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

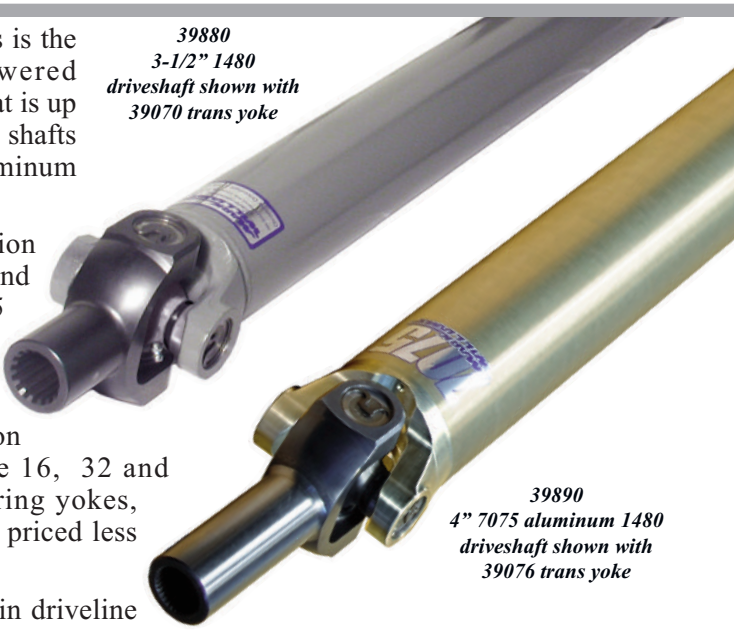
MARK WILLIAMS Enterprises®

1480 Aluminum & Chromoly Driveshafts

1480 series Drive Shafts, Transmission and Rear Yokes is the next step up for Pro-Mod and other High Powered combinations. The oversize joints create a driveshaft that is up to 40% stronger than 1350 series joints. The 1480 series shafts are available in 3-1/2" Chromoly and 4.0" 7075 Aluminum Accu-Bond™ shafts.

Pair either driveshaft with our 1480 series transmission yoke and pinion yokes for the ultimate in precision and strength. Steel pinion yokes are available for 9" Ford 35 spline pinion, GM 14 Bolt rears, and MW 12"40 spline pinion. Also we have Aluminum 7075 Pinion yokes for 9", 9-1/2",10" Ford 35 spline and MW 12"40 spline pinion. Mating U-bolt kits are required for the pinion yokes. Transmission yokes currently available are 16, 32 and 35-spline Lenco/B&J, 32-spline Liberty roller-bearing yokes, 32-spline Turbo 400, and 40 spline. Drive Shafts are priced less transmission yoke.

MW has raised the bar again for quality and strength in driveline products.



39880
3-1/2" 1480 driveshaft shown with 39070 trans yoke

39890
4" 7075 aluminum 1480 driveshaft shown with 39076 trans yoke

39880 3-1/2 1480 Chromoly Driveshaft 730.00
3.5" x 0.083" wall chromoly tubing. With cold forged precision 1480 universal joints and balancing,(Trans yoke sold separate). Meets SFI 43.1

39890 7075 Driveshaft 1670.00
Accu-Bond™ 4" O.D. x .100" 7075 aluminum tube, MW billet 7075-T6 end yokes and cold forged precision 1480 series U-joints. (Trans yoke sold separate) Meets SFI 43.1

1480 Series Transmission Yokes

Mark Williams Heavy Duty 1480 series transmission yokes are 100% machined from hot-forged chromoly. The Heat-treat hardness is compatible for use in roller bearing tail housing transmissions. Shot Peening after heat-treating gives a added fracture resistant durability.

Similar to our 1350 series yokes, they feature the same Patented Reduced Mass™ profile with the larger 1480 U-joint that is 40% stronger than standard 1350 U-joints. These yokes are designed for high power applications where strength is more important than the assembly's weight. Matching pinion yokes are available for popular differential applications.

39076
Turbo 400

39070 MW 1480 Series Transmission yoke 409.00
16-spline, Lenco and G-Force, 1480 joint, D=4.50"

39071 MW 1480 Series Transmission yoke 409.00
32-spline, Lenco , 1480 joint, D=4.50"

39074 MW 1480 Series Transmission yoke 409.00
32-spline, Liberty, Jerico 1480 joint, D=6.15"

39076 MW 1480 Series Transmission yoke 409.00
32-spline, Turbo 400, 1480 joint, D=6.15"

39176 MW 1480 Series **Rapid Release** Transmission yoke 442.00
32-spline, Turbo 400, 1480 joint, D=6.15"

39079 MW 1480 Series Transmission yoke 409.00
35-spline, Lenco, 1480 joint, D=4.25"

39095 MW 1480 Series Transmission yoke 35 spline 409.00
35 spline Liberty Trans 1.9685" barrel, 1480 joint, D=6-1/8"

Internal Slip 7075 Driveshaft

Mustang GT500 Driveshaft

The MWS series (Mark Williams Slip) shafts were designed for the Mustang GT500 and similar models. This replaces the two-piece steel shaft that cannot handle the torque and 150+ mph speeds, and eliminates the center driveshaft support bearing with the internal slip feature. This MWS-500 shaft is made with the exclusive Gold Finish 7075 aluminum material, which is both stronger and lighter than common aluminum driveshafts, making it able to perform under the stresses where the two-piece steel shafts fail. The MW patented boding process is used to join the end fittings, proving much stronger than the standard welding method. This shaft is made to match any Mustang transmission (automatic or stick shift) and differential flange with a 2" male pilot and ½" bolts on a 3" center square bolt pattern. Cars equipped with 9" Ford differentials can take advantage of this shaft using a 1350 series universal joint pinion yoke or our new Generation III 9" Ford pinion flange connection system. These shafts utilize precision Spicer 1350 universal joints and are Hi-Speed balanced to G30 specifications. The shaft run out is closely controlled. In addition, each shaft is torsion tested for additional quality assurance . Different shaft flange yoke combinations are available for attachment to different transmissions and differentials. Specific models can be designed for other applications.

MWS-500
Mustang Shaft

Optional
39082
9" Pinion
Flange

U.S. Patent # 7,485,045 B2

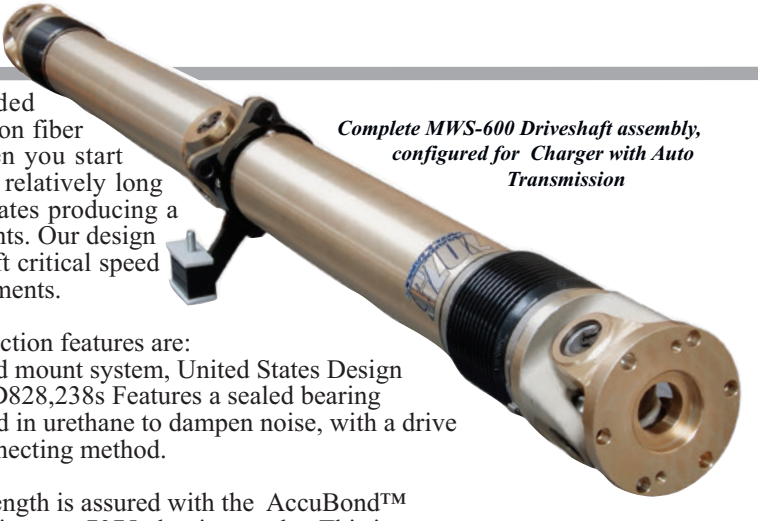
MWS-500 GT500 Driveshaft, Internal Slip 2199.00
with 2 shaft flange yokes

MWS-509 Driveshaft, Internal Slip 1866.00
with 1 shaft flange yoke

MWS-510 Driveshaft, Internal Slip 1716.00
Without flange yokes utilizes standard 1350 end yokes

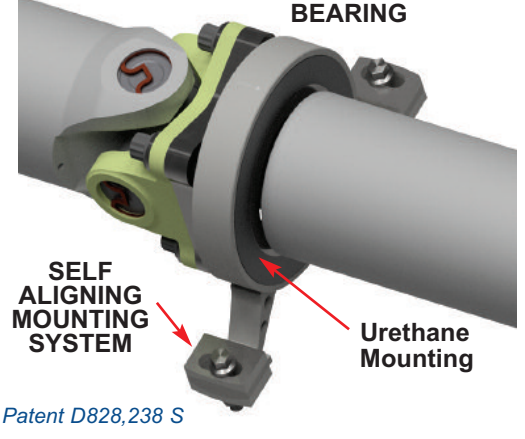
Hellcat Driveshaft

The Dodge Challenger and Charger SRT Hellcat needed some help in the driveshaft department. The factory carbon fiber shaft is a nice part but not up to the requirements when you start modifying the power output. The fact that this car has a relatively long distance from the transmission to the differential eliminates producing a one-piece shaft for high speeds and high RPM requirements. Our design utilized the two-piece construction as dictated by the shaft critical speed requirements.



Complete MWS-600 Driveshaft assembly, configured for Charger with Auto Transmission

39157



Patent D828,238 S

Construction features are:
A ridged mount system, United States Design Patent D828,238s Features a sealed bearing mounted in urethane to dampen noise, with a drive lug connecting method.

The strength is assured with the AccuBond™ connection to a 7075 aluminum tube. This is our offering for the strongest high RPM capable driveshaft for the Hellcat.

MWS-600 Hellcat Challenger Driveshaft Assy 4377.00
Hellcat Challenger Manual Transmission

MWS-601 Hellcat Driveshaft Assembly 4790.00
Charger Automatic Transmission

MWS-604 Hellcat Driveshaft Assembly 4640.00
Automatic Transmission with 9" Rear

Mark Williams Enterprises®

Transmission Yokes

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. All models are thru hardened heat treated to over 200k PSI that is compatible with roller bearing tail housings. All transmission yokes receive Shot Peen process as an extra precaution preventing surface crack formation. U-joint cup bores are line-honed to exact limits and the bearing-bushing/seal surface machined with special fixtures assuring concentricity with the spline pitch diameter. An added steep is the retaining ring surfaces are trimmed to assure an exact fit for the u-joint.

MW First!
O-Ring Plug Seal

Like all MW product's they are laser engraved with part numbers and batch numbers that allow complete trace-ability. An end of spline sealing is with an o-ring seal with a tapered retaining ring that forces a aluminum plug against the seal. This improved method has proven to eliminate fluid seepage.
Please note that there is a difference in diameters between a needle bearing tail housing, and a bushed tail housing, for same brand transmissions. Nobody goes thru all these steps to produce the highest quality Transmission Yokes as Mark Williams.

39002 MW Chrysler Transmission Yoke 235.00
30 spline, for 1350 series U joint. Mopar, Doug Nash and Liberty trans. for bushing 1.680" Diameter, "D" = 6-1/8"

39004 MW Turbo 400 Transmission Yoke 235.00
32 spline, for 1350 series U joint. Turbo 400 and Super T-10 trans. 1.886" barrel for roller or bushing "D" = 5-3/4" 1.886" Dia

39005 MW Powerglide Transmission Yoke 235.00
27 spline, for 1350 series U joint. Powerglide and Turbo 350 trans. for bushing 1.5035 diameter "D" = 5-13/16"

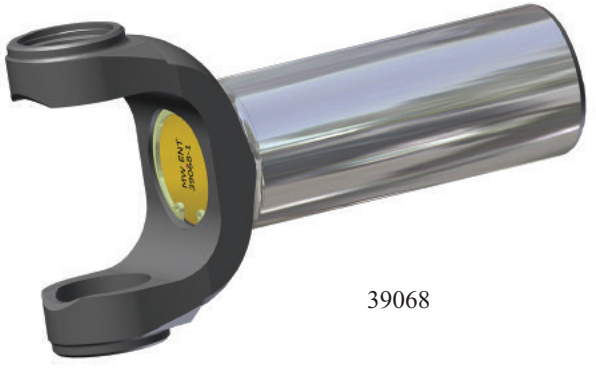
39013 MW Lenco Transmission Yoke 235.00
32 spline, for 1350 series U joint. Lenco trans. For exposed output shaft."D" = 4"

39015 MW Lenco Transmission Yoke 235.00
16 spline, for 1350 series U joint. Lenco trans. For exposed output shaft."D" = 4"

39020 MW C-6 Ford Transmission Yoke 235.00
31 spline, for 1350 U joint. C-6 & Toploader Transmissions. For bushing 1.6845" Dia "D"=6-1/8"

39021 MW Lenco Transmission Yoke 235.00
35 spline, for 1350 series U joint. Lenco trans. For exposed output shaft."D" = 4"

39022 MW Ford C-4 Transmission Yoke 235.00
28 spline, for 1350 series U joint. C-4 trans. For bushing 1.6845 diameter" D" = 5-13/16"



39068

39031 MW 904 Torqueflight 235.00
26 Spline, for 1350 Series U joint, 904 Torqueflight, For bushing 1.559" diameter "D=6-1/8"

39040 MW G-Force Transmission Slip Yoke 235.00
16 spline, for 1350 series U joint. G-Force or Lenco trans. For exposed output shaft. "D" = 3 1/2"

39060 32 Spline Aftermarket Trans. Yoke 235.00
32 spline, for 1350 series U joint. . G-Force or Lenco trans. For exposed output shaft "D" = 3 1/2"

39032 Mopar-Liberty Slip Yoke 235.00
30 spline. Liberty trans. for roller bearing 1.750" Diameter "D"=6-1/8"

39034 32 Spline Aftermarket Trans. Yoke 235.00
32 spline. Jerico and G Force trans. 1.885" diameter mostly bushing but some manufactures roller bearing "D" = 6-1/8"

39035 Powerglide Slip Yoke 235.00
27 spline. Powerglide for needle bearing 1.500 Diameter Tail-Housing. "D" = 5-13/16"

39057 32 Spline Aftermarket Trans. Yoke 235.00
32 Spline, Jerico for roller bearing 1.888" Diameter. "D" = 6-1/8"

39068 32 Spline Aftermarket Trans. Yoke 235.00
32 Spline, for roller bearing 1.888" Diameter. "D" = 6-7/16" Two splines omitted , side fit splines 1.888" barrel Diameter

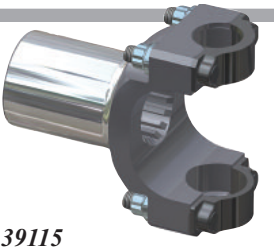
39057-TP

This handy tool keeps transmission gear lube from exiting the transmission when removing your driveshaft between runs. It has a knurled end for turning the output shaft to realign the clutch. Fits all 32 spline transmissions with 1.885-1.888 " seal diameter. (Liberty, Jerico, & Richmond manual transmissions.) Will also work as a plug in the Turbo 400 and 4L80 automatic transmissions. Installation - Service instructions can be found on Service Bulletin #0037.

39057-TP Trans Cap & Alignment Tool 55.00

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 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.



39115

39105

39102 Mopar Rapid Release Yoke 437.00
30 spline. Mopar, Doug Nash and Liberty trans. "D"=6-1/8"

39104 Turbo 400 Rapid Release Yoke 437.00
32 spline. Turbo 400 and Super T-10 trans. "D"=5-3/4"

39105 Powerglide Rapid Release Yoke 437.00
27 spline. Powerglide and Turbo 350 trans. "D"=5-13/16"

39113 Lenco Rapid Release Yoke 437.00
32 spline. Lenco trans. "D"=4"`

39115 Rapid Release Yoke 437.00
16 spline. Lenco trans. "D"=4"

39120 Ford Rapid Release Yoke 437.00
31 spline. C-6 and Toploader trans. "D"=6-1/8"

39135 Dedenbear PG Rapid Release Yoke 437.00
27 spline. Powerglide trans. with Dedenbear Tail-Housing Roller bearing 1.500 diameter "D"=5-13/16"

39157 Quick Release 32 Spline Roller Bearing . . .437.00
32 spline. Roller bearing with 1.888" diameter D"=6-7/16"

39110 Replacement Steel Caps, Bolt on *(pr)* 80.00
For pre 2016 yoke with threaded holes.

39112 Replacement Steel Caps, Gen II, stud *(pr)* . .97.00

39110

39112

Pinion Yokes

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. Every MW pinion yoke can use conventional Spicer 3/8" diameter U-bolts, or the new 2nd Gen™ alloy steel kit to retain the U-joint.

39011

39003 MW 8.5" GM 10 Bolt Pinion Yoke 215.00
30 spline, for 1350 series U joint. "B" = 3-3/16"

39006 MW GM 12 Bolt Pinion Yoke *(long)* 215.00
30 spline, for 1350 series U joint. "B" = 3-7/8"

39038 MW GM 12 Bolt Pinion Yoke *(short)* 204.00
30 spline, for 1350 series U joint. "B" = 2-7/8" Recommended yoke

39008 MW 9" Ford Pinion Yoke, 28 spline 195.00
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 210.00
35 spline, for 1350 series U joint. "B" = 3-7/8"

39014 MW Dana 60 Pinion Yoke 195.00
29 spline, for 1350 series U joint. "B" = 3-1/32"

39016 MW 8-3/4" Mopar Pinion Yoke 210.00
10 spline, for 1350 series U joint. "B" = 3-1/2"

39018 MW '57-'64 Olds/Pontiac Pinion Yoke 195.00
13 spline, for 1350 series joint. "B" = 3.160"

39023 MW 8.8" Ford Pinion Yoke 195.00
30 spline, for 1350 series U joint. "B" = 3-9/32"

39037 MW 12" Rear 270.00
40 Spline, for 1350 Series U-Joint "B"=3.830"

39025 MW 9" Pinion Yoke 1330 series Joint 195.00
*28 spline for MW support, **1330 Ford joint** (3-5/8 X 1-1/8") "B"=3-1/2"*

39083 14Bolt GM Truck 1410 series joint 304.00
30 spline for early GM Truck used in Rock Bouncer

Billet Aluminum Yokes

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. "B"= 3-7/8"

39911 MW Aluminum 9" Ford Pinion Yoke 295.00
35 spline, for 1350 series U joint. "B"= 3-7/8"

39936 Low Friction 9" Ford Pinion Yoke 295.00
32 spline, for 1350 series U joint. B"= 3-7/8" This is the aluminum yoke used with the 57022 series Thirdmembers and the MWE-XXX 9-1/2" Gear sets.

39972 9" Ford Pinion Yoke 1480 Joint 325.00
35 spline, for 1480 series U joint. B"= 3-7/8" for 9",9-1/2", Gear sets.

39973 12" Modular Pinion Yoke 1480 Joint 325.00
40 spline, for 1480 series U joint. B"= 3-7/8" for 11", Gear sets.

39973 1480 Joint

39908 1350 Joint

All MW aluminum yokes are CNC machined from 7075-T6 billet materials and have the MW Gold Coat process. These 1350 series pinion yokes mate to the 39912 Gen II and1480 Joint, 39075 U-Bolt kits. (Page 73)

1480 Series Pinion Yokes

39073 w/ 39075 Billet Caps.

39972 w/ 39075 Billet Caps.

MW Extra Heavy Duty pinion yokes are precision machined from Alloy Heat-Treated steel forgings. They feature a 1480 series U-joint that is 40% stronger than the standard 1350 U-Joints. Special fixtures ensure that every yoke runs concentric to the splines. Shot Peened for surface strength improvement. For extra strength, the 39075 Billet Steel Cap Kit is required rather than replace standard straps.

39072 MW 1480 Series 9" Ford Pinion Yoke 339.00
35 spline, for 1480 series U-Joints B=3-7/8"

39073 MW 1480 Series 12" Pinion Yoke 339.00
40 spline, for 1480 series U-Joints B= 3-7/8"

39084 MW 1480 Series 14 Bolt GM Pinion Yoke 339.00
30 spline, for 1480 series U-Joints B= 3.7" early 14 Bolt GM Truck

39075 Cap Kit for 1480 Series Yokes 129.00
Billet steel cap kit for 1480 series pinion yokes

39972 MW 1480 Series Aluminum 9" Ford Pinion Yoke 325.00
35 spline, for 1480 series U-Joints B=3-7/8"

39973 MW 1480 Series Aluminum 12" Pinion Yoke 325.00
40 spline, for 1480 series U-Joints B= 3-7/8"

Oval Track Yoke & Pulley

39053-1 9" Oval Track Yoke Short 320.00
9" Ford 28-spline. "B"=3-9/16" Nickel Plated.

39063 9" Oval Track Yoke, Short 206.00
9" Ford 28-spline. "B"=3-9/16" Nickel Plated. For billet caps.

39064 9" Oval Track Yoke, Long 196.00
9" Ford 28-spline. "B"=3-7/8" For 39111 billet caps.

39924-1 9" Oval Track Aluminum Long 295.00
9" Ford 7075-T6 billet, 28-spline. "B"=3-7/8" with Threads.

U-Bolts & Options

39111 Billet U-Bolt Kit for NASCAR 97.00
Billet caps with studs and 12 point nuts (pr).

39053-2 V- Belt Pulley Installed on above Yoke 35.00
Pulley installed for driving oil cooler system pumps

39027 Strap Bolt on U-Joint Caps 14.70

MW Oval Track yokes are machined from 4340 forgings and designed to use Spicer 1350 U-joint and straps or MW U -bolt kit. V-belt pulleys are optional. These yokes are designed for Daytona type pinion supports or MW's 57690 nodular iron ball bearing support (yokes must be modified if used with any other MW support). Two new yokes accept a U-

39064 shown with 39111 billet caps

39024 w/strap kit and optional 39053-2 pulley

Off-Road Driveline Components

With the increased popularity of off road events M/W is proud to offer several drive line products. For the Atlas transfer case we have yokes and CV flanges. For the 14 Bolt pinion yokes and CV flanges. Look for new problem solving products for you're off road drivelines in the future.

39086

39085

39332 Series 21

39334 Series15 CV

39385 for Spicer Flange

39086 Atlas Transfer Yoke 304.00
32-spline. 1350 Spicer Joint size

39087 Atlas Transfer Yoke 304.00
32-spline. 1410 Spicer Joint size

39088 Atlas Transfer Yoke 304.00
32-spline. 1480Spicer Joint size

39084 GM Truck14 Bolt Pinion Yoke 339.00
30-spline. 1480 Spicer Joint size

39085 GM Truck14 Bolt Pinion Yoke 304.00
30-spline. 1350 Spicer Joint size

39331 Pinon CV flange 930 Size 384.00
35-spline. for 930 Series 15 CV Joint

39332 Pinon CV flange 934 Size 384.00
35-spline. for 934 Series 21CV Joint

39334 Atlas CV flange 930 Size 384.00
32-spline. for Series 15 CV Joint

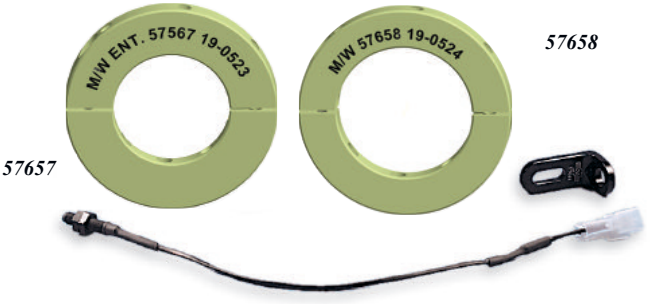
39335 Atlas CV flange 934 Size 384.00
32-spline. for Series 21 CV Joint

39385 Pinon 4 bolt U-Joint flange 204.00
for Spicer 4 Bolt up flange 4-3/4" square

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 8 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. 57656 has a 2.375 I.D. Most MW yokes and couplers are designed to use one of these collars. Specify number of magnets required. 1,2 4 or 8

57640	Assembly Std Pinion *(collar & bracket)*	145.00
57641	Bracket for 9" Ford Thirdmember	21.20
57646	Assembly Lrg. Pinion *(collar & bracket)*	145.00
57658	Magnet Ring 8 mag *(lrg pinion)* 2.187" I.D.	125.16
57643	Magnet *(1/4" dia. x 1/4" long)*	2.75
57644	Proximity Sensor Assembly	75.00



57658

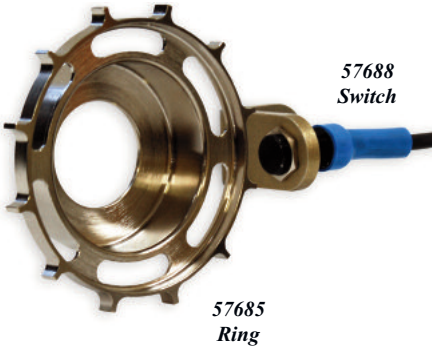
57657

High Resolution Hall Effect Sensor

The Mark Williams hall effect driveline sensor features a lightweight, nickel plated trigger ring and a solid state pickup. 12 pulses per revolution deliver accuracy 3 times higher than a 4 magnet system, and the system is less prone to errors due to vibration. The kit includes everything needed to install the system on a 9" Ford, including the bracket and updated seal.

57685 12 Point Hall Effect Sensor Ring *Fits 28 spline 9" Ford pinion, includes seal*	150.00
57686 12 Point Hall Effect Sensor Ring *Fits 32 spline low drag 9" Ford pinion (MW), includes seal*	150.00
57687 12 Point Hall Effect Sensor Ring *Fits 35 spline 9" Ford large pinion, includes seal*	150.00
57688 Hall Effect Sensor Switch *Fits 9" includes bracket*	118.00

Older RacePak units may not be compatible without an update from RacePak.



57688 Switch

57685 Ring

Balancing

Hi-Speed Balancing

Many of our driveshaft improvement is result in utilizing use of our highly sophisticated balancing machine This enables Mark Williams Enterprises technicians to accurately balance shafts that simulate operating conditions. The device features a built-in "dyno" that can place loads on the shaft and is adjustable to universal joint operating angle The 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. This equipment is used on all driveshafts manufactured by Mark Williams Enterprises. Mark Williams quality check and balance any existing 1350 or 1480 series universal shaft, regardless of manufacturer, for a nominal fee.

BAL	Straighten and High Speed Driveshaft Balance	125.00
BAL-SPIN	Spin Test and Balance to NASCAR Specifications	145.00

MARK WILLIAMS Enterprises®

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 alloy steel and hardened by MW's Austempering heat treat process. 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 Ford C-4 Transmission Coupler 231.65
28 spline, male, Ford C-4 trans. 5-3/4" long

40350 Ford C-6 Transmission Coupler 205.00
31 spline, male, Ford C-6 trans. 5-3/4" long

40550 Mopar Transmission Coupler 205.00
30 spline, male, Jerico or Liberty trans. 5-3/4" long

40600 Lenco Transmission Coupler 106.00
16 spline, male, Lenco trans. 2-7/8" long

40610 Lenco Transmission Coupler 122.00
16 spline, male, Lenco trans. 3-7/8" long

40620 Lenco Transmission Coupler 160.00
16 spline, female, Lenco trans or 16 spline driveshaft.

40640 Lenco Transmission Coupler 160.00
32 spline, female, Lenco trans or 32 spline driveshaft.

40650 Male Coupler Ring Gear 67.00
20 tooth gear with 1.650 bore (for making special couplers).

40660 Lenco Transmission Coupler 164.00
35 spline, male, Lenco trans. 6" long

40700 Turbo 400 and B&J Trans Coupler 164.00
32 spline, male, Turbo 400 or B&J trans. 3-7/8" long

40711 Turbo 400 and B&J Trans Coupler 182.00
32 spline, male, Turbo 400 or B&J trans. 6-3/4" long

40780 Lenco Transmission Coupler 164.00
32 spline, male, Lenco trans. 3-7/8" long

40800 Powerglide Transmission Coupler 145.00
27 spline, male, Powerglide or 350 trans. 3-7/8" long

40805 Powerglide Transmission Coupler 145.00
27 spline, male for Dedenbear Tail Housing. 3-7/8" long

40810 Powerglide, Transmission Coupler 205.00
27 spline, male, Powerglide or 350 trans. 6 3/4" long

40820 Powerglide, Transmission Coupler 245.00
27 spline, male, Powerglide or 350 trans. 8" long

40830 Powerglide, Trans Coupler, with 4.5" Gap 265.00
27 spline, male, Powerglide or 350 trans, includes lock ring, sleeve & coupler

40900 Driveshaft Connector 66.00
16 spline, Lenco transmission and solid driveshafts.

40950 Driveshaft Connector 66.00
32 spline, Lenco transmission and solid driveshafts.

40951 Driveshaft Connector 66.00
32 spline, B & J transmission and solid driveshafts.

40960 Driveshaft Connector 92.50
40 spline, Transmission and solid driveshafts.

40980 Driveshaft Connector 86.00
35 spline, Lenco transmission and solid driveshafts.

Shaft to Coupler Lock Rings

40601 Coupler Lock Ring *(aluminum)* 44.81
Fits 1 3/8" 16 or 32 spline trans output or splined shaft. 1 pc.

40602 Coupler Lock Ring *(steel)* 42.40
Fits 1 3/8" 16 or 32 spline trans output or splined shaft. 2 pc.

40603 Coupler Lock Ring *(aluminum)* 43.43
Fits 1 3/8" 16 or 32 spline trans output or splined shaft. 2 pc.

40605 Coupler Lock Ring *(steel)* 40.00
Fits 1 1/2" 35 spline trans output or splined shaft. 2 pc.

40836 Coupler Lock Ring for 40 spline O.D.*(steel)* 45.30
Fits 40 spline 1.708" diameter used in Quick Disconnect Coupler assy.

Pinion Couplers

40000 9" Ford Pinion Coupler 182.00
35 spline, female, 9" Ford large pinion.

40040 9" Ford Pinion Coupler 215.00
40 spline, female, 9" Ford TF pinion.

40045 11" Modular Pinion Coupler 215.00
40 spline, female, 11" Modular pinion.

40050 Blank Female Pinion Coupler 140.00
No internal splines, No heat treat

40060 9" Ford Pinion Coupler 215.00
32 Spline, female, Low Friction Thirdmember

40100 9" Ford Pinion Coupler 164.00
35 spline, male, 9" Ford large pinion.

40200 '49-'50 Olds-Pontiac Pinion Coupler 208.00
10 spline, female.

40250 '57-'64 Olds-Pontiac Pinion Coupler 208.00
13 spline, female.

40300 9" Ford Pinion Coupler 182.00
28 spline, female, 9" Ford standard pinion.

40400 Dana 60 Pinion Coupler 182.00
29 spline, female.

40500 8-3/4" Mopar Pinion Coupler 192.00
10 spline, female.

40630 Quick Change Pinion Coupler 182.00
10 spline, female.

40750 12-Bolt Chevrolet Pinion Coupler 182.00
30 spline, female.

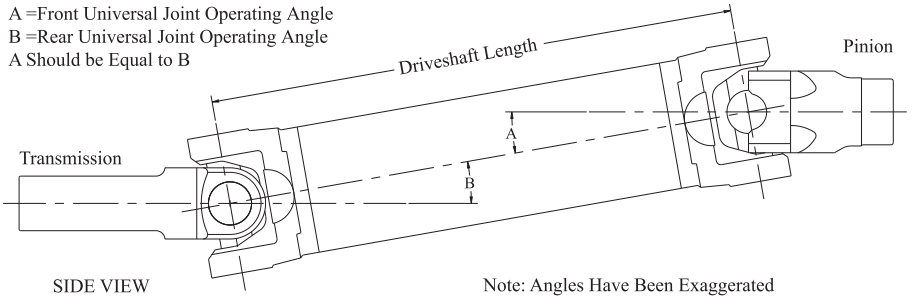
49300 9" Ford Aluminum Pinion Coupler 276.00
Made from 7075 Aluminum. Similar to 40300. 28 Spline, female. 9" Ford standard pinion. ***Note: Limited service life.***

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 (ØA) should be kept as parallel as possible to the pinion centerline (ØB). 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

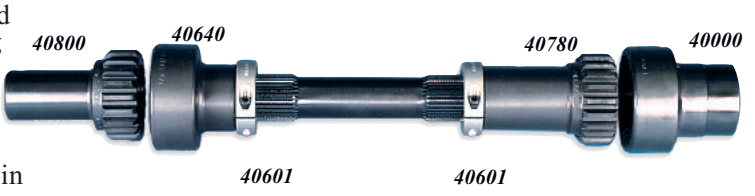
MW Part Number	44"	46"	48"	50"	52"	54"	56"	58"	60"
39155 4.0" Carbon Fiber	14173	12940	11860	10910	10070	9320	8650	8060	7521
39550 4" Bonded 7075	10620	9700	8890	8170	7540	6980	6480	6040	5630
39555 3.5" Bonded 7075	8590	7850	7190	6620	6110	5660	5250	4890	4570
39600 3.0" Mild Steel	7860	7170	6570	6050	5580	5170	4800	4470	4170
39640 4" Mild Steel	10460	9560	8760	8060	7440	6890	6400	5960	5560
39650 3.5" Mild Steel	9210	8410	7710	7090	6550	6060	5630	5240	4890
39800 3" 4130 Steel	7960	7270	6660	6130	5660	5240	4860	4530	4220
39850 3.5" 4130 Steel	9230	8430	7730	7110	6570	6080	5650	5260	4910
39860 4" DOM Mild Steel	10470	9560	8770	8070	7450	6900	6410	5970	5570
39880 3.5" Chromoly 1480	9320	8510	7800	7170	6620	6130	5690	5300	4940
39890 4" 1480 Bonded 7075	10620	9700	8890	8170	7540	6980	6480	6040	5630
39985 3.5" Bonded 6061	9050	8260	7580	6970	6430	5960	5530	5150	4810
39990 4" Bonded 6061	10460	9540	8750	8050	7430	6870	6380	5940	5540

Critical Speeds of MW Driveshafts in RPM'S
Lengths are centers of U-Joints

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.

Solid Driveshafts

MW solid driveshafts are for vehicles with solid mounted rear ends where a single coupler is not long enough. These shafts are available in stocked lengths from 6" to 28" long. All shafts are machined out of 4340-alloy steel. All shafts are, micro polished, and heat-treated with MW's austempering process. All shafts receive a black oxide finish. Standard shafts in stock are: 1-3/8-16 straight key, 1-3/8-32 involute spline and 1-1/2-35 involute splines. Shafts over 12" have 4 full inches of spline on each end and can be shortened up to 2" on each end. Couplers and spline shafts should not be used unless perfect alignment is assured. Critical speed calculations must be considered for these shafts. Call with your numbers to confirm the RPM critical speed value. MW can also build custom solid driveshafts to your specs with different splines upon request.



Typical Powerglide to 9" Ford set-up with 32 spline shaft

16 Spline Driveshafts

41000-06 F/C Driveshaft, 16 Spline 6" Long 170.00
41000-08 F/C Driveshaft, 16 Spline 8" Long 185.00
41000-12 F/C Driveshaft, 16 Spline 12" Long 207.00
41000-14 F/C Driveshaft, 16 Spline 14" Long 215.00
41000-16 F/C Driveshaft, 16 Spline 16" Long 242.00
41000-20 F/C Driveshaft, 16 Spline 20" Long 255.00
41100-24 F/C Driveshaft, 16 Spline 24" Long 265.00
41100-28 F/C Driveshaft, 16 Spline 28" Long 276.00
41100-32 F/C Driveshaft, 16 Spline 32" Long 299.00

32 Spline Driveshafts

41050-06 F/C Driveshaft, 32 Spline 6" Long 170.00
41050-08 F/C Driveshaft, 32 Spline 8" Long 185.00
41050-12 F/C Driveshaft, 32 Spline 12" Long 207.00
41050-16 F/C Driveshaft, 32 Spline 16" Long 219.00
41050-20 F/C Driveshaft, 32 Spline 20" Long 255.00
41150-24 F/C Driveshaft, 32 Spline 24" Long 242.00
41150-28 F/C Driveshaft, 32 Spline 28" Long 253.00

35 Spline Driveshafts

41060-06 F/C Driveshaft, 35 Spline 6" Long 170.00
41060-24 F/C Driveshaft, 35 Spline 24" Long 255.00
41160-28 F/C Driveshaft, 35 Spline 28" Long 265.00
41160-32 F/C Driveshaft, 35 Spline 32" Long 282.00

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. ***Shorty Powerglide only.***

Powerglide 27 spline Bushing Tail Housings

40830 Q/D Coupler, Powerglide (Short) 265.00
Requires 4" from trans seal to pinion coupler, bushed housing

40840 Q/D Coupler, Powerglide *(Long)* 276.00
Requires 4" - 6" from trans seal to pinion coupler, bushed housing

40860 Q/D Coupler, Powerglide (Extra Long) 285.00
Requires 6"-8" from trans seal to pinion coupler, bushed housing

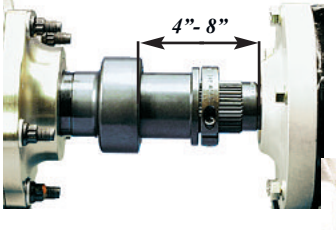
Powerglide 27 spline Roller Tail Housings

40850 Q/D Coupler, Powerglide (Short) 265.00
Requires 4" from trans seal to pinion coupler, roller housing

40855 Q/D Coupler, Powerglide (Long) 276.00
Requires 4"-6" from trans seal to pinion coupler, roller housing

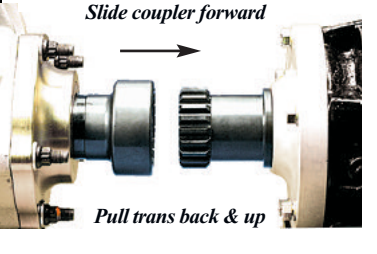
40865 Q/D Coupler, Powerglide (Extra Long) 285.00
Requires 6"-8" from trans seal to pinion coupler, roller housing

Individual replacement parts are available for all couplers. Our MW Technical Representative can help you find the right parts. Give us a call.



With coupler installed and lock ring in place, a gap (approximately 1/8") is need to be 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.



Powerglide with 32 spline output

40870 Q/D Coupler 32T for Powerglide (Short) 287.00
Requires 4" from trans seal to pinion coupler, roller housing

40875 Q/D Coupler 32T Powerglide (Long) 318.00
Requires 4"-6" from trans seal to pinion coupler, roller housing

40876 Q/D Coupler 32T, Powerglide (Extra Long) .344.00
Requires 6"-8" from trans seal to pinion coupler, roller housing

40878 Q/D Coupler 32T, T-400 (Extra Long) 357.00
Requires 6"-8" for Bushing (long barrel)

Quick Release Steering Hubs

MW quick release hubs not only make it easier for drivers to get in and out of their cars under normal conditions, but they're invaluable in emergency situations. Our hubs feature a 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 tooth splined sleeve (with one tooth omitted for indexing purposes) can easily be welded or bolted to any 3/4" O.D. steering shaft. Hubs are CNC machined from billet 7075 aluminum and black anodized for durability. Note: *Splined sleeve & wheel mounting hardware included w/ each hub kit.*

10020 Q/R Hub Dragster & F/C 120.00
For MW wheels, 4 holes, 3/16" holes, .75 x 1.65

10025 Q/R Hub 154.00
5-Hole Grant GT Pattern, 3/16" hole, 5 x 2.86 B.C.

10029 Splined Sleeve, Bolt on 32.00

10050 Q/R Hub 154.00
6-Hole Sparco/Momo Pattern. 3/16" holes, 2.755" (70mm) B.C

10060 Q/R Steering Hub 120.00
3 hole Don Long style, 10-32 thd., 3 holes on 1.375 B.C.

10070 Q/R Hub 120.00
Oval track, 3 hole x 1/4" threads on 1.75 B.C.

10080 Q/R Hub,Universal 120.00
Blank 2.45" diameter flange.

30112 1/4" Cross Bolt and Nut 7.95
Aircraft smooth shank bolt with washers and Jet nut.

Dragster Steering Wheels

MW Dragster/FC steering wheels are fully CNC machined from 3/16" aluminum. Main wheel is fully polished inside and out with 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.

We can offer wheels without the grips installed for customers wanting the have the grips anodized colored with other car components.

10035 Dragster/FC Type Steering Wheel 170.00
With polished grips, Mounting drilled for 10020 quick release hub or D5 weld in mount. We no longer offer anodized colored grips.

10046 Switch Panel* 45.00
Brushed Aluminum, w/ Button Holes

10048 Switch Black Panel* 45.00
Black Aluminum, with Button Holes

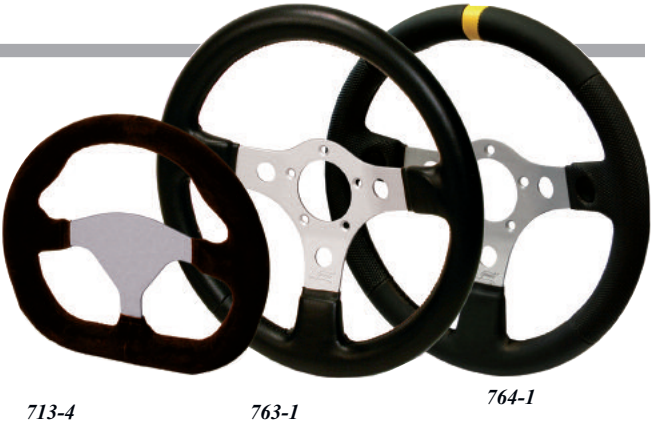
Switch panel mounting holes must be drilled in steering wheel.

Steering Wheels

713-4 10" Grant "D" Shape Wheel 147.00
Black suede grip, silver spokes.Uses 10060 Quick Release hub. Dragster/Altered Applications. Note legal for door cars.

763-1 13" Grant Steering Wheel 124.00
Black grip, silver spokes. Uses 10025 Quick Release hub.

764-1 13" Grant Steering Wheel 134.00
Black grip, yellow stripe 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 with racks in either steel or aluminum. Rack and Pinion Units are dimensionally the same as original P&S machine steering. We now have the original P-S (TAK Machine) tooling and patterns to reproduce the original P-S product.

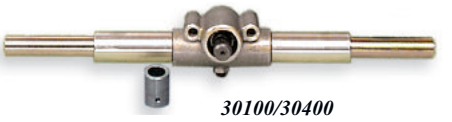
30100 Rack and Pinion 407.00
15" rack with 6" of travel steel rack 2.74 lbs

30100A Aluminum Rack and Pinion 407.00
15" 7075 aluminum rack with 6" of travel 1.71 lbs

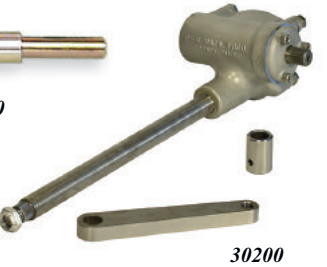
30400A Aluminum Rack and Pinion 407.00
10" 7075 aluminum rack with 6" of travel 1.34 lbs

30200 Standard Steering, 10:1 Ratio 560.00
Standard unit for F/C and Altered race cars 5.36 lbs

30110 Universal Joint for 3/4" OD Tube 176.89
Aircraft quality Joint lubricated with rubber boot


30100/30400


30110


30200

MW Front Spindles

MW front spindles are manufactured from 4130 steel forgings or 7075 Aluminum Billet 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 brass thrust washers, spindle castle nuts, washers, and cotter pins.

31200 MW Front Spindle Assembly *(pr)* 574.00
Steel. 2 control arms. Standard is 5" arms

31210 MW Front Spindle Assembly *(pr)* 609.00
Steel 3 control arms. Specify 4", 5" or 6" arms.

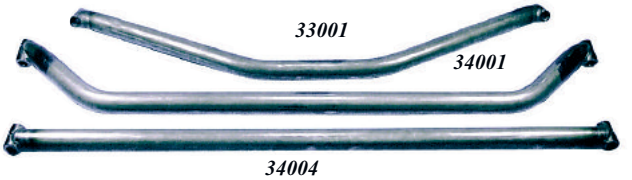
31230 MW Front Spindle Assembly *(pr)* 560.00
Steel With king pins. No steering arms.

31300 Aluminum 7075 Spindle (*pr*) 560.00
Two 4" aluminum arms with castle nuts and thrust washers.

31221 Tow Rings Spindle Cap M/W Spindle 33.75

31222 Tow Rings Spindle Cap P-S Spindle 33.75

Tubular Front Axles



33001 Dragster Axle 320.00
6" drop, 39" centers, 6" flat, 1-1/2 x .120 4130 tube

33002 Dragster Axle 337.00
5" drop, 39" centers, 6" flat, 1-1/2 x .120 4130 tube

33003 Dragster Axle 322.00

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.

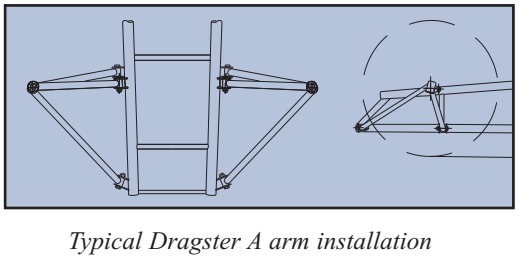
5" drop, 39" centers, 20" flat, 1-1/2 x .120 4130 tube

33005 Dragster Axle 320.00
6" drop, 36" centers, 6" flat, 1-1/2 x .120 4130 tube

34001 Funny Car/Altered Axle 326.00
5" drop, 42" centers, 1-5/8 x .188 4130 tube

34002 Funny Car/Altered Axle 298.00
3" drop, 40" centers, 1-5/8 x .188 4130 tube

A-Arm Front End Materials 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 removable A-arm design. The 33600 A-arm jig fixture or a similar clamping fixture is necessary to build a car with these kits. (See page 84)

34500 F/C Altered A-Arm Front End Kit 206.00

33500 Dragster A-Arm Front End Kit 211.00

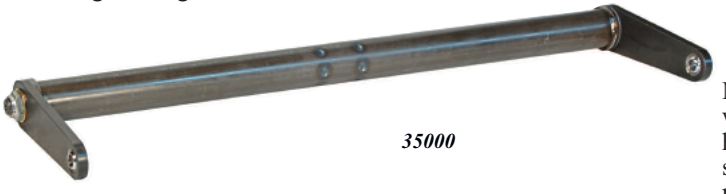
33600 A-Arm Jig Fixture (see photo page 86) 195.00

Torsion Assemblies

Funny Car Torsion Assembly

The MW FC/Altered 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 heat-treated 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

35000 Funny Car/Altered Torsion Assembly 460.00
26” centers with 5” arms

Axle Mounting Brackets

15010

Pre-cut mounting brackets make it easy to mount the front axle. All are produced from 4130 sheet normalized condition steel.

33020

15010 Axle Mount Brackets F/C (4) 61.00
3/16 4130 welds to 1-5/8” tube axle bolts to the 35000 Torsion

33020 Axle Mount Brackets Dragster (4) 69.00
3/16 4130 plate welds to 1-1/2” tube axle, bolts to the 35300 Torsion

Dragster Torsion Assembly

Mark Williams has reproduced the Dragster Torsion assembly that was used in the '60's. The bar is produced from ½" hex material 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

35300 Dragster Torsion Bar 332.00
20” centers 6-3/8” long arm 1-3/8” Dia housing

Anti-Roll Assemblies

The Anti-Roll assembly features splined 7075 aluminum outer arms. There are two models, 1-1/4” and 1-1/2” spline sizes. The shaft for the 1-1/4” (351XX) series can be heavy wall 1-1/4" chromoly tube or splined adapter .083” diameter adapter tube. The 1-1/2” spline size assemblies, (352XX) series utilize the splined adapter for for 3” x .083 wall 4130 tube.
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 than the straight 1-1/4” bar, and has the advantage of being fabricated to any width in the field.
The spherical self-aligning aluminum and Delrin® bearing mount are supplied with the weld on tabs and are available separately.

1-1/4” Anti-Roll Assemblies

35105 3” Tubular Anti Roll Center Tube Assy. 1-1/4” .686.00
3” center tube assy., with 35103 bearings, specify 5” or 6” arms & width. Includes (2) 35103 bearing blocks.

35100 MW Anti-Roll Assembly 1-1/4” Serrations 396.51
5” or 6” arms. 18” centers. 1-1/4 x .188 tube (custom widths available) (no bearing blocks)

35103 Spherical Bearing Block 1-1/4” 115.00
1-1/4“ x 48 Tooth serrations partially in bore. (2 required)

1-1/2” Anti-Roll Assemblies

35250 3” Tubular Anti Roll Center Tube Assy 1-1/2” . .873.00
3 X .083” X (24”) center tube 35203 bearings (2), 1.5” ends, and 6” aluminum arms

35203 Spherical Bearing Block, 1-1/2” (one) 152.00
1-1/2 “ x 48 Tooth serrations partially in bore. (2 required) and 35105 kits (not shown).

35110 Linkage Kit for Anti-Roll Assembly 198.00
Includes (2) 12” long 7/8” x .058” tube, tube adapters 4130 7/16” large shank RH & LH rod ends with 3/8” holes, all nuts and washers, for 35100

35100

35103

35105

35250

35203

Suspension, Mono-Shock Rocker System

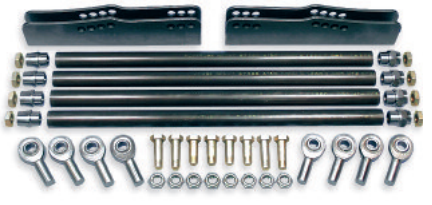
This is a unique mono-shock system that's perfect 4-link dragster. This design utilizes a single coil over shock and combines the functions of actuating the shock and an anti-roll bar in one assembly. The 12010 assembly shown with optional shock and spring, which are sold separately. Three different spring rates are available to suit various engine combinations.

12010 Rocker Assembly shown with available coil over

12010	Rocker Suspension Assembly (less shock)	.864 .00
12011	Splined Outer Rocker Arm (ea)	.107.50
12017	Delrin® Shaft Bushing (ea)	.31.56
12015	Adjuster Link, no rod ends (ea)	.26.00
12019	Double Adjustable Shock (5" stroke no spring)	.POA
12019-225	Coil Spring (225#)	.63.00
12019-275	Coil Spring (275#)	.63.00

4-Link & Wishbone Kits

91750



97100 KIT

12030 KIT

Mark Williams' 4-link 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, M/W reduced hex shear shank bolts and locking jam nuts, and chromoly tubing. Both 4-link kits also include chromoly front chassis brackets.

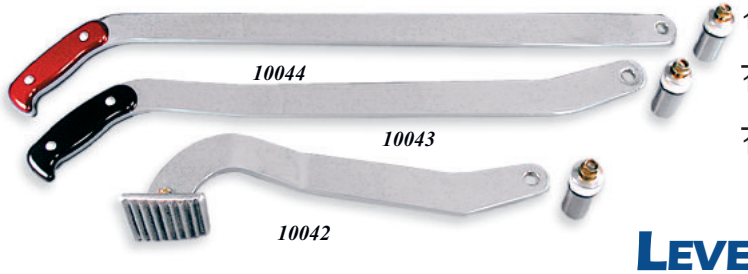
12021

97150

12020	Dragster/Altered 4 Link Kit	.804.00
	Kit uses 1-1/8" x .083" tubing & 5/8" x 5/8" rod ends.	
12021	Dragster Front 4 Link Bracket *(ea)*	.47.68
12030	Dragster/Altered Wishbone Kit *(ea)*	.220.00
	1/2" (2) and 5/8 (1) 4130 rod ends, aluminum slider shaft	
97100	4 Link Kit for 96000/97000 Housing	.1060.00
	Kit uses 1-1/4" x .095 tubing & 5/8 x 3/4 rod ends.	
97150	Front Chassis 4 Link Bracket *(ea)*	.56.00

Levers, Pedals

MW brake levers and clutch/brake pedal are all CNC machined from 1/4" 6061 aluminum stock and fully polished to a bright luster. Both brake levers have polished aluminum grips installed. Clutch/brake pedal features bolt-on foot pad with grooved non-slip surface. All include mounting stud #10040 (see below).



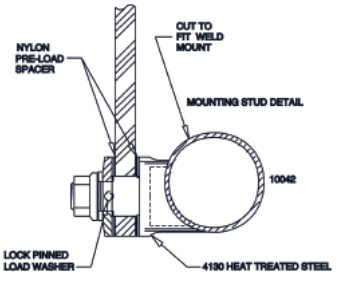
10042	Brake/Clutch Pedal	.102.34
	With bolt on foot pad.	
10043	Dragster Brake Lever	.118.62
	Polished aluminum grips.	
10044	Funny Car Brake Lever	.140.00
	Polished aluminum grips.	

Lever/Pedal Mounting Stud

10040

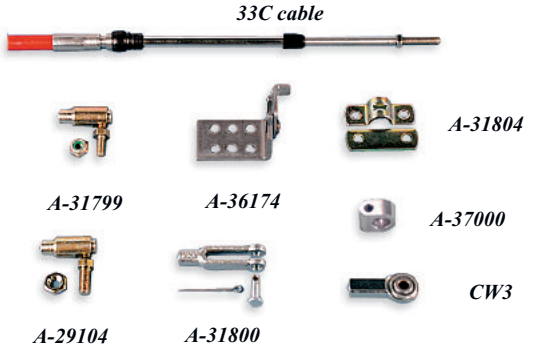
This unique assembly makes mounting controls such as brake levers and/or pedals simple. The use of a keyed aluminum washer along with teflon washers on each side of the lever allows the tension to be adjusted without the possibility of the nut loosening during use. The main body is machined from 4130 alloy steel and can be cut to fit against chassis rail *(as shown)*.

10040 Lever/Pedal Mounting Stud Assembly 58.00



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.

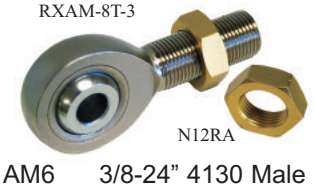


33C-3	3' Morse Push/Pull Cable	.44.07
33C-4	4' Morse Push/Pull Cable	.51.00
33C-5	5' Morse Push/Pull Cable	.45.30
33C-6	6' Morse Push/Pull Cable	.45.51
33C-7	7' Morse Push/Pull Cable	.52.31
33C-8	8' Morse Push/Pull Cable	.50.59
33C-9	9' Morse Push/Pull Cable	.49.89
33C-10	10' Morse Push/Pull Cable	.56.67
33C-11	11' Morse Push/Pull Cable	.57.58
33C-12	12' Morse Push/Pull Cable	.58.74
33C-13	13' Morse Push/Pull Cable	.59.91
33C-14	14' Morse Push/Pull Cable	.70.63
33C-24	24' Morse Push/Pull Cable	.72.66

Cable Accessories

A-21002	Quick Cable End 1/4"-28 X 3/8 Ball	.10.50
A-29104	Quick Release Rod End, 1/4-28 thread	.11.69
A-31799	Quick Release Rod End, 10-32 thread	.14.15
A-31800	Clevis,10-32 thread	.7.32
A-31804	Clamp & Shim	.6.42
A-36174	Quick Release Clamp	.16.16
A-37000	Clamp, Aluminum Morse Cable	.15.53
CW3	3/16" Female Rod End	.6.76

Chromoly Rod Ends



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.

AM6	3/8-24" 4130 Male Rod End	.24.28
AB6	3/8-24" 4130 Male Left Hand Rod End	.24.28
AM7	7/16"-20 4130 Male Rod End	.30.02
AB7	7/16"-20 4130 Male Left Hand Rod End	.30.02
AM8	1/2"-20 4130 Male Rod End	.38.22
AB8	1/2"-20 4130 Male Left Hand Rod End	.38.22
AM10	5/8"-18 4130 Male Rod End	.48.42
AB10	5/8"-18 4130 Male Left Hand Rod End	.48.42
AM12	3/4"-16 4130 Male Rod End	.68.80
AB12	3/4"-16 4130 Male Left Hand Rod End	.68.80
RAM6T	3/8"-24 4130 Rod End	.49.40

Right hand thread, nickel plated and PTFE lined.

RXAM10T	3/4"-16 4130 Male Rod End	.98.98

5/8" ball, right hand thread, nickel plated and PTFE lined.

RXAB10T	3/4"-16 4130 Male Rod End	.100.56

5/8" ball. left hand thread, nickel plated and PTFE lined.

RAM12T	3/4"-16 4130 Male Rod End	.106.56

Right hand thread, nickel plated and PTFE lined.

RAB12T	3/4"-16 4130 Male Rod End	.106.56

Left hand thread, nickel plated and PTFE lined.

XAM6	7/16"-20 4130 Male Rod End	.29.74

3/8 ball, right hand thread.

XAB6	7/16"-20 4130 Male Rod End	.29.74

3/8 ball, left hand thread.

XAM10	3/4"-16 4130 Male Rod End	.68.24

5/8 ball, right hand thread.

XAB10	3/4"-16 4130 Male Rod End	.68.24

5/8 ball, left hand thread. 5/8 ball, left hand thread.

RXAM-8T-3	3/4"-16 4130 Male Rod End	.107.46

3/4 Shank, Teflon LI ned. 1/2" ball, right hand thread.

RXAB-8T-3	3/4"-16 4130 Male Rod End	.109.06

3/4 Shank, Teflon Lined. 1/2" ball, left hand thread.

Thin Jam-Nuts

Jam nuts are used to lock the rod end in the mating female threaded connector. We can supply thin steel nuts of aircraft quality or M/W produced from 7075 aluminum and gold coated. Currently the 3/4 and 1/2" sizes are available in aluminum with more to follow.

N5R	5/16-24 R.H. Jam Nuts, *(6 pcs)*	.5.25
N5L	5/16-24 L.H. Jam Nuts, *(6 pcs)*	.12.54
N6R	3/8-24 R.H. Jam Nuts, *(6 pcs)*	.6.99
N6L	3/8-24 L.H. Jam Nuts, *(6 pcs)*	.12.39
N7R	7/16-20 R.H. Jam Nuts, *(6 pcs)*	.9.30
N7L	7/16-20 L.H. Jam Nuts, *(6 pcs)*	.13.65
N10R	5/8-18 R.H. Jam Nuts, *(4 pcs)*	.15.00
N10L	5/8-18 L.H. Jam Nuts, *(4 pcs)*	.21.00
N8RA	1/2-20 R.H. Aluminum Jam Nuts, *(6 pcs)*	.21.50
N8LA	1/2-20 L.H. Aluminum Jam Nuts, *(6 pcs)*	.21.78
N12RA	3/4-16 R.H. Aluminum Jam Nuts, *(4 pcs)*	.21.98
N12LA	3/4-16 L.H. Aluminum Jam Nuts, *(4 pcs)*	.22.44

Mild Steel Rod Ends

CM3	10-32 Male Rod End	.6.88
CW3	10-32 Female Rod End	.6.76
CW4	1/4”-28 Female Rod End	.6.98
CM5	5/16”-24 Male Rod End	.8.68
CB5	5/16”-24 Left Hand Male Rod End	.7.08
CW5	5/16”-24 Female Rod End	.7.70
CM6	3/8”-24 Male Rod End	.8.68
CB6	3/8”-24 Male Left Hand Rod End	.8.68
CM7	7/16”-20 Male Rod End	.10.26
CB7	7/16”-20 Male Left Hand Rod End	.10.26
CM8	1/2”-20 Male Rod End	.13.68
CB8	1/2” -20 Male Left Hand Rod End	.13.68

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	.18.46
CB10	5/8”-18 Male Left Hand Rod End	.18.46
CM12	3/4”-16 Male Rod End	.25.02
CB12	3/4”-16 Male Left Hand Rod End	.25.02
XM10	3/4”-16 Male Rod End	.39.34

3/4-16 Thread on shank with 5/8” hole in ball.

XB10	3/4”-16 Male Left Hand End	.39.34

3/4-16 Thread on shank with 5/8” hole in ball.

Tube Adapters

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 part.

10510	Tube Adapter, 5/16”-24 to 5/8 x .058	.8.20
10510L	.Tube Adapter, 5/16”-24 L.H. to 5/8 x .058	8.20
10610	Tube Adapter, 3/8”-24 to 5/8 x .058	.5.26
10610L	Tube Adapter, 3/8”-24 L.H. to 5/8 x .058	.5.26
10612	Tube Adapter, 3/8”-24 to 3/4 x .058	.6.72
10612L	.Tube Adapter, 3/8”-24 L.H. to 3/4 x .058	6.72
10614	Tube Adapter, 3/8”-24 to 7/8 x .058	.6.70
10614L	.Tube Adapter, 3/8”-24 L.H. to 7/8 x .058	6.70
10714	Tube Adapter, 7/16”-20 to 7/8 x .058	.9.04
10714L	.Tube Adapter, 7/16”-20 L.H. to 7/8 x .058	9.04
10814	Tube Adapter, 1/2”-20 to 7/8 x .058	.10.36
10814L	.Tube Adapter, 1/2”-20 L.H. to 7/8 x .058	10.36
10816	Tube Adapter, 1/2”-20 to 1 x .058	.11.20
10816L	.Tube Adapter, 1/2”-20 L.H. to 1 x .058	11.20
11016	Tube Adapter, 5/8”-18 to 1 x .058	.11.20
11016L	Tube Adapter, 5/8”-18 L.H. to 1 x .058	.11.20
11018	Tube Adapter, 5/8”-18 to 1 1/8 x .083	.12.00

11018L	Tube Adapter, 5/8”-18 L.H. to 1 1/8 x .083	12.00
11218	Tube Adapter, 3/4”-16 to 1 1/8 x .083	.12.00
11218L	Tube Adapter, 3/4”-16 L.H. to 1 1/8 x .083	12.00
11220	Tube Adapter, 3/4”-16 to 1 1/4 x .058	.13.00
11220L	Tube Adapter, 3/4”-16 L.H. to 1 1/4 .058	.13.00
11221	Tube Adapter, 3/4”-16 Thread	.13.00

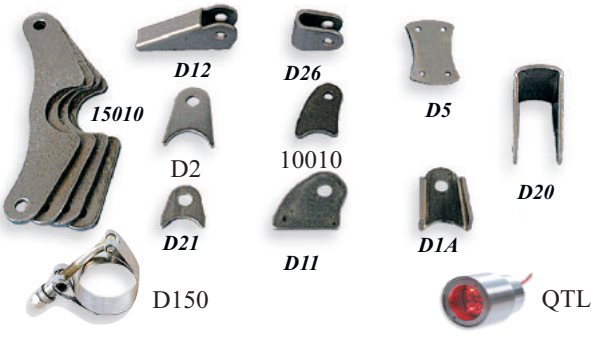
For 1-1/4 x .095 tubing, for 4-link rear suspension

11221L	Tube Adapter, 3/4”-16 L.H. Thread	.13.00

For 1-1/4 x .095 tubing, hex wrench driver for 4-link

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.

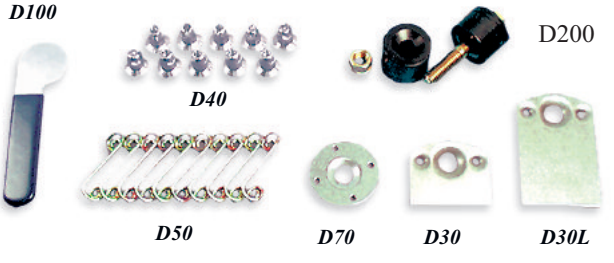


10010	Mounting Tab for Clevis *(5/16" hole)*	.7.19
15010	Torsion Mounting Brackets, 3/16" *(set of 4)*	.61.00
	For 34002 3" drop x 40" centers	
D11	Anti-Rotation Tab *(3/8" Hole)*	.3.20
D12	Chassis Radius Rod Mount Bracket	.5.72
D1A	Small Motor Mount Tab *(3/8" Hole)*	.3.45
D2	Large Flat Mount Tab *(3/8" Hole)*	.4.07
D20	Large Motor Mount Tab *(No hole)*	.14.35
D21	Small Flat Mounting Tab *(3/8" Hole)*	.1.65
D26	Weld-In Clevis for 7/8" Tube (3/8 Rod End)	.3.69
D5	Steering Wheel Mount Plate	.4.25
D150	Motor Mount Clamp, 1-1/2" (ea)	.7.00
	Fits 1-1/4" to 1-1/2" diameter tubing. Quantity pricing available.	
QTL	Frame Rail Tail Light 1.5" diameter	.88.50

Dzus Fasteners & Tools

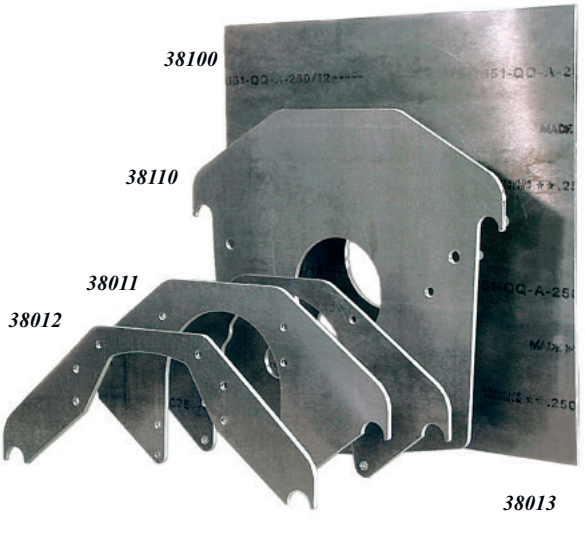
D30	Dzus Mounting Tab, (ea)	.98
D30-100	Dzus Mount Tabs, (pack of 100)	.61.95
D30L	Dzus Mounting Tab, 3" Long (ea)	1.44
D30L-100	Dzus Mounting Tab, 3" Long (100)	74.00
D40	Dzus Buttons, Steel (10 ea.)	.18.32
D40-100	Dzus Buttons, (pack of 100)	.150.80
D50	Dzus Springs, (pack of 10)	.13.52
D50-100	Dzus Springs, (pack of 100)	.101.39
D70	Panel Doubler (Round)	..71
D100	Dzus Button Wrench	.9.00
D200	Dzus Dimpling Tool	.22.50

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.



Engine Mounting Plates

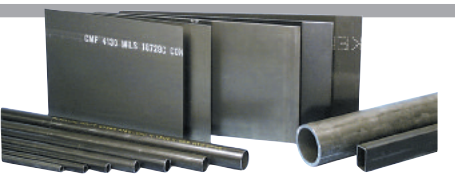
All MW engine mounting plates are manufactured from 1/4" thick 7075-T6 aluminum plate and CNC machined with common crankshaft centerlines to ensure exact fit and interchange-ability even from one engine make to another. Semi-Finished plate Has the 6" crankshaft hole, dowel pin, and 2" vent holes.



38010	Engine Mount Plate Blank	.105.00
	12" x 24" Front blank. 1/4" thick (no holes)	
38100	Rear Engine Mount Plate	.229.00
	24" x 24" Semi-Finished with crank and vent holes and choice of dowel pin holes. 1/4" thick.	
38115	Rear Engine Mount Plate	.240.00
	For Funny Car and Altered with crank and vent holes. Milled for 1 1/2" tube size. Choice of dowel pin holes. Top section is not profiled. 1/4" thick. (photo not shown)	
38110	Rear Engine Mount Plate	.240. 00
	For Dragster with crank and vent holes. Milled for 1 1/4" tube size. Choice of dowel pin holes. 1/4" thick.	
38011	Front Engine Mount Plate	.130.00
	Small Block Chevrolet for Dragster & Funny Car. 1/4" thick.	
38012	Front Engine Mount Plate	.130.00
	Late Model Chrysler for Dragster and Funny Car. 1/4" thick.	
38013	Front Engine Mount Plate	.130.00
	Big Block Chevrolet for Dragster & Funny Car. 1/4" thick.	

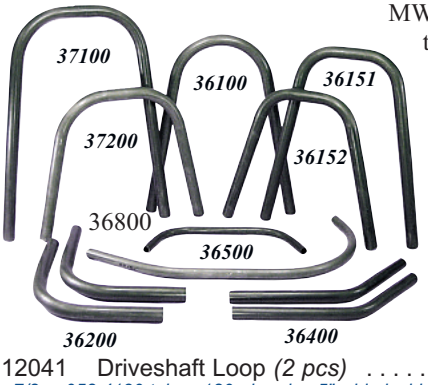
Chromoly Tubing & Plate

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	13.35	8.90
0500X058	1/2 x .058 Tube	.27	14.79	9.28
0625X058	5/8 x.058 Tube	.35	14.76	9.84
0750X058	3/4 x.058 Tube	.43	11.11	7.40
0875X058	7/8 x .058 Tube	.51	12.21	8.14
1000X058	1 X .058 Tube	.58	10.77	7.18
1125X058	1 1/8 x .058 Tube	.66	13.62	9.08
1125X083	1 1/8 x .083 Tube	.92	18.00	12.00
1250X058	1 1/4 x .058 Tube	.74	12.69	8.64
1250X083	1 1/4 x .083 Tube	1.03	17.16	11.44
1250X095	1 1/4 x .095 Tube	1.17	21.75	14.50
1375X058	1 3/8 x .058 Tube	.82	15.39	6.26
1375X065	1 3/8 x .065 Tube	.91	16.83	6.26
1375X095	1 3/8 x .095 Tube	1.30	20.85	13.90
1500X058	1 1/2 x .058 Tube	.89	13.74	9.16
1500X065	1 1/2 x .065 Tube	1.00	14.73	9.82
1500X120	1 1/2 x .120 Tube	1.77	22.50	15.00
1625X083	1 5/8 x .083 Tube	1.37	16.59	11.06
1625X188	1 5/8 x .188 Tube	2.88	35.79	23.86
3000X250	3 x .250 Tube	7.34	72.63	
3250X250	3 1/4 x .250 Tube	8.01	74.52	
4130-062	Sheet Steel, 4130 1/16" Thick 9" X 12"			.33.25
4130-125	Sheet Steel, 4130 1/8" Thick 9" x 18"			.60.25
4130-187	Sheet Steel, 4130 3/16" Thick 9" x 18"			.75.75
4130-250	Sheet Steel, 4130 1/4" Thick 9" X 18"			.91.10

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)* 54.00
7/8 x .058 4130 tube. 180° bends. 5" wide inside.

36100 Dragster Roll Bar *(single bend)* 81.50
24" tall x 19 1/2" centers, 1-5/8 x .083 4130 tube.

36151 Double Bend Dragster Roll Bar 82.00
24" tall x 19 1/2 centers, 1-5/8 x .083 4130 tube, 2 bends.

36152 Double Bend Drag Secondary Roll Bar 56.10
19" tall x 19 1/2" centers 1-5/8 x .083 4130 tube, 2 bends.

36155 Helmet Guard Tubes *(pr)* 62.00
1 x .058 4130 tube, 2 bends..

36161 Double Bend Dragster Roll Bar 62.50
24" tall x 19 1/2" centers, 1-1/2 x .065 4130 tube, 2 bends.

36162 Double Bend Drag Secondary Roll Bar 48.50
19" tall 19 1/2" centers 1-1/2 x .065 4130 tube, 2 bends.

36171 Double Bend Dragster Roll Bar *(6" radius)* 64.50
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)* . . .62.50
19" tall 19 1/2" centers 1-1/2 x .065 4130 tube, 2 bends.

36200 Dragster Roll Bar Back Brace 46.00
14" tall x 16" deep, 90 degree bend, 1 5/8 x .083 4130 tube.

36260 Dragster Roll Bar Back Brace 41.00
14" tall x 16" deep, 90 degree bend, 1 1/2 x .065 4130 tube.

36300 Dragster Shoulder Hoop 158.00
19" inside x 72" tall, 1 1/2 x .058 4130 tube

36350 Dragster Shoulder Hoop 99.00
19" inside x 36" tall, 1 1/2 x .058 4130 tube.

36360 F.E. Dragster Shoulder Hoop 181.50
Up to 22" inside x 82" tall, 1 1/2 x .058 4130 tube.

36370 F.E. Dragster Lower Hoop 199.05
17" inside, 1 3/8 x .058 4130 tube w/kick up bends.

36375 F.E. Dragster Lower Hoop *(1 bend)* 178.75
17" inside, 1 3/8 x .058 4130 tube w/kick up bends.

36400 Dragster Support Tube (1) 43.58
Upper to lower rail 1 3/8 x .095 4130 tube.

36500 Dragster Seat Former 56.00
1 1/4 x .058 4130 tube.

36550 Dragster Seat Former 57.24
1 3/8" x .058" 4130 tube

36800 Steering Mount Cross Tube 41.25
1" x .058 4130 tube.

37100 Funny Car Roll Bar 110.00
29" tall x 21 1/2" centers, 1 5/8 x .083 4130 tube.

37200 Funny Car Secondary Roll Bar 88.00
19 1/2" tall x 21 1/2" centers, 1 5/8 x .083 4130 tube.

37400 Funny Car Shoulder Hoop 166.00
20" inside x 74" tall, 1 1/2 x .058 4130 tube.

BEND PACKAGES

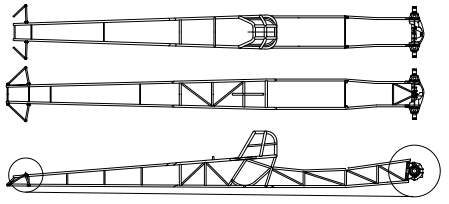
37000 Funny Car Bend Package 456.00
Roll bar, secondary roll bar, 2 back braces & shoulder hoop.

38000 F.E. Dragster Bend Package 589.55
Includes shoulder hoop, lower rail hoop, first and second roll bars, and the back brace.

36050 R.E. 1 5/8" Dragster Bend Package 388.10
Roll bar, secondary roll bar, back braces and shoulder hoop.

36060 R.E. 1 1/2" Dragster Bend Package 351.00
Roll bar, secondary roll bar, back braces and shoulder hoop.

Chassis Tools and Instruction

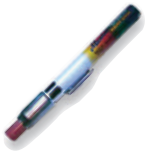


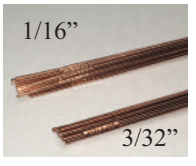
This DVD Video contains information on the BIG Picture on tubular chassis constructions. Although this video is done on a Top Alcohol Dragster from years past, its value is in knowing correct construction steps. It shows the method of building the chassis from the rear differential around the engine to the front end to result in the desired ground clearance. This general knowledge is the source for many of the current popular chassis builders today. Even If you are considering purchasing a chassis from you local builder, it will give your basic knowledge of the correct construction methods.

10004 Chassis Construction DVD 90.00

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 ER70S-2 filler rod for tig welding chromoly. It is a triple deoxidizer for a clean and ductile weld joint.



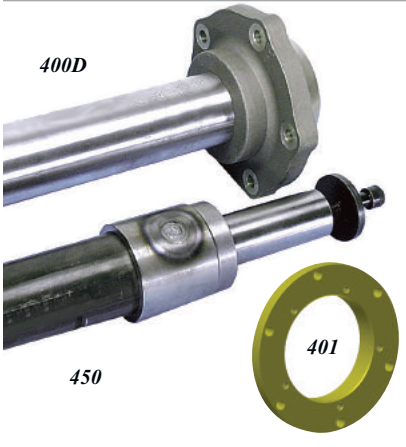


10008 Temperature Stick Indicator 38.74
1050 degrees.

65-062 1/16” Oxweld 65 Welding Filler Rod 13.85/lb
Photo shows the amount in one pound

65-093 3/32” Oxweld 65 Welding Filler Rod 14.47/lb
Photo shows the amount in one pound

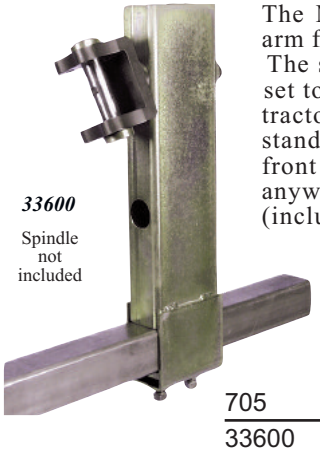
Driveline Alignment Bars



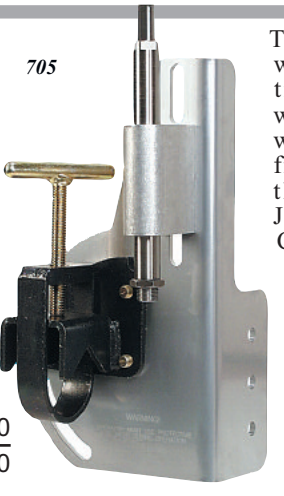
The Mark Williams 9” alignment bar is manufactured from 2-1/2” diameter heavy wall D.O.M. tubing with a CNC machined aluminum flange attached to one end. This aluminum flange bolts directly to the front of a 9” Ford thirdmember case in place of pinion support and allows for perfect alignment between 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. Door car chassis construction can use this also by extend the tube length with a piece of 3” x 1/4” wall tubing. This will work as long as the engine block has a 3” or larger main bore. 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	.370.00
401	Adapter to Use 400D on MW 11” Rear, Aluminum Gold Coated	.192.50
450	12 Bolt Driveline Alignment Bar	.295.00

A-Arm Jig Tube Fitting Tools



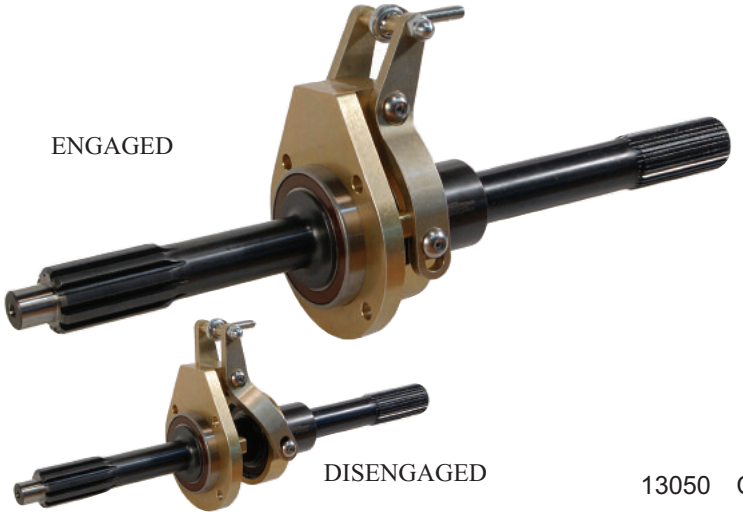
The MW A-Arm jig simplifies installing an a-arm front end on a dragster or funny car chassis. The spindle is fastened through the upright and set to the proper caster angle with a bubble protractor. This is normally used for cars with standard 17” dragster or 15” FC spindle mount front wheels. The uprights can be positioned anywhere along the 1-1/2” square cross tube (included) to produce the desired front end tread width. The cross tube is clamped to the bottom of the chassis rails with shims to make the appropriate ground clearance.



The Tubing Notcher tool will help you produce tight fitting joints that will result in better welds and a nicer finished product. This is the original Ol’ Joint Jigger tool not a cheap Chinese copy. 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	.167.00
33600	A-Arm Fixture	.195.00

Cackle-Safe Disconnect



When attached to the bell housing, this device allows the driver to disconnect the output shaft from the driveshaft and safely run the car without having to hold in the clutch pedal. This eliminates the possibility of a foot slipping of the pedal and reduces wear on the clutch springs. All normal driveline couplers stay engaged and do not rotate while the engine is running. The sliding coupler, output shaft, and driveshaft are made of heat-treated alloy steel, while the bearing retainer and fork assembly are machined from billet aluminum. The output shaft and driveshaft are custom made to the length required for your can depth and engine location.

13050 Cackle-Safe Disconnect . . . . . .1752.00`

CV Dragster Drive Shaft

39371 CV Drive Assembly Powerglide-9" Ford . . .1600.00
For 27 spline output. 28 or 35 spline 9" rear

39372 CV Drive Assembly Powerglide-9" Ford . . .1600.00
For 32 spline output. 28 or 35 spline 9" rear

39360 CV Drive Long Tailhousing Flange 725.00
For 32 spline (only)mid length Powerglide Tail housing

39373 CV Drive Long Tailhousing Assy 1412.00
For 32 spline mid length Powerglide Trans & 9" rear.

This kit includes everything required to convert to a CV shaft. The 7075 aluminum transmission housing that bolts to the transmission is 27-spline. The CV joints are race-prepped with our Supra-Fin™ isotropic super finishing process and lightened. The CV is assembled and pre-lubed. The CV joint includes retaining cups and high-speed boots with gaskets that keep the lubricant in place. The center drive-shaft is produced from 300M material and shot peened. The CV 9" differential pinion flange is included and available in the 28 and 35-spline configurations. All exposed steel parts are finished with a Cerakote ceramic coating for rust prevention

The 39373 assemblies are for mid length tail housing with a 32-spline output and longer engine to transmission distances.

The center shafts are made to fit your specific chassis-engine-trans-mission combination, and the assembly is delivered ready for bolt-in installation. See Service Bulletin 113 for length ordering information or call 800-525-1963 .

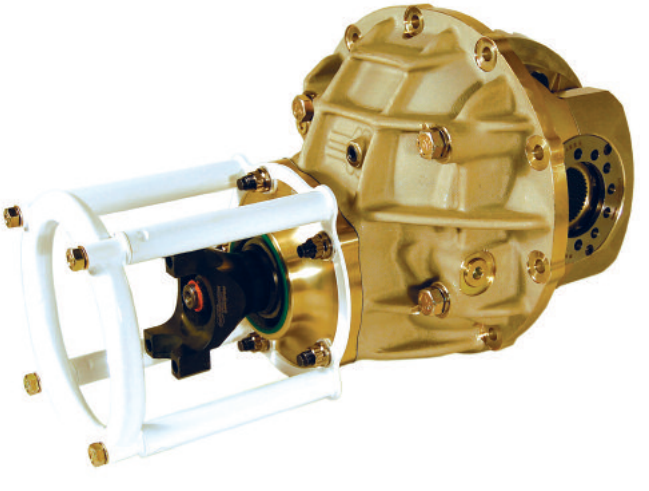
Driveshaft Safety Loops

Our driveshaft safety loop attaches directly to the differential third member, eliminating tubular structures that attach to the chassis.
The front section loop is removable by four retaining bolts allowing easy drive shaft removal. The open design allows removal of the rear universal retaining bolts that are impossible to remove with enclosed tube designs. Constructed from 4130 material this satisfies the NHRA rule requirements for a "retainer loop 360 degrees of enclosure".

Available for both 9" Ford and MW 11" differentials

57625 Drive Shaft Loop Assembly 295.00
9" Thirdmember, for 7/16 stud size

90725 Drive Shaft Loop Assembly 310.00
11" Modular rear, 7/16" stud size

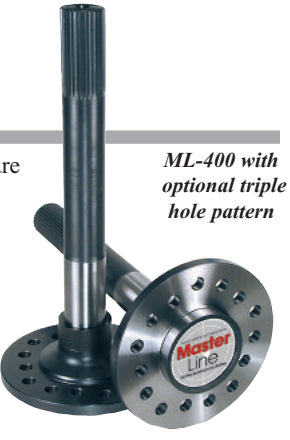


MasterLine

For over 50 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 offers 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 alloy 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 for your specific pattern. An upgrade for 5/8 stud size is available.We can provide any spline up to 35 tooth, 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.



ML-400 with optional triple hole pattern

ML-400 MasterLine Axles, 28 to 35 spline (pr) 568.00

MasterLine Spools

ML-132 8.8 Ford 35 Spline Spool 279.00
ML-140 9" Ford for 2.893" or 3.062" Bore Case . . .279.00
ML-146 9" Ford for3.250" Bores 279.00
ML-160 12 Bolt Chevrolet 3.062 Stock Bore . . . . .279 .00

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.

MasterLine Bearings

ML-001 Mopar Axle Bearings, 2.875" O.D. (pr) 96.55
ML-003 Mopar Axle Brng, 2.875" w/snap ring (pr) . .106.55
ML-250 Small GM "C" Clip Eliminator kit 211.00
ML-507 Ford/Olds Axle Bearings, 3.150" O.D. (pr) . . .98.77
ML-803 Mustang Axle Bearings, 2.835" O.D. (pr) 91.55

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/Pontiac, Mopar and GM 10 &12 Housing ends and Bolt C-clip eliminator kit. Even though it is a sealed bearing a inner housing end seal is recommended.

MasterLine Driveshafts

MasterLine driveshafts are custom built from 3" x .083 DOM mild steel tubing or 6061 aluminum 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 forged billet MW4340 transmission yoke.

ML-39200

ML-600 3" x .083 Mild Steel Driveshaft 621.00
Any length with u-joints, includes transmission yoke.
ML-39200 3.5" x .125" 6061 Aluminum Shaft 670.00
Any length with u -joints, Includes transmission yoke.
ML-39300 4" x .125" 6061 Aluminum Shaft 825.00
Any length with u-joints, includes transmission yoke.

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 545.00
Steel caps and billet adjusters, adjuster locks
ML-470 Nodular Iron Case w/ 3.250" Bores 545.00
Steel caps and billet adjusters, adjuster locks

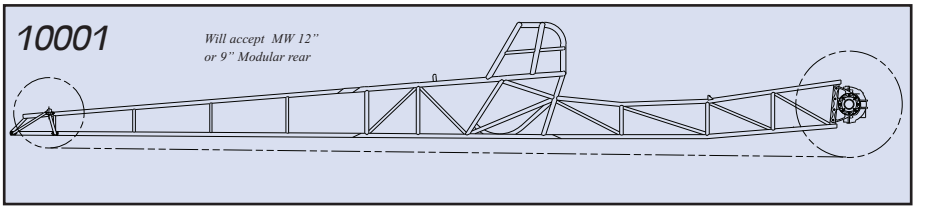
Chassis Plans

For those drag racers that want to build their own race car from scratch, Mark Williams offers the plans and bill of materials required for the construction. Plans are available for several Dragster chassis or A-Altered/Funny car. The material specified will conform to the appropriate SFI (SEMA Foundation Inc.) specification, if constructed accordingly. Since their introduction, MW kit car plans have proven to be very competitive in various classes ranging from Economy Altered to Alcohol dragsters. The construction of any chassis requires a level of experience necessary to complete the project satisfactorily . We are supplying the basic dimensioned print for each chassis. No two cars are built alike, and you will find it necessary to determine dimensions based on engine placement, transmission type, driver size, wheel base, and ground clearance desired. The tubing will need to be fitted for each joint utilizing a tool specifically for "fish mouthing" joints. We suggest purchasing the DVD video to review the construction methods before committing to build the chassis from the prints.

10004 Dragster Chassis Construction Video DVD *(Covers solid mount dragster chassis construction only)* 90.00

Solid Rear Engine Dragster Plans

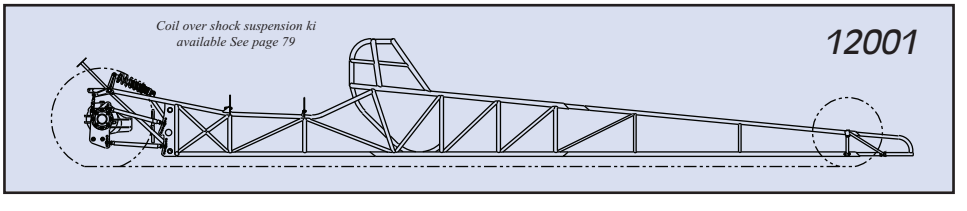
Top Alcohol type chassis plans designed with solid mounted 92000 MW modular 9" aluminum housing. This chassis is to be constructed with the 11" Modular rear. Plans include a bill of materials list. Parts list includes: Steering hardware with rack and pinion box, engine mounting plates, and all of the pre bent and straight tubing required to build a chassis. The drawing can be used to build a chassis the meets the SFI 2.3K chassis specs.



10001 Plans and Bill of Materials List, Top Alcohol Dragster 90.00

4-Link Engine Dragster Plans

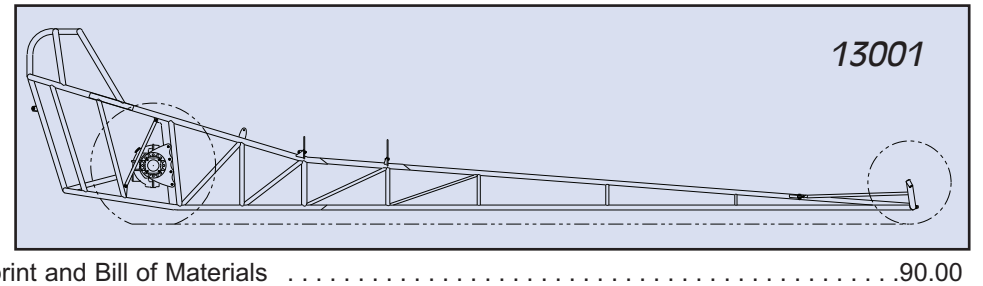
Chromoly chassis with unique mono-shock rear suspension and MW modular 12 bolt housing w/billet aluminum 4 link brackets. Plan and bill of materials includes monoshock rocker shaft and arms, 4-link and wishbone kits, complete steering with rack and pinion box, engine mounting plates and all the pre bent and straight tubing to build a chassis that meets the current SFI 2.5 chassis specs.



12001 Dragster Blueprint and Bill of Materials, 4-Link Suspension 90.00

Front Engine Dragster Plans

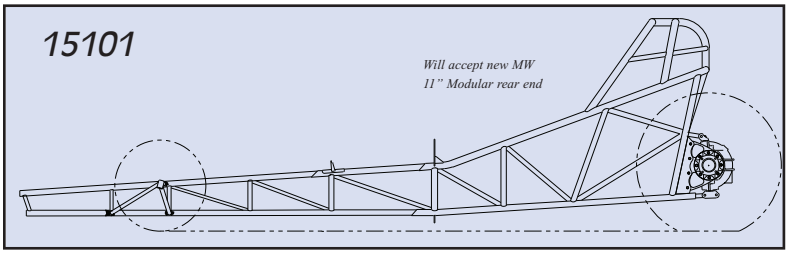
Chromoly chassis with 92000 MW modular 9" aluminum housing. Meets the current SFI 2.2B chassis specs for new front engine dragsters (6.29 and quicker). Plans include bill of materials for: modular housing steering with standard box, engine mounting plates and all of the pre bent and straight tubing to build a basic chassis. Supercharged applications will require a full floater housing.



13001 Front Engine Dragster Blueprint and Bill of Materials 90.00

We can still supply all of the components that were available in the kit car packages.
Bill of material lists are available on our web site at www.markwilliams.com/billmat

Funny Car/Altered Plans



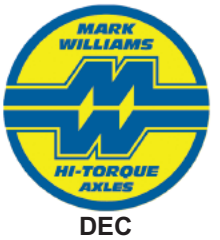
Plans are designed utilizing the 92000 MW modular 9" or 11" Modular aluminum housing. Bill of materials include: Spindles and linkage for standard box, engine mounting plates and all the pre bent and straight tubing to build a basic chassis that will meet the current SFI 10.1E chassis specs for new Funny Car or Altered. When built to print chassis can be certified for any class up to Nitro Funny Car. Supercharged applications will require a full floater housing.

15101 Funny Car or Altered Blueprint and Bill of Materials 90.00

Promotional Items

Pro-Stock T-PS *Funny Car T-FC* *Pro Mod T-PM* *Super Stock T-SS*

ML-DEC



DEC

DEC-DB

DEC-DS

WC

MWTAPE

DSP

WC	Wall Clock Axle Logo	.16.00
MWTAPE	Inch/Metric 10' Tape	.Free with Purchase
ML-DEC	MasterLine Round Decal	.1.00
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
DSP	Driveshaft Poster 24" X 36"	.Free with Purchase

T-FC	MW cotton T-shirt, Funny Car (specify size)	.15.00
	Black or white, specify size	
T-PM	MW cotton T-shirt, Pro Mod (specify size)	.15.00
	Black or white, specify size	
T-PS	MW cotton T-shirt, Pro Stock (specify size)	.15.00
	Black or white, specify size	
T-SS	MW cotton T-shirt, Super Stock (specify size)	.15.00
	Black or white, specify size	