Tom's Gear	.1219.25
F910500	**5.00**	10" Ford Motive Gear	.1399.34
T10-514	**5.14**	10" Ford Tom's Gear	.1219.25
F910514	**5.14**	10" Ford Motive Gear	.1399.34
F910533M	**5.33**	10" Ford Motive Gear	.1442.62
F910537M	**5.37**	10" Ford Motive Gear	.1458.30
F910543	**5.43**	10" Ford Motive Gear	.1399.34

Gear Lightening

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. Some gears are factory lightened but we can remove additional weight in most cases.

LRG	Lighten ring gear. (with gear purchase)	.105.00

MW 12" Modular Gears

9310 Pro Gear Material *For 12" MW Modular Differential 14 ring gear bolts 9/16-18 thread* *2.167" rear bearing dia. 40 spline input*

729-0121	**2.91**	12" Modular Gear, Series 1 Spool 2800.00
729-0320	**3.20**	12" Modular Gear, Series 1 Spool 2800.00
729-0133	**3.70**	12" Modular Gear, Series 2 Spool 2800.00
729-0120	**3.89**	12" Modular Gear, Series 2 Spool 2800.00
729-0115	**4.11**	12" Modular Gear, Series 2 Spool 2800.00
729-0116	**4.29**	12" Modular Gear, Series 2 Spool 2800.00
729-0132	**4.44**	12" Modular Gear, Series 2 Spool 2800.00
729-0117	**4.57**	12" Modular Gear, Series 2 Spool 2800.00
729-0118	**4.71**	12" Modular Gear, Series 2 Spool 2800.00
729-0135	**5.00**	12" Modular Gear, Series 2 Spool 2800.00
729-0136	**5.14**	12" Modular Gear, Series 2 Spool 2800.00
729-0134	**5.43**	12" Modular Gear, Series 2 Spool 2800.00
729-0124	**5.83**	12" Modular Gear, Series 2 Spool 2800.00

Series 1 gears use 53104 Spool or 90030 Carrier, Series 2 Gears use 53108 Spool or 90034 Carrier

Special Gear Ratios are now available for the MW 12" Modular Rear! Call 1-800-525-1963 for more information.

8.8" Ford Gears

8620 Street Gears *1.626" dia. pinion stem 30 spline pinion*

07-888308	**3.08**	8.8" Ford US Gear 8620 . . . . . .175.58
2020743	**3.08**	8.8" Ford Spicer Gear 8620 . . . . . .176.78
F888355	**3.55**	8.8" Ford Richmond Gear 8620 . . . . .294.00
F888373	**3.73**	8.8" Ford Motive Gear 8620 . . . . . .288.66
F888390	**3.90**	8.8" Ford Motive Gear 8620 . . . . . .336.15
F888410	**4.10**	8.8" Ford Motive Gear 8620 . . . . . .288.41

GM Car 12 Bolt Gears

8620 Street Oval Track Gears *1.625" dia. pinion stem 30 spline pinion, 4 series*

429-0094	**3.08**	12 Bolt Car Richmond 3 series 342.61
429-0113	**3.42**	12 Bolt Car Richmond 3 series 298.72
G888342	**3.42**	12 Bolt Car Motive 3 series 318.92
429-0095	**3.55**	12 Bolt Car Richmond 3 series 297.59
429-0039	**3.73**	12 Bolt Car Richmond 3 series 298.96
G888373	**3.73**	12 Bolt Car US Gear 3 series 197.48
429-0096	**3.73**	12 Bolt Car Richmond 4 series 260.09
429-0040	**3.90**	12 Bolt Car Richmond 3 series 260.09
629-0304	**4.10**	12 Bolt Car Richmond 3 series 389.82
629-0031	**4.10**	12 Bolt Car Richmond 4 series 294.47
G888411	**4.11**	12 Bolt Car Motive Gear 4 series 272.25
629-0378	**4.33**	12 Bolt Car Richmond 4 series 367.33
G888456	**4.56**	12 Bolt Car Motive Gear 4 series 421.34
629-0306	**4.56**	12 Bolt Car Richmond 3 series 287.08
629-0032	**4.56**	12 Bolt Car Richmond 4 series 460.05
G888456	**4.56**	12 Bolt Car Motive 4 series 194.36
629-0033	**4.88**	12 Bolt Car Richmond 4 series 421.34
629-0034	**5.14**	12 Bolt Car Richmond 4 series 223.12
629-0035	**5.38**	12 Bolt Car Richmond 4 series 323.38
629-0037	**5.86**	12 Bolt Car Richmond 4 series• 323.80
629-0038	**6.14**	12 Bolt Car Richmond 4 series 320.39
83-1019		Installation Kit, GM Car 12 Bolt 161.21

3 series carriers 3.08 to 3.73

4 series carriers 3.90 and numerically higher

GM Car 12 Bolt Pro Gears

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

729-0099	**4.11**	12 Bolt Car Richmond Pro Gear . .405.18
729-0074	**4.33**	12 Bolt Car Richmond Pro Gear . . .411.11
729-0072	**4.56**	12 Bolt Car Richmond Pro Gear . .372.20
729-0064	**4.88**	12 Bolt Car Richmond Pro Gear . .372.01
729-0027	**5.14**	12 Bolt Car Richmond Pro Gear . .373.20
729-0029	**5.38**	12 Bolt Car Richmond Pro Gear• . .381.08
729-0031	**5.57**	12 Bolt Car Richmond Pro Gear• . .398.83
729-0033	**5.86**	12 Bolt Car Pro Gear• 339.24
83-1019		Installation Kit, GM Car 12 Bolt 161.21

**** Requires C-Clip Eliminator kit or other axle retention method***

Corvette C2-C3 '63 69 Gears

429-0097	**3.08**	Corvette C2-C3 . . . . . .423.22	V885370	**3.70**	Corvette C2-C3 . . . . . .315.66
429-0139	**3.36**	Corvette C2-C3 . . . . . .423.18	429-0031	**3.70**	Corvette C2-C3 . . . . . .409.96
V885355	**3.36**	Corvette C2-C3 . . . . . .403.93	429-0139	**3.90**	Corvette C2-C3 . . . . . .426.18
429-0021	**3.55**	Corvette C2-C3 . . . . . .423.14			

30 spline pinion for series 3 carriers or M/W ACG-030 Case

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 309.41	629-0204	**4.10**	GM Truck 12 Bolt - 4 series 303.50
429-0280	**3.73**	GM Truck 12 Bolt - 4 series 309.50	83-1018		Installation Kit, GM Truck 12 Bolt 131.70

3 series carriers 3.40 and numerically lower **4 series carriers 3.73 and numerically higher**

MW Hi-Efficiency Gears

Replacement gears for the 67410 series Hi-Efficiency Thirdmembers (High Pinion). Made from 9310 material with the same hypoid distance (and efficiency) as the Dana 60 rears. Requires MW pinion support, case, and spool to utilize. 32 spline input.

98-401	**4.77**	Hi-Efficiency Pro Gear 600.00	98-403	**5.67**	Hi-Efficiency Pro Gear 600.00
98-400	**4.86**	Hi-Efficiency Pro Gear 600.00	98-402	**5.71**	Hi-Efficiency Pro Gear 600.00
98-405	**5.00**	Hi-Efficiency Pro Gear 600.00	98-404	**5.83**	Hi-Efficiency Pro Gear 600.00
98-406	**5.50**	Hi-Efficiency Pro Gear 600.00			

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*

429-0101	**3.55**	8" Ford Richmond Gear 8620 . . . . .344.94	629-0065	**4.62**	8" Ford Richmond Gear 8620 . . . . . .256.45
429-0111	**3.80**	8" Ford Richmond Gear 8620 . . . . .340.36			

8" Ford Installation Kit 83-1015 Installation Kit, 8" Ford 123.96

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*

429-0129	**3.54**	Dana 60 Richmond Gear 495.79	629-0053	**4.56**	Dana 60 Richmond Gear 342.60
706033-1X	**3.54**	Dana 60 Spicer Gear 336.48	629-0054	**4.88**	Dana 60 Richmond Gear 342.60
429-0130	**3.73**	Dana 60 Richmond Gear 481.65	629-0057	**5.13**	Dana 60 Richmond Gear 342.60
706033-2X	**3.73**	Dana 60 Spicer Gear 428.03	706033-8X	**7.17**	Dana 60 Spicer Gear 373.87
629-0052	**4.10**	Dana 60 Richmond Gear 342.60			

Dana 60 Pro Gears

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 . . . . . .423.49	729-0013	**5.38**	Dana 60 Pro Gear 9310 . . . . . .392.53
729-0077	**4.56**	Dana 60 Pro Gear 9310 . . . . . .424.80	729-0041	**6.17**	Dana 60 Pro Gear 9310 . . . . . .451.41
729-0068	**4.88**	Dana 60 Pro Gear 9310 . . . . . .424.80			

Dana 60 Installation Kit 83-1034 Installation Kit, Dana 60 . . . . . .251.39

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"	.480.00
629-0045	**4.10**	8-3/4" Mopar Gear 1-3/4"	.257.75
629-0046	**4.30**	8-3/4" Mopar Gear 1-3/4"	.257.75
629-0047	**4.56**	8-3/4" Mopar Gear 1-3/4"	.257.75
629-0048	**4.86**	8-3/4" Mopar Gear 1-3/4"	.261.94
629-0145	**5.13**	8-3/4" Mopar Gear 1-3/4"	.246.15

83-5310-S	Installation Kit, 8 3/4" Mopar - 742	196.60	
83-1037	Installation Kit, 8 3/4" Mopar - 742	.196.36	

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"	.332.87
629-0058	**3.91**	8-3/4" Mopar Gear 1-7/8"	.308.92
629-0059	**4.10**	8-3/4" Mopar Gear 1-7/8"	.384.61
629-0060	**4.30**	8-3/4" Mopar Gear 1-7/8"	.290.81
629-0061	**4.57**	8-3/4" Mopar Gear 1-7/8"	.290.81
629-0062	**4.86**	8-3/4" Mopar Gear 1-7/8"	.293.89
629-0063	**5.13**	8-3/4" Mopar Gear 1-7/8"	.318.98
83-1031	Installation Kit, 8 3/4" Mopar - 489	.167.67	

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*

429-0278	**3.42**	GM 8.5" 10 Bolt	.331.92
429-0041	**3.73**	GM 8.5" 10 Bolt	.300.88
629-0165	**4.10**	GM 8.5" 10 Bolt	.354.55
629-0167	**4.56**	GM 8.5 10 Bolt	.332.12
629-0169	**4.88**	GM 8.5 10 Bolt	.332.12
629-0171	**5.13**	GM 8.5 10 Bolt	.331.62
83-1021	Installation Kit, GM 8.5" 10 Bolt	.131.70	

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

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" aluminum center section. The Richmond Gear video is designed for basic ring and pinion gear set-ups. The Richmond 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 DVD Video	.26.00
10098	MW 9" Ford Assembly DVD Video	.25.00