
Strange
HIGH PERFORMANCE COMPONENTS
FORD

GET NOTICED. GET CONNECTED. GET STRANGE.

GOT STRANGE? **Well now you can look Strange with Strange apparel. Visit us at Strangeeng.net and gear up with one of our latest designs to show the world just how Strange you are.**

Our founder, Bob Stange, was born and raised in Chicago and began his career almost 60 years ago. He got this start working in machine shops during the day and making suspension parts for him and his friends' drag cars in his mom's garage at night.

We weren't always Strange. A printing error in the 60's resulted in the long standing respectable name that we proudly bear today when it changed Stange Engineering to Strange Engineering. Since then, we have grown into an industry leading manufacturing company housed on a 120,000 square foot site and we continue to fuel the passion for the sport of Drag Racing!

DON'T JUST RACE...

RaceStrange

Follow us on social media and hang on while we guide you through the world of Strange Racing and Strange Events.

Like racing? How about racing for up to $20k? Come see us at Gearheadracingseries.com

CONTENTS

TERMS & CONDITIONS

TERMS
Orders may be shipped Certified Check, VISA, MASTER CARD, AMERICAN EXPRESS, OR DISCOVER CARD. Minimum order is $10.00.

CLAIMS
Claims for damages in shipping, open or sealed, are to be made to freight forwarder. Claims for shortages must be made directly to Strange Engineering within 5 days of receipt.

RETURNS
Special order parts are non-returnable. No returns will be accepted without prior authorization. Please contact a Strange Engineering associate for a Returned Merchandise Authorization number. Returns must be in new condition. Any part that has been installed or used will not be credited. All returns are subject to a 20% handling charge (minimum $10) and return freight must be prepaid.

PRICING
Prices are subject to change without notice.

DISCLAIMER OF WARRANTY
Strange Engineering reserves the right to make changes in design and to add to or improve on its product without incurring any obligation to install the same on products previously manufactured.

Purchasers using Strange Engineering racing components and equipment as well as any and all inventory services, acknowledge that due to the differing conditions and circumstances under which all equipment and parts are installed and used, purchasers are not relying on Strange Engineering's skills or judgments to select or furnish the proper part or equipment. Purchasers expressly affirm they are relying upon their own skill or judgment to select and purchase suitable goods.

Strange Engineering makes no warranties whatsoever, expressed or implied, oral or written, to purchasers. There is no warranty of merchantability made to purchasers. Strange Engineering further excludes any implied warranty of fitness with respect to racing, equipment, any and all inventory and service.

AXLE REPLACEMENT GUARANTEE
Strange Alloy (induction hardened) 33 and 35 spline axles and Strange Pro Race Axles (thru-hardened) with 33, 35 (excluding gun-drilled) and 40-splines are guaranteed against spline breakage to the original owner for a period of five years. This replacement policy shall not apply to any product which has been repaired or altered in anyway so as in our judgment affects its performance; nor which has been subject to misuse, abuse, negligence or any other occurrence beyond the control of Strange Engineering. The replacement policy is effective from the invoice shipping date. In no way does Strange Engineering accept responsibility or liability beyond repair or replacement.

SPOOL REPLACEMENT GUARANTEE
Strange Pro Race steel spools carry a lifetime replacement policy against breakage to the original owner with proof of purchase. This replacement policy is only valid when the spool is used with Strange or unmodified OEM axles- this is due to irregularly cut and non-involute splines which occur in re-spline and cut spline axles which provide poor spline contact area. This replacement policy shall not apply to any product which has been repaired or altered in anyway so as in our judgment affects its performance; nor which has been subject to misuse, abuse, negligence or any other occurrence beyond the control of Strange Engineering. The replacement policy is not warrantied against excessive run-out due to ring and/or pinion breakage. The replacement policy is effective from the invoice shipping date. In no way does Strange Engineering accept responsibility or liability beyond repair or replacement.

BEING STRANGE

Strange Engineering has over 50 years of manufacturing experience in the performance industry. Strange has grown from creating products inside a two car garage in the late 50's to an industry leading manufacturing company housed on a 120,000 square foot site.

The family owned business is still based on principles the company was founded on- quality product, quality service and a true enthusiasm for the performance industry.

STRANGE PRO RACE VS ALLOY AXLES

The best tool for the job is the right tool for the job. Strange Engineering prides itself on supplying the best possible product for your particular application. Many years of experience have created different axle designs based on their intended use. After considering the loads and forces that the axle will endure, the right material is chosen along with the proper heat treatment to optimize its characteristics. Since this can not be accomplished by only one type of axle, it has lead to the development of both Pro Race Axles and Alloy Axles. Quality is ensured as all Strange axles are proudly made in the USA by Strange Engineering.

PRO RACE - THRU-HARDENED

MATERIAL

Hy-Tuf ultra strength forged alloy steel

HEAT TREATMENT

Thru-hardened @ Rc 45-46

Full depth of shaft

APPLICATION

Competitive Drag Racing

ORIGIN

Hy-Tuf was originated in the class of Ultra-Strength alloys, which was developed for highly stressed landing gear in military aircrafts. The material is a low carbon, high manganese, high-nickel and high molybdenum steel.

PROPERTIES

Each Pro Race Axle is heat treated in a vertical furnace to a hardness of Rc 45-46. The axle is the same hardness from the center of the shaft to the surface (thru-hardened).

The combination of Hy-Tuf and thru-hardened heat treatment provides an axle that achieves superior torsional strength and ductility. In addition, thru-hardened Hy-Tuf is ideal for weight saving gun-drilled and ultra light axles. More drag racers depend on Strange Hy-Tuf Pro Race Axles than all other brands combined.

Pro Race (thru-hardened) and Alloy (induction hardened) axles are all NHRA & IHRA accepted; however, Strange Engineering maintains the highest standards in the industry for safety and performance. Therefore, we strongly recommend our thru-hardened Pro Race shafts for all competitive drag racing applications.

ALLOY - INDUCTION HARDENED

MATERIAL

Modified 1550 premium forged alloy steel

HEAT TREATMENT

Induction Hardened @ Rc 58-62

Hardness decreases from surface to the axle core

APPLICATION

High performance Street and Track

ORIGIN

1550 proved to be an excellent material for street applications, but required different properties to be suitable for track use as well. Various modifications were tested until the proper combination resulted in the material use today.

PROPERTIES

Induction hardening is a process in which an axle is pulled through an electrical coil. The electric coil heats and quenches the shaft. This type of heat treatment is ideal for hardening the case of the shaft while the axle shaft core and flange remain soft, allowing for an extremely ductile axle.

The combination of a premium alloy steel and induction hardening creates an axle which is able to survive the bending loads that are inherent with street use.

Strange Alloy Axles are offered in 28, 30, 31, 33 and 35 spline applications. Shafts up to 31 spline are ideal for street applications with the use of posi-units, Detroit Lockers, and helical gear differentials. The 33 and 35-spline axles are able to withstand even higher torque and bending loads. 35-spline alloy axles are well suited for street and track applications. They can be used with Detroit Lockers, Helical gear differentials, and spools. Spools are for racing applications only and should never be used on the street.

While Strange Alloy Axles are NHRA and IHRA accepted, the Pro Race Axles offer superior torsional and axle flange strength for the ultimate in Drag Race Only applications.

AXLE ORDERING INFORMATION

Strange axles are manufactured to meet each customer's needs. In order for us to produce an optimal axle fit, we have provided the following text and illustrations to assist you with supplying the necessary axle information. Please do not hesitate to call us if you have any questions.

Complete the information for Rear End Housing form if you cannot determine dimension C. The C dimension of an existing axle may be affected by changes to the housing ends, carrier, and brakes. When brakes are changed, so are many of the axle dimensions. Any additional information provided will help ensure a proper fit. Give all the necessary information for existing axles provided everything will remain the same. The facing page has a housing end identification chart as well as common OEM and aftermarket dimensions that can be useful to verify the measurements you are supplying.

INFORMATION FOR AXLE ORDER FORM

(1) Application - Street, Track, Street and Strip, or Drag Race Only
(2) Carrier - Differential or spool, and manufacturer
The original C dimensions may change if the carrier is replaced
(3) Number of axle splines
(4) Bolt Circle - See chart
(5) Tapped for screw in studs (1/2-20 or 5/8-18)
Only Alloy Axles can be drilled for knurled studs - Specify knurl size
(6) Housing end type - Shape may vary- Please verify dimensions
(7) Type of brakes and manufacturer- Drum, factory disc, or aftermarket
Aftermarket brake companies should supply F dimension
(8) D dimension - Axle flange OD is 6.245" unless specified otherwise
(9) Driver side and passenger side C dimension - See axle diagram
(10) A dimension - Brake register - See axle diagram
(11) B dimension - Bearing seat - See axle diagram
(12) H dimension - Bearing area diameter - See axle diagram
(13) F dimension - Brake offset - See housing diagram
B and F are not the same dimension - See Notes
(14) Passenger side housing end to center of pinion - Dimension L
(15) Driver side housing end to center of pinion - Dimension O
(16) Housing end to housing end - Dimensions L + O
(17) Passenger side axle flange to center of pinion - Dimension M
(18) Driver side axle flange to center of pinion - Dimension J
(19) Axle flange to axle flange - Dimensions M + J
Do not add thickness of brake hat or drum

COMMON OEM DIMENSIONS

Chrysler / Dana / Mopar
A dimension - 2.300" or 2.820"
B dimension - 2.200", 2.312", or 2.562"
F dimension - 2.238, 2.350", or 2.600"
H dimension - 1.563"
Bolt circle - 5 on 4 1/2"

Ford
A dimension - 2.430", 2.530", 2.750", 2.780", 2.796", 2.875, or 3.060"
B dimension - 1.875", 2.062", 2.125", 2.250", 2.375" or 2.437"
F dimension - 2.145", 2.332", 2.500", or 2.625"
H dimension - 1.379", 1.400", 1.532", 1.563", 1.626" or 1.773"
Bolt circle - 4 on 4 1/4", 5 on 4 1/2', 5 on 5 1/2"

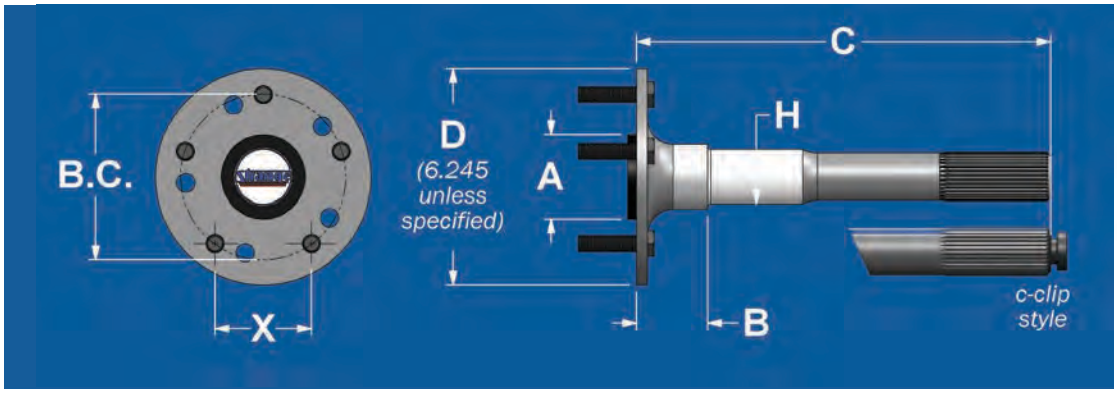
General Motors
A dimension - 2.780", 2.812", or 3.060"
B dimension - 2.562", C-clip style axle (none)
F dimension - 2.832"
H dimension - 1.379", 1.400", 1.532", 1.563" 1.626, or 1.773"
Bolt circle - 5 on 4 3/4", 5 on 5", 5 on 5 1/2"

Notes:

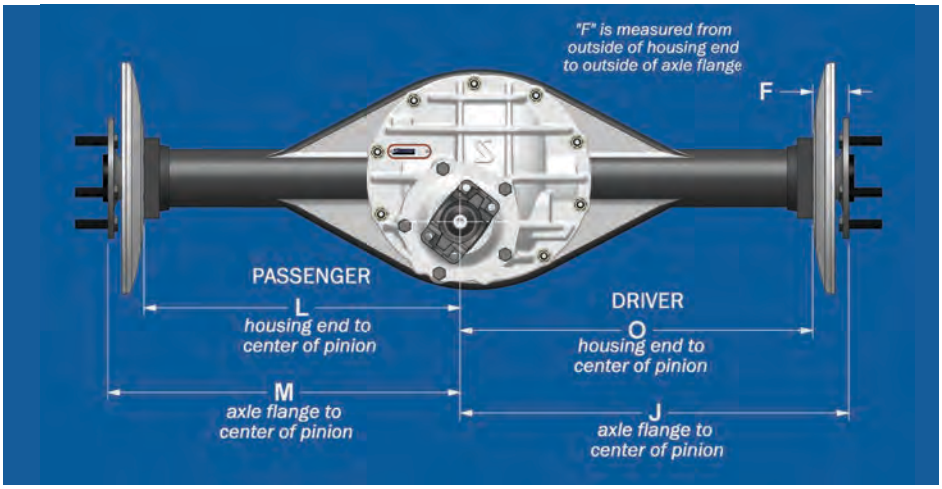
- Axle flange to axle flange is measured from the outside face of the axle flanges without any brakes installed.
- If you have listed only housing end to housing end or axle flange to axle flange, please specify pinion offset.
- The B dimension is from the outside face of axle flange to the bearing shoulder machined onto the axle.
- The F dimension is measured from outside face of bare axle flange to the outside face of the housing end.
  Chrysler / Dana / Mopar housing ends do not have an internal step to stop the axle bearing.
  Therefore, the F dimension is obtained with the backing plate and gasket installed or their combined thickness accounted for.
- When upgrading to 35 spline axles in a Ford 9", an aftermarket 3.250" bore case is required.

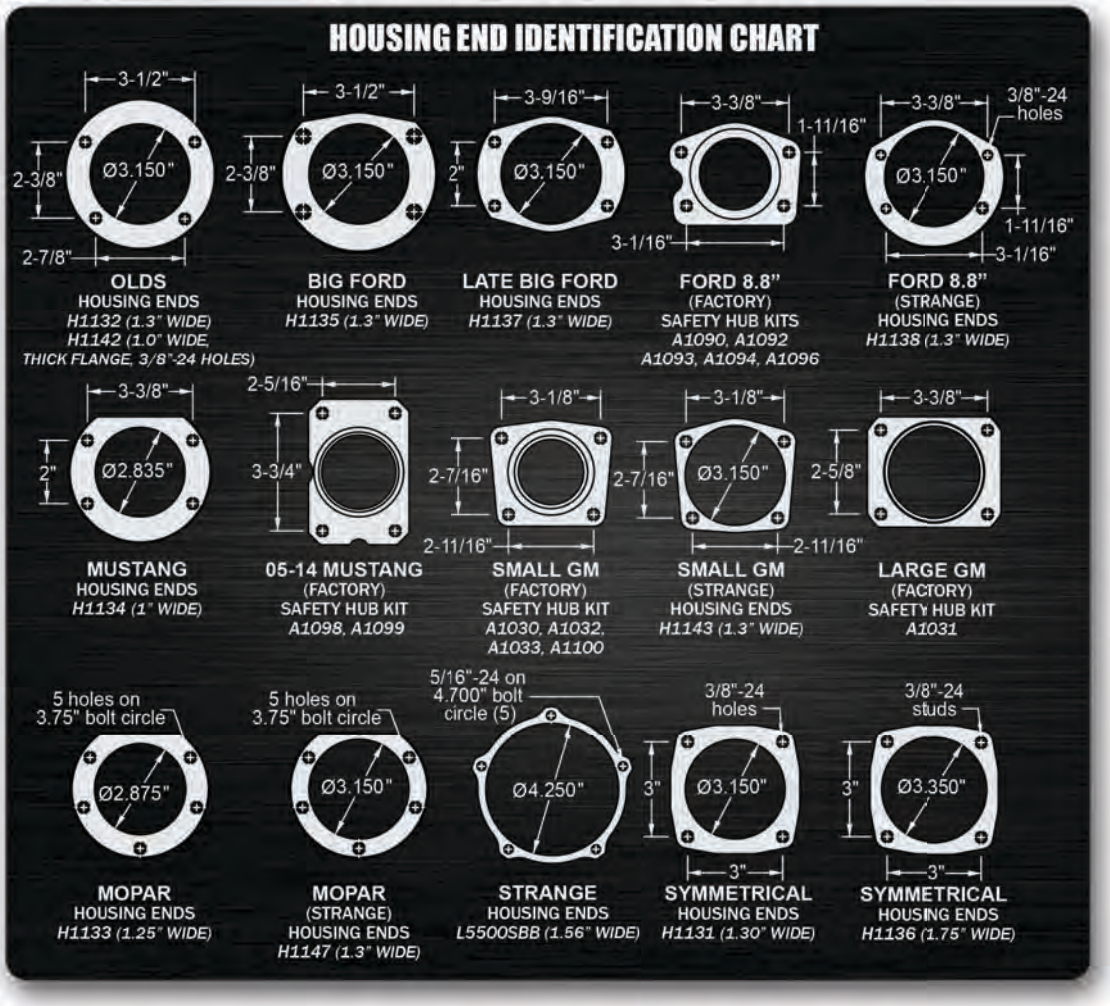
AXLE FORM

X	Bolt Circle
2.645"	4 1/2"
2.792"	4 3/4"
2.939"	5"
3.233"	5 1/2"



HOUSING FORM





Housing End Chart

Notes:

(1) FACTORY indicates OEM style housing ends that Strange does not manufacture and are listed for identification purposes; however, we do offer c-clip eliminator kits. C-clip eliminator kits may require new axles- call for your application.

(2) Big Ford or late big Ford OEM housing ends may vary in shape and housing end stud hole size.

AXLES

ALLOY AXLE PACKAGES

- 2 day turnaround
- Designed for your custom street and hi-performance vehicle
- CNC machined from premium forged alloy steel
- Induction hardened to resist bending loads and provide a more flexible axle
- Radius rings to minimize stress concentrations
- Axles for Dana 60, Ford 8.8", 9", GM 12 bolt, 10 bolt, 57-64 Olds, Mopar 8 3/4"
- 28, 30, 31, 33, & 35 spline
- Alloy 35 spline axles designed for your street/strip requirements

Strange Alloy Axles are designed to meet the demanding bending loads of street use. Manufactured from premium alloy steel forgings, each alloy axle is induction hardened to its optimal hardness with Strange designed tooling. Alloy axle splines are hobbed to the proper involute spline before heat treatment. The axles are made with a large 1.563" diameter axle bearing area and the shoulder accepts a radius ring that minimizes stress concentrations. A billet aluminum brake register is provided to properly locate the center of your disc or drum brake system.

Alloy axles are offered in 28, 30, 31, 33 and 35 spline applications. Shafts up to 31 spline are ideal for street applications with the use of posi-units, Detroit Lockers, and helical gear differentials. It is always recommended to use the largest shaft as possible. If you own a 9" rear end and are considering purchasing a differential for a OEM case, then you should always upgrade from 28 to 31 spline components. The axles are identical in price and often the differentials are similar in cost. Although our 28 spline Alloy axle is stronger than OEM 28 spline, 31 spline axles are 38% stronger. We strongly recommend an upgrade to 31 spline axles for street applications.

Strange Alloy 33 and 35-spline axles are able to withstand even higher torque and bending loads. 35-spline alloy axles are ideal for street and strip applications and may be used with Detroit Lockers, helical gear differentials and spools. Spools are for Drag Racing only and should never be used on the street.

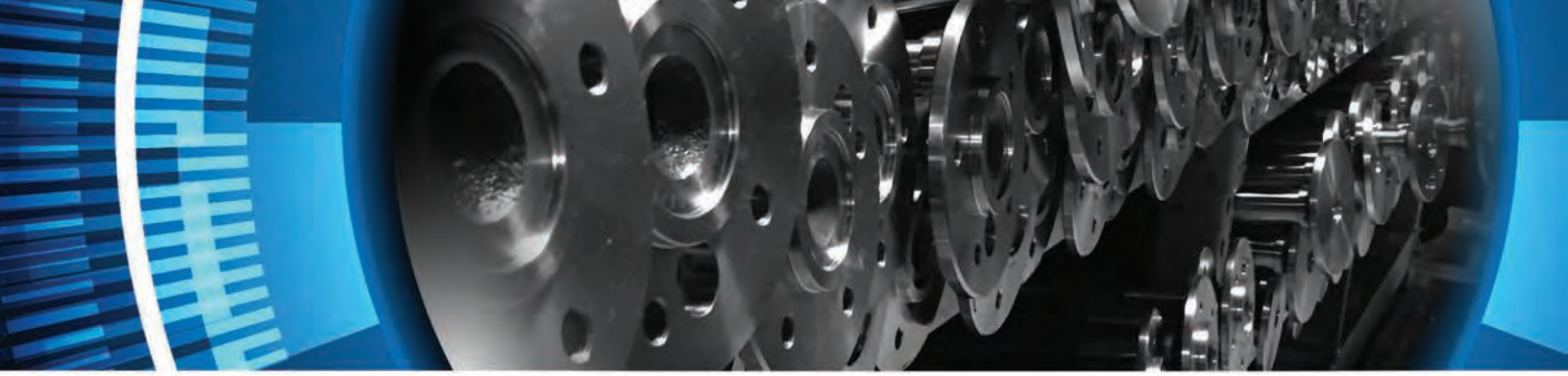
Strange also offers alloy replacement c-clip style axles for many OEM applications. Call today to discuss your requirements.

STRANGE ALLOY AXLES

A3100 Strange Alloy induction hardened axles Ford 28, 31, 33 spline / Mopar 30 spline/ GM 30, 33 spline. Drilled and tapped for your choice of bolt circle- pair... $324

A3500 Strange Alloy 35 spline induction hardened axles. Drilled and tapped for your choice of bolt circle- pair... $324

A1004 Additional charge for access hole or third bolt circle- pair... $16



STRANGE ALLOY C-CLIP AXLES

- Manufactured from high strength steel
- Harder surface area than OEM for improved bearing/axle life
- Deeper case hardening than OEM for superior torsional strength
- Fully ground bearing surface and radius
- Drilled for 1/2-20 screw-in studs & OEM press-in studs
- Fits OEM bearing

FORD MUSTANG 31SPLINE C-CLIP AXLES

P3110 Strange 31spline 8.8" c-clip axles
94-98 OEM Mustang disc applications- pair $250

P3111 Strange 31 spline 8.8" c-clip axles
99-04 OEM Mustang disc applications- pair $250

P3112 Strange 31 spline 8.8" c-clip axles
05-14 OEM Mustang disc applications- pair $284

C-CLIP AXLE BEARINGS, SEALS & STUDS

A3120K Ford 8.8" & GM 10 & 12-bolt car
Axle bearing and seal for c-clip axle- pair... $54

A3121 Ford 8.8" press-in stud kit - 10 pieces
94-04 Mustang (1/2"-20) .615" knurl... $26

AXLES

ALLOY AXLE PACKAGES

STRANGE ALLOY AXLE PACKAGES FOR FORD, GM, MOPAR AND MORE...

Alloy axle packages are easily configured to a wide range of applications and are customized for your vehicle. Strange has combined integrated components at money saving prices As with all Strange packages, Alloy Axle packages are designed to ease installation saving you time & money

P3102 Ford 28 or 31 spline axles, bearings, and 2" or 3" (1/2-20) stud kit..... $405

P310258 P3102 with upgrade to 5/8" stud kit... $465

P3104 Ford 28, 31, Chevy or Mopar 30 spline axles, axle bearings, retaining plates, and 2" or 3" (1/2-20) stud kit..... $421

P310458 P3104 with upgrade to 5/8" stud kit... $481

P3302 Strange 33 spline axles, bearings, and 2" or 3" (1/2-20) stud kit..... $405

P330258 P3302 with upgrade to 5/8" stud kit... $465

P3304 Strange 33 spline axles, bearings, retaining plates, and 2" or 3" (1/2-20) stud kit..... $421

P330458 P3304 with upgrade to 5/8" stud kit..... $481

P3502 Alloy 35 spline axles, bearings, and 2" or 3" (1/2-20) stud kit..... $405

P350258 P3502 with upgrade to 5/8" stud kit..... $465

P3504 Alloy 35 spline axles, bearings, retaining plates, and 2" or 3" (1/2-20) stud kit..... $421

P350458 P3504 with upgrade to 5/8" stud kit... $481

The Chevy 30 spline axles listed above are NON-c-clip style axles and require aftermarket 3.150" ID housing ends.


P3509F0558


P3109F86

FORD 8.8" ALLOY AXLE PACKAGES WITH C-CLIP ELIMINATOR KIT

Strange 8.8" c-clip eliminators feature Timken roller bearings that are ideal for street and constant use

86-93 MUSTANG

P3109F86 Ford 28, 31 or Strange 33 spline Alloy axles, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit
1986-1993 Mustang 8.8" application for OEM drum brakes..... $424

P3109F8658 With upgrade to A1027 5/8" stud kit..... $484

P3509F86 With 35 spline Alloy axles..... $424

P3509F8658 With 35 spline Alloy axles and A1027 5/8" stud kit... $484

1986-1993 Applications can be used with aftermarket disc brake kits that are designed for c-clip eliminator kits

94-04 MUSTANG

P3109F94 Ford 28 or 31 spline Alloy axles, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit
1994-2004 Mustang 8.8" application for OEM disc brakes - Specify GT or Cobra brakes... $545

P3109F9458 P3109F94 with upgrade to A1027 5/8" stud kit..... $605

P3509F94 P3109F94 with Strange 35 spline Alloy axles..... $545

P3509F9458 P3109F94 with Strange 35 spline Alloy axles and A1027 5/8" stud kit... $605

OPAX01 Add optional Strange 1994-2004 ABS reluctor rings - pair..... $89

05-14 MUSTANG

P3109F05 Ford 31 spline Alloy axles, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit
2005-2014 Mustang 8.8" application for OEM GT & GT500 disc brakes... $653

P3109F0558 With upgrade to A1027 5/8" stud kit..... $713

P3509F05 With Strange 35 spline Alloy axles..... $653

P3509F0558 With Strange 35 spline Alloy axles and A1027 5/8" stud kit..... $713

OPAX05 Add optional OEM 2005-2012 ABS reluctor rings - pair... $98

2005-2014 kits include billet aluminum caliper mounts - Eliminating modifications that compromise integrity of the OEM mount
5/8" stud kit option limited to A1027 due to clearance requirements for eliminator kits

AXLES

ALLOY AXLE & SPOOL PACKAGES

STRANGE 35 SPLINE ALLOY AXLE & SPOOL PACKAGES FOR FORD, GM, MOPAR AND MORE...

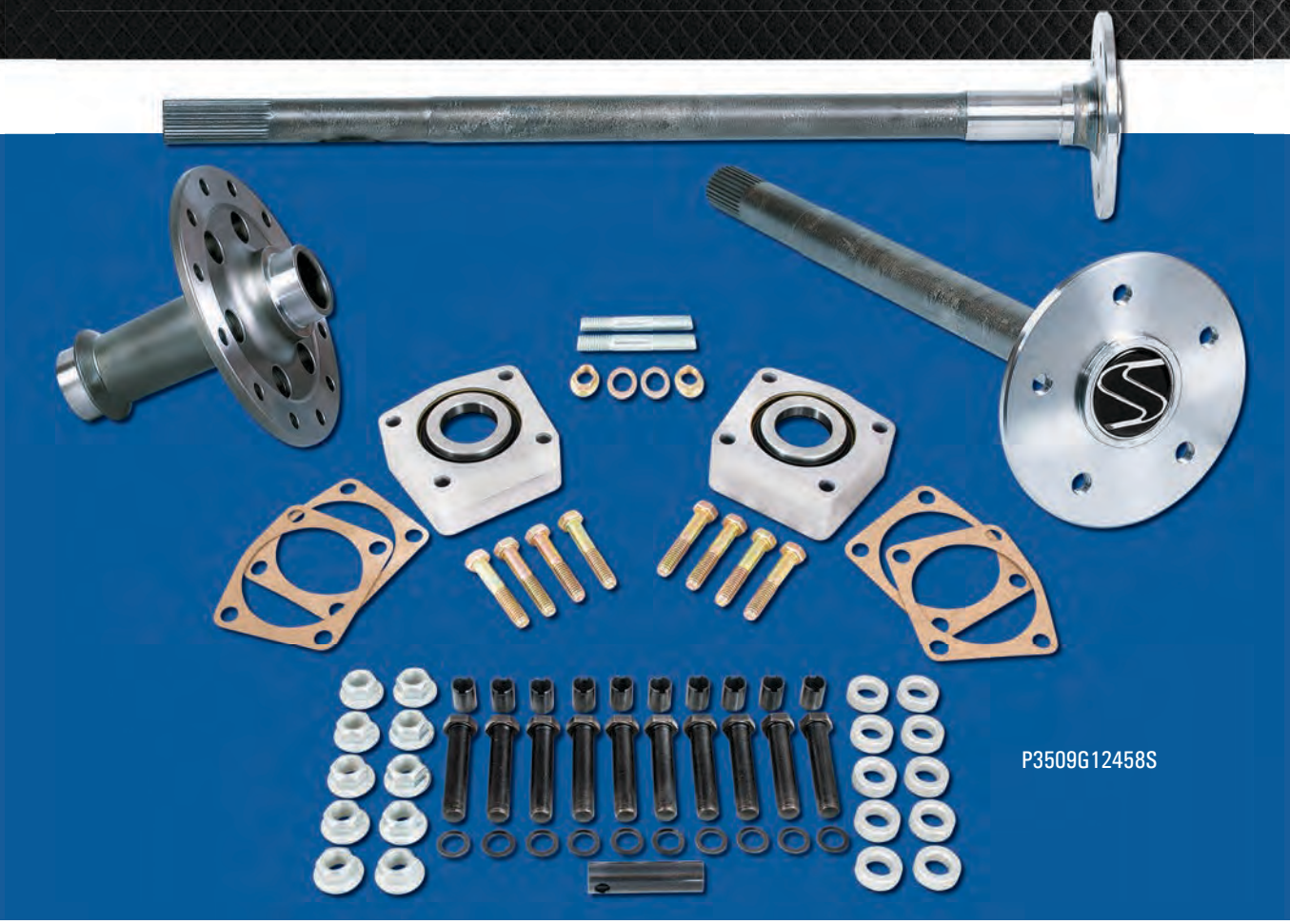
Alloy axle & spool packages are easily configured to a wide range of applications and are customized for your vehicle. Strange has combined integrated components at money saving prices. As with all Strange packages, Alloy Axle packages are designed to ease installation saving you time & money

P3502S Strange 35 spline Alloy axles, axle bearings, 2" or 3" (1/2-20) stud kit, and Lightweight Pro Steel Spool... $554

P350258S With upgrade to 5/8" stud kit... $614

P3504S Strange 35 spline Alloy axles, axle bearings, retaining plates, 2" or 3" (1/2-20) stud kit, and Lightweight Pro Steel Spool... $571

P350458S With upgrade to 5/8" stud kit... $631



FORD 8.8 35 SPLINE ALLOY AXLE & SPOOL PACKAGES WITH C-CLIP ELIMINATOR KIT

P3509F86S Alloy 35 spline axles, lightweight pro steel spool, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit
1986-1993 Mustang 8.8" application for OEM drum brakes... $565

P3509F8658S With upgrade to A1027 5/8" stud kit..... $625

1986-1993 Mustang applications can use aftermarket disc brakes kits designed for use with c-clip eliminator kits

P3509F94S Alloy 35 spline axles, lightweight pro steel spool, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit
1994-2004 Mustang 8.8" application for OEM disc brakes - Specify GT or Cobra brakes...$686

P3509F9458S With upgrade to A1027 5/8" stud kit..... $746
OPAX01 Add Optional Strange 1994-2004 ABS reluctor rings - pair..... $89

P3509F05S Alloy 35 spline axles, lightweight pro steel spool, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit
2005-2014 Mustang application for OEM GT & GT500 disc brakes... $794

P3509F0558S With upgrade to A1027 5/8" stud kit..... $854

OPAX05 Add optional OEM 2005-2014 ABS reluctor rings - pair..... $98

2005-2014 Mustang kits include billet aluminum caliper mounts - No modifications to OEM mounts that compromise integrity

All 5/8" upgrades above are limited to A1027 stud kit due to clearances necessary for eliminator kits

AXLES

PRO RACE AXLES

- Designed for your custom drag racing application
- Involuted splines for increased strength
- Forged from Hy-Tuf for optimal grain structure
- Thru-hardened for superior torsional strength
- Contingency programs
- Five year replacement guarantee for 33, 35 and 40-spline axles
- Most orders shipped within 2 days

STRANGE PRO RACE AXLES are forged from Hy-Tuf alloy steel that was originally developed for highly stressed landing gear in military aircrafts. The material is in the class of Ultra Strength alloys and contains low carbon, high manganese, high nickel, and high molybdenum steel. Pro racing axles are thru-hardened allowing for a Drag Racing shaft with an exceptionally high, 240,000 PSI, tensile strength while retaining ductility.

Strange Engineering stocks a variety of completely finished axles for specific applications. After 50 years of manufacturing axles, we know which applications are most common and there is no reason to charge you extra for priority service. If your requirements cannot be met by our extensive inventory, we will custom manufacture your axle at no additional cost. Strange Pro Race axles are the best value on the market today. That's why more drag racing competitors rely on Strange axles than all other brands combined! Contact a Strange sales technician to discuss your specific application.

A1000 Pro Race Hy-Tuf axles, any length, and any spline up to 35
Choice of bolt circle - Tapped for 1/2" or 5/8" screw-in studs- pair... $429

A1003 Lightened axle flange - Five 1" round lightening holes- pair... $28

A1004 Additional charge for access hole or third bolt circle- pair..... $16

A1005 Lighten shaft and flange - 35 spline axles shafts gun-drilled with .875" bore
Maximum length is 20" - Flanges machined with five round holes- pair... $129

A1006 Ultra Lite flange - Pocket mill flange in solid or gun-drilled axles... $75

Gun-drilled axles with A1006 option also are lightened underneath the Strange logo
See picture on next page

STRANGE GUN-DRILLED AXLES were created to reduce rotating weight. Gun-drilling is a process where the core of the axle is removed leaving a .875" hole through the entire length of the shaft. Each gun-drilled axle is further lightened by eliminating axle flange material with five 1" diameter holes. A 35 spline gun-drilled axle is 25.6% lighter than a solid 35 spline axle and can be used for non-blown cars weighing under 1,850 lbs.

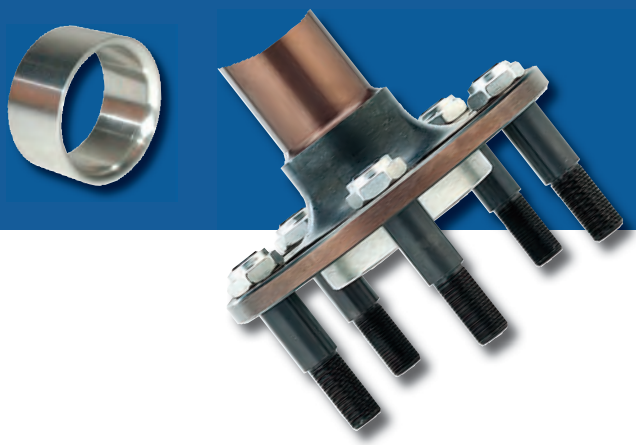
Strange 40 spline gun-drilled axles can withstand the abuse of drag racing vehicles weighing 3,500 lbs. and with quarter mile elapsed time slips under seven seconds. Strange 40 spline gun-drilled axles are 10% lighter than 35 spline solid axles and an astonishing 54% stronger. The Strange 40 spline gun-drilled axle is truly the ultimate drag racing axle.

A solid axle shaft is stronger than an equivalent in diameter gun-drilled shaft. When weight is not an issue, a gun-drilled axle should not be used.

Strange Ultra Light flange for solid axle is pictured above

Strange Ultra Light axle for gun-drilled axle shown above

Strange 40 Spline Pro Race Axles



A2000 Pro Race Hy-Tuf 40 spline gun-drilled axles, any length up to 30", choice of bolt circle, with five 1" round lightening holes in flange, tapped for 1/2" or 5/8" screw-in studs- pair..... $554

A2100 Pro Race Hy-Tuf 40-spline solid axles, any length up to 35", choice of bolt circle, with five 1" round lightening holes in flange, tapped for 1/2" or 5/8" screw-in studs- pair..... $469

A1006 Ultra Lite flange - Pocket mill axle flange for solid or gun-drilled axles... $75

Gun-drilled axles with A1006 option
are further lightened underneath the Strange logo
removing an additional 1.50 lbs. compared to five 1" holes

ADVANTAGES OF THE STRANGE RADIUS RING

The axle bearing shoulder, where the bearing rests against the axle, encounters a tremendous amount of stress. The load, compared to OEM axles, is compounded by the use of slicks, larger diameter tires, aggressive launches, and tire shake. This area can be strengthened by increasing the diameter of the bearing surface and minimizing the distance from the axle bearing shoulder to the outside of the axle flange.

When we developed our 40 spline axle, the bearing surface OD was made to a giant 1.7735". By using a special stainless steel ring, we were able to accomplish three important goals. Increase the radius of the axle bearing shoulder, drastically reduce stress concentrations, minimize the distance from the bearing shoulder to the outside of the axle flange, and set axle offset to match the brake kit.

AXLES

PRO RACE AXLE PACKAGES

P1007

FORD MUSTANG 8.8" DRAG RACE AXLE PACKAGE WITH C-CLIP ELIMINATOR KIT Continued

P1011F94	Ford 31, Strange 33 or 35 spline Pro Race Hy-Tuf axles, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit 1994-2004 Mustang 8.8" applications for OEM disc brakes - Specify GT or Cobra brakes... $641
P1011F9458	With upgrade to A1027 5/8" stud kit..... $695
OPAX01*	Optional Strange ABS reluctor rings- pair... $89
P1011F05	Ford 31, Strange 33 or 35 spline Pro Race Hy-Tuf axles, c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit 2005-2014 Mustang 8.8" applications for OEM GT or GT500 disc brakes... $749
P1011F0558	With upgrade to A1027 5/8" stud kit..... $803
OPAX05	Optional OEM ABS reluctor rings- pair..... $98

* Needs special A1094E reluctor rings for ABS applications

FORD MUSTANG 8.8" DRAG RACE AXLE PACKAGE WITH C-CLIP ELIMINATOR KIT

P1011F86 Ford 31, Strange 33 or 35 spline Pro Race Hy-Tuf axles,
86-93 Mustang 8.8" c-clip eliminator kit for OEM drum brakes, and 2" or 3" (1/2"-20) stud kit..... $520

P1011F8658 With upgrade to A1027 5/8" stud kit..... $574

86-93 Mustang applications can only be used with aftermarket disc brake kits designed for c-clip eliminator kits

2005-2014 kits include billet aluminum caliper mounts - Eliminating modifications that compromise integrity of the OEM mount

5/8" stud kit option limited to A1027 for all axle packages with eliminator kits due to clearance requirements

STRANGE 28 TO 35 SPLINE PRO RACE AXLE PACKAGES FOR FORD

P1007 Pro Race Hy-Tuf axles any length, splined up to 35, choice of bolt circle, axle bearings, and 2" or 3" (1/2-20) stud kit..... $470

P100758 P1007 with upgrade to 5/8" stud kit... $524

P1008 Pro Race Hy-Tuf axles any length, splined up to 35, choice of bolt circle, axle bearings, retainer plates, and 2" or 3" (1/2-20) stud kit..... $480

P100858 P1008 with upgrade to 5/8" stud kit... $534

P1013 Pro Race Hy-Tuf 35 spline gun-drilled axles, any length up to 20", five round lightening holes, choice of bolt circle, axle bearings, and 5/8" stud kit..... $637

A1006 Ultra Lite flange - Pocket mill axle flange for solid or gun-drilled axles- pair..... $75

AXLES

40 SPLINE PRO RACE AXLE PACKAGES

40 SPLINE PRO RACE AXLE PACKAGES

P1014 Lightweight Pro Race Hy-Tuf 40 spline gun-drilled axles with .875" bore, any length up to 32", choice of bolt circle five 1" round lightening holes in flange, A1019 axle bearings, and 5/8" stud kit... $663

P1015 With upgrade to A1024 3.350" OD axle bearings... $810

P1016 Pro Race Hy-Tuf 40 spline solid axles - any length up to 35", choice of bolt circle five 1" round lightening holes in flange, A1019 axle bearings, and 5/8" stud kit... $582

P1017 With upgrade to A1024 3.350" OD axle bearings... $72

P1020

The Strange 2 piece axle has evolved beyond our competitions offerings. Designed for the professional racer, the two-piece axle is stronger and safer than a traditional one piece axle. However, the two-piece axle is not a replacement for a floater rear end. Strange developed the lightweight two-piece axle with Warren and Kurt Johnson in 1999 and is now common place among the most demanding teams including NHRA Pro Stock World Champions Greg Anderson, Allen Johnson, Jason Line and Erica Enders.

- Large capacity double row ball bearing
- 3.543" OD / 1.968" ID bearing housed in aluminum cartridge
- Provides low friction - Allows high misalignment
- 1" bore gun-drilled 300M axle shafts
- Axle design captivates axle bearing - Eliminates wedding ring
- Reduces wheel deflection
- Lightweight construction

STRANGE 2 PIECE AXLE PACKAGE

P1020 Lightweight 2 Piece axle assembly - Includes 1" bore gun-drilled 300M shafts, Ultra light independent axle flanges, chrome moly 5/8" stud kit, low friction high misalignment axle bearings, bearing cartridges, seals, and caliper mounts. Requires L5500SBB Strange housing ends and Strange brake kit for two piece axles - Not included..... $1,795

OPPS01	Upgrade to HD spherical roller bearings... $250
L5500SBB	Housing end for Strange 2 piece axle- each... $88
C18104NBUC	Pro Carbon brake Kit - 4 3/4" BC - for Strange 2 piece axles - caliper mounts not included.... $2,590
C18105NBUC	Pro Carbon brake Kit - 5" BC - for Strange 2 piece axles - caliper mounts not included..... $2,590
B1711NBM	Pro Steel brake kit - 4 3/4" & 5" BC - for Strange 2 piece axles - caliper mounts not included... $545

AXLES

FORD 8.8" PRO AXLE & SPOOL PACKAGES

FORD MUSTANG 8.8" PRO RACE AXLE & SPOOL PACKAGE WITH C-CLIP ELIMINATOR KIT

P2000FM86 Pro Race Hy-Tuf 31 or 33-spline axles, c-clip eliminator kit, 2" or 3" (1/2-20) stud kit, and Lightweight Pro spool 1986-1993 Mustang 8.8" using OEM drum brakes *..... $615

P2000FM8658 With upgrade to A1027 5/8" stud kit..... $669

OPRA01 Upgrade to 35 spline axles and spool..... $50

** Aftermarket disc brake kits can be used if designed for c-clip eliminator kits*

All 5/8" upgrades above are limited to A1027 stud kit due to clearances necessary for eliminator kits

P2000FM94 Pro Race Hy-Tuf 31 or 33-spline axles, c-clip eliminator kit, 2" or 3" (1/2-20) stud kit, and Lightweight Pro spool 1994-2004 Mustang 8.8" using OEM disc brakes (specify GT or Cobra brakes)... $696

P2000FM9458 P2000FM94 with upgrade to A1027 5/8" stud kit... $750

OPRA01 Upgrade to 35 spline axles and spool... $50

OPAX01* Optional Strange ABS reluctor rings for 1994-2004 Mustang- pair... $89

* Needs special A1094E reluctor rings for ABS applications

P2000FM05 Pro Race Hy-Tuf 31 or 33-spline axles, c-clip eliminator kit, 2" or 3" (1/2-20) stud kit, and Lightweight Pro spool 2005-2014 Mustang 8.8" using OEM GT or GT500 disc brakes..... $805

P2000FM0558 With upgrade to A1027 5/8" stud kit..... $859

OPRA01 Upgrade to 35 spline axles and spool..... $50

OPAX05 Optional OEM ABS reluctor rings for 2005-2014 Mustang- pair... $98

05-14 kits include billet aluminum caliper mounts - Eliminating modifications that compromise integrity of the OEM mount

5/8" stud kit option limited to A1027 due to clearance requirements for eliminator kits

AXLES

PRO RACE AXLE & SPOOL PACKAGES & AXLE ACCESSORIES

P2005

STRANGE PRO RACE HY-TUF AXLE AND LIGHTWEIGHT STEEL SPOOL PACKAGES

Easily configured to a wide range of applications.
Custom designed for your vehicle at money saving prices!

P2005	Pro Race Hy-Tuf axles any length, 33 or 35-spline, choice of bolt circle, axle bearings, 2" or 3" (1/2-20) stud kit, retaining plates, and Lightweight Pro Steel spool..... $629
P200558	With upgrade to 5/8" stud kit..... $683
P2007	Pro Race Hy-Tuf axles any length, 33 or 35-spline, choice of bolt circle, axle bearings, 2" or 3" (1/2-20) stud kit, and Lightweight Pro Steel spool..... $609
P200758	With upgrade to 5/8" stud kit..... $663

P2017

P2015	Lightweight Pro Race Hy-Tuf 40 spline gun-drilled axles - .875" bore, any length up to 30" choice of bolt circle, five 1" round lightening holes in axle flange, A1019 axle bearings, 5/8" stud kit and Lightweight Pro Steel spool..... $890
P2016	With upgrade to A1024 3.350" OD axle bearings..... $1,010
P2017	Pro Race Hy-Tuf 40 spline solid axles - any length up to 35" choice of bolt circle, five 1" round lightening holes in axle flange, A1019 axle bearings, 5/8" stud kit and Lightweight Pro Steel spool)..... $800
P2018	With upgrade to A1024 3.350" OD axle bearings..... $920

OPTIONAL ULTRA LIGHT FLANGE AVAILABLE FOR ALL STRANGE AXLE PACKAGES A1006 ADD $75

PRO RACE AXLE & SPOOL PACKAGES & AXLE ACCESSORIES

STRANGE STUD KITS

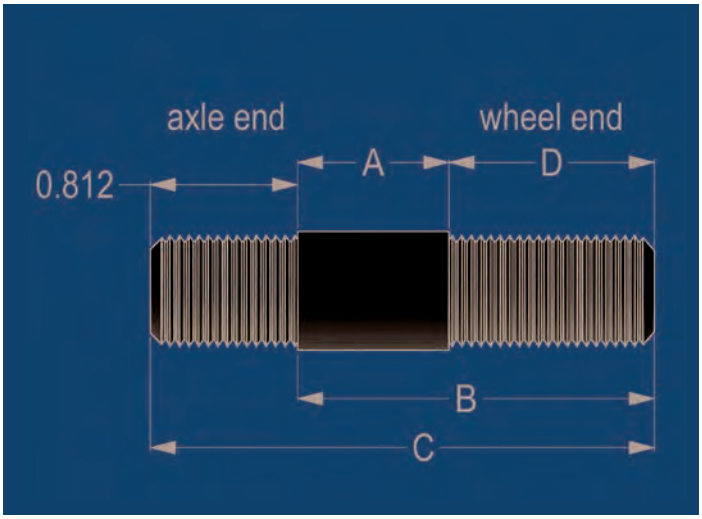
Strange offers the choice of two types of 5/8" stud kits.

Our traditional A1027 stud kit features premium bolts & adjustable .875" long sleeves. This the lightest stud kit.

In addition, we offer five lengths of chrome moly stud kits. Ensure dimension "A" is able to fully engage into your wheel. This needs to be slightly greater than the combined thickness of the disc brake hat or drum and the thickness of the wheel.

Every 5/8" stud kit includes aluminum anti-marring washers that protect the wheel from the nut. Anti-marring washers are offered in .250", .4375" and .688" widths. The .4375" washer is our standard washer thickness. You can choose to substitute with the .250" by adding "S" at the end of the part number, or "L" for the .688" washers.

Strange 1/2" stud kits are offered in 2" and 3" lengths. The stud length refers to the threaded portion of the stud. To determine the usable thread that will protrude from the axle flange, subtract the thickness of the axle flange and an additional .0625" for the washer. 1/2" stud kits are designed for 1/2"-20 lug nuts - Not included in kits.



STRANGE 1/2" STUD KITS

A1025 2" screw-in stud kit for Strange axles (1/2"-20)
Grade 8 bolts and washers- 10 of each..... $21

A1026 3" screw-in stud kit for Strange axles (1/2"-20)
Grade 8 bolts and washers- 10 of each..... $21

CHROME MOLY 5/8" STUD KITS

A1037 3" screw-in stud kit for Strange axles (5/8"-18)
Grade 8 bolts with .875" adjustable sleeves,
lug nuts, .4375" aluminum washers, and wrench... $90

A1037

A1027

TRADITIONAL 5/8" STUD KITS

A1027 3" screw-in stud kit for Strange axles (5/8"-18)
Grade 8 bolts with .875" adjustable sleeves,
lug nuts, .4375" aluminum washers, and wrench... $90

STRANGE CHROME-MOLY 5/8" STUD KITS

A1036 Strange chrome-moly 5/8" stud kit
Lug nuts, .250" aluminum washers, and locking nuts
A= .775", B= 1.550", C= 2.362" , D= .775"

A1037 Strange chrome-moly 5/8" stud kit
Lug nuts, .4375" aluminum washers, and locking nuts
A= .875", B= 2.063", C= 2.875", D= 1.188"

A1037MD Strange chrome-moly 5/8" stud kit
Lug nuts, .4375" aluminum washers, and locking nuts
A= .875", B= 1.760", C= 2.572", D= .885"

A1038 Strange chrome-moly 5/8" stud kit
Lug nuts, .4375" aluminum washers, and locking nuts
A= 1.187", B= 2.375", C= 3.187" , D= 1.188"

A1039 Strange chrome-moly 5/8" stud kit
Lug nuts, .4375" aluminum washers, and locking nuts
A= 1.500", B= 2.688", C= 3.500" , D= 1.188"

A1041 Strange chrome-moly 5/8" stud kit
Lug nuts, .4375" aluminum washers, and locking nuts
A= 1.875", B= 3.125", C= 4.00" , D= 1.250"

L7010NX
Aluminum 5/8" lug nut
With integral washer.. $9 ea

ALL STRANGE 5/8" STUD KITS - $90

5/8" stud kits contain .4375" washers unless otherwise noted

Add "S" to end of part number for .250" or "L" for .688"

AXLES

ACCESSORIES

C-Clip Eliminator kits were originated by Strange Engineering and are required by drag racing rules for good reason.

C-Clip type axles are retained by a clip above the spline portion of the axle. When the stock axle or differential breaks, the entire axle and wheel assembly can slide completely out of the housing. The Strange kit eliminates the dangers of wheel loss. The bearings are press fit onto the axles and enclosed by aluminum halves. These halves bolt to the stock axle housing ends, securely retaining the axle.

Drag Race Only kits are supplied with low friction ball bearings. They reduce rotational loss, but are not acceptable for any other use.

Street, Street/Strip, and Oval Track kits utilize tapered axle bearings. These kits are ideal for many applications requiring extended use.

FORD 8.8" MUSTANG C-CLIP ELIMINATOR KITS

A1090	Street / Strip c-clip eliminator kit for Strange axles @ 1.563" 86-93 Mustang 8.8" using OEM drum brakes *.....$159
A1093	Street / Strip c-clip eliminator kit for OEM c-clip axles 86-93 Mustang 8.8" using OEM drum brakes *..... $169
A1094	Street / Strip c-clip eliminator kit for Strange axles @ 1.563". Includes billet aluminum caliper mounts for GT brakes 94-04 Mustang 8.8" using OEM GT disc brakes..... $230
A1095	Street / Strip c-clip eliminator kit for Strange axles @ 1.563". Includes billet aluminum caliper mounts for Cobra brakes 94-04 Mustang 8.8" using OEM Cobra disc brakes..... $230
A1096*	Street / Strip c-clip eliminator kit for OEM c-clip axles. Includes billet aluminum caliper mounts for GT brakes 94-04 Mustang 8.8" using OEM GT disc brakes..... $230
A1097	Street / Strip c-clip eliminator kit for OEM c-clip axles. Includes billet aluminum caliper mounts for Cobra brakes 94-04 Mustang 8.8" using OEM Cobra disc brakes..... $230
A1098	Street / Strip c-clip eliminator kit for OEM c-clip axles. Includes billet aluminum caliper mounts for stock brakes 05-14 Mustang 8.8" using OEM stock disc brakes..... $329
A1098GT5	Street / Strip c-clip eliminator kit for OEM & replacement c-clip axles. Includes billet aluminum caliper mounts for GT500 brakes 05-14 Mustang 8.8" using 13-14 GT500 brakes..... $329.00
A1099	Street / Strip c-clip eliminator kit for Strange custom Hy-Tuf axles. Includes billet aluminum caliper mounts for stock brakes 05-14 Mustang 8.8" using OEM stock disc brakes..... $329
A1099ST	Street / Strip c-clip eliminator kit for Strange custom Alloy axles. Includes billet aluminum caliper mounts for stock brakes 05-14 Mustang 8.8" using OEM stock disc brakes..... $329
A1099GT5	Strip c-clip eliminator kit for Strange Hy-Tuf axles. Includes billet aluminum caliper mounts for GT500 brakes 05-14 Mustang 8.8" using 13-14 GT500 brakes..... $329.00
A1099STGT5	Street / Strip c-clip eliminator kit for Strange Alloy axles. Includes billet aluminum caliper mounts for GT500 brakes 05-14 Mustang 8.8" using 13-14 GT500 brakes..... $329.00

* Needs special A1094E reluctor rings for ABS applications

1986-1993 Mustang applications can use aftermarket disc brake kits designed specifically for c-clip eliminator kits

AXLE BEARINGS

A1013 Timken tapered axle bearing, locking ring & outboard seal
1.562″ bore for 3.150 ID housing end- ea... $35

A1019 Ball style axle bearing and locking ring
1.772″ bore for 3.150″ ID housing end- ea... $35

A1021 Ball style axle bearing and locking ring
1.562″ bore for 3.150″ ID housing end- ea... $35

A1023 Small Ford axle bearing, locking ring, and retainer plate
1.562″ bore for 2.835″ ID housing end- ea... $40

RETAINER PLATES

A1016 Early Big Ford retainer plate
with 1/2 ″ bolt holes- ea... $13

A1018 Late big Ford retainer plate
with 3/8″ bolt holes- ea... $13

A1023B Small Ford retainer plate- ea... $13

H1138B Ford 8.8″ retainer plate for Strange
H1138 ends- ea... $13

GEARS

US STRANGE, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE

8620 PRO STREET / STANDARD GEAR SETS:

The combination of 8620 steel and precise heat treatment results in a gear set with the strength and hardness necessary for excellent life in circle track, street and some Drag Racing applications.

9310 DRAG RACE / PRO GEAR SETS:

For Drag Racing ONLY! High nickel 9310 steel gear sets are softer by design to absorb the high impact shock loads that occur in many Drag Racing classes.

GEAR SET BREAK-IN:

Pro Street / Standard gear sets must be broken-in properly to ensure maximum life and quiet operation. During this process, the gear set is heat cycled and lapped. A new ring and pinion will generate a lot of heat due to friction. If temperatures get too high, they will alter the surface hardness of the material leading to early failure.

LUBRICATION:

The differential will best determine the proper gear lube. Always follow the recommendations of the differential manufacturer. In general, clutch style posi units or cone type systems require a quality petroleum based gear lube along with a bottle of friction modifier. For helical gear units, use the petroleum based fluid only. Always check before using any synthetic fluids as irreversible damage may occur. If using a spool, the choice is yours between petroleum and synthetic.

RING GEAR LIGHTENING SERVICE:

Ring gear lightening is offered for all gear sets that can benefit from the process. The ring gear is machined to reduce rotating weight. Weight reduction ranges from .75 lbs. to 2.75 lbs. depending on ratio and the rear end it fits. Each ring gear is machined with a generous radius and the weight reduction will not reduce gear life for the vast majority of applications.

D3596	Lighten purchased new ring gear.....	$75
D3597	Lighten customer supplied new ring gear.....	$100

GEAR RATIO CALCULATION

$$\text{Revolutions Per Minute} = \frac{336 \times \text{Gear Ratio} \times \text{MPH}}{\text{Tire Diameter}}$$

$$\text{Miles Per Hour} = \frac{\text{Tire Diameter} \times \text{RPM}}{336 \times \text{Gear Ratio}}$$

$$\text{Gear Ratio} = \frac{\text{Tire Diameter} \times \text{RPM}}{336 \times \text{MPH}}$$

$$\text{Tire Diameter} = \frac{336 \times \text{Gear Ratio} \times \text{MPH}}{\text{RPM}}$$

APPROXIMATE 1/4 MILE ET TO MPH (without power adders or throttle stop)

13.00 - 100 mph	12.00 - 108 mph	11.00 - 121 mph	10.00 - 132 mph	9.00 - 147 mph	8.00 - 165 mph
12.50 - 105 mph	11.50 - 116 mph	10.50 - 127 mph	9.50 - 139 mph	8.50 - 158 mph	7.50 - 176 mph

STRANGE MASTER INSTALLATION KITS: When investing in the new gear set and/or carrier, it is important to use new bearings, seals, ring gear bolts, and other essential installation components. New installation components will reduce the chance of gear set and component failure.

Strange Engineering offers master installation kits for most gear set applications. Master installation kits feature Timken bearings and races, ring gear bolts, shims, seal, pinion nut, gasket or sealer, brush, marking compound, and crush collar if required.

STRANGE BASIC INSTALLATION KITS: Basic kits include ring gear bolts, shims, seal, pinion nut, gasket or sealer, brush, marking compound, and crush collar if required. Bearings and races are not included.

MICROBLUE: This two step process greatly reduces friction between the ring and pinion. The REM stage removes the rough OEM machining marks. Afterwards, it receives the MicroBlue coating which improves the wetting characteristics of the differential fluid. This makes the gear set "slipperier" in gear oil. Less heat and friction add up to more available horsepower and longer gear life. This process is also available for bearings and races in installation kits.

D3598G MicroBlue Gear Set..... $220
D3598B Pinion & side (bearings/races)..... $71
D3598BT Pinion & side (bearings/races), and tail bearing..... $88

GEARS

US GEAR, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE

FORD

9" FORD STANDARD GEAR SETS - 28 SPLINE PINION

RS07890300US	US Gear	3.00 ratio	$217
RS07890300	Motive	3.00 ratio	$263
RS07890325US	US Gear	3.25 ratio	$217
RS07890325	Motive	3.25 ratio	$263
RS07890340US	US Gear	3.40 ratio	$217
RS07890350US	US Gear	3.50 ratio	$217
RS07890350	Motive	3.50 ratio	$204
RS07890370US	US Gear	3.70 ratio	$217
RS07890370	Motive	3.70 ratio	$242
RS07890389US	US Gear	3.89 ratio	$217
RS07890389	Motive	3.89 ratio	$238
RS07890400US	US Gear	4.00 ratio	$217
RS07890411US	US Gear	4.11 ratio	$217
RS07890411	Motive	4.11 ratio	$238
RS07890430US	US Gear	4.30 ratio	$217
RS07890430	Motive	4.30 ratio	$247
RS07890457US	US Gear	4.57 ratio	$217
RS07890457	Motive	4.57 ratio	$215
RS07890463US	US Gear	4.63 ratio	$217
RS07890471US	US Gear	4.71 ratio	$217
RS07890471	Motive	4.71 ratio	$268
RS07890478US	US Gear	4.78 ratio	$217
RS07890486US	US Gear	4.86 ratio	$217
RS07890486	Motive	4.86 ratio	$232
RS07890500US	US Gear	5.00 ratio	$217
RS07890500	Motive	5.00 ratio	$242
RS07890514US	US Gear	5.14 ratio	$217
RS07890514	Motive	5.14 ratio	$226
RS07890529US	US Gear	5.29 ratio	$217
RS07890529	Motive	5.29 ratio	$242
RS07890543US	US Gear	5.43 ratio	$217
RS07890543	Motive	5.43 ratio	$226
RS07890567US	US Gear	5.67 ratio	$217
RS07890567	Motive	5.67 ratio	$226
RS07890583US	US Gear	5.83 ratio	$217
RS07890583	Motive	5.83 ratio	$242
RS07890600US	US Gear	6.00 ratio	$217
RS07890600	Motive	6.00 ratio	$242
RS07890620US	US Gear	6.20 ratio	$217
RS07890620	Motive	6.20 ratio	$242
RS07890633US	US Gear	6.33 ratio	$217
RS07890633	Motive	6.33 ratio	$242
RS07890650US	US Gear	6.50 ratio	$217
RS07890650	Motive	6.50 ratio	$242

9" FORD DRAG RACE PRO GEAR SETS

RP07990340US	US Gear	3.40 ratio *	$450
RPF90340	Richmond	3.40 ratio *	$484
RP07990350US	US Gear	3.50 ratio *	$450
RPF90350	Richmond	3.50 ratio *	$484
RP07990360US	US Gear	3.60 ratio *	$450
RPF90360	Richmond	3.60 ratio *	$471
RP07990370US	US Gear	3.70 ratio *	$450
RP07990370	Motive	3.70 ratio *	$551
RPF90370	Richmond	3.70 ratio *	$418
RP07990389US	US Gear	3.89 ratio *	$450
RP07990389	Motive	3.89 ratio *	$424
RPF90389	Richmond	3.89 ratio *	$446
RP07990411US	US Gear	4.11 ratio *	$420
RP07990411	Motive	4.11 ratio *	$389
RPF90411	Richmond	4.11 ratio *	$409
RP07990429US	US Gear	4.29 ratio *	$420
RP07990429	Motive	4.29 ratio *	$389
RPF90429	Richmond	4.29 ratio *	$409
RP07990457US	US Gear	4.57 ratio *	$420
RP07990457	Motive	4.57 ratio *	$402
RPF90457	Richmond	4.57 ratio *	$423
RP07990471US	US Gear	4.71 ratio *	$420
RPF90471	Richmond	4.71 ratio *	$408
RP07990486US	US Gear	4.86 ratio *	$405
RP07990486	Motive	4.86 ratio *	$389
RPF90486	Richmond	4.86 ratio *	$409
RP07990486S	Motive	4.86 ratio	$353
RPF90486S	Richmond	4.86 ratio	$371
RP07990500US	US Gear	5.00 ratio	$389
RPF90500	Richmond	5.00 ratio	$370
RP07990514US	US Gear	5.14 ratio	$389
RP07990514	Motive	5.14 ratio	$342
RPF90514	Richmond	5.14 ratio	$360
RP07990529US	US Gear	5.29 ratio	$389
RP07990529	Motive	5.29 ratio	$388
RPF90529	Richmond	5.29 ratio	$408
RP07990543US	US Gear	5.43 ratio	$389
RP07990543	Motive	5.43 ratio	$370
RPF90543	Richmond	5.43 ratio	$389
RP07990567US	US Gear	5.67 ratio	$389
RP07990567	Motive	5.67 ratio	$370
RPF90567	Richmond	5.67 ratio	$389
RP07990583US	US Gear	5.83 ratio	$374
RP07990583	Motive	5.83 ratio	$371
RPF90583	Richmond	5.83 ratio	$390
RP07990600US	US Gear	6.00 ratio	$374
RP07990600	Motive	6.00 ratio	$449
RP07990620US	US Gear	6.20 ratio	$374
RP07990620	Motive	6.20 ratio	$449
RP07990633US	US Gear	6.33 ratio	$374
RP07990650US	US Gear	6.50 ratio	$374
RP07990650	Motive	6.50 ratio	$449
RPF90650	Richmond	6.50 ratio	$362

* 35 spline pinion shaft- Suitable pinion support and yoke required

9 1/2" DRAG RACE PRO GEAR SETS - 35 SPLINE PINION

RP07995325	US Gear	3.25 ratio	$512	RPF95411	Richmond	4.11 ratio	$619
RP07995340	US Gear	3.40 ratio	$512	RP07995429	US Gear	4.29 ratio	$498
RP07995350	US Gear	3.50 ratio	$512	RP07995429MOT	Motive	4.29 ratio	$509
RP07995360	US Gear	3.60 ratio	$512	RPF95429	Richmond	4.29 ratio	$619
RP07995370	US Gear	3.70 ratio	$512	RP07995456MOT	Motive	4.56 ratio	$509
RP07995389	US Gear	3.89 ratio	$498	RP07995457	US Gear	4.57 ratio	$498
RP07995389MOT	Motive	3.89 ratio	$509	RP07995486	US Gear	4.86 ratio	$498
RP07995411	US Gear	4.11 ratio	$498	RP07995500	US Gear	5.00 ratio	$498
RP07995411MOT	Motive	4.11 ratio	$509	RP07995514	US Gear	5.14 ratio	$498

All 9 1/2" gear sets require suitable case, pinion support, & yoke ensure housing was designed with proper clearance to use these gears

10" DRAG RACE PRO GEAR SETS - 35 SPLINE PINION

RP07910389	US Gear	3.89 ratio	$934	RP07910514MOT	Motive	5.14 ratio	$1,233
RP07910411	US Gear	4.11 ratio	$934	RP07910529MOT	Motive	5.29 ratio	$1,257
RP07910411MOT	Motive	4.11 ratio	$1,288	RP07910533MOT	Motive	5.33 ratio	$1,257
RP07910429	US Gear	4.29 ratio	$934	RP07910537MOT	Motive	5.37 ratio	$1,257
RP07910429MOT	Motive	4.29 ratio	$1,275	RP07910543	US Gear	5.43 ratio	$934
RP07910457	US Gear	4.57 ratio	$934	RP07910543MOT	Motive	5.43 ratio	$1,233
RP07910457MOT	Motive	4.57 ratio	$1,275	RP07910567	US Gear	5.67 ratio	$934
RP07910471	US Gear	4.71 ratio	$934	RP07910583	US Gear	5.83 ratio	$934
RP07910471MOT	Motive	4.71 ratio	$1,245	RP07910620	US Gear	6.20 ratio	$934
RP07910500	US Gear	5.00 ratio	$934				
RP07910500MOT	Motive	5.00 ratio	$1,233				
RP07910514	US Gear	5.14 ratio	$934				

All 10" gear sets require suitable case, pinion support, & yoke
Ensure housing was designed with proper clearance to use these gears

10.5", 12", & 12 1/4" LIVE AXLE GEAR SETS

R7091	10.5"	2.91 ratio	$2,150
R7111	10.5"	4.11 ratio	$2,150
R7422	12.25"	3.20 ratio	$2,750

Live Axle gear sets include pinion bearing, pinion nut & ring gear bolts

GEARS

US GEAR, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE

FORD

BASIC INSTALLATION KITS

R5240	Basic installation kit for posi units.....	$37
R5242	Basic installation kit for open carriers.....	$37

Basic kits include center section gasket

ULTRA CASE GEAR CHANGE KITS

R5237UC	For tapered bearing and 28 spline pinion *.....	$185
R5237UCR	For tapered bearing and 28 spline pinion.....	$220
R5237UCB	For ball bearing and 28 spline pinion *.....	$275
R5237UCBR	For ball bearing and 28 spline pinion.....	$287
R5238UC	For tapered bearing and 35 spline pinion *.....	$225
R5238UCR	For tapered bearing and 35 spline pinion.....	$260
R5238UCB	For ball bearing and 35 spline pinion *.....	$340
R5238UCBR	For ball bearing and 35 spline pinion.....	$350

* Pinion races not included
Center section gasket not included in above kits- Available separately

MASTER INSTALLATION KITS

R5237	N1922 or N2322 support and 28 spline pinion *.....	$130
R5237WR	N1922 or N2322 support and 28 spline pinion.....	$149
R5238	N1922 or N2322 support and 35 spline pinion *.....	$133
R5238WR	N1922 or N2322 support and 35 spline pinion.....	$155
R5236	N1917 or Ford Daytona support *.....	$100
R5236WR	N1917 or Ford Daytona support.....	$120
R5235	Stock Ford (non-Daytona) support *.....	$125
R5235WR	Stock Ford (non-Daytona) support.....	$135
R5237B	N1920 or N2323 support and 28 spline pinion*.....	$245
R5237BR	N1920 or N2323 support and 28 spline pinion.....	$258
R5237B	N1921 or N2323 support and 35 spline pinion*.....	$258
R5237B	N1921 or N2323 support and 35 spline pinion.....	$271

* Pinion races not included
Center section gasket not included in above kits- Available separately

R5237WR

9" FORD INSTALLATION COMPONENTS

H1112G	Center section gasket	$6
H1111	Fel Pro high performance gasket	$15
H1111S	Lube Locker center section gasket	$20
D1586	Side bearings & races for 2.891" case	$40
D1588	Side bearings & races for 3.062" case	$40
D1590	Side bearings & races for 3.250" case	$40
D1592	Side bearings & races for 3.812" case	$47
N1923	Pinion bearing kit for N1922 & N2322 (28 spline pinion)	$60
N1924	Pinion bearing kit for N1922 & N2322 (35 spline pinion)	$60
N1916	Pinion bearing kit for N1917 & N1914	$42
N1916PS	Pinion bearing kit for stock Ford support (non-Daytona)	$55
N2323S	Pinion bearing kit for N1920 & N2323 (28 spline pinion)	$175
N2323L	Pinion bearing kit for N1921 & N2323 (35 spline pinion)	$185

Pinion bearing kits contain front and rear bearing, two piece preload assembly, seal, and any required adapters/spacers (races not included)

N1960	Pinion seal for 28 spline pinion	$10
N1960L	Low drag pinion seal for 28 spline pinion	$11
N1961	Pinion seal for 35 spline pinion	$9
N1961L	Low drag pinion seal for 35 spline pinion	$11
N1922A	Pinion nut for 28 spline pinion	$7
N1922B	Pinion nut for 35 spline pinion	$7
N1930	Front pinion bearing for N1923 & Ultra case (28 spline pinion)	$16
N1936	Front pinion bearing for N1924	$15
N1925H	Front pinion bearing for N1916	$13
N1931	Front pinion race for N1922 & Ultra case	$13
N1914C	Front pinion race for N1917 & N1914	$9
N1938	Rear pinion bearing for N1923 & N1924	$26
N1925J	Rear pinion bearing for N1917 & N1914	$20
N2001F	Rear pinion bearing for Ultra case	$50
N1920B	Rear pinion bearing for 28 spline ball bearing supports	$110
N1920BM	Rear pinion bearing for 35 spline ball bearing supports	$150
N1939	Rear pinion race for N1922	$15
N1914B	Rear pinion race for N1917 & N1914	$13
N2001E	Rear pinion race for Ultra case	$24
N1926A	Pinion bearing adapter sleeve from N1923	$13
N1926D	Torrington washer from N1923	$8
N1920G	Pinion bearing adapter sleeve from N2323S	$25
N1920D	.220" thick ball bearing spacer (35 spline pinion)	$11
N1919	Two piece preload assembly from N1921, N1923 & N1924	$20
N1920HK	Two piece preload assembly from N1920	$24
N1925	Two piece preload assembly from N1916	$20
N1924A	Solid preload spacer from N1924	$15
N1920F	Solid preload spacer to replace N1920HK	$15
N2001C	Solid preload spacer for Ultra case using tapered bearings	$19
N1940	Tail bearing	$19
N1941	Tail bearing retainer	$3
N1943	Tail bearing for HD Pro & Ultra case	$33
N1943R	T/B retainer plate w/screws for HD Pro & Ultra case	$12
N1962	Pinion depth shim kit	$15
N1962UC	Pinion depth shim kit for Ultra case	$45
N1958A	Pinion support o-ring	$3
N1950B	Pinion support o-ring for Ultra case	$3
N1965	Ring gear bolt kit (7/16"-20 x .875")	$9
D1565RK*	Ring gear bolt kit	$10
N1967	Ring gear bolt kit (7/16"-20 x .1.00")	$9
N1968	Ring gear bolt kit (7/16"-20 x 1.250")	$9
N1964	Ring gear bolt kit (1/2"-20 x .875")	$9
N1973	ARP bolt kit (7/16" for D2004 spool)	$55
N1975	ARP bolt kit (7/16" for Strange steel spools)	$25
N1976	ARP bolt kit (1/2" for Strange steel spools)	$42
N1910H	Load bolt assembly for Ultra case	$39
N1950HK	Pinion support spacer kit for Ultra case using 10" gear	$61

* 7/16" for D1512, D1513 & D1565 aluminum spools

8.8" FORD STANDARD GEAR SETS & INSTALLATION KITS

- 10 bolt cover
- Ring gear = 8.8"
- Pinion shaft = 1.625"
- Pinion spline = 30
- 7/16"-20 RH bolt holes

Mustang V8 86-pres
Bronco 83-96
Explorer 90-present
Ranger 4.0L 90-present

F150 83-present
F250 83-90
E150 87-present
E250 83-87

Thunderbird 87-96
Cougar 88-96
Mercury (full size) 82-present
Ford (full size) 86-present

RS07888308US	US Gear	3.08 ratio	$195
RS07888331	Motive	3.31 ratio	$257
RS07888355US	US Gear	3.55 ratio	$195
RS07888355	Motive	3.55 ratio	$224
RS07888373US	US Gear	3.73 ratio	$195
RS07888373	Motive	3.73 ratio	$224
RSF888390US	US Gear	3.90 ratio	$195
RSF888390	Motive	3.90 ratio	$263
RS07888410US	US Gear	4.10 ratio	$195
RS07888410	Motive	4.10 ratio	$224
RS07888430US	US Gear	4.30 ratio	$195
RS07888430	Motive	4.30 ratio	$240
RS07888456US	US Gear	4.56 ratio*	$195
RS07888456	Motive	4.56 ratio*	$231
RS07888471US	US Gear	4.71 ratio*	$234
RS07888488US	US Gear	4.88 ratio*	$195
RS07888488	Motive	4.88 ratio*	$242
RS07888513US	US Gear	5.13 ratio*	$195
RS07888514	Motive	5.14 ratio*	$271
RS07888571	Motive	5.71 ratio*	$276

* Posi units require modified cross pin

R5231**	Master installation kit	$94
R5230**	Basic installation kit	$34
R5230PS	8.8 solid adjustable preload spacer kit	$34
D1582**	Side bearings and races	$40

** Will NOT fit Super 8.8 Mustang

8.8" FORD PRO GEAR SETS

RPF88375L	Richmond	3.75 ratio - Lightened	$450
RPO7888390	Motive	3.90 ratio	$432
RPF88411L	Richmond	4.11 ratio - Lightened	$411
RPF88429L	Richmond	4.29 ratio - Lightened	$411

8.8" FORD SUPER IRS GEAR SETS

- Ring gear = 8.8"
- Pinion shaft = 2.001"
- Pinion spline = 30
- M12-1.25 bolt holes

Mustang 2014-17

RS07888373-15US	US Gear	3.73 ratio	$256
RS07888391-15US	US Gear	3.91 ratio	$256
RS07888411-15US	Motive	4.11 ratio	$256

Fits 3.31 & numerically higher carrier

8" FORD STANDARD GEAR SETS & INSTALLATION KITS

10 bolt cover
Ring gear = 8"
Pinion shaft = 1.187"
Pinion spline = 25
7/16"-20 RH bolt holes

Bobcat 75-80
Comet 71-77
Cougar 67-79
Fairlane 64-74
Fairmont 75-79

Falcon 64-70
Granada 75-79
Maverick 71-78
Monarch 74-80
Mustang 64-79

Pinto 71-80
Torino 71-74
Zephyr 78-79

RS07880280US	US Gear	2.80 ratio	$249
RS07880300US	US Gear	3.00 ratio	$238
RS07880300	Motive	3.00 ratio	$252
RS07880325US	US Gear	3.25 ratio	$238
RS07880325	Motive	3.25 ratio	$261
RS07880340	Motive	3.40 ratio	$273
RS07880355US	US Gear	3.55 ratio	$221
RS07880355	Motive	3.55 ratio	$224
RS07880380US	US Gear	3.80 ratio	$221
RS07880380	Motive	3.80 ratio	$219
RS07880411US	US Gear	4.11 ratio	$221
RS07880411	Motive	4.11 ratio	$213
RS07880462US	US Gear	4.62 ratio	$221
RSF80462	Richmond	4.62 ratio	$224

R5226	Master installation kit	$94
R5225	Basic installation kit	$35

DIFFERENTIALS & SPOOLS

STRANGE, EATON, AUBURN, SPICER US GEAR, HOOSIER, & YUKON

DIFFERENTIALS: Driving down a straight road, the differential allows both axles to turn at the same speed. During a turn, the outer wheel needs to turn faster than the inner wheel since it has to cover a longer path in the same amount of time. If not, the tire will scrub or hop around the corner. The differential compensates for this condition, by altering the RPM relationship between the two axle shafts. There are several designs that meet this requirement, but accomplish it in different ways.

Spicer Clutch

OPEN DIFFERENTIALS: This is the most basic unit. It uses side gears (internally splined to the axles), engaged with spider gears (shaft mounted to the case). All the gears are in constant mesh. As long as the load remains the same, the gears will remain idle and both axles will turn at the same rate. Once an axle becomes harder to rotate, like the inside tire during a turn, it causes the spider gears to walk around the held gear and drive the other side gear faster. While it may perform adequately for some applications, it is very sensitive to any variance in loads. If weight is shifted in the vehicle it can cause this condition to occur. An open differential in a performance car is undesirable since it will speed-up the tire with the worst traction.

Eaton Clutch

CLUTCH SYSTEMS: Similar in design as the open, but have a series of friction plates between the side gear and the case. Standard Duty units have them behind one side gear, Heavy Duty have them behind both. There is a spring or springs that apply tension between the case, clutch pack(s), and the side gears . By increasing friction in this way, it requires more load variation before the clutches release and allow the gears to start rotating and speed-up the outer wheel. The number of plates, their material, and spring pressure will alter the release point. The clutch packs can be replaced when worn-out, but their replacement cost might be prohibitive.

Strange Clutch

CONE SYSTEMS: The case is machined with tapered bores and the side gears have a mating cone shape on their backside. There is a spring or springs that apply pressure to the side gears causing them to wedge into the case. It also uses spider gears and a cross shaft as above. The operation is much the same as the clutch system, but utilizes tapered cones instead of clutch packs. Standard Duty units have smaller cones than the Heavy Duty. Larger cones have more surface area resulting in more holding power and longer life. These are non- rebuild-able and must be replaced when worn out.

Auburn Cone

LOCKERS: A Locker is a mechanical unit that is sensitive to torque application. It will lock (drive both wheels) under acceleration, or unlock (allow the axles to turn at different rates) during coast or deceleration. A very strong piece, since it doesn't use any clutches or cones that can wear out, which made it a good choice for it's original truck application. Since driver input mainly determines whether the unit is locked or not, it can be very frustrating to a driver who is unfamiliar with the operation of the differential. Hard acceleration during a turn will cause the unit to lock and skid the tire. Between lock and unlock, a distinctive "clunk" can be heard. During a properly executed turn, clicking will be audible since locking teeth are allowed to jump each other inside the unit.

Eaton Locker

HELICAL GEAR UNIT: A helical gear differential is a mechanical unit that, unlike the Locker, offers smooth and progressive power transfer. If one tire begins to slip relative to the other tire, a separating force is created between the pinion gears and side gears. This generates internal friction which slows the spinning wheel and sends power to the wheel with the most traction. These differentials are comparable to the strength of a Locker, but without it's downsides. The Strange 9" S-Trac, due to materials and design, exceed the strength limits of the Locker while offering all the benefits of a helical gear unit.

Eaton Helical Truetrack

SPOOL: A spool is one solid part that replaces all components of a differential. It will always turn both axles at the same speed with an equal amount of force. Due to the simplistic design, it is much stronger and lighter than any differential. It also allows the use of larger axles that can handle greater amounts of torque. This makes it the best choice for Drag Racing, Drifting, and other forms of motorsports that require uninterrupted transfer of power to both wheels. Spools should never be considered for a street application. They are produced in forged steel, forged aluminum, and billet aluminum. Before purchasing an aluminum spool, contact Strange to discuss your particular application.

L/W Steel Spool

STRANGE 35 SPLINE S-TRAC FOR FORD 9" & FORD 8.8"

The Strange 35 Spline S-Trac is a helical gear differential that offers smooth and progressive power transfer. Its superior design and quality make it ideal for the most abusive Street/Track applications.

The torque biasing S-Trac is purely mechanical, which eliminates the need for clutches. It provides quiet operation while maximizing tire traction and vehicle acceleration. The forged steel case halves are heat treated and fully machined to minimize weight and provide a rigid mounting surface for the ring gear resulting in improved gear life. Internal gear pocket geometry is designed to minimize stress risers increasing component life.

The housing encapsulates precision manufactured gears, including 9310 steel pinion gears that provide exceptional strength. All internal gears, pinion and side gears, are vacuum heat treated to increase strength and also cold treated to extend service life while reducing wear. A dry film solid lubricant coating is applied to friction surfaces to minimize wear.

The S-Trac is recommended for full bodied street/track cars that run the 1/4 mile in the low 9 seconds or slower. For Drag Race Only vehicles, Strange Engineering strongly recommends using a spool. The seamless operation also makes it ideal for road racing, off-road and autocross. This premium unit carries a limited lifetime replacement warranty to the original purchaser.

- Torque Biased - Mechanical - Clutchless - Quiet Operation- Maximized Traction and Acceleration
- Forged Steel Case Halves are Heat Treated and Fully Machined Providing a Light, Durable, and Rigid Unit
- Internal Gear Pocket Geometry is Designed to Minimize Stress Risers for Increased Life
- Dry Film Solid Lubricant Coating Applied to Thrust Surfaces Minimizing wear
- 9310 Steel Pinion Gears for Ultimate Torque Carrying Capacity
- Aggressive Gear Helix Angle Promotes Superior Torque Bias In Situations of Unequal Traction
- All Internal Gears Made from 9310 Steel and Vacuum Heat Treated for Superior Strength
- Gears are also Cold Treated to Optimize Fatigue Life and Reduce Wear

LUBRICATION: Always follow the recommendations of the differential manufacturer. In general, clutch style posi units or cone type systems require a quality petroleum based gear lube along with a bottle of friction modifier. For helical gear units, use the petroleum based fluid only. Always check before using any synthetic fluids as irreversible damage may occur. If using a spool, the choice is yours between petroleum and synthetic.

DIFFERENTIALS & SPOOLS

STRANGE, EATON, AUBURN, SPICER US GEAR, HOOSIER, & YUKON

FORD 9" / FORD 8.8 / FORD 8" DIFFERENTIAL

N1974	Ford 9"	US Gear	Clutch	28 spline.....	$410
N1981	Ford 9"	Eaton	Helical Gear	28 spline.....	$563
R542036	Ford 9"	Auburn	H/D Cone	31 spline.....	$520
N1970H *	Ford 9"	Hoosier	Clutch	31 spline.....	$389
N1970F *	Ford 9"	Strange	Clutch	31 spline.....	$389
N1979	Ford 9"	Eaton	Helical Gear	31 spline.....	$563
N1972	Ford 9"	Eaton	Locker	31 spline.....	$625
N1980 *	Ford 9"	Strange	H/D Helical Gear	35 spline.....	$995
N1971T	Ford 9"	Eaton	Helical Gear	35 spline.....	$795
N1971	Ford 9"	Eaton	Locker	35 spline.....	$595
R542080	Ford 8.8	Auburn	H/D Cone	28 spline.....	$520
R542054	Ford 8.8	Auburn	H/D Cone	31 spline.....	$520
N1869	Ford 8.8	Eaton	H/D Clutch	31 spline.....	$495
N1869T	Ford 8.8	Eaton	Helical Gear	31 spline.....	$525
N1865	Ford 8.8	Eaton	Locker	31 spline.....	$745
N1882 **	Ford 8.8	Strange	Helical Gear	35 spline.....	$1,295
R542059	Ford 8"	Auburn	H/D Cone	28 spline.....	$520

* Forged steel body ** Forged steel body (includes side bearings, races, & side shims

Eaton Locker

FORD 9" / FORD 8.8 SPOOL

D1515	Ford 9"	Strange	Steel Spool	28 spline	9.80 lbs.....	$150
D1512	Ford 9"	Strange	Aluminum Spool	28 spline	3.86 lbs.....	$150
D1516	Ford 9"	Strange	Steel Spool	31 spline	9.30 lbs.....	$150
D1513	Ford 9"	Strange	Aluminum Spool	31 spline	3.70 lbs.....	$150
D1553	Ford 9"	Strange	L/W Steel Spool	31 spline	8.50 lbs.....	$190
D1554	Ford 9"	Strange	L/W Steel Spool	33 spline	8.10 lbs.....	$190
D1518 *	Ford 9"	Strange	Steel Spool	35 spline	9.12 lbs.....	$150
D1555 *	Ford 9"	Strange	L/W Steel Spool	35 spline	8.20 lbs.....	$190
D1565 *	Ford 9"	Strange	Aluminum Spool	35 spline	3.95 lbs.....	$350
D2000 *	Ford 9"	Strange	L/W Steel Spool	40 spline	7.95 lbs.....	$280
D2002 **	Ford 9"	Strange	L/W H/D Steel Spool	40 spline	8.25 lbs.....	$280
D2004 **	Ford 9"	Strange	H/D Aluminum Spool	40 spline	4.85 lbs.....	$399
L6000J ***	Ford 9"	Strange	L/W H/D Steel Spool	36 spline	9.25 lbs.....	$385
L6000J2 ****	Ford 9"	Strange	L/W H/D Steel Spool	36 spline	9.25 lbs.....	$385
D1558	Ford 8.8	Strange	L/W Steel Spool	31 spline	8.80 lbs.....	$190
D1560	Ford 8.8	Strange	L/W Steel Spool	33 spline	8.45 lbs.....	$190
D1567	Ford 8.8	Strange	L/W Steel Spool	35 spline	8.10 lbs.....	$190

* For 3.250" bore aftermarket case
** For 3.812" bore aftermarket case
*** For 4.00" bore case in Drop-out Live Axle using 3.20 and numerically higher gear
**** For 4.00" bore case in Drop-out Live Axle using 2.91 gear

Aluminum Spool

COVERS, CASES & MAIN CAPS

FORD 9" ALUMINUM CASES

Stock covers are stamped from thin sheet metal and are designed to close access to the housing internals while maintaining a leak-free seal. While this is sufficient under normal circumstances, increasing torque and horsepower can create unforeseen forces. The housing wants to flex at the opening where the cover attaches since it is the weakest section of the casting. The main caps are made of cast iron and are relatively thin and brittle. As forces mount and the case begins to deflect, ring and pinion life suffers as the contact pattern changes. Additional stress can lead to broken gear teeth as well as shattered main caps.

Chrome covers are purely for looks. Aluminum covers can be cosmetic, supportive, or both. Supportive covers are thick aluminum which reinforces the opening and makes the case much stiffer. They are also equipped with load bolts that contact the main caps increasing the threshold of when they would flex and break. The "ready for back-brace" LPW covers have additional bolt holes to accept their back-brace kit. This kit utilizes the cover to also support the housing tubes eliminating axle tube flex.

Main caps can be replaced with stronger alternatives, but will need to be fitted to the case. This process involves installing them in the housing so the bores can be measured. Since the bores will now be oversized, the main cap bases require milling to return the bore to the proper size. These caps are made of steel or aluminum. Quality aluminum main caps can be an advantage over steel as it is lighter and easier to machine. Under extreme conditions, such as a broken tooth caught between the ring and pinion, they can allow a little flex that might save the differential or spool from damage. These caps are not required for, and will not fit, a Strange S60 or Strange 12 bolt as they are already equipped with heavy duty main caps.

LPW HD aluminum cover

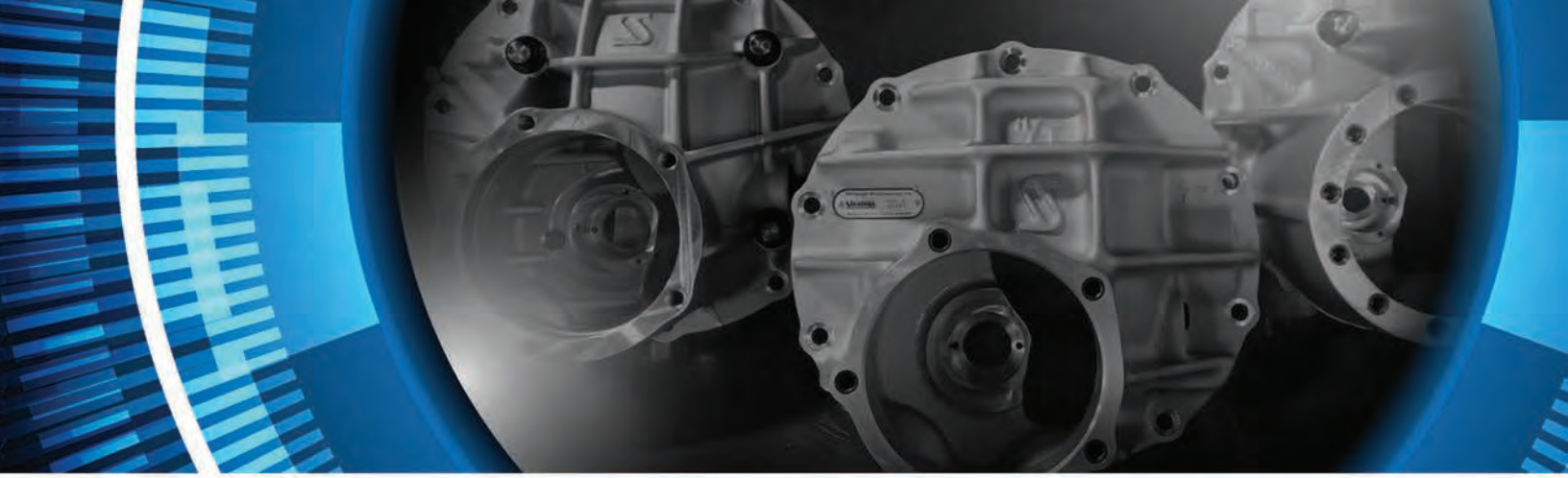
LPW HD aluminum cover
ready for back-brace

LPW axle tube back-brace kit

COVERS / BILLET ALUMINUM MAIN CAPS

FORD 8.8

R5233	LPW HD aluminum cover	Supportive	$159
R5234	LPW HD aluminum cover Ready for back-brace	Supportive	$159
R5209	LPW axle tube back-brace kit	Chrome moly tubing	$120
H1124	Strange Ford 8.8 billet aluminum main caps with bolts	Requires machining	$88



COVERS / BILLET ALUMINUM MAIN CAPS Continued

LABOR

H1123	Fit and install Strange billet aluminum main caps Labor only- parts extra	$90

Chrome cover

Strange Ford 8.8 Billet aluminum main caps with bolts

COVERS, CASES & MAIN CAPS

FORD 9" NODULAR IRON CASES

FACTORY CAST IRON VS NODULAR IRON

OEM Ford 9" cases were first made from cast iron only. This material was inexpensive, easy to pour, and offered acceptable strength for the time. Later, certain applications became more demanding and required a stronger case. More material was added in critical areas including additional webbing. Since cast iron tends to be brittle, a new material was also required. An agent was added to cast iron to create a stronger molecular bond. It made the case more ductile and less prone to breakage. The result was named "Nodular iron" and became the sought after case for heavy duty applications. During WW II, high strength materials were being diverted to military applications. While the casting design remained the same, the material reverted back to regular cast iron. These are often referred to as "WAR" cases. The factory main cap bore sizes are 2.891" and 3.062". The same casting was used for both cases, but some uses required bearings with a higher load capacity. There was a 9 3/8" case that has a 3.250" bore size. While its appearance is very similar to a Ford 9", and will bolt into the same housing, it was a short term item from Ford and parts are no longer available for it.

STRANGE S-SERIES NODULAR IRON

Strange's radial rib design significantly increases the rigidity of the case Strange Engineering's own blend of nodular iron contains more bonding additive which increases material strength by 8-10%. Coupled with strategical reinforcements to the pinion support area, tail bearing pocket, and main caps, it exceeds the strength of the factory nodular case. The 3.062" bore case will fit all differentials and spools from 28 to 33 spline. The 3.250" will fit 35 spline differentials and spools, and 40 spline spools requiring a 3.250" bore case. The pricing allows an individual to purchase a new upscale case at a price of a used and fatigued factory part.

S-SERIES NODULAR IRON

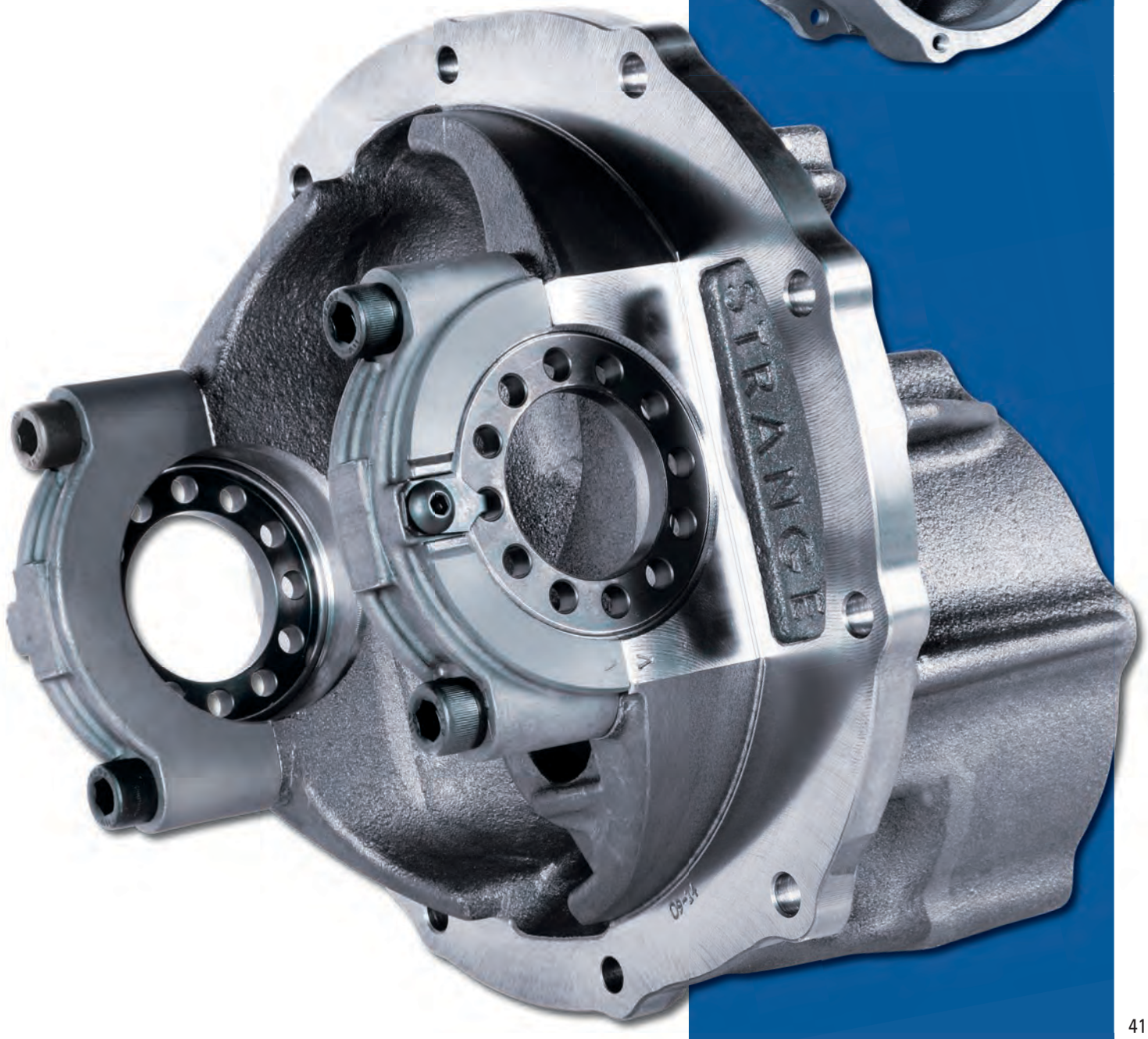
N2205	3.062" bore case	Nodular Iron main caps	27.2 lbs.....$249
N2206	3.250" bore case	Nodular Iron main caps	27.2 lbs.....$249

STRANGE PRO SERIES NODULAR IRON

The Pro Series case is designed for maximum rigidity and strength where weight is not a primary concern. It can be identified by the stout horizontal and vertical ribs. As with all Strange engineering cases, "Strange" is embossed near the main cap area. Strange Engineering's proprietary form of nodular iron is used, which is 8-10% stronger than typical nodular iron. The Pro Iron case design features reinforcements to two critical areas: the pinion support area and the tail bearing pocket. The main caps are chrome moly and utilize high strength adjuster nuts. The 3.062" bore case will fit all differentials and spools from 28 to 33 spline. The 3.250" will fit 35 spline differentials and spools, and 40 spline spools requiring a 3.250" bore case.

PRO SERIES NODULAR IRON

N1905	3.062" bore case	Chrome moly main caps	31.5 lbs.....	$329
N1906	3.250" bore case	Chrome moly main caps	31.2 lbs.....	$329



COVERS, CASES & MAIN CAPS

FORD 9" ALUMINUM CASES

STRANGE LIGHTWEIGHT ALUMINUM CASE

Lightweight aluminum cases are ideal for vehicles where unsprung weight is extremely critical and gear life is not a major concern. Dimensionally very similar to the Pro Iron case, but uses high tensile aluminum alloy and forged aluminum main caps. Since the case is responsible for holding together the gear set and spool, the application should be carefully considered before a purchasing this case. Typical Drag Race applications are Super Comp Dragsters, Altereds, and very lightweight cars. This case is not recommended for Street or Street/Strip. A Strange Engineering associate will be happy to assist you with your decision. Available bore sizes are 3.062" and 3.250".

Lightweight Case

N1901	3.062" bore case	Aluminum	Case only .....14.0 lbs ... $380
N1901P	3.062" bore case	Polished aluminum	Polished case only $595
N1904	3.250" bore case	Aluminum	Case only .....13.9 lbs ... $380
N1904P	3.250" bore case	Polished aluminum	Polished case only $595

STRANGE HD PRO ALUMINUM CASE

The HD Pro aluminum case is designed for Drag Race applications and for the most abusive Hi-Performance street/strip applications. As with all Strange aluminum cases, it is crafted from 206-T4 heat treated aluminum. This premium aluminum has a 12% higher yield strength and a 32% higher tensile strength compared to commonly used 356-T6 aluminum. The billet aluminum pinion support has a unique oil channel that is machined 360º into the support to maximize oil flow to the pinion bearings as well as a large slot in the front to further boost oil circulation. The support is in contact with the bore of the case in two locations as opposed to one as found in normal cases. This additional contact area holds the pinion shaft much more securely resulting in better bearing and gear life. The tail bearing is oversized to handle more load and greater RPM than a stock tail bearing. Billet aluminum main caps encapsulate chrome-moly studs, provide the utmost support for the carrier bearings and significantly reduce ring gear deflection. This case is most commonly purchased in kit form due to some of the unique components. The kit contains the case, pinion support with races, support bolts and o-ring, depth shims, tail bearing and retainer plate. The remainder of the parts necessary for a complete unit are readily available. The kits are available in 3.062", 3.250", and 3.812" bore sizes, and for tapered or ball bearing pinion support. Bearings are not included in these kits other than the tail bearing. This case will accept 9" and 9 1/2" gear sets.

HD Pro Case

N2300	3.062" bore case	Aluminum HD Pro	Case only ..... 16.8 lbs ... $490
N2300P	3.062" bore case	Polished Alum HD Pro Polished	Case only $745
N2303	3.250" bore case	Aluminum HD Pro	Case only ..... 16.8 lbs ... $490
N2303P	3.250" bore case	Polished Alum HD Pro Polished	Case only $745
N2307	3.812" bore case	Aluminum HD Pro	Case only ..... 15.7 lbs ... $490

STRANGE ALUMINUM ULTRA CASE

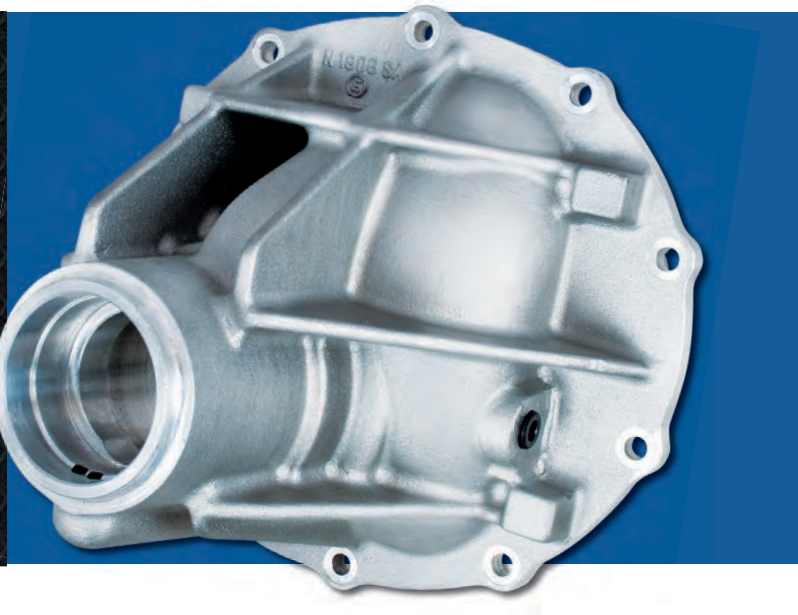
The Ultra Case is the strongest case and pinion support combination offered for all out Drag Racing applications. The case is manufactured from 206-T4 and utilizes four chrome-moly studs encapsulated by billet aluminum main caps, allowing for shorter and stronger studs. The tail bearing is larger than factory, which can withstand greater rpm and is secured by a special retainer plate. The pinion support is retained by 12 bolts and a features a unique design which provides strength and optimizes bearing lubrication. It places both pinion bearings within the case and has a much tighter fit to the case bore. This firmly holds the pinion shaft in proper alignment with the ring gear, providing maximum gear life while avoiding gear bind. For Funny Car applications, a pinion support with a built-in coupler cover is offered as an option. The case has a provision to accept a load bolt (N1910) which helps support the ring gear during tire shake. It will accept 9" , 9 1/2", and 10" gear sets. 10" gear sets require N1950HK spacer and bolt kit. The cases are packaged in kit form due to the unique components. The kit contains the case, pinion support, bolts, shims, bearings, races, spacers, o-ring, and seal. To build a complete center section, add a spool, gear set, and yoke or coupler. The case packages are available in 3.250", 3.812", and 4.00" bore sizes and are offered with either a tapered rear pinion bearing or a angular contact ball style bearing.

Ultra Case

N1902	3.250" bore case	Ultra	Case only ..... 21.4 lbs ... $660
N1912	3.812" bore case	Ultra	Case only ..... 20.2 lbs ... $660
N1912PS	3.812" bore case	Ultra Lightened For Pro Stock	Case only- For P/S ball bearing support ..... 18.4 lbs ... $660
N1913	4.000" bore case	Ultra	Case only- For L6000 Live Axle ..... 20.1 lbs ... $704

STRANGE 12 BOLT DROP-OUT ALUMINUM CASE

The 12 bolt Drop-out aluminum case is designed to bolt into a Ford 9" housing and utilize a Chevy 12 bolt ring and pinion. It allows the builder to create a lightweight sheet metal housing, have the convenience of a center section, and benefit from the efficiency of a 12 bolt gear set. The application is a very light Drag Race Only vehicle that does not require the strength of a Ford 9" gear set, but can benefit from its lightweight housing. Since a 12 bolt gear is 2-3% more efficient than a comparable 9", horsepower loss is reduced resulting in improved top end performance. This case should not be used outside its application as increasing loads beyond its design will cause case deflection resulting in gear bind. Approaching gear bind will cause decreasing efficiency and poor gear life. It requires a Strange spool specifically designed for this unit, and may also require different axles. Consult a Strange Engineering representative to discuss your application.



12 bolt Drop-out Case

N1200	3.062" bore case	For Strange 30 or 33 spline spool ..... 15.8 lbs ... $627
N1202	3.250" bore case	For Strange D1535 / D1537 35 spline spool ..... 15.7 lbs ... $627

COVERS, CASES & MAIN CAPS

FORD 9" ALUMINUM CASES

- **7075-T73 AEROSPACE ALUMINUM**
  Superior strength & high stress resistance
- **VIBRATORY STRESS RELIEVED**
  Utilizing sub-harmonic vibrational energy
- **SOLUTION HEAT TREATED**
  Ensures consistent mechanical properties
- **.650" THICK MOUNTING FLANGE**
  Provides a rigid foundation
- **RAISED CROSS RIB DESIGN**
  Increases stiffness throughout unit
- **WRAP AROUND DESIGN MAIN CAPS**
  Enhances main cap strength and rigidity
- **AISI 8740 STEEL BULLET END MAIN STUDS**
  38% higher yield strength than typical chrome moly
  Allows increased clamping force on main caps
- **MASSIVE WALL SECTIONS IN TAIL BEARING AREA**
  Provides exceptional tail bearing support
- **OIL SCAVENGING CHANNEL**
  Enhanced pinion bearing lubrication
- **EXTENSIVE LIGHTENING ON CASE AND SUPPORT**
  Removes 1.5 lbs over comparable Ultra Case
- **ARP 12 POINT PINION SUPPORT BOLTS**
  Secure pinion support retention
- **ACCEPTS 10" DEVELOPMENT GEAR SET**
  True finished ring gear O.D. 9.625"
- **TYPE II ANODIZED FOR CORROSION PROTECTION**
- **EXTRA WIDE TAIL BEARING**
  Increased load capacity
- **BOLT-ON TAIL BEARING RETAINER**
- **JACK SCREW PROVISIONS**
- **DEDICATED 10" PINION SUPPORT AVAILABLE**
  Eliminates pinion support spacer
- **OPTIONAL LOAD BOLT**
- **OPTIONAL BILLET SPEED SENSOR HOLDER**

FORD 9" BILLET ALUMINUM CASE PACKAGES

The Billet Case and billet pinion support offer an unmatched strength to weight combination for the most brutal Drag Racing applications. The goal was to manufacture the finest billet case- regardless of material and process costs- and we have achieved that. The case is manufactured from 7075-T73 aerospace aluminum that offers superior strength and is highly resistant to stress corrosion. After initial rough machining, it is vibratory stress relieved utilizing sub-harmonic vibrational energy. This process stabilizes the heavily machined aluminum before proceeding. Afterwards, it is solution heat treated and artificially overaged. This ensures consistent mechanical properties throughout the material. The .650" thick mounting flange coupled with the raised cross rib design provides a solid structure to maintain proper alignment of the ring and pinion. Unique wrap around style main caps enhance strength and stiffness. Each cap is retained by four AISI 8740 steel bullet end studs which have 38% higher yield strength than typical chrome moly. This allows for an increase in clamping loads further enhancing cap rigidity. The tail bearing area has massive wall sections to firmly retain the oversized tail bearing, which can withstand greater loads, and is secured by a special retainer plate. A large oil scavenging channel directs additional lubrication to the pinion support. The case has a provision to accept a load bolt which helps support the ring gear during tire shake. The case will accept 9" , 9 1/2", and 10" gear sets. Integrated jack screws facilitate center section removal from the rear end housing.

The Billet Pinion Support is manufactured from 2024-T351 aluminum and retained by 12 ARP twelve point bolts. The support features a unique design which optimizes strength, weight reduction, and bearing lubrication. It places both pinion bearings within the case and has a much tighter fit to the case bore. This firmly holds the pinion shaft in proper alignment with the ring gear, providing maximum gear life while avoiding gear bind. The 10" gear sets require a pinion support designed specifically for those gears. This support eliminates the need for a spacer between the support and the case, further contributing to the integrity of the assembly.

BILLET CASE PACKAGES

P5381LT	3.812" case	Case & 9" / 9.5" support package with tapered pinion bearings using 35 spline pinion	$3,250
P5381LT-10	3.812" case	Case & 10" support package with tapered pinion bearings using 35 spline pinion	$3,250
P5381LB	3.812" case	Case & 9" / 9.5" support package with ball pinion bearing using 35 spline pinion	$3,360
P5381LB-10	3.812" case	Case & 10" support package with ball pinion bearing using 35 spline pinion	$3,360

Package includes all necessary components to build a complete center section less spool, gear set, and yoke or coupler

COVERS, CASES & MAIN CAPS

FORD 9" ALUMINUM CASES

HD PRO CASE KITS

P3200	3.062" case	Case & support kit for tapered pinion bearing.....	$684
P3203	3.250" case	Case & support kit for tapered pinion bearing.....	$684
P3207	3.812" case	Case & support kit for tapered pinion bearing.....	$684
P3200BB	3.062" case	Case & support kit for ball pinion bearing.....	$699
P3203BB	3.250" case	Case & support kit for ball pinion bearing.....	$699
P3207BB	3.812" case	Case & support kit for ball pinion bearing.....	$699

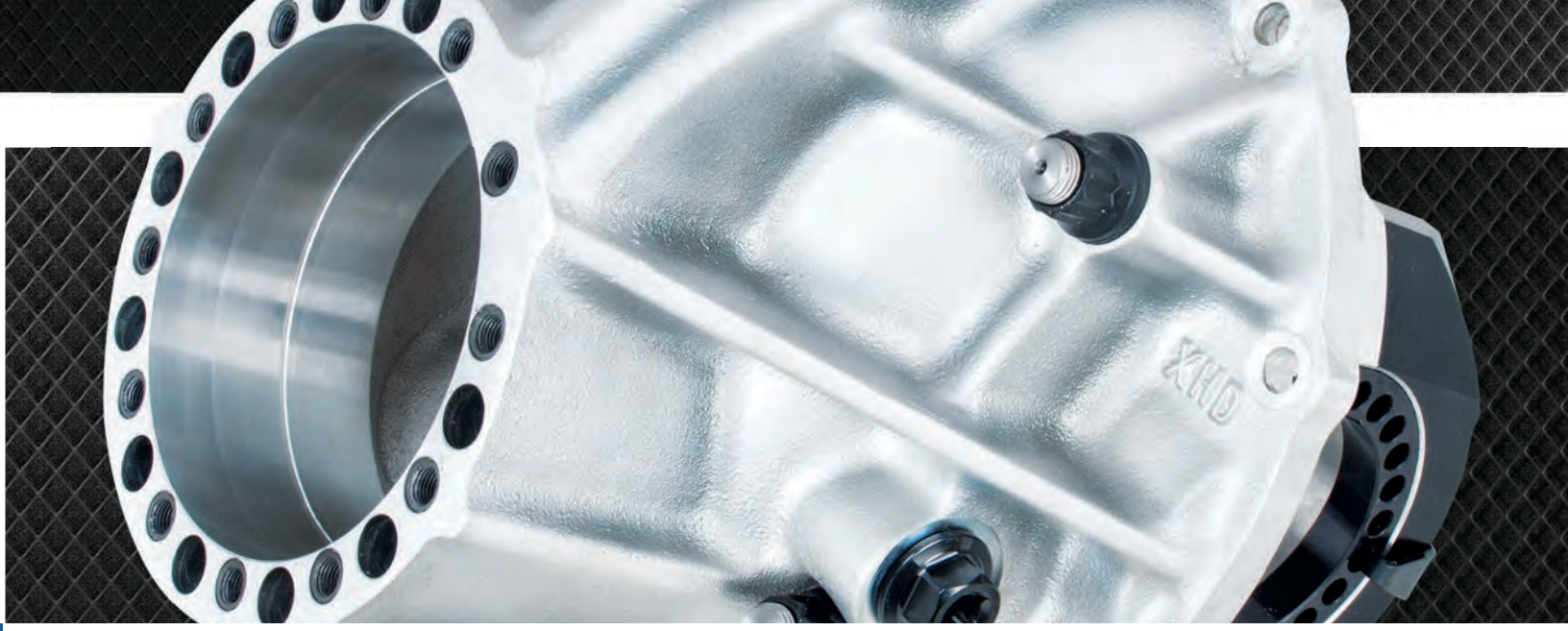
Kit includes case, pinion support with races, o-ring, support bolts, depth shims, tail bearing and retainer

HD PRO COMPLETION KITS

R3200ST	Completion kit for tapered bearing support using 28 spline pinion.....	$105
R3200LT	Completion kit for tapered bearing support using 35 spline pinion.....	$105
R3200SB	Completion kit for ball bearing support using 28 spline pinion.....	$245
R3200LB	Completion kit for ball bearing support using 35 spline pinion.....	$225

Kit includes pinion bearings, preload assembly, pinion seal & nut, side bearings & races, and ring gear bolts

Case Kit with Completion Kit provide all necessary parts to build a complete center section less spool, gear set, and yoke or coupler



ULTRA CASE PACKAGES

P3250ST	3.250″ case	Case & support package with tapered pinion bearings using 28 spline pinion	$949
P3250LT	3.250″ case	Case & support package with tapered pinion bearings using 35 spline pinion	$949
P3250SB	3.250″ case	Lightened case & support package with ball pinion bearing using 28 spline pinion	$1,059
P3250LB	3.250″ case	Lightened case & support package with ball pinion bearing using 35 spline pinion	$1,059
P3812ST	3.812″ case	Case & support package with tapered pinion bearings using 28 spline pinion	$949
P3812LT	3.812″ case	Case & support package with tapered pinion bearings using 35 spline pinion	$949
P3812LT10	3.812″ case	Case & 10″ support package with tapered pinion bearings using 10″ gear set	$988
P3812LTC*	3.812″ case	Case & CC support package with tapered pinion bearings using 35 spline pinion	$1,162
P3812SBHD	3.812″ case	Case & support package with ball pinion bearing using 28 spline pinion	$1,059
P3812LBHD	3.812″ case	Case & support package with ball pinion bearing using 35 spline pinion	$1,059
P3812SB	3.812″ case	Lightened case & support package with ball pinion bearing using 28 spline pinion	$1,059
P3812LB	3.812″ case	Lightened case & support package with ball pinion bearing 35 spline pinion	$1,059
P400LT	4.000″ case	Case & support package with tapered pinion bearings using 35 spline pinion	$1,085
P400LTC*	4.000″ case	Case & CC support package with tapered pinion bearings using 35 spline pinion	$1,162

Package includes all necessary components to build a complete center section less spool, gear set, and yoke or coupler

* Pinion support with built-in coupler cover

PINION SUPPORTS

FORD DAYTONA, STRANGE TAPERED BEARING, STRANGE BALL BEARING

FORD DAYTONA PINION SUPPORTS

N1914: Ford Daytona pinion supports are an option to replace the stock OEM unit. The stock support is made of nodular iron and uses the same size bearing front and rear. The N1914 is also constructed from cast iron, but uses a larger rear pinion bearing for increased load capacity. The support is supplied with front and rear Timken races installed. O-ring and bearing & seal kit are available separately.

Strange Tapered Bearing Pinion Supports

N1917: Designed for heavy duty use in street / track applications that require a large rear pinion bearing, offering increased load capacity, while allowing greater oil flow for continuous operation. Constructed from forged aluminum, it has better grain flow compared to billet aluminum supports. The forged aluminum will not shatter or crack like cast iron and is much lighter. This support will accept 28 spline pinion gears and comes in a black anodized finish. It can also be ordered in polished aluminum. The support is supplied with front and rear Timken races installed, bolts, washers, and an o-ring. Bearing & seal kit is available separately.

N1922: Heavy duty Drag Race pinion support. It uses even larger front and rear pinion bearings than the Daytona or N1917, further increasing load capabilities to suit the most demanding requirements. Manufactured from forged aluminum, it offers better grain flow than billet aluminum supports. Oil channels have been reduced to allow more material around the race sections to maximize rigidity. It can accept either 28 or 35 spline pinion gears, and comes in a clear anodized finish. A polished support is also available. The support is supplied with front and rear Timken races installed, bolts, washers, and an o-ring. Bearing & seal kit is available separately. Manufactured from 2024-T4 forged aluminum.

N2322: Designed specifically for the HD Pro aluminum case, it will not fit any other cases. The fresh design of this support make it ideal for use in street, track, and Drag Race applications. It utilizes the same oversized bearings as the N1922, but the oil flow is increased for continuous use. The pinion seal is retained by a snap ring ensuring it will not come loose under extreme conditions. Constructed from heat treated aluminum, ultimate strength is achieved while weight is kept to a minimum. This support can accept either 28 or 35 spline pinion gears, and comes in a clear anodized finish. It can also be ordered in polished aluminum. The support is supplied with front and rear Timken races installed, bolts, washers, snap ring, and o-ring. Bearing & seal kits are available separately.

STRANGE BALL BEARING PINION SUPPORTS

Ball bearing supports use an angular contact ball bearing to replace the rear pinion bearing. This bearing offers reduced rolling resistance and requires less preload than a tapered bearing, decreasing the forces necessary to rotate the pinion gear. Pinion supports must be specifically designed for ball bearing use since tapered bearing supports are not adaptable.

N1920 / N1921: Can be used in any Ford 9" case, iron or aluminum, except for HD Pro and Ultra cases. They are manufactured from heat treated 2024 aluminum, offering strength and ductility, while remaining lightweight. The N1920 is designed for a 28 spline pinion gear, and the N1921 for a 35 spline. Both supports come complete with Timken race installed, front tapered bearing, rear angular contact ball bearing, adjustable preload assembly, low drag pinion seal, bolts, and o-ring.

N2323: Support designed for the HD Pro aluminum case. Machined from heat treated T6061 aluminum ensuring maximum strength and reduced weight. This support can accept 28 or 35 spline pinion gears with the proper bearing & seal kit. It is supplied with a Timken front race installed, pinion support bolts & washers, and o-ring. Bearing & seal kit is available separately.

TAPERED BEARING SUPPORTS

N1914	Daytona- Nodular Iron	Street / Track	$90
N1917	Forged Aluminum	HD Street / Track	$140
N1917P	Forged Aluminum- Polished	HD Street / Track	$187
N1922	Forged Aluminum	Drag Race	$130
N1922P	Forged Aluminum- Polished	Drag Race	$170
N2322	HD Pro Aluminum	HD Street / Track / Drag Race	$150
N2322P	HD Pro Aluminum- Polished	HD Street / Track / Drag Race	$235

All supports have Timken races installed. Supports include o-ring except for Daytona.

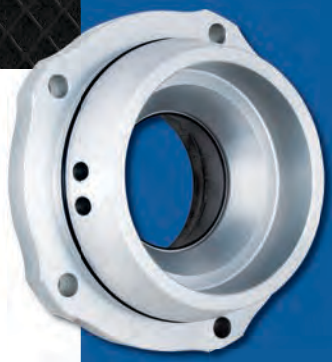
N1914

N1922

BALL BEARING SUPPORTS

N1920*	Aluminum Support Package	Drag Race- For 28 spline pinion	$295
N1921*	Aluminum Support Package	Drag Race- For 35 spline pinion	$295
N2323	HD Pro Aluminum with race	Drag Race- For 28 or 35 spline	$170

* Bearing & Seal Kit included



N1920

N1917

RACES / O-RING

N1914C	Front pinion race	For N1914 & N1917	$9
N1914B	Rear pinion race	For N1914 & N1917	$13
N1931	Front pinion race	For N1922, N2322, & N2323	$13
N1939	Rear pinion race	For N1922 & N2322	$15
N1958A	O-ring	For all supports listed above	$3

N1921

BEARING & SEAL KITS *

N1916	For N1914 & N1917	Using 28 spline pinion	Bearings, seal, & 2 pc preload spacer	$42
N1923	For N1922 & N2322	Using 28 spline pinion	Bearings, seal, 2 pc preload spacer, adapter sleeve & washer	$60
N1924	For N1922 & N2322	Using 35 spline pinion	Bearings, seal, 2 pc preload spacer, & solid preload spacer	$60
N2323S	For N1920 & N2323	Using 28 spline pinion	Bearings, seal, 2 pc preload spacer, & adapter sleeve	$175
N2323L	For N1921 & N2323	Using 35 spline pinion	Bearings, seal, 2 pc preload spacer, & washer	$185

* Races and o-ring are not included in Bearing & Seal Kits.

9" IRON S-SERIES

CENTER SECTION

Our highly trained technicians are dedicated to provide the highest quality assembly that customers have grown to expect from Strange Engineering. Timken bearings and races are used throughout. The Gear set is hand massaged to remove sharp corners and burrs to provide quiet operation. Contact patterns are check and readjusted until satisfactory. Any questionable gear sets are returned to the manufacturer for evaluation and the set-up process begins again. We believe the extra time is well spent because while some may advertise the fastest assembly time, we would rather deliver the best in quality and workmanship.

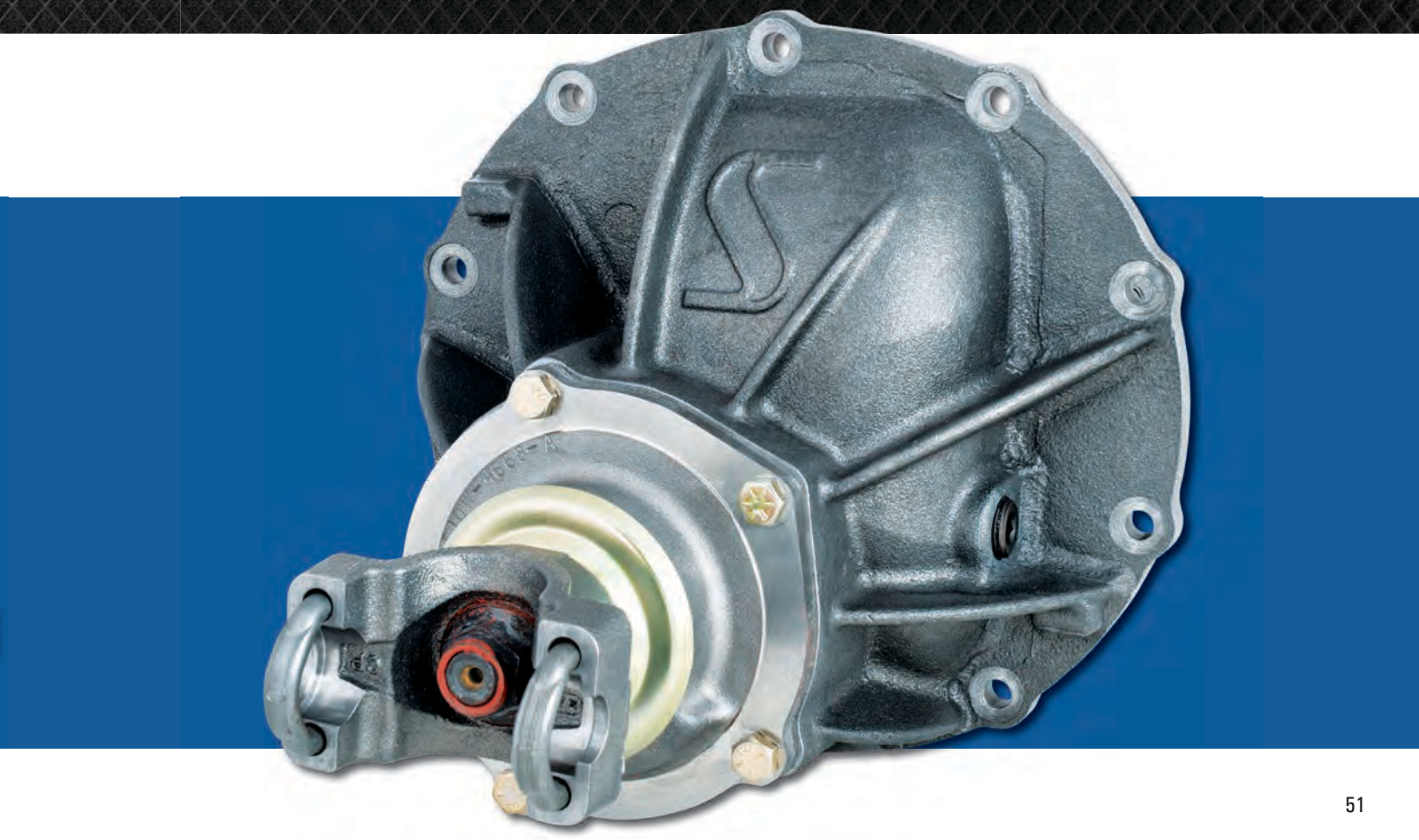
S-SERIES CASE WITH DIFFERENTIAL

PRF130: The S-Series nodular iron case is a stout foundation for any Street / Track application. The package contains the S-series iron case, Ford cast iron Daytona pinion support, clutch style posi unit, Standard gear, and S-series 1350 yoke with u-bolts. Upgrades to the differential, a forged aluminum pinion support, and chrome moly yoke are available.

S-SERIES CASE WITH SPOOL

PRF135: The S-Series nodular iron case begins the basis for Track and many Drag Race applications. The package contains the S-series iron case, Ford cast iron Daytona pinion support, 28 to 35 spline spool, Standard gear, and S-series 1350 yoke with u-bolts. Upgrades are available to a forged aluminum pinion support and chrome moly yoke.

PRF130	S-Series case / Iron Daytona pinion support- N1914 / Clutch style 28-31 spline posi unit Standard gear set / S-Series 1350 yoke- U2203 / U-bolts			$1,290
	Upgrades:	OPRF16	Upgrade to Strange black forged aluminum support- N1917	Add $29
		OPRF09	Upgrade to Eaton 28 or 31 spline Truetrack	Add $200
		OPRF17	Upgrade to Eaton 28, 31, or 35 spline Detroit Locker	Add $165
		OPRF11	Upgrade to Eaton 35 spline Truetrack	Add $400
		OPRF10	Upgrade to Strange 35 spline S-Trac- N1980	Add $510
		OPRF07	Upgrade to Chrome moly pinion yoke- U1603	Add $35
		OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
PRF135	S-Series Case / Iron Daytona pinion support- N1914 / 28-35 spline spool Standard gear set / S-Series 1350 yoke- U2203 / U-bolts			$1,129
	Upgrades:	OPRF16	Upgrade to Strange black forged aluminum support- N1917	Add $29
		OPRF07	Upgrade to Chrome moly pinion yoke- U1603	Add $35
		OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73



9" PRO IRON
CENTER SECTION

Our highly trained technicians are dedicated to provide the highest quality assembly that customers have grown to expect from Strange Engineering. Timken bearings and races are used throughout. The Gear set is hand massaged to remove sharp corners and burrs to provide quiet operation. Contact patterns are check and readjusted until satisfactory. Any questionable gear sets are returned to the manufacturer for evaluation and the set-up process begins again. We believe the extra time is well spent because while some may advertise the fastest assembly time, we would rather deliver the best in quality and workmanship.

PRO IRON CASE WITH DIFFERENTIAL

PRF120: The Pro Iron nodular case is the strongest iron case available. This package contains the Pro Iron case, Ford cast iron Daytona pinion support, clutch style posi unit, Standard gear, and S-series 1350 yoke with u-bolts. Upgrades to the differential, a Strange forged aluminum pinion support, and chrome moly yoke are available.

PRO IRON CASE WITH SPOOL & YOKE

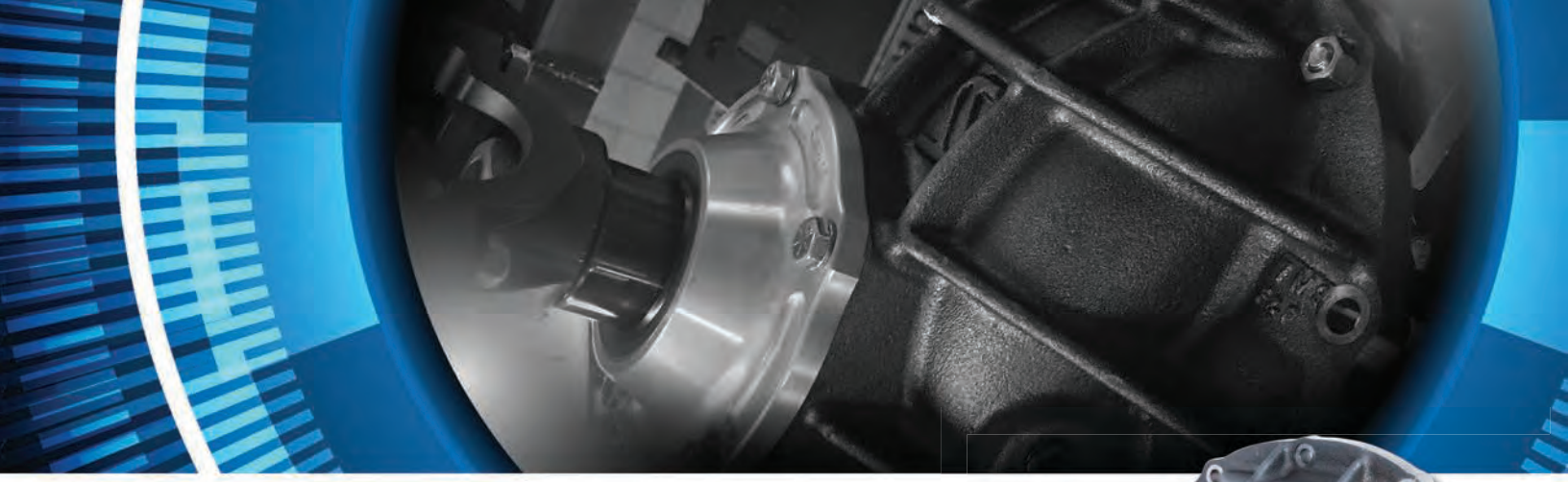
PRF105: The Pro Iron is the ultimate in strength in a nodular iron case. This package contains the Pro Iron case, Strange forged aluminum support (N1922), 31 to 35 spline lightweight steel spool, Standard gear, and chrome moly 1350 yoke with u-bolts. Upgrade is available to a 40 spline L/W steel spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, and computer pick-up collar.

PRF115: The Pro Iron nodular case is the foundation for this solid unit. This package contains the Pro Iron case, Strange forged aluminum support (N1922), 28 to 35 spline lightweight steel spool, 28 spline Pro gear, and chrome moly 1350 yoke with u-bolts. Upgrades are available to a 35 spline Pro gear and 40 spline L/W steel spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, and computer pick-up collar.

PRO IRON CASE WITH SPOOL & COUPLER

PRF100: The Pro Iron nodular case surpasses the requirements for heavy duty iron case. This package contains the Pro Iron case, Strange forged aluminum support (N1922), 31 to 35 spline lightweight steel spool, Standard gear, and female coupler. Upgrade is available to a 40 spline L/W steel spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, and computer pick-up collar.

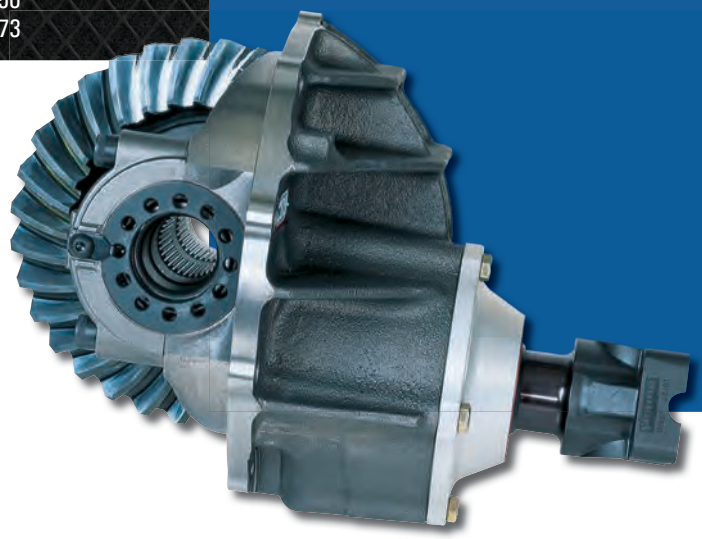
PRF110: The Pro Iron nodular case is the basis for this formidable unit. This package contains the Pro Iron case, Strange forged aluminum support (N1922), 28 to 35 spline lightweight steel spool, 28 spline Pro gear , and female coupler. Upgrades are available to a 35 spline Pro gear and 40 spline L/W steel spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, and computer pick-up collar.



PRF120	Pro Iron Case / Iron Daytona support- N1914 / Clutch style 28-31 spline posi unit Standard gear set / S-Series 1350 yoke- U2203 / U-bolts $1,393		
Upgrades:	OPRF16	Upgrade to Strange black forged aluminum support- N1917	Add $29
	OPRF09	Upgrade to Eaton 28 or 31 spline Truetrack	Add $200
	OPRF17	Upgrade to Eaton 28, 31, or 35 spline Detroit Locker	Add $165
	OPRF11	Upgrade to Eaton 35 spline Truetrack	Add $400
	OPRF10	Upgrade to Strange 35 spline S-Trac- N1980	Add $510
	OPRF07	Upgrade to Chrome moly pinion yoke- U1603	Add $35

PRF105	Pro Iron Case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool Standard gear set / Chrome moly 1350 yoke- U1603 / U-bolts $1,274		
Upgrades:	OPRF01	Upgrade to 40 spline spool	Add $73

PRF115	Pro Iron Case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool 28 spline Pro gear / Chrome moly 1350 yoke- U1603 / U-bolts $1,409		
Upgrades:	OPRF05	Upgrade to 35 spline Pro gear	Add $50
	OPRF01	Upgrade to 40 spline spool	Add $73
PRF100	Pro Iron Case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool Standard gear set / Female coupler $1,239		
Upgrades:	OPRF01	Upgrade to 40 spline spool	Add $73
PRF110	Pro Iron Case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool 28 spline Pro gear / Female coupler $1,376		
Upgrades:	OPRF05	Upgrade to 35 spline Pro gear	Add $50
	OPRF01	Upgrade to 40 spline spool	Add $73



Options for all packages above	D3596	Lighten ring gear	Add $75
	OPRF42	MicroBlue gear set and bearings	Add $308
	OPRF03	Ball bearing support	Add $100
	OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
	U1613	1 magnet pick-up collar for 28 spline pinion	Add $48
	U1613-2	2 magnet pick-up collar for 28 spline pinion	Add $52
	U1613-4	4 magnet pick-up collar for 28 spline pinion	Add $60
	U1613-8	8 magnet pick-up collar for 28 spline pinion	Add $129
	U1614	1 magnet pick-up collar for 35 spline pinion	Add $48
	U1614-2	2 magnet pick-up collar for 35 spline pinion	Add $52
	U1614-4	4 magnet pick-up collar for 35 spline pinion	Add $60
	U1614-8	8 magnet pick-up collar for 35 spline pinion	Add $129
	N1927S	Sensor bracket for pinion support	Add $15

9" LIGHTWEIGHT ALUMINUM

CENTER SECTION WITH YOKE

Our highly trained technicians are dedicated to provide the highest quality assembly that customers have grown to expect from Strange Engineering. Timken bearings and races are used throughout. The Gear set is hand massaged to remove sharp corners and burrs to provide quiet operation. Contact patterns are check and readjusted until satisfactory. Any questionable gear sets are returned to the manufacturer for evaluation and the set-up process begins again. We believe the extra time is well spent because while some may advertise the fastest assembly time, we would rather deliver the best in quality and workmanship.

LIGHTWEIGHT ALUMINUM CASE WITH DIFFERENTIAL

PRF170: The Lightweight Aluminum case with a posi unit can be used where weight savings or cosmetic appearance is important and shock loads are minimal. Popular applications include lightweight street rods and show cars. It should not be used in Street / Strip applications as deflection can occur causing noise and poor gear life. This package contains the Lightweight aluminum case, Ford cast iron Daytona pinion support, clutch style posi unit, Standard gear, and S-series 1350 yoke with u-bolts. Upgrades are available to the differential, a Strange forged aluminum pinion support (N1917), and chrome moly yoke. The PRF170P contains an upgraded pinion support, and polished case & support. The OPRF35S option to chromed chrome moly yoke is common for the PRF170P. For more demanding applications, consider using the HD Pro aluminum center section.

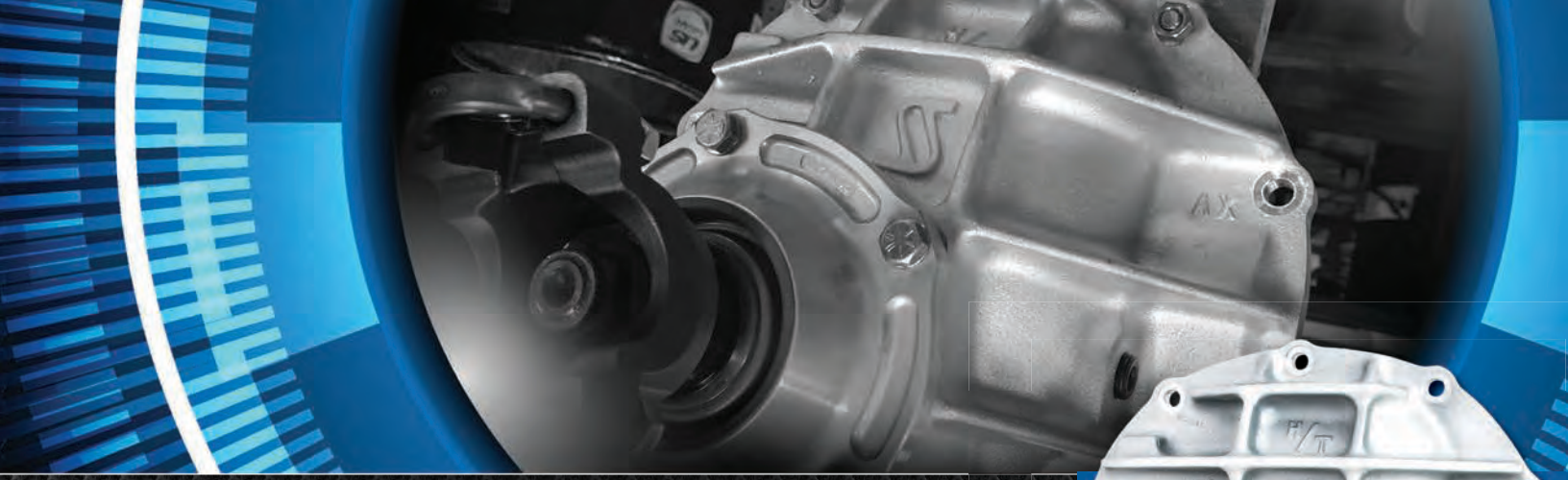
LIGHTWEIGHT ALUMINUM CASE WITH SPOOL & YOKE

PRF155: The Lightweight Aluminum case with a lightened steel spool and Standard gear set can be used where weight is critical, the vehicle is light, and impact loads are relatively low. Drag Race applications include 4-link Super Comp Dragsters, Altereds, Comp, and lightweight door cars. This package contains the Lightweight aluminum case, Strange forged aluminum pinion support (N1922), lightweight steel spool, Standard gear, and chrome moly 1350 yoke with u-bolts. The PRF155P contains a polished case and support. Upgrades available are a 40 spline L/W steel spool or 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar polished case and support, polished and chromed yoke, and aluminum yoke. Higher horsepower vehicles, especially those using a throttle stop, will opt for the PRF165 which contains a Pro gear. It is also very common to upgrade to a 40 spline L/W steel spool.

PRF165: The Lightweight Aluminum case with a lightened steel spool and 28 spline Pro gear set can be used where weight reduction is more of a factor, and gear life might be less important. Popular Drag Race applications include 4-link Super Comp Dragsters, Altereds, Comp, and lightweight door cars. This package contains the Lightweight aluminum case, Strange forged aluminum pinion support (N1922), lightweight steel spool, 28 spline Pro gear, and chrome moly 1350 yoke with u-bolts. The PRF165P contains a polished case and support. Upgrades are available to a 35 spline Pro gear, 40 spline L/W steel spool, and 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, polished and chromed yoke, and aluminum yoke. For more abusive applications such as Top Dragster, consider using the HD Pro aluminum or Ultra Case to achieve maximum gear life.

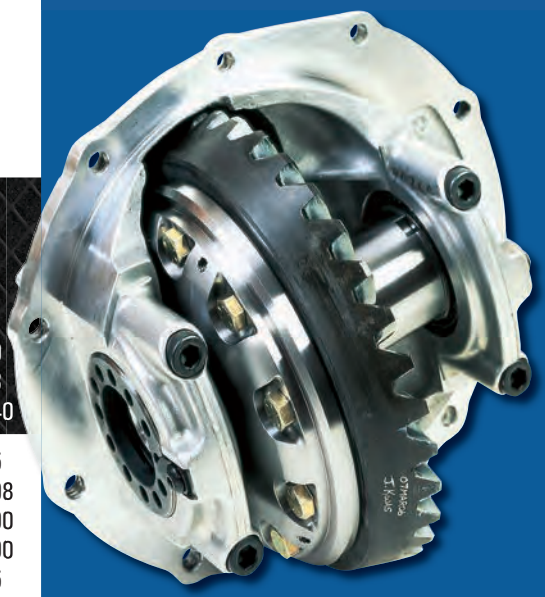
12 BOLT DROP-OUT ALUMINUM CASE WITH SPOOL & YOKE

PRG500: The 12 bolt aluminum Drop-out center section is designed to bolt into a Ford 9" housing and utilize a 12 bolt ring and pinion. This allows the builder to create a lightweight sheet metal housing, have the convenience of a center section, and benefit from the efficiency of a 12 bolt gear. The application is a very lightweight Drag Race Only vehicle that does not require the strength of a Ford 9" gear, but can appreciate its lightweight housing. Since a 12 bolt gear is 2-3% more efficient than a comparable 9", horsepower loss is reduced and an improvement realized in top end performance. This assembly should not be used outside its application since overloading will cause case deflection, gear bind, efficiency loss, and poor gear life. Upgrades available include a Pro gear, 35 spline aluminum spool, lightened ring gear, and MicroBlue service.



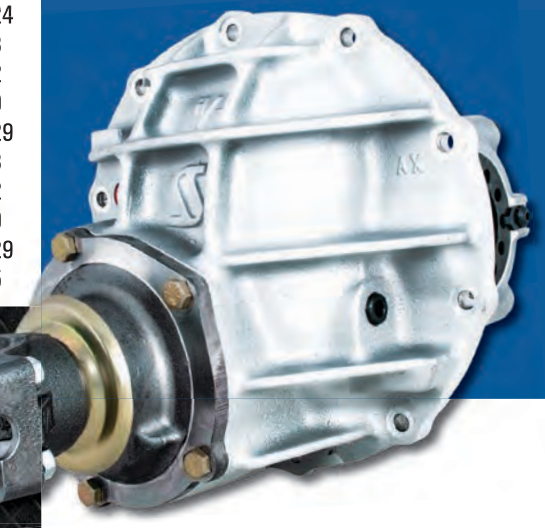
PRF170	Lightweight Aluminum case / Iron Daytona support- N1914 / Clutch style 28-31 spline posi unit		
	Standard gear set / S-Series 1350 yoke- U2203 / U-bolts		$1,430
PRF170P	Polished L/W Aluminum case / Polished aluminum support- N1917P / Clutch style 28-31 spline posi unit		
	Standard gear set / S-Series 1350 yoke- U2203 / U-bolts		$1,730
Upgrades:	OPRF16	Upgrade to Strange black forged aluminum support- N1917	Add $29
	OPRF09	Upgrade to Eaton 28 or 31 spline Truetrack	Add $200
	OPRF17	Upgrade to Eaton 28, 31, or 35 spline Detroit Locker	Add $165
	OPRF11	Upgrade to Eaton 35 spline Truetrack	Add $400
	OPRF10	Upgrade to Strange 35 spline S-Trac- N1980	Add $510
	OPRF07	Upgrade to Chrome moly pinion yoke- U1603	Add $35

PRF155	Lightweight Aluminum case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool		
	Standard gear set / Chrome moly 1350 yoke- U1603 / U-bolts		$1,354
PRF155P	Polished L/W Aluminum case / Polished aluminum support- N1922P / 31-35 spline L/W steel spool		
	Standard gear set / Chrome moly 1350 yoke- U1603 / U-bolts		$1,617
Upgrades:	OPRF01	Upgrade to 40 spline spool	Add $73
	OPRF19	Upgrade to 35 spline aluminum spool	Add $140



PRF165	Lightweight Aluminum case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool		
	28 spline Pro gear / Chrome moly 1350 yoke- U1603 / U-bolts		$1,483
PRF165P	Polished L/W Aluminum case / Polished aluminum support- N1922P / 31-35 spline L/W steel spool		
	28 spline Pro gear / Chrome moly 1350 yoke- U1603 / U-bolts		$1,746
Upgrades:	OPRF05	Upgrade to 35 spline 9" Pro gear	Add $50
	OPRF01	Upgrade to 40 spline spool	Add $73
	OPRF19	Upgrade to 35 spline aluminum spool	Add $140

Options for all packages above	D3596	Lighten ring gear	Add $75
	OPRF42	MicroBlue gear set and bearings	Add $308
	OPRF03	Ball bearing support- Not available in polished	Add $100
	OPRF35S	Replace S-Series yoke with Chromed chrome moly yoke	Add $100
	OPRF35	Replace Chrome moly yoke with Chromed chrome moly yoke	Add $65
	OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
	OPRF13	Replace Chrome moly yoke with Aluminum yoke	Add $124
	U1613	1 magnet pick-up collar for 28 spline pinion	Add $48
	U1613-2	2 magnet pick-up collar for 28 spline pinion	Add $52
	U1613-4	4 magnet pick-up collar for 28 spline pinion	Add $60
	U1613-8	8 magnet pick-up collar for 28 spline pinion	Add $129
	U1614	1 magnet pick-up collar for 35 spline pinion	Add $48
	U1614-2	2 magnet pick-up collar for 35 spline pinion	Add $52
	U1614-4	4 magnet pick-up collar for 35 spline pinion	Add $60
	U1614-8	8 magnet pick-up collar for 35 spline pinion	Add $129
	N1927S	Sensor bracket for pinion support	Add $15



PRG500	12 bolt Drop-out case / Ultra lite 35 spline steel spool		
	Standard gear set / Chrome moly 1350 yoke / U-bolts		$1,528
Upgrades:	OPRG01	Upgrade to Pro gear	Add $99
	OPRG03	Upgrade to 35 spline aluminum spool	Add $81
	D3596	Lighten ring gear	Add $75
	OPRF42	MicroBlue gear set & bearings	Add $308
	OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73

9" LIGHTWEIGHT ALUMINUM

CENTER SECTION WITH COUPLER

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Lightweight Aluminum Case with Spool & Coupler

PRF150: The Lightweight Aluminum case with a lightened steel spool and Standard gear set can be used where weight is critical, the vehicle is light, and impact loads are relatively low. Drag Race applications include solid mount Super Comp Dragsters and Altereds. This package contains the Lightweight aluminum case, Strange forged aluminum pinion support, lightweight steel spool, Standard gear, and female coupler. The PRF150P contains a polished case and support. Upgrades are available to a 40 spline L/W steel spool or 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, and computer pick-up collar. Current Super Comp vehicles that use a throttle stop will opt for the PRF160 which contains a Pro gear, and also upgrade to the 40 spline L/W steel spool.

PRF160: The Lightweight Aluminum case with a lightened steel spool and 28 spline Pro gear set can be used where minimal weight is of utmost importance. Most common Drag Race applications include solid mount Super Comp Dragsters and Altereds. The package contains the Lightweight aluminum case, Strange forged aluminum pinion support, lightweight steel spool, 28 spline Pro gear, and female coupler. The PRF160P contains a polished case and support. Upgrades available are a 35 spline Pro gear, 40 spline spool, 35 spline aluminum spool, and ball bearing pinion support. Options include a lightened ring gear, MicroBlue service, and computer pick-up collar. For more extreme applications, check out the HD Pro aluminum or Ultra case assemblies.

12 bolt Drop-out Aluminum Case with Spool & Coupler

PRG505: The 12 bolt aluminum Drop-out center section is designed to bolt into a Ford 9" housing and utilize a 12 bolt ring and pinion. This allows the builder to create a lightweight sheet metal housing, have the convenience of a center section, and benefit from the efficiency of a 12 bolt gear. The application is a very lightweight Drag Race Only vehicle that does not require the strength of a Ford 9" gear, but can appreciate its lightweight housing. Since a 12 bolt gear is 2-3% more efficient than a comparable 9", horsepower loss is reduced and an improvement realized in top end performance. This assembly should not be used outside its application since overloading will cause case deflection, gear bind, efficiency loss, and poor gear life. Upgrades available include a Pro gear, 35 spline aluminum spool, lightened ring gear, and MicroBlue service.

PRF150 Lightweight Aluminum case / 1922 Strange forged aluminum support
31-35 spline L/W steel spool / Standard gear set/ Female coupler $1,324

PRF150P Polished Lightweight Aluminum case / N1922P polished support
31-35 spline L/W steel spool / Standard gear set/ Female coupler $1,587

Upgrades:
OPRF01 Upgrade to 40 spline spool ..... Add $73
OPRF19 Upgrade to 35 spline aluminum spool ..... Add $140

PRF160 Lightweight Aluminum case / 1922 Strange forged aluminum support
31-35 spline L/W steel spool / 28 spline Pro gear / Female coupler $1,448

PRF160P Polished Lightweight Aluminum case / N1922P polished support
31-35 spline L/W steel spool / 28 spline Pro gear / Female coupler $1,710

Upgrades:
OPRF05 Upgrade to 35 spline 9" Pro gear ..... Add $50
OPRF01 Upgrade to 40 spline spool ..... Add $73
OPRF19 Upgrade to 35 spline aluminum spool ..... Add $140

Options for all packages above

D3596 Lighten ring gear ..... Add $75
OPRF42 MicroBlued gear set and bearings ..... Add $308
OPRF03 Ball bearing support- Not available in polished ..... Add $100
OPRF37 Upgrade to HD cap kit for rear end yoke ..... Add $73
U1613 1 magnet pick-up collar for 28 spline pinion ..... Add $48
U1613-2 2 magnet pick-up collar for 28 spline pinion ..... Add $52
U1613-4 4 magnet pick-up collar for 28 spline pinion ..... Add $60
U1613-8 8 magnet pick-up collar for 28 spline pinion ..... Add $129
U1614 1 magnet pick-up collar for 35 spline pinion ..... Add $48
U1614-2 2 magnet pick-up collar for 35 spline pinion ..... Add $52
U1614-4 4 magnet pick-up collar for 35 spline pinion ..... Add $60
U1614-8 8 magnet pick-up collar for 35 spline pinion ..... Add $129
N1927S Sensor bracket for pinion support ..... Add $15

PRG505 12 bolt Drop-out case / Ultra lite 35 spline steel spool
Standard gear set / Female coupler..... $1,463

Upgrades:
OPRG01 Upgrade to Pro gear ..... Add $99
OPRG03 Upgrade to 35 spline aluminum spool ..... Add $81
D3596 Lighten ring gear ..... Add $75
OPRF42 MicroBlue gear set & bearings ..... Add $308
OPRF37 Upgrade to HD cap kit for rear end yoke ... Add $73

9" HD PRO ALUMINUM

CENTER SECTION WITH YOKE

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HD Pro Aluminum Case with Differential

PRF180: The HD Pro Aluminum case equipped with a posi unit can be used where weight savings or cosmetic appearance is important without sacrificing any gear life. In fact, gear life is increased over OEM cast and nodular iron units due to the rigidity of this case and pinion support design. This allows use of an aluminum case in applications that would normally be considered too heavy or abusive. Popular applications include street, Street / Track, Road Race, and many others. This package includes the HD Pro case and support, clutch style posi unit, Standard gear, and S-series 1350 yoke with u-bolts. Upgrades are available to the differential and to a chrome moly yoke. Options include a polished case and support, and a polished and chromed chrome moly yoke.

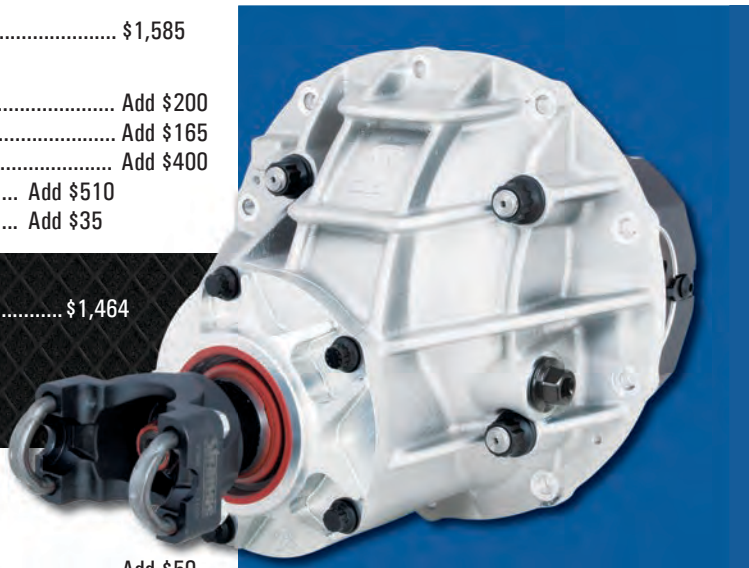
HD Pro Aluminum Case with Spool & Yoke

PRF184: The HD Pro Aluminum case with a lightweight steel spool and Standard gear is used where weight savings and gear life are both very important. This case will offer greater gear life than OEM cast and nodular iron units, while drastically reducing weight. A typical application is a Drag race vehicle that is still able to get sufficient life out of a Standard gear. This package includes the HD Pro case and support, lightweight steel spool, Standard gear, and a chrome moly 1350 yoke with u-bolts. Upgrades available are a 40 spline L/W steel spool or 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, polished and chromed yoke, aluminum yoke, and load bolt. If shock loads are going to be more extreme, the PRF188 would be the better choice since it contains a Pro gear.

PRF188: The HD Pro Aluminum case with a lightweight steel spool and 28 spline Pro gear is used where weight savings and gear life are both very important, and shock loads are too high for a Standard gear. The case and pinion support design offer a very stout foundation to support the spool and gear set. The oversized tail bearing offers more pinion support. Typical Drag Race applications are fast Door cars, Dragsters that run in both Super Comp and Top Dragster, and Top Sportsman vehicles. This package includes the HD Pro case and support, lightweight steel spool, 28 spline Pro gear, and a chrome moly 1350 yoke with u-bolts. Upgrades are available to a 35 spline 9" Pro gear, 9 1/2" Pro gear, 40 spline L/W steel spool, and 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, polished and chromed yoke, aluminum yoke, and load bolt.

PRF192: This center section features a HD Pro Aluminum 3.812" bore case and a special heavy duty lightened 40 spline steel spool. The spool has a thicker wall on the bearing journal to eliminate any possibility that the journal could collapse under extreme conditions. It has extended internal splines which allow the continued use of the same 40 spline axles, even if replacing a competitors 40 spline center section. The case, pinion support, and spool design create a ridged fixture to keep the ring and pinion in proper alignment. The oversized tail bearing further adds to the support of the pinion. This package includes the HD Pro case and support, HD lightened 40 spline steel spool, 28 spline Pro gear, and a chrome moly 1350 yoke with u-bolts. Upgrades available are a 35 spline Pro gear, 9 1/2" Pro gear, and 40 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, a polished and chromed yoke, aluminum yoke, and load bolt.

PRF180		HD Pro aluminum case and support / Clutch style 28-31 spline posi unit Standard gear set / S-Series 1350 yoke- U2203 / U-bolts	$1,585
Upgrades:	OPRF09	Upgrade to Eaton 28 or 31 spline Truetrack	Add $200
	OPRF17	Upgrade to Eaton 28, 31, or 35 spline Detroit Locker	Add $165
	OPRF11	Upgrade to Eaton 35 spline Truetrack	Add $400
	OPRF10	Upgrade to Strange 35 spline S-Trac- N1980	Add $510
	OPRF07	Upgrade to Chrome moly pinion yoke- U1603	Add $35
PRF184		HD Pro aluminum case and support / 31-35 spline L/W steel spool Standard gear set / Chrome moly 1350 yoke- U1603 / U-bolts	$1,464
Upgrades:	OPRF01	Upgrade to 40 spline L/W steel spool- D2000	Add $73
	OPRF19	Upgrade to 35 spline aluminum spool- D1565	Add $140
PRF188		HD Pro aluminum case and support / 31-35 spline L/W steel spool 28 spline Pro gear / Chrome moly 1350 yoke- U1603 / U-bolts	$1,615
Upgrades:	OPRF05	Upgrade to 35 spline 9" Pro gear	Add $50
	OPRF52	Upgrade to 35 spline 9 1/2" Pro gear	Add $170
	OPRF01	Upgrade to 40 spline L/W steel spool- D2000	Add $73
	OPRF19	Upgrade to 35 spline aluminum spool- D1565	Add $140
PRF192		HD Pro 3.812" bore aluminum case and support / D2002 HD 40 spline L/W steel spool 28 spline Pro gear / U1603 chrome moly 1350 yoke / U-bolts	$1,699
Upgrades:	OPRF05	Upgrade to 35 spline 9" Pro gear	Add $50
	OPRF52	Upgrade to 35 spline 9 1/2" Pro gear	Add $170
	OPRF29	Upgrade to 40 spline aluminum spool- D2004	Add $95



Options for all packages above	D3596	Lighten ring gear	Add $75
	OPRF42	MicroBlue gear set and bearings	Add $308
	OPRF03	Ball bearing pinion support- Not available in polished	Add $100
	OPRF33	Polished case	Add $240
	OPRF34	Polished pinion support	Add $75
	OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
	OPRF35S	Replace S-Series yoke with Chromed chrome moly yoke	Add $100
	OPRF35	Replace Chrome moly yoke with Chromed chrome moly yoke	Add $65
	OPRF13	Replace Chrome moly yoke with Aluminum yoke	Add $124
	N1910H	Load bolt- Can not be used with lightened ring gear	Add$39
	U1613	1 magnet pick-up collar for 28 spline pinion	Add $48
	U1613-2	2 magnet pick-up collar for 28 spline pinion	Add $52
	U1613-4	4 magnet pick-up collar for 28 spline pinion	Add $60
	U1613-8	8 magnet pick-up collar for 28 spline pinion	Add $129
	U1614	1 magnet pick-up collar for 35 spline pinion	Add $48
	U1614-2	2 magnet pick-up collar for 35 spline pinion	Add $52
	U1614-4	4 magnet pick-up collar for 35 spline pinion	Add $60
	U1614-8	8 magnet pick-up collar for 35 spline pinion	Add $129
	N2300S	Sensor bracket for HD Pro pinion support	Add $15

9" HD PRO ALUMINUM

CENTER SECTION WITH COUPLER

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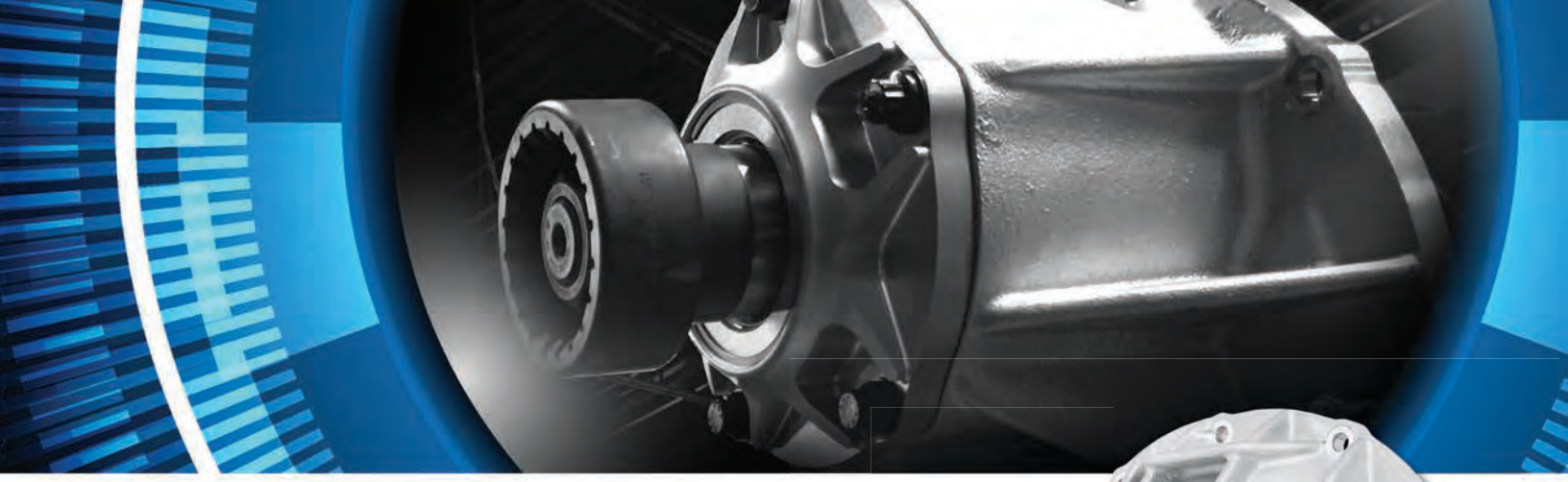
HD Pro Aluminum Case with Spool & Coupler

PRF182: The HD Pro Aluminum case with a lightweight steel spool and Standard gear is used when weight savings and gear life are both very important. This case will offer much greater gear life than OEM cast and nodular iron units, while drastically reducing weight. A typical application is a Dragster or Altered that is still able to get sufficient life out of a Standard gear. This package includes the HD Pro case and support, lightweight steel spool, Standard gear, and female coupler. Upgrades available are a 40 spline L/W steel spool or 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, and load bolt. If shock loads are going to be more extreme, the PRF188 which contains a Pro gear would be the better choice.

PRF186: The HD Pro Aluminum case with a lightweight steel spool and 28 spline Pro gear is used when weight savings and gear life are both very important and shock loads are too high for a Standard gear. The case and pinion support design offer a very stout foundation to support the spool and gear set. The tail bearing is oversized further adding to the support of the pinion. Solid mount Dragsters and Altereds are the most common applications. This package includes the HD Pro case and support, lightweight steel spool, 28 spline Pro gear, and female coupler. Upgrades are available including a 35 spline 9" Pro gear, 9 1/2" Pro gear, 40 spline spool, and 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, and load bolt. For extreme conditions such as Alcohol Dragster or Funny Car, the PRF190 would be the better choice due to the spool design.

PRF190: This center section features a HD Pro Aluminum 3.812" bore case and a special heavy duty lightened 40 spline steel spool. The spool has a thicker wall on the bearing journal to eliminate any possibility that the journal could collapse under extreme conditions. It has extended internal splines which allow the continued use of the same 40 spline axles, even if replacing a competitor's 40 spline center section. The case, pinion support, and spool design create a ridged fixture to keep the ring and pinion in proper alignment. The oversized tail bearing further adds to the support of the pinion. This package includes the HD Pro case and support, HD lightened 40 spline steel spool, 28 spline Pro gear, and female coupler. Upgrades available are a 35 spline 9" Pro gear, 9 1/2" Pro gear, and 40 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, and load bolt.



PRF182 HD Pro aluminum case and support / 31-35 spline L/W steel spool
Standard gear set / Female coupler $1,434

Upgrades:
OPRF01 Upgrade to 40 spline L/W steel spool- D2000 ..... Add $73
OPRF19 Upgrade to 35 spline aluminum spool- D1565 ..... Add $140

PRF186 HD Pro aluminum case and support / 31-35 spline L/W steel spool
28 spline Pro gear / Female coupler $1,580

Upgrades:
OPRF05 Upgrade to 35 spline 9" Pro gear ..... Add $50
OPRF52 Upgrade to 35 spline 9 1/2" Pro gear ..... Add $170
OPRF01 Upgrade to 40 spline L/W steel spool- D2000 ..... Add $73
OPRF19 Upgrade to 35 spline aluminum spool- D1565 ..... Add $140

PRF190 HD Pro 3.812" bore aluminum case and support / 40 spline HD L/W steel spool- D2002
28 spline Pro gear / Female coupler $1,663

Upgrades:
OPRF05 Upgrade to 35 spline 9" Pro gear ..... Add $50
OPRF52 Upgrade to 35 spline 9 1/2" Pro gear ..... Add $170
OPRF29 Upgrade to aluminum 40 spline spool- D2002 ..... Add $95

Options for all packages above

D3596	Lighten ring gear	Add $75
OPRF42	MicroBlue gear set and bearings	Add $308
OPRF03	Ball bearing pinion support- Not available in polished	Add $100
OPRF33	Polished case	Add $240
OPRF34	Polished pinion support	Add $75
OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
N1910H	Load bolt- Can not be used with lightened ring gear	Add$39
U1613	1 magnet pick-up collar for 28 spline pinion	Add $48
U1613-2	2 magnet pick-up collar for 28 spline pinion	Add $52
U1613-4	4 magnet pick-up collar for 28 spline pinion	Add $60
U1613-8	8 magnet pick-up collar for 28 spline pinion	Add $129
U1614	1 magnet pick-up collar for 35 spline pinion	Add $48
U1614-2	2 magnet pick-up collar for 35 spline pinion	Add $52
U1614-4	4 magnet pick-up collar for 35 spline pinion	Add $60
U1614-8	8 magnet pick-up collar for 35 spline pinion	Add $129
N2300S	Sensor bracket for HD Pro pinion support	Add $15

9" ULTRA

CENTER SECTION WITH YOKE

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ULTRA CASE DESIGN: The Ultra case is used where maximum gear life is essential. This case and pinion support design move both pinion bearings into the case. This offers greater support than all other designs whereas the outer bearing sits outside the case. The pinion support has a tight fit to the case bore, further eliminating any flex that can occur. This coupled with the oversized tail bearing, firmly holds the pinion gear in proper alignment with the ring gear under the most extreme conditions. The massive billet aluminum main caps complete this maximum effort design. This case supports 9" and 9 1/2" gear sets, and can use 10" development gears with the proper pinion support. All Ultra cases have a provision to use an optional load bolt if required. Bore sizes available are 3.250" and 3.812". The 3.812" bore Ultra case is designed for a heavy duty lightweight 40 spline steel spool that features a thicker wall on the bearing journal to eliminate the possibility of collapse under the most abusive conditions. It also allows the use of a aluminum 40 spline spool were applications permit. The 3.812" is available in a special lightened version with a ball bearing pinion support commonly used in Pro Stock cars. Ball bearing supports are an option on non-lighten cases as well. For a Funny car requiring a coupler cover, a support with a built-in cover is an option. A special 4.00" bore case is available to suit the Strange L6000 Drop-out Live Axle.

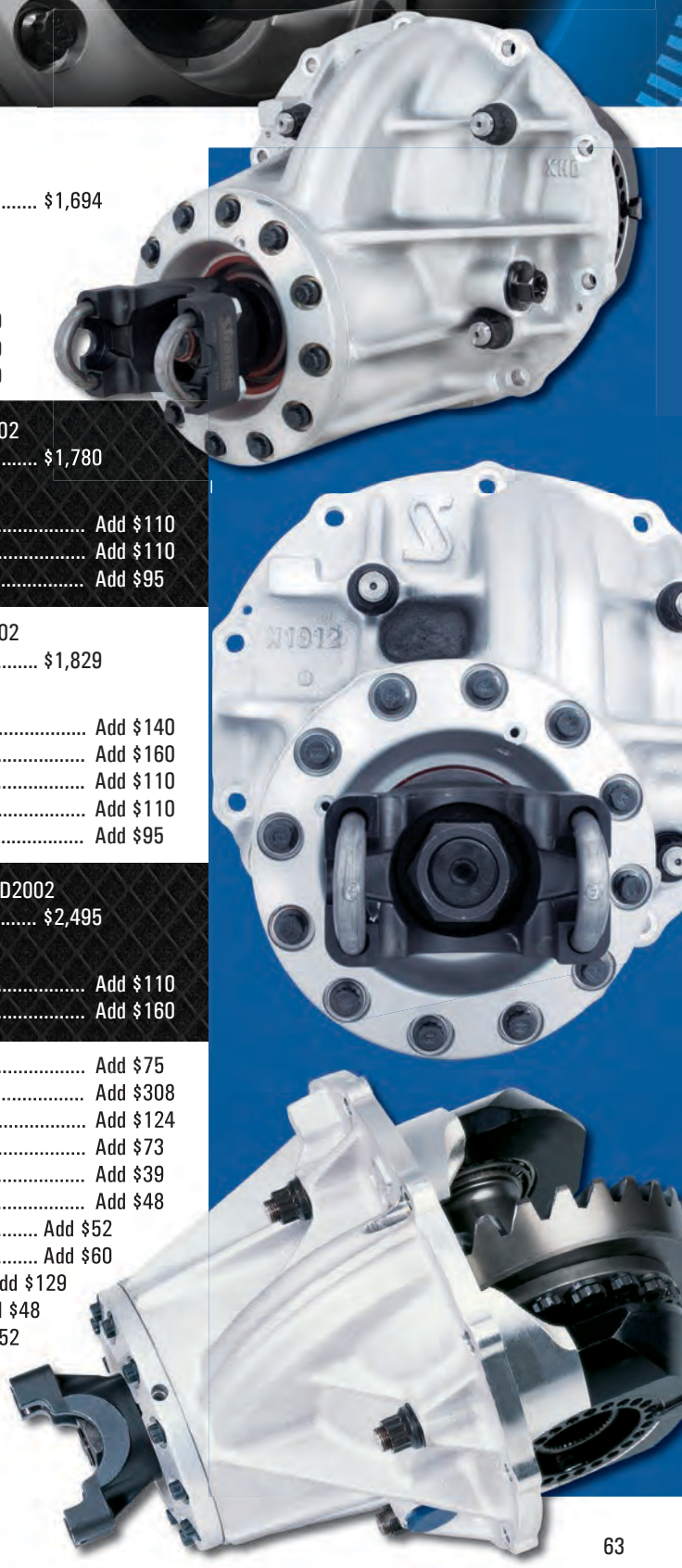
ULTRA CASE WITH SPOOL & YOKE

PRF205: This assembly includes a 3.250 bore Ultra case, billet aluminum pinion support, 35 spline lightweight steel spool, 28 spline Pro gear set, and a chrome moly 1350 yoke with u-bolts. Upgrades available are to a 40 spline L/W steel spool, 35 spline aluminum spool, 35 spline 9" Pro gear, 9 1/2" Pro gear, and ball bearing pinion support. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, aluminum 1350 yoke, and load bolt.

PRF215: This assembly includes a 3.812 bore Ultra case, billet aluminum pinion support, HD 40 spline lightweight steel spool, 28 spline Pro gear set, and a chrome moly 1350 yoke with u-bolts. Upgrades available are a ball bearing support, Lightened case with ball bearing support, and 40 spline aluminum spool. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, aluminum 1350 yoke, and load bolt.

PRF225: This assembly includes a 3.812 bore Ultra case, billet aluminum pinion support, HD 40 spline lightweight steel spool, 35 spline Pro gear set, and a chrome moly 1350 yoke with u-bolts. Upgrades available are a ball bearing support, Lightened case with ball bearing support, and 40 spline aluminum spool. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, chrome moly 1480 yoke, aluminum 1350 yoke, and load bolt.

PRF205	Ultra 3.250" bore case and support / 35 spline lightweight steel spool- D1555 28 spline Pro gear set / Chrome moly 1350 yoke- U1603 / U-bolts		$1,694
Upgrades:	OPRF01	Upgrade to 40 spline L/W steel spool- D2000	Add $73
	OPRF05	Upgrade to 35 spline 9" Pro gear	Add $50
	OPRF52	Upgrade to 35 spline 9 1/2" Pro gear	Add $170
	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF19	Upgrade to 35 spline aluminum spool- D1565	Add $140
PRF215	Ultra 3.812" bore case and support / 40 spline HD lightweight steel spool- D2002 28 spline Pro gear set / Chrome moly 1350 yoke- U1603 / U-bolts		$1,780
Upgrades:	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF25	Upgrade to Lightened case and ball bearing support	Add $110
	OPRF29	Upgrade to 40 spline aluminum spool- D2004	Add $95
PRF225	Ultra 3.812" bore case and support / 40 spline HD lightweight steel spool- D2002 35 spline Pro gear / Chrome moly 1350 yoke- U604 / U-bolts		$1,829
Upgrades:	OPRF23	Upgrade to 9 1/2" Pro gear	Add $140
	OPRF20	Upgrade to 1480 yoke	Add $160
	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF25	Upgrade to Lightened case and ball bearing support	Add $110
	OPRF29	Upgrade to 40 spline aluminum spool- D2004	Add $95
PRF225-10	Ultra 3.812" bore case and 10" support / 40 spline HD lightweight steel spool- D2002 10" Pro gear / Chrome moly 1350 yoke- U604 / U-bolts		$2,495
Upgrades:	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF20	Upgrade to 1480 yoke	Add $160
Options for all packages above	D3596	Lighten ring gear	Add $75
	OPRF42	MicroBlue gear set and bearings	Add $308
	OPRF13	Replace Chrome moly yoke with Aluminum yoke	Add $124
	OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
	N1910H	Load bolt- Can not be used with lightened ring gear	Add $39
	U1613	1 magnet pick-up collar for 28 spline pinion	Add $48
	U1613-2	2 magnet pick-up collar for 28 spline pinion	Add $52
	U1613-4	4 magnet pick-up collar for 28 spline pinion	Add $60
	U1613-8	8 magnet pick-up collar for 28 spline pinion	Add $129
	U1614	1 magnet pick-up collar for 35 spline pinion	Add $48
	U1614-2	2 magnet pick-up collar for 35 spline pinion	Add $52
	U1614-4	4 magnet pick-up collar for 35 spline pinion	Add $60
	U1614-8	8 magnet pick-up collar for 35 spline pinion	Add $129
	N1952S	Sensor bracket for lightened case & ball support	Add $22



9" ULTRA

CENTER SECTION WITH COUPLER

Our highly trained technicians are dedicated to provide the highest quality assembly that customers have grown to expect from Strange Engineering. Timken bearings and races are used throughout. The Gear set is hand massaged to remove sharp corners and burrs to provide quiet operation. Contact patterns are check and readjusted until satisfactory. Any questionable gear sets are returned to the manufacturer for evaluation and the set-up process begins again. We believe the extra time is well spent because while some may advertise the fastest assembly time, we would rather deliver the best in quality and workmanship.

ULTRA CASE DESIGN: The Ultra case is used where maximum gear life is essential. This case and pinion support design move both pinion bearings into the case. This offers greater support than all other designs whereas the outer bearing sits outside the case. The pinion support has a tight fit to the case bore, further eliminating any flex that can occur. This coupled with the oversized tail bearing, firmly holds the pinion gear in proper alignment with the ring gear under the most extreme conditions. The massive billet aluminum main caps complete this maximum effort design. This case supports 9" and 9 1/2" gear sets, and can use 10" development gears with the proper pinion support. All Ultra cases have a provision to use an optional load bolt if required. Bore sizes available are 3.250" and 3.812". The 3.812" bore Ultra case is designed for a heavy duty lightweight steel spool that features a thicker wall on the bearing journal to eliminate the possibility of collapse under the most abusive conditions. It also allows the use of a aluminum 40 spool were applications permit. The 3.812" is available in a special lightened version with a ball bearing pinion support commonly used in Pro Stock cars. Ball bearing supports are an option on non-lighten cases as well. For a Funny car requiring a coupler cover, a support with a built-in cover is an option. A special 4.00" bore case is available to suit the Strange L6000 Drop-out Live Axle.

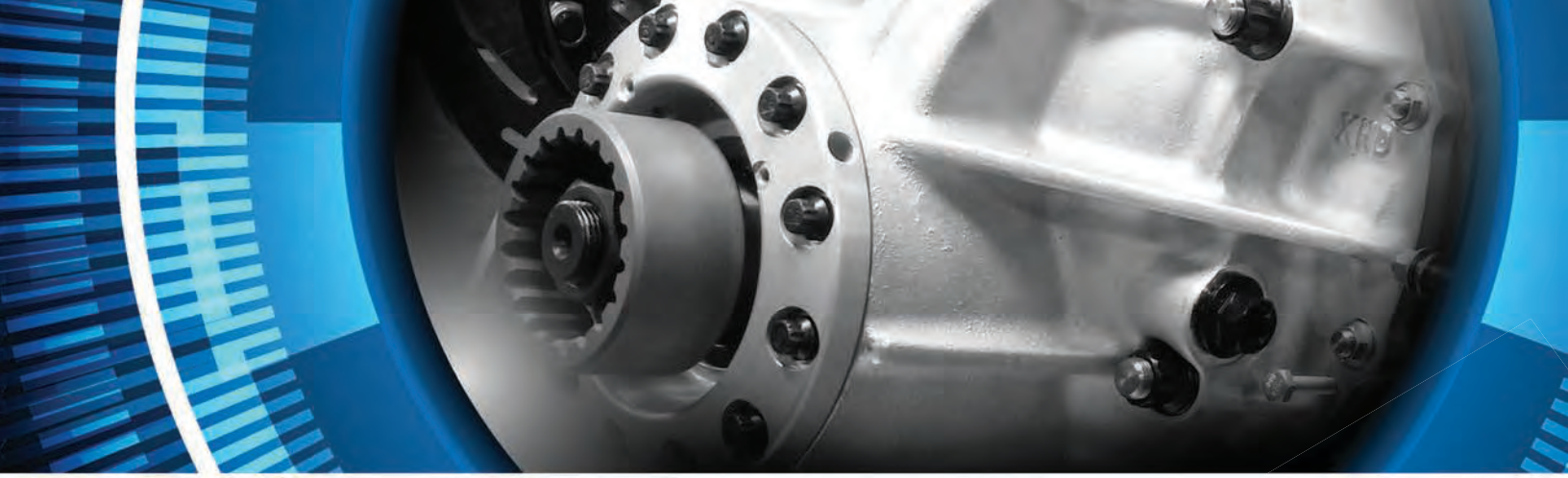
ULTRA CASE WITH SPOOL & COUPLER

PRF200: This assembly includes a 3.250 bore Ultra case, billet aluminum pinion support, 35 spline lightweight steel spool, 28 spline Pro gear set, and female coupler. Upgrades available are to a 40 spline L/W steel spool, 35 spline aluminum spool, 35 spline 9" Pro gear, and 9 1/2" Pro gear. Options include a coupler cover support, ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, and load bolt.

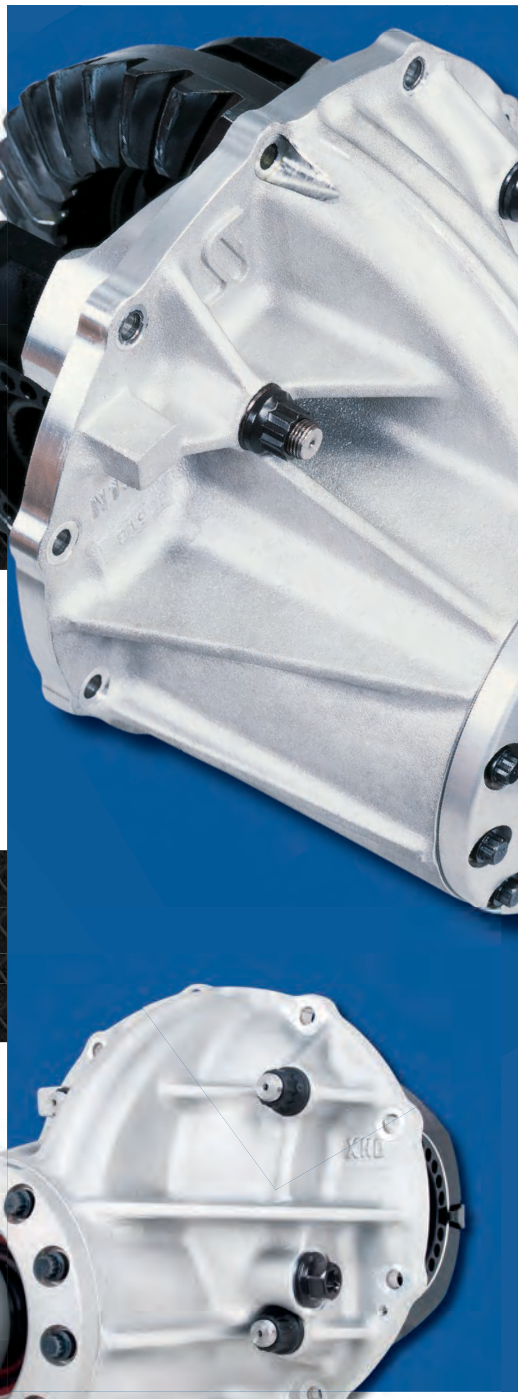
PRF210: This assembly includes a 3.812 bore Ultra case, billet aluminum pinion support, HD 40 spline lightweight steel spool, 28 spline Pro gear set, and female coupler. Upgrades available are a coupler cover support, ball bearing support, Lightened case with ball bearing support, 40 spline aluminum spool, 35 spline 9" Pro gear, and 9 1/2" Pro gear. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, and load bolt.

PRF220: This assembly includes a 3.812 bore Ultra case, billet aluminum pinion support, HD 40 spline lightweight steel spool, 35 spline Pro gear set, and female coupler. Upgrades available are a coupler cover support, ball bearing support, Lightened case with ball bearing support, 40 spline aluminum spool, and 9 1/2" Pro gear. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, and load bolt.

PRF230: This assembly includes a 4.00 bore Ultra case, billet aluminum pinion support, Live Axle 36 spline lightweight steel spool, 35 spline Pro gear set, and female coupler. Upgrades available are a coupler cover support and 9 1/2" Pro gear. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, and load bolt.



PRF200	Ultra 3.250" case and support / 35 spline L/W steel spool- D1555 28 spline Pro gear / Female coupler		$1,672
Upgrades:	OPRF01	Upgrade to 40 spline L/W steel spool- D2000	Add $73
	OPRF05	Upgrade to 35 spline 9" Pro gear	Add $50
	OPRF52	Upgrade to 35 spline 9 1/2" Pro gear	Add $170
	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF31	Upgrade to Coupler cover support- Not available in ball bearing	Add $75
	OPRF19	Upgrade to Aluminum 35 spline spool- D1565	Add $140
PRF210	Ultra 3.812" case and support / 40 spline HD L/W steel spool- D2002 28 spline Pro gear / Female coupler		$1,762
Upgrades:	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF25	Upgrade to Lightened case & ball bearing support	Add $110
	OPRF31	Upgrade to Coupler cover support- Not available in ball bearing	Add $75
	OPRF29	Upgrade to Aluminum 40 spline spool- D2004	Add $95
PRF220	Ultra 3.812" case and support / 40 spline HD L/W steel spool- D2002 35 spline Pro gear / Female coupler		$1,808
Upgrades:	OPRF23	Upgrade to 9 1/2" Pro gear	Add $140
	OPRF26	Upgrade to Ball bearing support	Add $110
	OPRF25	Upgrade to Lightened case and ball bearing support	Add $110
	OPRF31	Upgrade to Coupler cover support- Not available in ball bearing	Add $75
	OPRF29	Upgrade to Aluminum 40 spline spool- D2004	Add $95
PRF230	Ultra 4.00" case and support / Live Axle 36 spline lightweight steel spool 35 spline Pro gear / Female coupler		$1,970
Upgrades:	OPRF23	Upgrade to 9 1/2" Pro gear	Add $140
	OPRF31	Upgrade to Coupler cover support- Not available in ball bearing	Add $75
Options for all packages above	D3596	Lighten ring gear	Add $75
	OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73
	OPRF42	MicroBlue gear set and bearings	Add $308
	N1910H	Load bolt- Can not use with lightened ring gear	Add$39
	U1613	1 magnet pick-up collar for 28 spline pinion	Add $48
	U1613-2	2 magnet pick-up collar for 28 spline pinion	Add $52
	U1613-4	4 magnet pick-up collar for 28 spline pinion	Add $60
	U1613-8	8 magnet pick-up collar for 28 spline pinion	Add $129
	U1614	1 magnet pick-up collar for 35 spline pinion	Add $48
	U1614-2	2 magnet pick-up collar for 35 spline pinion	Add $52
	U1614-4	4 magnet pick-up collar for 35 spline pinion	Add $60
	U1614-8	8 magnet pick-up collar for 35 spline pinion	Add $129
	N1952S	Sensor bracket for lightened case & ball support	Add $22



9" BILLET ALUMINUM

CENTER SECTION WITH YOKE

Our highly trained technicians are dedicated to provide the highest quality assembly that customers have grown to expect from Strange Engineering. Timken bearings and races are used throughout. The Gear set is hand massaged to remove sharp corners and burrs to provide quiet operation. Contact patterns are check and readjusted until satisfactory. Any questionable gear sets are returned to the manufacturer for evaluation and the set-up process begins again. We believe the extra time is well spent because while some may advertise the fastest assembly time, we would rather deliver the best in quality and workmanship.

Billet Case & Pinion Support Design: The billet case and pinion support provide unsurpassed support to the ring and pinion under the most extreme conditions. This case and pinion support design move both pinion bearings into the case. This offers greater support than other designs where the outer bearing sits outside the case. The billet pinion support is tightly fitted to the case bore, further eliminating any flex that can occur. This, coupled with the oversized tail bearing, firmly holds the pinion gear in proper alignment with the ring gear. The massive curved billet aluminum main caps feature two extra studs to provide additional support against cap deflection. This case utilizes a support for 9" and 9 1/2" gear sets, or a 10" specific support. The billet case has a provision to use an optional load bolt if required. The 3.812" bore billet case is designed for a heavy duty lightweight steel spool that features a thicker wall on the bearing journal to eliminate the possibility of collapse under the most abusive conditions. A ball bearing support is available as an option.

Billet Case with HD 40 Spool & Yoke

PRF425: This assembly includes the Strange 3.812 bore Billet case, billet pinion support, sensor holder, HD 40 spline lightweight steel spool, 35 spline Pro gear set, and a chrome moly 1350 yoke with HD cap kit. A ball bearing support upgrade is available. Options include a 9 1/2" Pro gear, lightened ring gear, MicroBlue service, computer pick-up collar, additional sensor holder, 1350 billet yoke, 1480 billet yoke, and load bolt.

PRF425-10: This assembly includes the Strange 3.812 bore Billet case, 10" gear specific billet pinion support, sensor holder, HD 40 spline lightweight steel spool, 10" Pro gear set, and a 1350 chrome moly yoke with HD cap kit. A ball bearing support upgrade is available. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, additional sensor holder, 1350 billet yoke, 1480 billet yoke, and load bolt.

Billet Case with HD 40 Spool & Coupler

PRF420: This assembly includes the Strange 3.812 bore Billet case, billet pinion support, sensor holder, HD 40 spline lightweight steel spool, 35 spline Pro gear set, and a chrome moly female coupler. A ball bearing support upgrade is available. Options include a 9 1/2" Pro gear, lightened ring gear, MicroBlue service, computer pick-up collar, additional sensor holder, and load bolt.

PRF420-10: This assembly includes the Strange 3.812 bore Billet case, 10" gear specific billet pinion support, sensor holder, HD 40 spline lightweight steel spool, 10" Pro gear set, and a chrome moly female coupler. A ball bearing support upgrade is available. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, additional sensor holder, and load bolt.

PRF425 Billet 3.812 bore case, support & sensor holder / D2002 HD 40 spline lightweight steel spool 35 spline Pro gear set / U1604 chrome moly 1350 yoke / U1610HD cap kit..... $4,245

Upgrades:

OPRF52	Upgrade to 35 spline 9 1/2" Pro gear	Add $170
OPRF08	Upgrade to 1350 Billet yoke	Add $150
OPRF20	Upgrade to 1480 Billet yoke	Add $150
OPRF26	Upgrade to Ball bearing support	Add $110

PRF425-10 Billet 3.812" bore case / 10" specific support & sensor holder / D2002 HD 40 spline lightweight steel spool 10" Pro gear set / U1604 chrome moly 1350 yoke / U1610HD cap kit..... $4,895

Upgrades:

OPRF08	Upgrade to 1350 Billet yoke	Add $150
OPRF20	Upgrade to 1480 Billet yoke	Add $150
OPRF26	Upgrade to Ball bearing support	Add $110

PRF420 Billet 3.812" bore case, support & sensor holder / D2002 HD 40 spline lightweight steel spool 35 spline Pro gear / Chrome moly female coupler..... $4,145

Upgrades:

OPRF23	Upgrade to 9 1/2" Pro gear	Add $140
OPRF26	Upgrade to Ball bearing support	Add $110

PRF420-10 Billet 3.812" bore case / 10" specific support & sensor holder / D2002 HD 40 spline lightweight steel spool 10" Pro gear set / Chrome moly female coupler..... $4,795

Upgrades:

OPRF26	Upgrade to Ball bearing support	Add $110
OPRF37	Upgrade to HD cap kit for rear end yoke	Add $73

Options for all packages above

D3596	Lighten ring gear	Add $75
OPRF42	MicroBlue gear set and bearings	Add $308
N1910T	Load bolt - Can not be used with lightened gear	Add $39
N1952T	Additional Sensor holder	Add $30
U1614	1 magnet pick-up collar	Add $48
U1614-2	2 magnet pick-up collar	Add $52
U1614-4	4 magnet pick-up collar	Add $60
U1614-8	8 magnet pick-up collar	Add $129

9" STEEL HOUSINGS

HEAVY DUTY

Bare Housing Centers: Bare housing centers are constructed from .141" mild steel with a heavy duty .282" face plate. Tube insertion locations are slotted to allow complete and secure welding of the tubes to the housing. Internal plates gusset the housing and provide internal support to the ends of the tubes. The cover is designed to provide the clearance necessary for cases with heavy duty main caps and also allow the use of 9 1/2" gear sets. The H1110 housing center is designed to accept 3" O.D. tubing and the H1112 is for 3 1/4". Both housing centers come equipped with 10 center section studs installed.

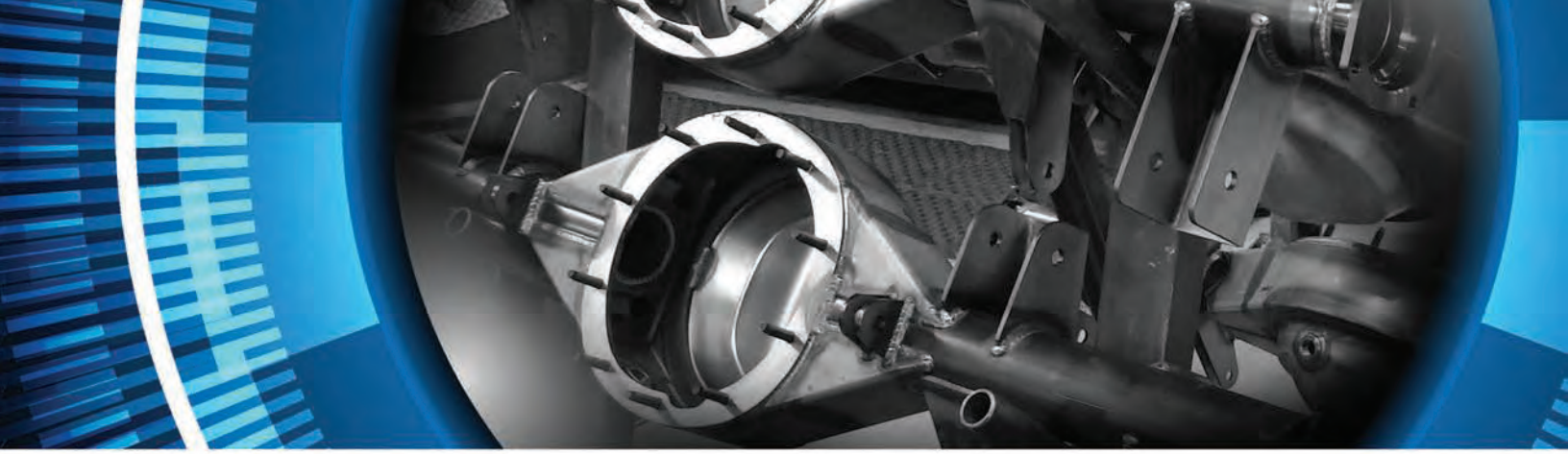
Welded Housings: All below housings begin with a Strange bare housing center as described above. Fill and drain plugs are installed to facilitate fluid changes. Your choice of .250" wall 3" or 3 1/4" mild steel tubing is installed deep into the housing until fully engaged into the internal gusset near the face plate. Using an alignment jig, the tubing is welded 360 degrees to the outside of the housing, along the housing slots, and to the internal gusset. The mounts are attached to the jig and welded to the tubes. Lastly, the ends are welded after all other welding is complete to ensure perfect alignment with the center section. Some housings may be only available in a certain tube diameter limited by mount design. H1128N backbrace option is available on most housings. The brace would be installed prior to the housing ends.

Housing Tubed: The housing is fitted with fill and drain plugs, and tubed with your choice of .250" wall 3" or 3 1/4" mild steel tubing. Larger tubing is stronger, but the intended mounts may dictate tube diameter. A housing like this is for the builder that will be installing their own mounts and may also trim the tubing further. A welding jig will be required to install the housing ends after all other welding has been completed.

Housing with Ends- no mounts: The housing is fitted with fill and drain plugs, tubed with your choice of .250" wall 3" or 3 1/4" mild steel tubing, and choice of housing ends. Larger tubing is stronger, but the intended mounts may dictate tube diameter. Since the builder will be installing their own mounts, extreme care must be taken during the welding process as housing end alignment can be compromised. An alignment jig should be used afterwards to ensure that warping did not occur.

Housing with Mounts- no ends: The housing is fitted with fill and drain plugs, tubed with your choice of .250" wall 3" or 3 1/4" mild steel tubing, and choice of mounts. Larger tubing is stronger, but many mounts are designed to fit a 3" tube. A builder might order this if they are unsure of the final width, or already has housing ends and an alignment jig. It may also be the base for a housing that will use a floater kit. Purchased Strange floater spindles may be fitted and welded at an additional charge. A fully welded housing with spindles can also be ordered with an optional satin black powdercoat finish.

Housing with Ends and Mounts: The housing is fitted with fill and drain plugs, tubed with your choice of .250" wall 3" or 3 1/4" mild steel tubing, and choice of mounts and housing ends. While larger tubing is stronger, the mounts selection may have determined tube diameter. This configuration is the safest way to maintain the proper alignment of the housing ends. The fixturing and welding of the housing ends is always our last operation. For vehicles that will see very hard launches, there is an option to weld a back brace along the rear of the housing. It is designed to eliminate housing and tube flex that can occur under harsh conditions. An optional satin black powdercoat finish is also available.



H1110	HD bare housing center for use with 3" O.D. tubes	$259
H1112	HD bare housing center for use with 3 1/4" O.D. tubes	$259
HF9	HD housing tubed with fill and drain- No ends or mounts	$475
HF9E	HD housing with fill, drain, and ends- No mounts	$565
HF9L	HD housing with fill, drain, and leaf spring mounts- No ends	$575
HF9LE	HD housing with fill, drain, leaf spring mounts, and ends	$665
HF9M86	HD Mustang 79-04 housing tubed with ears, fill, and drain- No mounts or ends	$630
HF9M86E	HD Mustang 79-04 housing with ears, fill, drain, and ends- No mounts	$725
HF9M86M	HD Mustang 79-04 housing with ears, fill, drain, and mounts- No ends	$736
HF9M86ME	HD Mustang 79-04 housing with ears, fill, drain, mounts, and ends	$825
HF9M05	HD Mustang 05-14 housing tubed with ears, fill, and drain- No mounts or ends	$605
HF9M05E	HD Mustang 05-14 housing with ears, fill, drain, and ends- No mounts	$695
HF9M05M	HD Mustang 05-14 housing with ears, fill, drain, and mounts- No ends	$736
HF9M05ME	HD Mustang 05-14 housing with ears, fill, drain, mounts, and ends	$825

Options

H1128N	Install back brace on new housing- Parts & Labor	$185
H1199P-BLK	Powder coat housing satin black	$159
H1130DF	Install Drag Race floater spindles- Labor only	$200
H1130SF	Install Pro Touring floater spindles- Labor only	$150

9" ULTRA FAB
STEEL HOUSINGS

Ultra Fabricated Housing Centers: Ultra Fabricated housing centers are constructed from .125" alloy steel with a heavy duty .375" face plate. Triangulated design provides rigid housing tube support for more consistent and straighter launches. Internal radial gusset plates brace end of housing tube and increase overall housing stiffness. Tube insertion locations are slotted for 5" to allow complete and secure welding of the tubes to the housing. The housing is designed to provide the clearance necessary for cases with heavy duty main caps and also allowing the use of 9", 9 1/2", or 10" gear sets. The H1110UF housing center is designed to accept 3" OD tubing and the H1112UF is for 3 1/4". Both housing centers come equipped with center section studs installed.

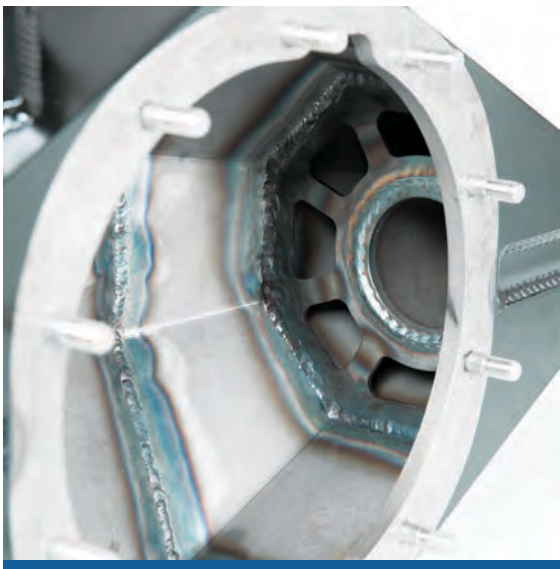
Ultra Fabricated Housings: All housings below begin with a Strange Ultra Fabricated housing center as described above. Fill and drain plugs are installed to facilitate fluid changes. Your choice of .250" wall 3" or 3 1/4" mild steel tubing is installed deep into the housing until fully engaged into the internal gusset near the face plate. Using an alignment jig, the tubing is welded 360 degrees to the outside of the housing, along the housing slots, and to the internal gusset. The mounts are attached to the jig and welded to the tubes. Lastly, the ends are welded after all other welding is complete to ensure perfect alignment with the center section. Some housings may be only available in a certain tube diameter limited by mount design. H1128N back brace option is available on most housings. The brace would be installed prior to the housing ends.

Ultra Fabricated Housing Tubed: The housing is fitted with fill and drain plugs, and tubed with your choice of .250" wall 3" or 3 1/4" mild steel tubing. Larger tubing is stronger, but the intended mounts may dictate tube diameter. A housing like this is for a builder that will be installing their own mounts and may also trim the tubing further. A welding jig will be required to install the housing ends after all other welding has been completed.

Ultra Fabricated Housing with Ends: The housing is fitted with fill and drain plugs, tubed with your choice of .250" wall, 3" or 3 1/4" mild steel tubing, and choice of housing ends. Larger tubing is stronger, but the intended mounts may dictate tube diameter. Since the builder will be installing their own mounts, extreme care must be taken during the welding process as housing end alignment can be compromised. An alignment jig should be used afterwards to ensure that warping did not occur.

Ultra Fabricated Housing with Mounts: The housing is fitted with fill and drain plugs, tubed with your choice of .250" wall 3" or 3 1/4" mild steel tubing, and choice of mounts. Larger tubing is stronger, but many mounts are designed to fit a 3" tube. A builder might order this if they are unsure of the final width, or already has housing ends and an alignment jig. It may also be the base for a housing that will use a floater kit. To fit and weld purchased Strange floater spindles is available at an additional charge. A fully welded housing with spindles can also be ordered with an optional satin black powder coat finish.

Ultra Fabricated Housing with Ends & Mounts: The housing is fitted with fill and drain plugs, tubed with your choice of .250" wall, 3" or 3 1/4" mild steel tubing, and choice of mounts and housing ends. While larger tubing is stronger, the mounts selection may have determined tube diameter. This configuration is the safest way to maintain the proper alignment of the housing ends. The fixturing and welding of the housing ends is always our last operation. For vehicles that will see very hard launches, there is an option to weld a back brace along the rear of the housing. It is designed to eliminate housing and tube flex that can occur under harsh conditions. An optional satin black powder coat finish is also available.



H1110UF	Ultra Fab Bare Housing Center for use with 3" OD tubes	$759
H1112UF	Ultra Fab Bare Housing Center for use with 3 1/4" OD tubes	$759
HF9UF	Ultra Fab Housing tubed with fill and drain- No ends or mounts	$975
HF9EUF	Ultra Fab Housing with fill, drain, and ends- No mounts	$1,065
HF9LUF	Ultra Fab Housing with fill, drain, and leaf spring mounts- No ends	$1,075
HF9LEUF	Ultra Fab Housing with fill, drain, leaf spring mounts, and ends	$1,165
HF9M86UF	Ultra Fab Mustang 79-04 housing tubed with ears, fill, and drain- No mounts / ends	$1,130
HF9M86EUF	Ultra Fab Mustang 79-04 housing with ears, fill, drain, and ends- No mounts	$1,225
HF9M86MUF	Ultra Fab Mustang 79-04 housing with ears, fill, drain, and mounts- No ends	$1,236
HF9M86MEUF	Ultra Fab Mustang 79-04 housing with ears, fill, drain, mounts, and ends	$1,325
HF9M05UF	Ultra Fab Mustang 05-14 housing tubed with ears, fill, and drain- No mounts / ends	$1,105
HF9M05EUF	Ultra Fab Mustang 05-14 housing with ears, fill, drain, and ends- No mounts	$1,195
HF9M05MUF	Ultra Fab Mustang 05-14 housing with ears, fill, drain, and mounts- No ends	$1,236
HF9M05MEUF	Ultra Fab Mustang 05-14 housing with ears, fill, drain, mounts, and ends	$1,325

Options

H1128N	Install back brace on new housing- Parts & Labor	$185
H1199P-BLK	Powder coat housing satin black	$159
H1130DF	Install Drag Race floater spindles- Labor only	$200
H1130SF	Install Pro Touring floater spindles- Labor only	$150

9" ALUMINUM
DRAGSTER HOUSINGS

Dragster / Altered: These housings are available in 26" or 27" widths with the pinion in the center. The 26" housing using Olds brake offset axles would result in 31.664" bare axle flange to axle flange, while the 27" would provide a 32.664" width. The 26" housing using special brake brackets would allow use of axles with an Early Big Ford offset of 2.332", achieving 30.664" bare axle flange to flange. Add your rotor hat thickness to determine your final wheel to wheel. Housings ordered in solid mount are supplied with your choice of three plate designs. The distance between the 3/8" thick plates can be anywhere from 14 3/8" to 17" measured from inside of plate to inside of plate. 4-Link versions are limited to 17" centers and do not include the mounting plates. Chrome moly mounting plates are available separately.

Packages: Packages are available that include a choice of a 26 or 27" wide housing, solid or 4-Link mount, 35 spline solid or 40 spline gun-drilled axles, Pro Steel brake kit, and come with or without a center section. The 26" housing package ordered with an Olds brake kit would result in 31.914" wheel mounting surface to mounting surface, while the 27" would provide a 32.914" width. The 26" housing package ordered with a special Early Big Ford brake kit would achieve a 30.914" wheel mounting surface to mounting surface. The solid mount packages include choice of mounting plates. The 4-Link versions do not include mounting plates, but a set of chrome moly plates are available for an additional $140. Options to the axles, brake kit, or center section can be ordered with the price difference added to the final cost of the assembly. See the appropriate sections in the catalog to compare options and pricing, or contact a Strange Engineering associate to discuss your requirements.

The Housing Advantage: Aluminum housings are more than just light. They allow thoughtful design to place more material where it is needed, and less where its not. The result is a housing that is extremely strong, but as light as possible. The casting receives an EnduraGuard coating before the machining process. This durable and attractive black finish resists corrosion, and is easy to keep clean. It also provides a good base for powdercoating for those who wish to change the color on their own. The housing is placed in a dedicated machining center which performs all operations start to finish. The advantage is a housing within tolerances that can't be achieved by a welded housing, providing precise alignment of the center section, axles, and brakes. They are also equipped with upper and lower mounting bosses to attach a chute or anti-rotational device. The housing features the EnduraGuard coating, fill plug, drain plug, and arrives with center section studs already installed.

Housing

H1151	Dragster / Altered 26" housing on 17" centers for use with 4-Link plates	$737
H1161	Dragster / Altered 27" housing on 17" centers for use with 4-Link plates	$737

Option

H1150PH4	4-Link plate for H1151 / H1161 housing- 4 plates required	$45 each

Housing

H1152	Dragster / Altered 26" solid mount housing with choice of plates	$737
H1162	Dragster / Altered 27" solid mount housing with choice of plates	$737
	Choice of type 1, 2, or 3 plate design- Specify inside of plate to plate dimension (from 14 3/8" to 17")	Included

Packages

PRF300	Choice of width, solid or 4-Link, Pro 35 spline axle package- P100758, and Pro Steel brake kit	$1,856
PRF305	Choice of width, solid or 4-Link, Pro 35 spline axle package- P100758, Pro Steel brake kit, & PRF150 or PRF155 center section	$3,210
PRF310	Choice of width, solid or 4-Link, Pro 40 spline axle package- P1014, and Pro Steel brake kit	$1,995
PRF315	Choice of width, solid or 4-Link, Pro 40 spline axle package- P1014, Pro Steel brake kit, & PRF150 + OPRF01 or PRF155 + OPRF01- Center section with 40 spline spool option	$3,349

Complete solid mount packages includes choice of plates and spacing
Complete 4-Link packages do not include plates- Add $140 for set of four plates

9" ALUMINUM ULTRA 4-LINK

STRANGE HOUSINGS

Pro Mod: These housings are designed for the most brutal Pro Mod applications. They are designed to accept an Ultra Case , HD Pro, or most heavy duty aftermarket cases. The housing has clearance to use 9", 9 1/2", and 10" development gear sets. The huge filler cap opening allows for inspection of the ring gear teeth without removing the center section. The drain plug features a magnet to retain harmful metallic particles. The upper wheelie bar mounts are cast directly into the main housing. These housings are available in 16", 17", 18", 19", 20", 21", 22", & 23" 4-Link centers. Chrome moly 4-Link mounts are not included but are available separately. The included floater hubs and drive plates can be ordered in 4 3/4", 5", or 5 1/2" bolt circle. Carbon brake housings come complete with 11" rotors, caliper mounts, calipers, and pads. Steel brake housings have 11.5" rotors & caliper mounts. Calipers and pads are available separately. Floater axles are in the Floater Kit section, while center sections choices are listed with the HD Pro, Ultra, & Billet Case assemblies.

Note: 20", 21", 22" & 23" 4-link centers available in early 2018

Modular 4-Link: This housing comes in at the same weight as many Pro Stock fabricated steel housings, but doesn't flex under launch as they are prone to. The same ridged main housing is used as the Pro Mod rear, but accepts the Strange two piece axle assemblies. This combination provides alignment accuracies that are unobtainable with a welded housing, while ensuring free rotation of the axle assemblies. Designed to accept an Ultra Case , HD Pro, or most heavy duty aftermarket cases, the housing is clearanced to use 9", 9 1/2", and 10" development gear sets. The huge filler cap opening allows for inspection of the ring gear teeth without removing the center section. The drain plug features a magnet to retain harmful metallic particles. The upper wheelie bar mounts are cast directly into the main housing. These housings are available in 16", 17", 18", 19", 20", 21", 22", & 23" 4-Link centers. Chrome moly 4-Link mounts are not included but are available separately. This housing is also packaged for those who already own the proper length Strange two piece axle kit and carbon brakes. It is supplied with special carbon caliper mounts to adapt to this housing. Center sections appropriate for this housing are listed with the HD Pro, Ultra, & Billet case assemblies.

Note: 20", 21", 22" & 23" 4-link centers available in early 2018

The Housing Advantage: The Ultra 4-Link Rear- Not Just your ordinary professional aluminum rear end! The strange Ultra Rear was specifically designed to meet the needs of the most abusive and demanding racers. The core of the Ultra Rear is crafted from superior 206-T4 heat treated aluminum. The premium aluminum has a 12% higher yield strength and a 32% higher tensile strength, compared to commonly used 356-T6 aluminum. In addition, the Strange casting is further enhanced by hot isostatic pressing (HIP). The HIP process subjects the casting to elevated temperatures and isostatic pressure which reduces or eliminates casting voids and microshrinkage, maximizes strength and ductility, and dramatically improves fatigue life. The HIP process is used in the aerospace industry and is not inexpensive, but is necessary when manufacturing an unrivaled rear end. Fully machined lightweight aluminum housing and components ensures precise alignment of wheels, as opposed to compromised welded steel housings, which are subject to heat distortion. Fully ribbed rigid housing design reduces deflection induced by hard launches and tire shake. The bottom brace is extended in close proximity to the shock mount for better support and the lower wishbone mount is designed for double shear loading vs. cantilever bending. The aluminum housing is coated with EnduraGuard, which offers unmatched corrosion protection and an attractive black finish.

Pro Mod Housing (Floater Housing)

16" 4 Link Centers	17" 4 Link Centers	18" 4 Link Centers	19" 4 Link Centers
31.75" WTW	32.75" WTW	33.75" WTW	34.75" WTW
33.25" WTW	34.25" WTW	35.25" WTW	36.25" WTW
33.75" WTW	34.75" WTW	35.75" WTW	36.75" WTW

20" 4 Link Centers	21" 4 Link Centers	22" 4 Link Centers	23" 4 Link Centers
35.75" WTW	36.75" WTW	37.75" WTW	38.75" WTW
37.25" WTW	38.25" WTW	39.25" WTW	40.25" WTW
37.75" WTW	38.75" WTW	39.75" WTW	40.75" WTW

WTW dimensions are unaffected by brakes

Modular 4-Link Housing (2 Piece Flanged Axles)

16" 4 Link Centers	17" 4 Link Centers	18" 4 Link Centers	19" 4 Link Centers
31.50" WTW	32.50" WTW	33.50" WTW	34.50" WTW
32.50" WTW	33.50" WTW	34.50" WTW	35.50" WTW

20" 4 Link Centers	21" 4 Link Centers	22" 4 Link Centers	23" 4 Link Centers
35.50" WTW	36.50" WTW	37.50" WTW	38.50" WTW
36.50" WTW	37.50" WTW	38.50" WTW	39.50" WTW

H1180	Modular 4-Link housing with floater kit and carbon brake kit Choice of 4 3/4", 5", or 5 1/2" bolt circle- No plates, axles, or center section	$7,750
H1182	Pro Mod housing with floater kit and stainless steel rotors Choice of 4 3/4", 5", or 5 1/2" bolt circle- No plates, axles, caliper / pad kit, or center section	$5,750
H1190	Modular 4-Link housing with two piece axles and carbon brake kit Choice of 4 3/4" or 5" bolt circle- No plates or center section	$7,435
H1192	Modular 4-Link housing with two piece axles and two piece stainless steel brake kit Choice of 4 3/4" or 5" bolt circle- No plates or center section	$5,398
H1194	Modular 4-Link housing with caliper mounts- No plates, axles, brakes, or center section	$3,298

Options

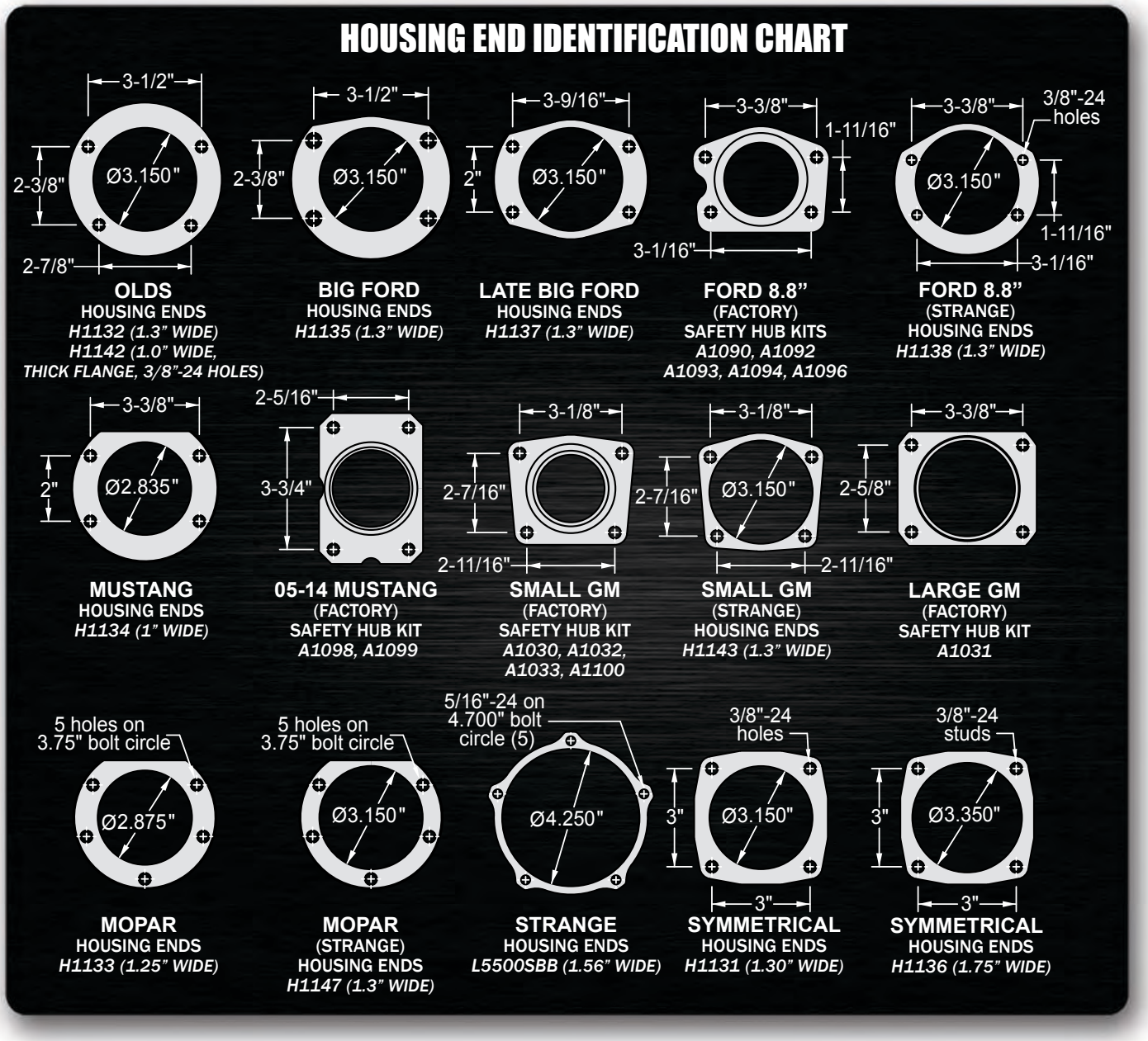
OPRH40	Supply with Std duty chrome moly 4-link plates	$580
OPRH44	Supply with HD chrome moly 4-link plates	$1,125
OPRH45	Supply with HD chrome moly 4-link plates & adjustable shock mounts	$1,600
B1955*	Billet 4 piston calipers with hard metallic pads and mounting hardware kit	$429

*For H1182 (Included in H1192)

HOUSING ENDS & COMPONENTS

Housing Ends: Strange housing ends are machined from MADE IN THE USA forged steel. These premium grade ends are ideal for a new or existing housing that needs to be narrowed. They provide an optimal mounting surface for the brakes to keep in proper alignment with the axle bearing. These housing ends are designed to be easily butt welded with the proper equipment. An alignment bar is required to properly install any housing ends. Many ends are now designed to accept an inner seal. This arrangement might require a specific seal and locking collar for the axle bearing. Contact a Strange representative if you intend to use an inner seal to discuss your intentions.

HOUSING END IDENTIFICATION CHART



H1131	Symmetrical housing ends (tapped)	3.150 bore	3/8 x 24	1.300" wide	$95
H1132	Olds housing ends	3.150 bore	3/8 holes	1.300" wide	$89
H1142	Olds housing ends (tapped)	3.150 bore	3/8 x 24	1.300" wide	$95
H1143*	Small GM housing ends	3.150 bore	3/8 holes	1.300" wide	$89
H1144*	Small GM housing ends (ABS clearanced)	3.150 bore	3/8 holes	1.300" wide	$89
H1133	Mopar housing ends	2.875 bore	3/8 holes	1.250" wide	$89
H1147*	Mopar housing ends (special bore)	3.150 bore	3/8 holes	1.300" wide	$89
H1134*	Small Ford housing ends	2.834 bore	3/8 holes	1.000" wide	$89
H1135	Big Ford housing ends	3.150 bore	1/2 holes	1.300" wide	$89
H1136*	Symmetrical Big Bore housing ends (tapped)	3.350 bore	3/8 x 24	1.750" wide	$175
H1146*	Symmetrical BB housing ends for 3 1/2" tube	3.350 bore	3/8 x 24	1.750" wide	$219
H1137	Late Big Ford housing ends	3.150 bore	3/8 holes	1.300" wide	$89
H1138*	'87-'93 Mustang 8.8 housing ends	3.150 bore	3/8 holes	1.300" wide	$89
H1148**	'05-'14 Mustang 8.8 housing ends	3.150 bore	3/8 holes	1.300" wide	$89
H1149*	Symmetrical housing ends for P1018 axle kit	3.600 bore	3/8 x 16	1.750" wide	$189

* Requires custom axles made specifically for this end
**Requires custom axles & B1706MC kit

B1300HSTKIT	3/8" housing end tee bolt kit- includes washers and lock nuts for 8 holes	$31
H1135STKIT	1/2" housing end tee bolt kit- includes washers and lock nuts for 8 holes	$46
H1112A	9" press-in center section housing stud- each	$2
F1282	3/8" x 24 reduced hex self locking flanged nut- each	$2
H1112G	Fel Pro 9" center section gasket	$6
H1111**	Fel Pro high performance 9" Teflon Center Section gasket	$6
H1111S**	LubeLocker Premium Gasket	$20

**Do not use sealer with this gasket

COMPLETE BOLT-IN REAR ENDS

Complete Assembly: Our highly trained professional tradesmen construct a custom rear end that will meet or exceed your expectations. The housing is fixture welded to ensure proper alignment of all components. The appearance and quality of welds show the care that was taken by our welding department. The technician that assembles your rear end is a member of the same team that's responsible for all our high end Pro Stock, Pro Mod, and Top Fuel rear ends. A completed rear end gives comfort in the knowledge that everything was thoroughly inspected and checked before it reached your door. The assembly arrives boxed in a custom crate to protect your investment. Optional satin black powder coating is offered on completely welded housings.

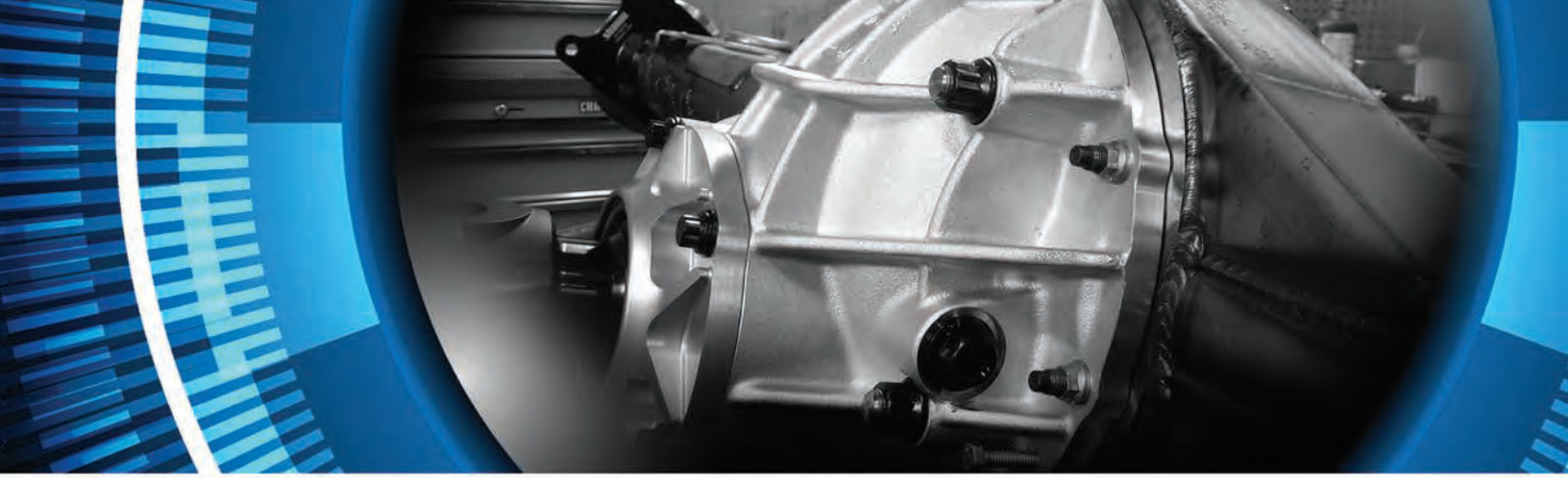
Ordering: If ordering a replacement rear end, we have extensive information on stock factory units. You might consider calling us first to obtain our information so you can verify before ordering. If you are considering new tires and wheels, this is the time to make adjustments to properly place them within the wheel wells. Any decision regarding the brakes must be made now as it will affect construction of the rear end.

The best method, is to place your tires and wheels within the wheel wells and measure wheel mounting surface to wheel mounting surface. If you are purchasing a brake kit from Strange along with your housing, this is the dimension you want to specify. If not, subtract the thickness of the brake drum or rotor you are going to use to arrive at bare axle flange to axle flange. It is important to relate the dimension you are supplying is "wheel mounting surface" or "bare axle flange". The brake kit you are going to use needs to be finalized before the rear end is ordered. Some rotors will add as little as 1/8"per side, while others can add up to 1/2". The brake kit will determine the housing end required and brake offset. Brake offset is the measurement from the outside face of the bare axle flange, to the outside face of the housing end. Brake thickness and axle offset will determine how wide the housing needs to be to achieve the desired wheel mounting location. Make sure to check the brake kit instructions for any special requirements. Some may need a specific axle flange diameter, brake register size, or access hole.

Strange Engineering sales staff is always happy to guide you through the ordering process, even if you are ordering from one of our many valued distributors. We will ensure you are not only well informed, but also confident that you will be receiving a product that will deliver many years of enjoyment and satisfaction.

Pinion Offset: Pinion location can be confusing to measure. If this is a replacement rear, and the motor and transmission are in the factory location, it can be ordered with the stock factory pinion offset. If unsure, measurements can be taken from the axle flanges or housing ends. Since we are determining differences, either is fine as long as we are comparing axle flange or housing end measurements. Measure from driver side to the center of the pinion nut, and passenger side to center of the pinion nut. Subtract and divide by two. This is your pinion offset and it is offset to the side that had the smallest number. If both are equal, then it is a centered pinion. Most factory rear ends will be offset to the passenger side since the motor and transmission are also. The design is to keep the driveshaft aligned with the motor and transmission to avoid vibration and poor service life of the u-joints and gear set.

Pinion Angle: If this is a replacement rear end, factory pinion angle is assumed unless specified otherwise. A custom pinion angle is ordered only in some leaf spring applications. Extreme care must be taken as pinion angle is commonly misunderstood. Pinion angle is determined by a calculation that compares the angle of the motor and transmission to the angle of the pinion shaft. It is measured once the motor, transmission, driveshaft, rear end, and tires and wheels are installed. The vehicle must be on level ground, at ride height, with the full weight of the car resting on all four tires. Where the leaf spring mounts are welded in relationship to pinion centerline is only one of the many factors that will result in a specific pinion angle. Any custom pinion angle should be discussed with a Strange Engineering associate before ordering.



Bolt-in Applications

Make	Model	Years	Available Rear Ends
Ford	Comet	67-71	9"
	Cougar	67-71	9"
	Fairlane	67-73	9"
	Mustang	64-73	9"
	Mustang	79-14	9"
	Ranchero	71-73	9"
	Torino	71-73	9"

Custom widths are available at no additional charge

New applications are constantly being added - Please call if you do not see your vehicle

9" STREET/TRACK HOUSINGS

Ford Bolt-in Assemblies: Complete Ford 9" rear ends are a combination of a housing, center section, axle package, and brake kit. Since the possibilities are endless, it is necessary to choose all of the components and total them to arrive at your desired assembly. Whenever a housing, center section, and axle package are ordered together, they are assembled as one unit and crated. Purchased brake kits can be installed for an additional $25. In these examples, the brake kit prices include the $25 charge.

Listed are samples of possible combinations. Options for housing, center section, axle package, and brake kit, are listed within their respective sections.

Custom widths are available at no additional charge

Street

Ford housing- HF9LE / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102 ..... $2,360

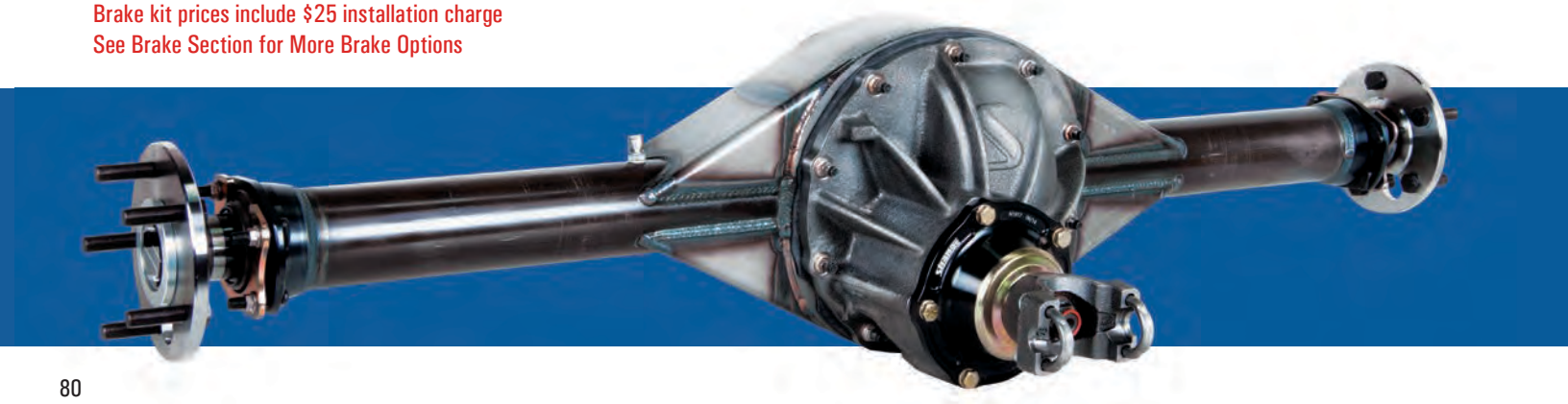
Mustang 1979-2004 housing- HF9M86ME / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102 ..... $2,520
Mustang 2005-2014 housing- HF9M05ME / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102 ..... $2,520

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Powder coat satin black- H1199P-BLK	$159
Differential	Eaton 31 spline helical gear Truetrack- OPRF09	$200
Center Section	HD Pro Aluminum - Replace PRF130 with PRF180	$296

Brakes	Wilwood 11" Pro street disc brake kit installed	$624
	Wilwood 12" Pro Street disc brake kit installed	$775
	Late Big Ford 11" drum brake kit installed	$500

Brake kit prices include $25 installation charge
See Brake Section for More Brake Options



Street/Track

Ford housing- HF9LE / Pro Iron center with upgrades / 35 spline alloy axle package- P3502	$2,892 *	$3,002**
Mustang 1979-2004 housing- HF9M86ME / Pro Iron center with upgrades / 35 spline alloy axle package- P3502	$3,052 *	$3,162 **
Mustang 2005-2014 housing- HF9M05ME / Pro Iron center with upgrades / 35 spline alloy axle package- P3502	$3,052 *	$3,162 **

* Pro Iron center- PRF120 with Eaton 35 spline cast iron Truetrack- OPRF11 and Strange black support- OPRF16
** Pro Iron center- PRF120 with Strange 35 spline forged steel helical gear S-Trac- OPRF10 and Strange black support- OPRF16

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Powder coat satin black- H1199P-BLK	$159
Yoke	Chrome moly yoke- OPRF07	$36
Center Section	HD Pro Aluminum center section Replace PRF120 with PRF180 With same differential upgrades	$164

Brake Kit Options

Brakes	Wilwood 11" Pro Street disc brake kit installed	$624
	Wilwood 12" Pro Street disc brake kit installed	$775
	Late Big Ford 11" Drum brake kit installed	$500

Brake kit prices include $25 installation charge
See Brake Section for More Brake Options

9" DRAG RACE

FEATURING PRO IRON CENTER SECTION

Ford Bolt-in Assemblies: Complete Ford 9" rear ends are a combination of a housing, center section, axle package, and brake kit. Since the possibilities are endless, it is necessary to choose all of the components and total them to arrive at your desired assembly. Whenever a housing, center section, and axle package are ordered together, they are assembled as one unit and crated. Purchased brake kits can be installed for an additional $25. In these examples, the brake kit prices include the $25 charge.

Listed are samples of possible combinations. Options for housing, center section, axle package, and brake kit, are listed within their respective sections.

Custom widths are available at no additional charge

Drag Race - 35 spline axles

Bare 9" housing without mounts- HF9E / Pro Iron center with standard gear- PRF105 / 35 spline Pro Race axle package- P1007 ..... $2,310

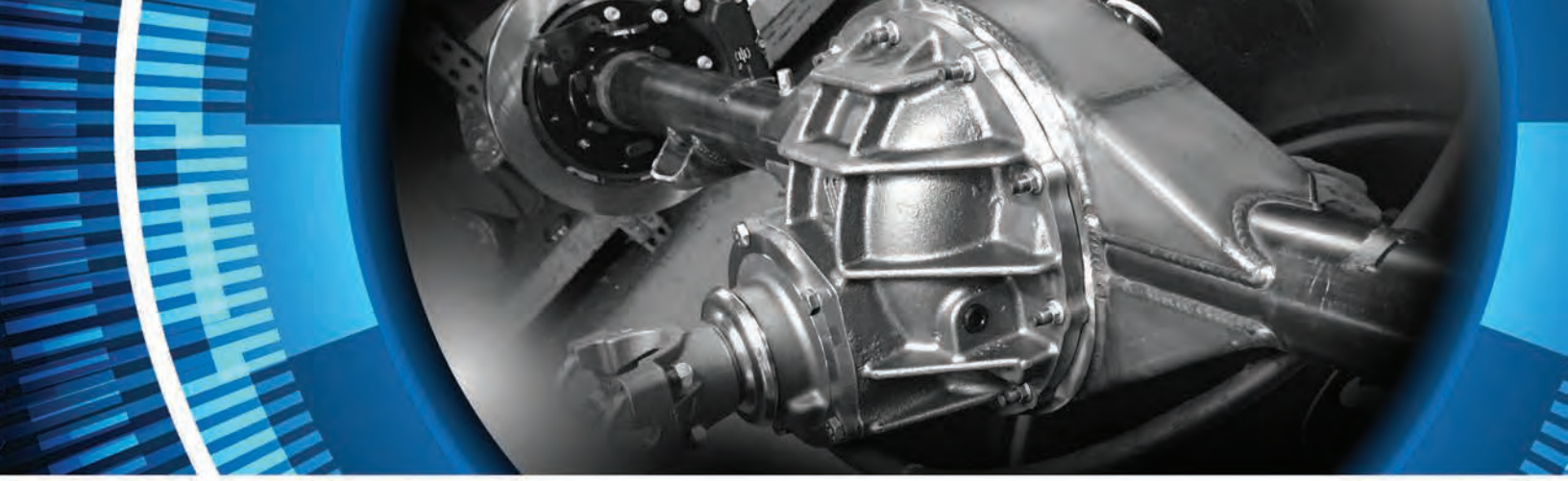
Ford housing- HF9LE / Pro Iron center with standard gear- PRF105 / 35 spline Pro axle package- P1007 ..... $2,410

Mustang 1979-2004 housing- HF9M86ME / Pro Iron center with standard gear- PRF105 / 35 spline Pro Race axle package- P1007 ..... $2,570
Mustang 2005-2014 housing- HF9M05ME / Pro Iron center with standard gear- PRF105 / 35 spline Pro Race axle package- P1007 ..... $2,570

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Option for Small stem Pro gear- Replace PRF105 with PRF115	$135
	Option for Large stem Pro gear- Replace PRF105 with PRF115 + OPRF05	$186
Axles	Option for 5/8" stud kit- Replace P1007 with P100758	$54
Brakes	S-Series disc brake kit installed	$494
	Pro Race disc brake kit installed	$624
	Dual Pro Race disc kit installed	$1,045
	Sportsman Carbon disc brake installed	$2,414

Brake kit prices include $25 installation charge - See Brake Section for More Brake Options



Drag Race - 40 Spline Axles

Bare 9" housing without mounts- HF9E / Pro Iron center with upgrade * / 40 spline solid Pro Race axle package- P1016 ..... $2,495

Ford housing- HF9LE / Pro Iron center with upgrade * / 40 spline solid Pro Race axle package- P1016 ..... $2,595

Mustang 1979-2004 housing- HF9M86ME / Pro Iron center with upgrade * / 40 spline solid Pro Race axle package- P1016 ..... $2,755
Mustang 2005-2014 housing- HF9M05ME / Pro Iron center with upgrade * / 40 spline solid Pro Race axle package- P1016 ..... $2,755

* Pro Iron center with standard gear- PRF105 + 40 spline spool upgrade- OPRF01

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Option for Small stem Pro gear- Replace PRF105 + OPRF01 with PRF115 + OPRF01	$135
	Option for Large stem Pro gear- Replace PRF105 + OPRF01 with PRF115 + OPRF01 + OPRF05	$186
Axles	Option for Gun-drilled axles - Replace P1016 with P1014	$81
Brakes	S-Series disc brake kit installed	$494
	Pro Race disc brake kit installed	$624
	Dual Pro Race disc kit installed	$1,045
	Sportsman Carbon disc brake installed	$2,414

Brake kit prices include $25 installation charge - See Brake Section for More Options

9" DRAG RACE

FEATURING LIGHT WEIGHT ALUMINUM CENTER SECTION

Ford Bolt-in Assemblies: Complete Ford 9" rear ends are a combination of a housing, center section, axle package, and brake kit. Since the possibilities are endless, it is necessary to choose all of the components and total them to arrive at your desired assembly. Whenever a housing, center section, and axle package are ordered together, they are assembled as one unit and crated. Purchased brake kits can be installed for an additional $25. In these examples, the brake kit prices include the $25 charge.

Listed are samples of possible combinations. Options for housing, center section, axle package, and brake kit, are listed within their respective sections.

Custom widths are available at no additional charge

Drag Race - 35 spline axles

Bare 9" housing without mounts- HF9E / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro Race axle package- P1007 ..... $2,389

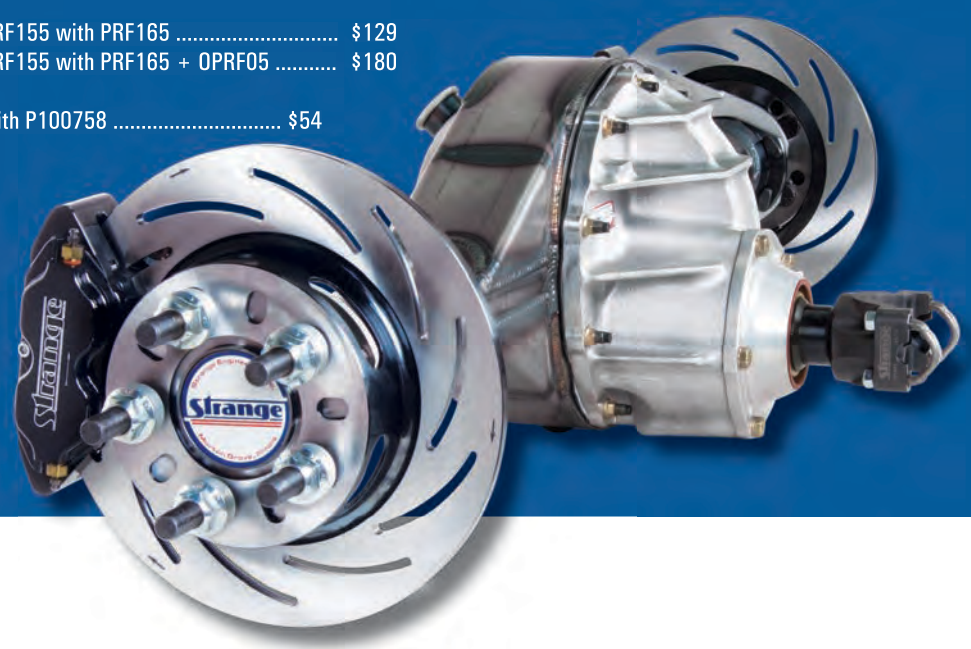
Ford housing- HF9LE / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007 ..... $2,489

Mustang 1979-2004 housing- HF9M86ME / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007 ..... $2,649
Mustang 2005-2014 housing- HF9M05ME / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007 ..... $2,649

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Option for Small stem Pro gear- Replace PRF155 with PRF165	$129
	Option for Large stem Pro gear- Replace PRF155 with PRF165 + OPRF05	$180
Axles	Option for 5/8" stud kit- Replace P1007 with P100758	$54
Brakes	S-Series disc brake kit installed	$494
	Pro Race disc brake kit installed	$624
	Dual Pro Race disc kit installed	$1,045
	Sportsman Carbon disc brake installed	$2,414

Brake kit prices include $25 installation charge
See Brake Section for More Brake Options



Drag Race - 40 Spline Axles

Bare 9" housing without mounts- HF9E / L/W Aluminum center with upgrade * / 40 spline solid Pro Race axle package- P1016 ..... $2,495

Ford housing- HF9LE / L/W Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,595

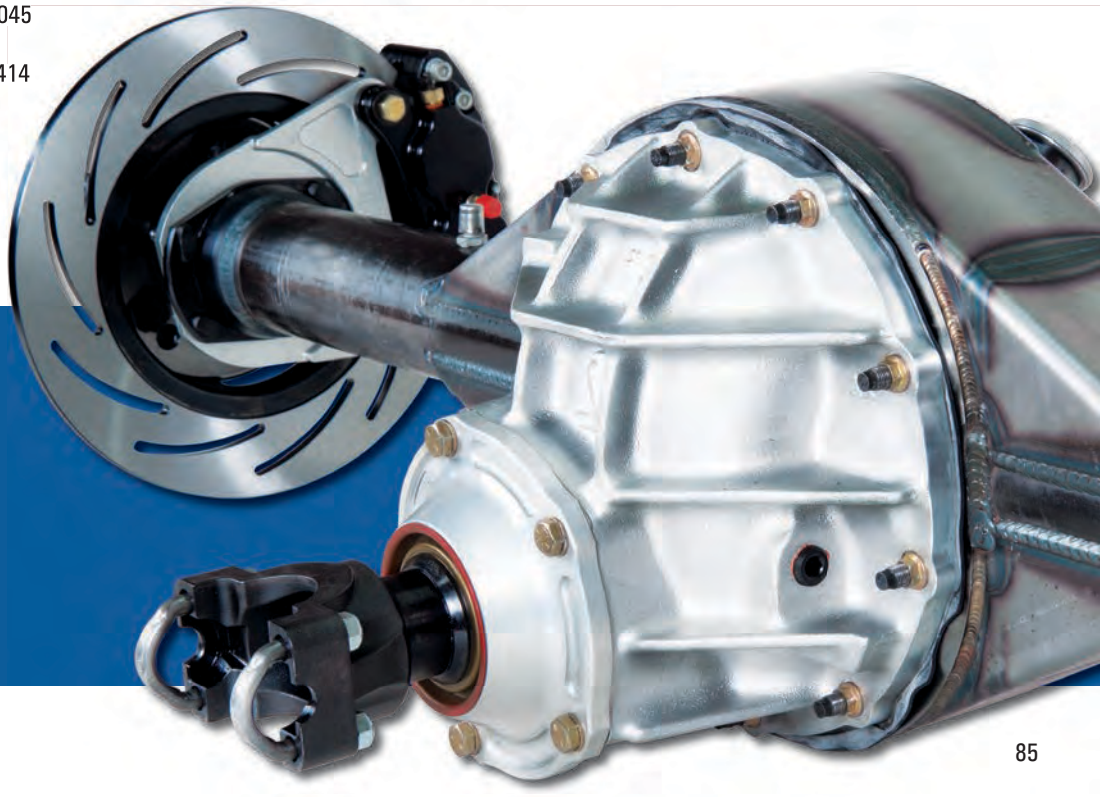
Mustang 1979-2004 housing- HF9M86ME / L/W Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,755
Mustang 2005-2014 housing- HF9M05ME / L/W Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,755

* Lightweight Aluminum center section with standard gear- PRF160 with 40 spline spool upgrade- OPRF01

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Option for Small stem Pro gear- Replace PRF155 + OPRF01 with PRF165 + OPRF01	$129
	Option for Large stem Pro gear- Replace PRF155 + OPRF01 with PRF165 + OPRF01 + OPRF05	$180
Axles	Option for Gun-drilled axles- Replace P1016 with P1014	$81
Brakes	S-Series disc brake kit installed	$494
	Pro Race disc brake kit installed	$624
	Dual Pro Race disc kit installed	$1,045
	Sportsman Carbon disc brake installed	$2,414

Brake kit prices include $25 installation charge
See Brake Section for More Brake Options



9" DRAG RACE

FEATURING PRO HD ALUMINUM CENTER SECTION

Ford / GM / Mopar Bolt-in Assemblies & Bare:

Complete Ford 9" rear ends are a combination of a housing, center section, axle package, and brake kit. Since the possibilities are endless, it is necessary to choose all of the components and total them to arrive at your desired assembly.

Whenever a housing, center section, and axle package are ordered together, they are assembled as one unit and crated. Purchased brake kits can be installed for an additional $25. In these examples, the brake kit prices include the $25 charge.

Listed are samples of possible combinations. Options for housing, center section, axle package, and brake kit, are listed within their respective sections.

Custom widths are available at no additional charge

Drag Race - 35 spline axles

Bare 9" housing without mounts- HF9E / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007 ..... $2,499

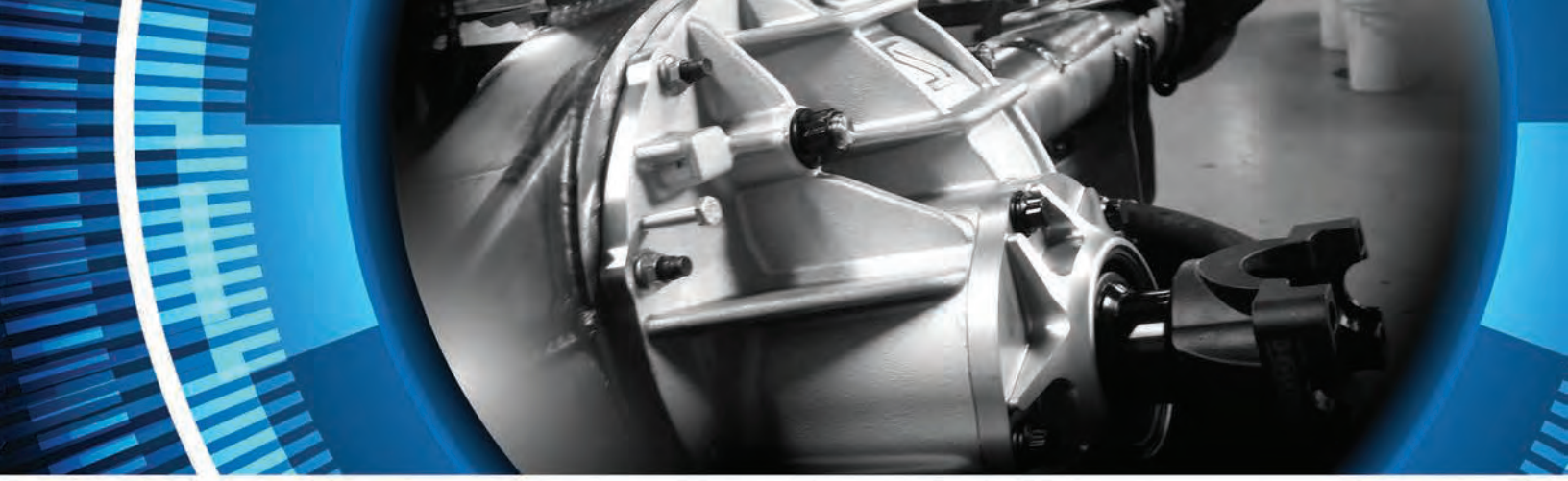
Ford / GM / Mopar leaf spring housing- HF9LE / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007 ..... $2,599

Mustang 1979-2004 housing- HF9M86ME / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007 ..... $2,759
Mustang 2005-2014 housing- HF9M05ME / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007 ..... $2,759

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Small stem pro gear- Replace PRF184 with PRF188	$152
	Large stem pro gear- Replace PRF184 with PRF188 + OPRF05	$203
	9 1/2" large stem pro- Replace PRF184 with PRF188 + OPRF52	$322
Axles:	5/8" stud kit- Replace P1007 with P100758	$54
Brakes	S-series disc brake kit installed	$494
	Pro Race disc brake kit installed	$620
	Dual Pro Race disc kit installed	$1,045
	Sportsman Carbon disc brake installed	$2,414

Brake kit prices include $25 installation charge - See Brake Section for More Brake Options



Drag Race - 40 Spline Axles

Bare 9″ housing without mounts- HF9E / HD Pro Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,684

Ford / GM / Mopar leaf spring housing- HF9LE / HD Pro Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,784

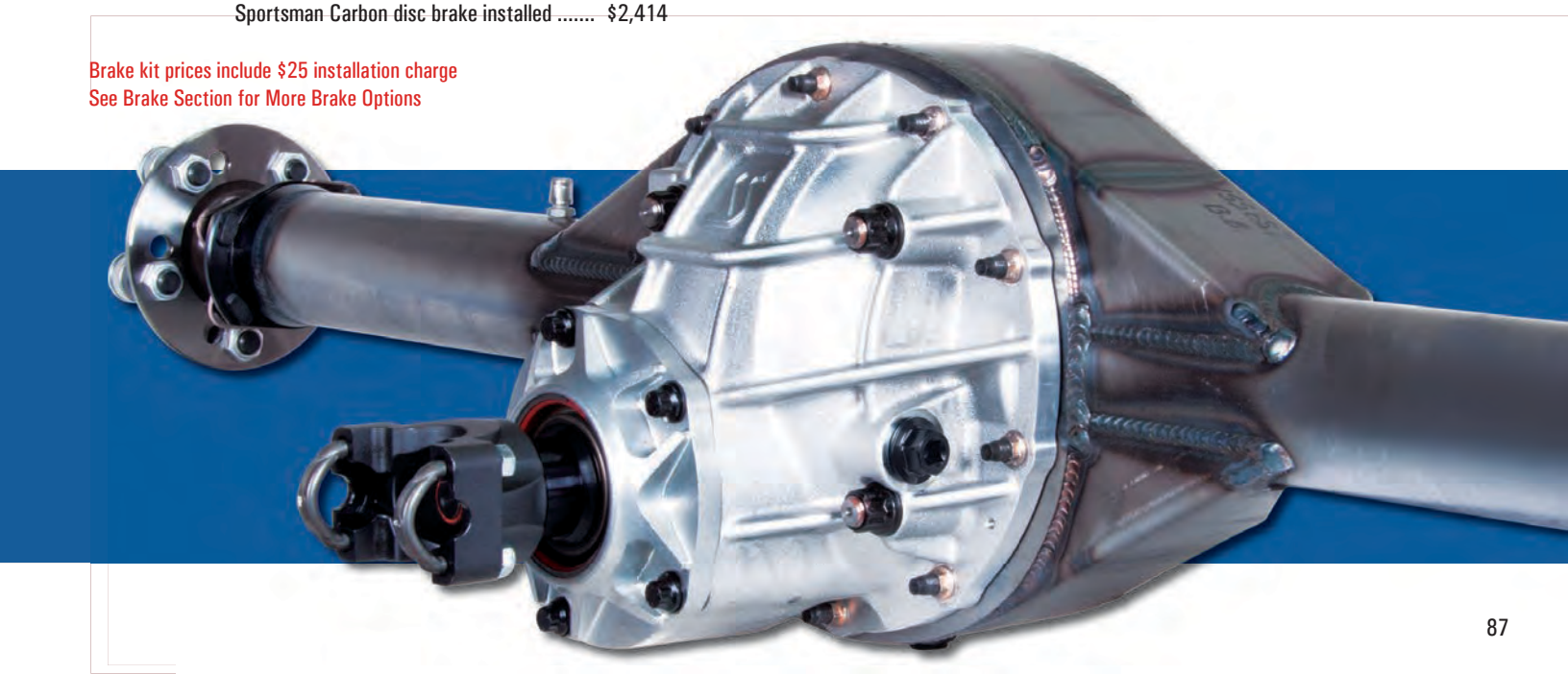
Mustang 1979-2004 housing- HF9M86ME / HD Pro Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,944
Mustang 2005-2014 housing- HF9M05ME / HD Pro Aluminum center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,944

* HD Pro Aluminum center with standard gear- PRF184 with 40 spline spool option- OPRF01

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Small stem pro gear- Replace PRF184 + OPRF01 with PRF188 + OPRF01	$152
	Large stem pro gear- Replace PRF184 + OPRF01 with PRF188 + OPRF01 + OPRF05	$203
	9 1/2″ large stem pro- Replace PRF184 + OPRF01 with PRF188 + OPRF01 + OPRF52	$322
Axles:	Gun-drilled axles- Replace P1016 with P1014	$81
Brakes	S-series disc brake kit installed	$494
	Pro Race disc brake kit installed	$620
	Dual Pro Race disc kit installed	$1,045
	Sportsman Carbon disc brake installed	$2,414

Brake kit prices include $25 installation charge
See Brake Section for More Brake Options



9" DRAG RACE

FEATURING ULTRA CASE CENTER SECTION

Ford / GM / Mopar Bolt-in Assemblies & Bare:

Complete Ford 9" rear ends are a combination of a housing, center section, axle package, and brake kit. Since the possibilities are endless, it is necessary to choose all of the components and total them to arrive at your desired assembly.

Whenever a housing, center section, and axle package are ordered together, they are assembled as one unit and crated. Purchased brake kits can be installed for an additional $25. In these examples, the brake kit prices include the $25 charge.

Listed are samples of possible combinations. Options for housing, center section, axle package, and brake kit, are listed within their respective sections.

Custom widths are available at no additional charge

Drag Race - 35 spline axles

Bare 9" housing without mounts- HF9E / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007 ..... $2,729

Ford / GM / Mopar leaf spring housing- HF9LE / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007 ..... $2,829

Mustang 1979-2004 housing- HF9M86ME / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007 ..... $2,989
Mustang 2005-2014 housing- HF9M05ME / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007 ..... $2,989

Popular Options

Housing:	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section:	Large stem pro gear- Add option OPRF05	$51
	9 1/2" large stem pro- Add option OPRF52	$170
	1480 chrome moly yoke- Add option OPRF20	$160
Axles:	5/8" stud kit- Replace P1007 with P100758	$54
Brakes	Pro Race disc brake kit installed	$620
	Dual Pro Race disc brake kit installed	$1,045
	Sportsman Carbon disc brake kit installed	$2,414

Brake kit prices include $25 installation charge
See Brake Section For More Brake Options

Drag Race - 40 Spline Axles

Bare 9" housing without mounts- HF9E / Ultra Case center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $2,914

Ford / GM / Mopar leaf spring housing- HF9LE / Ultra Case center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $3,014

Mustang 1979-2004 housing- HF9M86ME / Ultra Case center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $3,174
Mustang 2005-2014 housing- HF9M05ME / Ultra Case center with upgrade * / 40 spline solid Pro axle package- P1016 ..... $3,174

* 3.250" bore Ultra Case center with small stem pro gear- PRF205 with 40 spline spool option- OPRF01

Popular Options

Housing	Upgrade to Ultra Fab housing	$500
	Install back brace- H1128N	$185
	Powder coat satin black- H1199P-BLK	$159
Center Section	Large stem pro gear- Add option OPRF05	$51
	Large stem pro gear and 3.812" case- Replace PRF205 + OPRF01 with PRF225	$62
	9 1/2" large stem pro- Replace PRF205 + OPRF01 with PRF225 + OPRF52	$232
	1480 chrome moly yoke- Add option OPRF20	$160
Axles	Gun-drilled axles- Replace P1016 with P1014	$81
Brakes	Pro Race disc brake kit installed	$620
	Dual Pro Race disc brake kit installed	$1,045
	Sportsman Carbon disc brake kit installed	$2,414

Brake kit prices include $25 installation charge
See Brake Section for More Brake Options

FLOATER KITS

DRAG RACE

DRAG RACE FLOATER KITS: Strange Drag Race floater kits coupled with a Strange 9"/9.50" Ultra Case assembly have become a standard for Pro Mod classes, Blown classes and other abusive drag racing applications. The floater kit provides excellent safety and durability for sportsman and professional drag racers. Each kit includes 4130 chrome moly spindles, steel drive plates, aluminum hubs, rotors, Timken bearings, seals, chrome-moly studs and steel lug nuts. Strange Drag Race floater kits are available in carbon or steel. Carbon kits include calipers and pads, while steel kits require the calipers and pads to be purchased separately. Floater axles are not included with floater kits, but are available in either solid or gun drilled. Vehicles requiring a floater kit are under extreme forces. Due to the tremendous increase in torsional strength of a 40 spline axle in comparison to 35, Strange only offers 40 spline floater kits. Custom axles can be made with a smaller spline on the spool end if required, but axle torsional strength will be compromised.

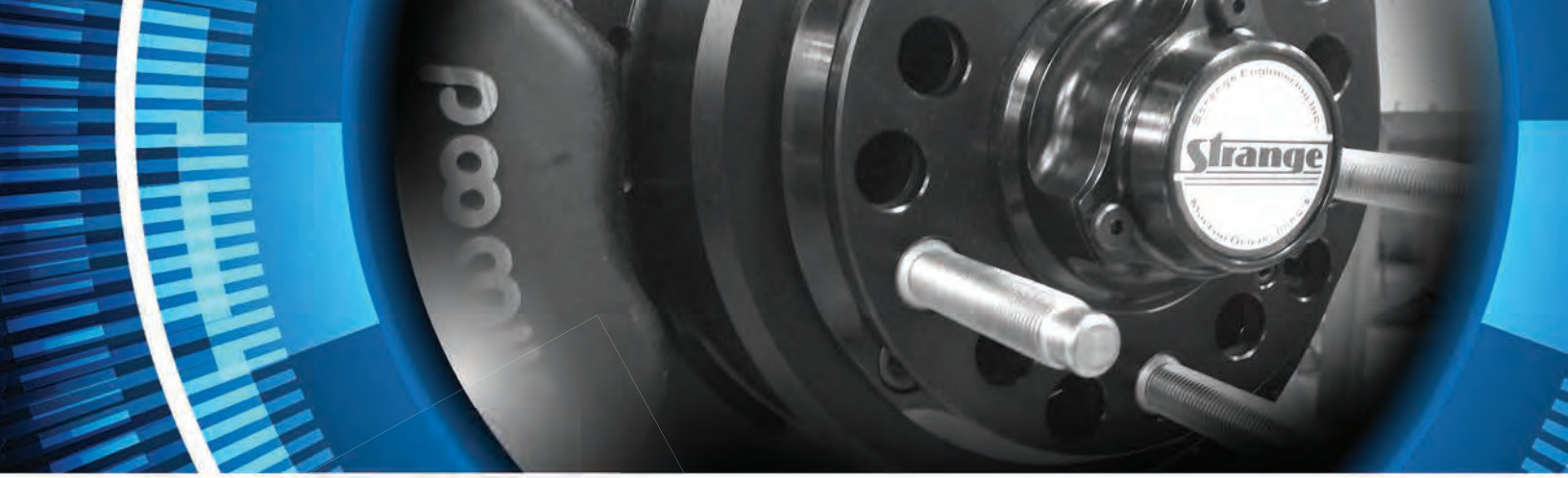
F2206WC	5 1/2" Bolt circle Floater kit with carbon brake kit	$4,995
F22065WC	5" Bolt circle Floater kit with carbon brake kit	$4,895
F22064WC	4 3/4" Bolt circle Floater kit with carbon brake kit	$4,895
F2206	5 1/2" Bolt circle Floater kit with steel brake rotors	$2,636
F22065	5" Bolt circle Floater kit with steel brake rotors	$2,536
F22064	4 3/4" Bolt circle Floater kit with steel brake rotors	$2,536
B1855	Caliper & metallic pad kit for steel brakes- pair	$369
A2040H24	Hy-Tuf gun drilled 40 spline floater axle- 24" or less- each	$198
A2040H28	Hy-Tuf gun drilled 40 spline floater axle- 24 1/8" to 28"- each	$214
A2040H32	Hy-Tuf gun drilled 40 spline floater axle- 28 1/8" to 32"- each	$231
A2040H36	Hy-Tuf gun drilled 40 spline floater axle- 32 1/8" to 36"- each	$249
A2140H24	Hy-Tuf solid 40 spline floater axle- 24" or less- each	$165
A2140H28	Hy-Tuf solid 40 spline floater axle- 24 1/8" to 28"- each	$179
A2140H32	Hy-Tuf solid 40 spline floater axle- 28 1/8" to 32"- each	$193
A2140H36	Hy-Tuf solid 40 spline floater axle- 32 1/8" to 36"- each	$208
A2040M*	300M gun drilled 40 spline floater axle- 20" or less- each	$385
A2040M24*	300M gun drilled 40 spline floater axle- 20 1/8" to 24"- each	$413
A2040M28*	300M gun drilled 40 spline floater axle- 24 1/8" to 28"- each	$440
A2040M32*	300M gun drilled 40 spline floater axle- 28 1/8" to 32"- each	$495
A2040M36*	300M gun drilled 40 spline floater axle- 32 1/8" to 36"- each	$523
A2140M*	300M solid 40 spline floater axle- 20" or less- each	$275
A2140M24*	300M solid 40 spline floater axle- 20 1/8" to 24"- each	$303
A2140M28*	300M solid 40 spline floater axle- 24 1/8" to 28"- each	$330
A2140M32*	300M solid 40 spline floater axle- 28 1/8" to 32"- each	$385
A2140M36*	300M solid 40 spline floater axle- 32 1/8" to 36"- each	$413

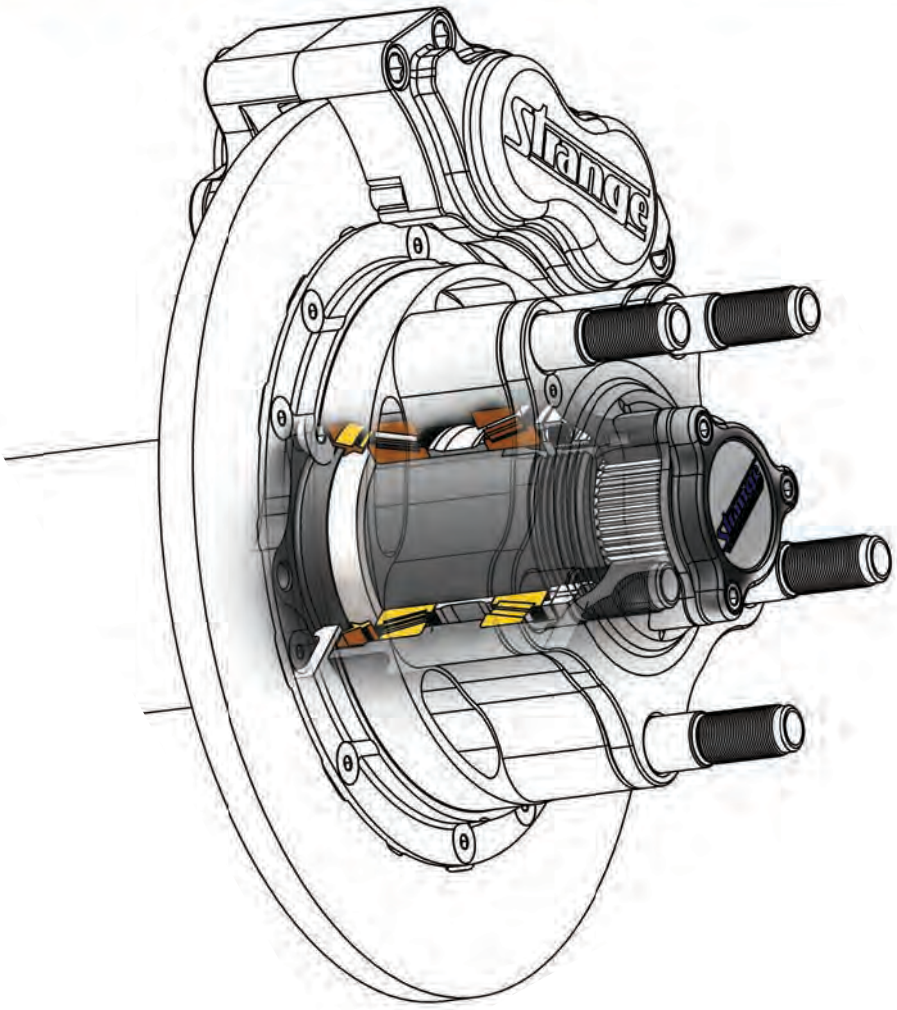
* For extreme applications such as heavy high-powered drag radial vehicles, Strange strongly recommends 300M axles as they are 21% stronger than Hy-Tuf axles

CURRENT REPLACEMENT PARTS

C1790	11" Carbon rotor- each	$594
L4050H	Carbon pad- each	$150
F2056NL	Steel rotor- LH	$154
F2056NR	Steel rotor- RH	$154
B5020	Metallic pad- each	$17
F2056K	Hub seal- each	$18
F2056I	Hub bearing- 4 3/4" & 5"- Inner only	
	5 1/2"- Inner & outer- each	$68
F2056J	Hub race- 4 3/4" & 5"- Inner only	
	5 1/2"- Inner & outer- each	$27
F1270	Hub bearing- 4 3/4" & 5"- Outer- each	$62
F1271	Hub race- 4 3/4" & 5"- Outer- each	$20
F2056M	Spindle nut wrench- 5 1/2" BC floater kit	$44
F2058W	Spindle nut wrench- 4 3/4" & 5" BC floater kit	$33

Replacement components are available for previous versions
Please call for available parts and pricing information





FLOATER KIT REDESIGNED STARTED IN 2012 AND FEATURES MANY KEY IMPROVEMENTS

- Larger bearings allow for increased spindle wall thickness and provide additional load capacity
- Solid preload sleeve ensures proper preload of hub bearings
- Positive spindle lock system maintains bearing preload under severe conditions
- Minimized distance to wheel mounting surface decreases stress imposed on spindles
- Spindle radius increased to .500" Vastly improving spindle integrity under bending loads
- Fully machined press-in wheel studs that eliminate stress risers and loosening of studs in hub
- Integral hub and rotor mounting lugs allow rotors to float and minimize components
- Hub lug design allows for simplified conversion between steel and carbon brakes
- Steel rotors increased in diameter and thickness to provide more braking capacity

FLOATER KITS

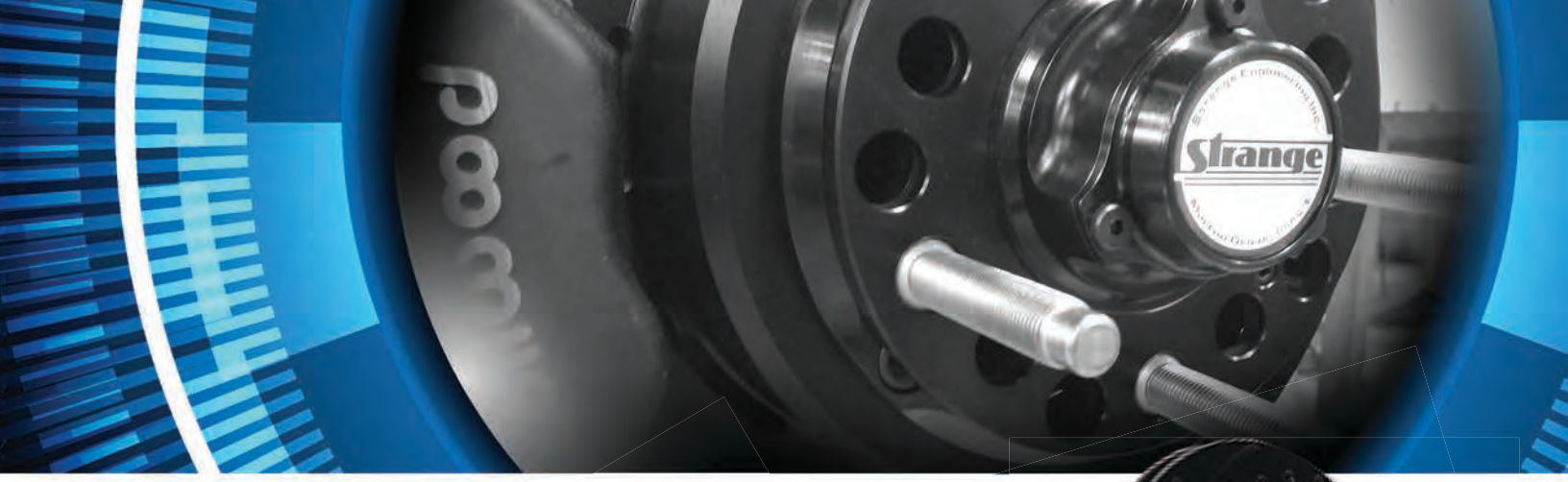
PRO TOURING

Pro Touring Floater Kits: The Strange Pro Touring full floating kit design dramatically increases safety in comparison to a traditional flanged axle assembly. The floater spindle supports vehicle weight and resists cornering, braking, and accelerating loads, leaving the floater axle solely responsible for transmitting torque. A preload spacer between the tapered bearings bolsters maximum spindle nut torque eliminating bearing end play. Zero end play in the bearings eliminates piston knock-back encountered during hard cornering. Compact brake gap (3.50") clears most suspension components located near original housing ends. The Strange Pro Touring floater kit features 2" O.D. chrome moly spindles, 35 spline drive plates, multiple patterns for 4 1/2", 4 3/4", and 5" bolt circles, and 1/2" x 20 press-in wheel studs. The floater axles and brake kit are sold separately. The axles are 35 spline to mate to the drive plate, and the inboard splines are made to match your specific carrier. The option for 5/8" x 18 press-in wheel studs also includes stud sleeves, lug nuts and washers. There are also options to adapt 2010 and earlier, or 2011 and later Mustang ABS systems.

F5010	Pro Touring floater kit- less axles and brakes	$1,100

Options

OPRS14	Replace 1/2" studs with 5/8" stud kit	$54
ABSFM10	Adapt to accept 2005-2010 Mustang ABS sensor	$20
ABSFM11	Adapt to accept 2011-2014 Mustang ABS sensor	$50
A1040H24	Hy-Tuf solid 35 spline floater axle- 24" or less- each	$143
A1040H28	Hy-Tuf solid 35 spline floater axle- 24 1/8" to 28"- each	$154
A1040H32	Hy-Tuf solid 35 spline floater axle- 28 1/8" to 32"- each	$165
A1040H36	Hy-Tuf solid 35 spline floater axle- 32 1/8" to 36"- each	$176
B2712WC	Wilwood Pro Touring brake kit / 11" rotors / for 15" beadlock wheels / black calipers	$895
B2711WC	Wilwood Pro Touring brake kit / 12.19" rotors / black calipers	$895
B2711WCR	Wilwood Pro Touring brake kit / 12.19" rotors / red calipers	$995
B2714WC	Wilwood Pro Touring brake kit / 14" rotors / black calipers	$1,995
B2714WCR	Wilwood Pro Touring brake kit / 14" rotors / red calipers	$2,095
N1948	Hub bearing- Inner and outer- each	$13
N1949	Hub race- Inner and outer- each	$10
F5056J	Hub seal- each	$10
F5056W	Spindle nut wrench- Included in floater kit	$45



Compact brake gap (3.50″clears most suspension components located near original housing ends

4 piston calipers

Internal Parking Brake

2″ O.D. Spindle

5/8″-18 or 1/2″-20 press-in wheel studs

4-1/2″, 4-3/4 or 5″ bolt circles

35 spline drive plate

Rigid full floating design dramatically increases safety in comparison to a traditional flanged axle assembly

Floater spindle supports vehicle weight and resists cornering, braking, and accelerating loads leaving the floater axle solely responsible for transmitting torque

Preload spacer between the tapered bearings bolsters maximum spindle nut torque eliminating bearing end play

Zero end play in the bearings eliminates piston knock-back encountered during hard cornering

BRAKES

TECHNICAL

By use of friction, brakes convert kinetic energy into heat and dissipate it into the atmosphere. Kinetic energy is the amount of energy stored in a vehicle in motion. The basic factors that effect this are weight and speed. A heavy car takes more power to get up to the same speed as a lighter car, but will have a greater amount of stored energy. Therefore, it has to dissipate more heat to come to a stop. Speed has even a larger influence since it is squared in the calculation for kinetic energy. A vehicle traveling at 120 mph, has four times the stored energy than when it was doing 60 mph. What may appear to be a mild increase in mph, causes a much greater burden on the braking system.

MASTER CYLINDER SELECTION - PEDAL / HANDLE RATIO - PRESSURE: The 1.032" master cylinder is recommended for systems using single piston or two piston calipers up front, and four piston calipers in the rear. The 1.125" master cylinder is used with four piston calipers in both the front and rear. Brake pressure should always be checked with a brake pressure gauge before use. In disc brake applications used for drag racing only, front brake pressure should be 550 to 650 lbs and rear brake pressure 1,000 to 1,100 lbs. These pressures should be achieved with a lot of effort since they are at "lock-up" of the tires and the actual normal stopping pressures will be lower.

1.032" bore master cylinder: Pedal ratio- 5.5 to 1 / Handle ratio- 11 to 1
1.125" bore master cylinder: Pedal ratio- 6.5 to 1 / Handle ratio- 13 to 1

MOUNTING: The master cylinder, pedal / handle assembly, and calipers should be rigidly mounted. Movement or flex of the mounting location can cause inconsistent or spongy brake feel. Regardless of the pedal ratio, the master cylinder push rod needs to be parallel with the master cylinder while maximum brake pressure is achieved. This will promote even loading and wear on the piston providing the longest life possible. The bleeder screws should be the highest part of the caliper so that air can escape during bleeding. If this is not possible, the calipers can be rotated for bleeding then reinstalled. The brake calipers and pads need to be square to the rotors to promote even pad wear, consistent pedal feel, and eliminate brake drag. Most Strange 4-piston calipers have staggered piston diameters, therefore, they are directional and the arrow on the caliper must point in the direction of normal rotation of the rotor.

CALIPER SELECTION: Single piston front calipers are used for spindle mount wheels only. They should be used in vehicles weighing no more than 2,600 lbs that always deploy a parachute. Vehicles exceeding these limitations will experience poor pad life and will cause the rotors to overheat and warp. Two piston calipers are used in the front on vehicles with five lug wheels weighing up to 2,600 lbs. Four piston calipers are used in the front on vehicles with five lug wheels exceeding 2,600 lbs and in all rear applications.

PAD SELECTION: Soft metallic pads, used in all front applications, have excellent cold holding abilities with decent fade resistance. They are also used in rear applications where the vehicle does not exceed 150 mph in the 1/4 mile. The high heat and hard metallic pads are used in "rear only" applications exceeding 150 mph. High heat pads have a much higher threshold before brake fade than the soft metallic, but sacrifice starting line holding capability. The hard metallic have the same resistance to brake fade as the high heat, but offer better cold holding ability. They do tend to transfer additional pad material onto the brake rotor surface that has to be occasionally removed. On vehicles requiring the rear brakes to hold on the starting line under additional duress, such as loading torque converters or spooling turbochargers, the soft metallic pads would be a better choice due to their cold holding characteristics. Dual rear calipers would further enhance this capability.

PLUMBING: Braided stainless steel Teflon® lined hoses should be used only in flex applications, while 3/16" OD steel or stainless steel tubing should be used for the rest of the system. All lines should be firmly secured and isolated from vibration. All connections should be tight and NPT fittings sealed with Teflon® thread sealer. In applications where the master cylinder is mounted below the calipers, a 2 lb. residual pressure valve should be plumbed at the exit port(s) of the master cylinder. This keeps fluid from returning to the lowest point, the master cylinder, and pulling the caliper pistons back in their bores. If using a Strange master with drum brakes in the system, a 10 lb. residual valve must be installed in the line going to the drum brakes regardless of master cylinder location. When calipers or master cylinders are changed in an OEM system, the stock proportioning valve should be removed in favor of an adjustable proportioning valve. In most drag racing applications, it should be plumbed between the master cylinder and the front calipers to limit pressure. For street applications, or a system using disc front / drum rear, the proportioning valve would be plumbed between the master cylinder and the rear brakes. In either application, adjustments should be made to the valve in order to achieve the same braking threshold for front and rear brakes.

BRAKE FLUID: It is recommended to use DOT 4, DOT 5.1, or a high performance glycol based brake fluid for the braking temperatures experienced during drag racing. When changing to a different brake fluid, completely flush the system in order to experience the benefits of a higher temperature rated fluid. DOT 5 (Silicone based) brake fluid is not recommended for racing applications for several reasons. It does not mix with other fluids requiring a complete system rebuild, it is slightly compressible giving a soft pedal, and it does not absorb water. Since it will not absorb water, when moisture enters the system it settles to the lowest point which in most cases is the brake calipers. At braking temperatures moisture easily boils causing a loss or lack of pedal. Brake fluid should be changed at the beginning of each season to remove the absorbed water and any other contaminates.

	Advantages	Disadvantages	Boiling Point Dry	Boiling Point Wet
DOT 3	Inexpensive / Absorbs water / Mixes with DOT 4 & 5.1	Lowest boiling point / Eats paint	400	285
DOT 4	Higher boiling point / Absorbs water / Mixes with DOT 3 & 5.1	Eats paint	445	310
DOT 5	High boiling point / Does not eat paint	Does not absorb water / Water settles and causes corrosion Difficult to bleed / Will not mix with DOT 3, 4, & 5.1	500	355
DOT 5.1	High boiling point / Absorbs water / Mixes with DOT 3 & 4	More expensive / Eats paint	527	365

BLEEDING: Fill the master cylinder reservoir with new DOT 4 or DOT 5.1 brake fluid. Start with the caliper furthest from the master cylinder and work your way to the caliper that is closest. Slide a clear plastic hose on the end of the bleeder screw. Open the bleeder screw approximately one turn and slowly depress and hold the brake pedal all the way down. Close the bleeder screw and release the brake pedal. Repeat this sequence until fluid comes out of the bleeder clear and free of air bubbles. Periodically check the fluid level in reservoir while bleeding and refill as necessary. After bleeding is complete, check entire system for leaks and the fluid level in the master cylinder.

BEDDING PROCEDURE: A bedding procedure is necessary to avoid premature brake fade, uneven pad deposits on the rotors, pad and rotor damage, and provide the best braking performance and the longest component life. It consists of 8-10 brake applications increasing in harshness while allowing the brakes to cool slightly in between; do not apply or drag the brakes between stops. After the last stop, the brakes should be allowed to cool completely. The concept is to slowly cycle the brakes up to operating temperature and back down avoiding thermal shock. A transfer of pad material to the rotor surface occurs that coats and protects the rotor, creating the actual wear surface. For best results, new pads should be bedded with seasoned rotors and new rotors should be bedded with seasoned pads.

COMMON ISSUES

BRAKE DRAG
Master cylinder piston not fully retracting
Calipers not square to rotors
Tapered brake pad material
Incorrect residual pressure valve
Using drum brake master with disc brakes
Using factory proportioning / combination valve
Defective line-lock
Contamination of brake fluid within the calipers

PULSING PEDAL
Warped rotors
Rotor faces not parallel
Excessive play in wheel bearings
Tire / wheel assembly out of balance

SOFT OR SPONGY PEDAL
Pedal ratio too high
Master cylinder bore too small
Old brake fluid
Air in system
Deflecting caliper
Caliper not square to rotor
Too much flex line in system
DOT 5 (Silicone) fluid in system

HARD PEDAL
Pedal ratio too low
Master cylinder bore too large
Misalignment of master cylinder push-rod

STEEL BRAKE KITS

DRAG RACE ONLY

4-PISTON DIRECTIONAL CALIPER is standard in all front steel 4-piston, rear Pro Series, and Pro Series II brake kits that features an aluminum caliper in 1.750" and 1.625" piston bore sizes. Directional calipers allow pad loading and wear to be balanced against the natural changing temperatures across the pad face. Coupled with superior Strange caliper bridge-bolt strength, the dissimilar piston sizes allow for optimum braking, feel, and more consistent pad wear. The caliper also features anti-rattle clips and stainless steel pistons.

4-PISTON BILLET CALIPER is used in the new Strange Pro Series II **Stainless** brake kits. Similar to the caliper used in the Pro Carbon brake kits, it has the same superior bridge strength provided by the billet aluminum bodies. This brake caliper is designed for steel brakes and uses non-insulated pistons that are longer than normal providing additional stability. All four stainless steel pistons are 1.750" in diameter providing 7% greater clamping force in comparison to directional calipers.

4-PISTON BILLET LOW PROFILE CALIPER is an option in Strange Pro Series rear brake kits. Essential when using some of the newly designed 15" bead lock wheels, this caliper fits where no other can. Added ribs improve overall stiffness and drastically reduces deflection. Enhanced piston retraction reduces brake pad drag. Each caliper utilizes four individual brake pads to eliminate the problems experienced with warped backing plates. (Image shown below)

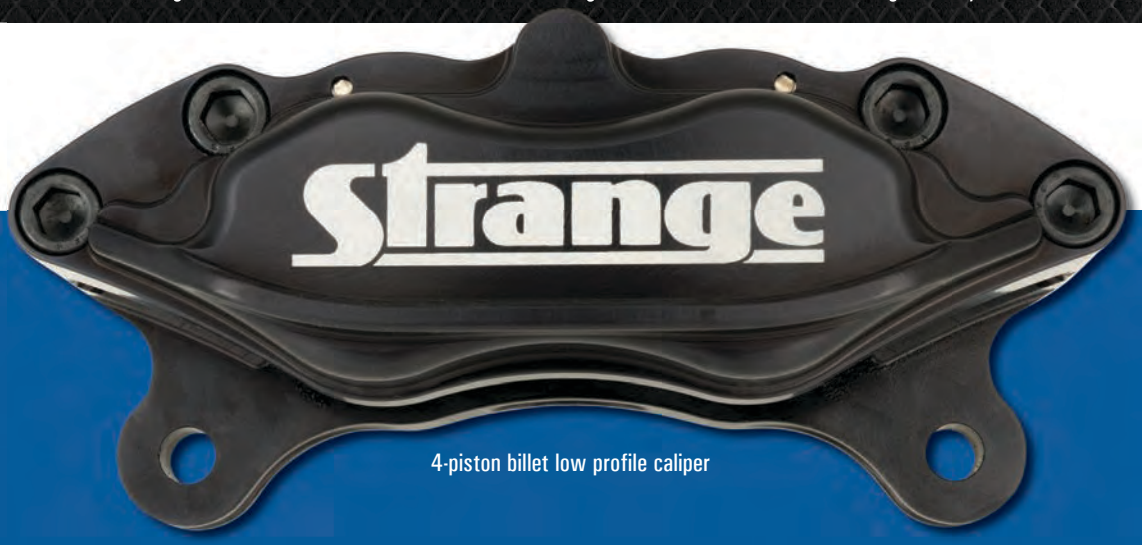
4-Piston Non-Directional Caliper is used in all S-Series rear brake kits that features an aluminum caliper with 1.750" piston bore sizes throughout. The S-Series caliper provides excellent bridge-bolt strength and increased clamping force. The caliper also features anti-rattle clips and stainless steel pistons.

2-PISTON CALIPER is standard in medium duty front brake kits. A fully machined aluminum caliper that features 1.750" piston bore sizes and is a lighter weight option, compared to 4-piston caliper, for vehicles under 2,600 lbs.

1-PISTON "FLOATING" CALIPER is used for F/C and spindle mount front brake kits. Employing a unique slider assembly that features internal bearings and precision ground sliders, prevents the caliper from binding or sticking which commonly occurs with other brands. This single piston caliper utilizes a square pad that slides freely, which prolongs pad life.

DIRECTIONAL SLOTTED ROTORS are used in all brake kits except for the S-Series. The slots are precisely milled into the rotor surface to create a thermally stable braking surface with added benefits of reduced rotating weight and promoting braking consistency by eliminating pad glaze. The slots location, size, and shape were meticulously selected after field and dyno testing.

The slots provide a thermally stable rotor which vastly reduces distortion and/or warping of the rotor. Even though it would be far less expensive to offer only one slotted rotor, our testing clearly dictated the best slot design and placement required a rotational shaped slot; hence- directional rotors. The slot design also minimizes rotational weight. Unlike drilled rotors, the reduction in weight is achieved without sacrificing stability.



4-piston billet low profile caliper

Strange one piece solid and slotted rotors are both fully machined from premium forgings

Two-piece floating rotor shown unassembled
Strange assembles all two-piece rotors before shipment

ONE PIECE ROTOR forging is used to produce all brake rotors except for Pro Series II. The one piece rotor is more expensive to manufacture when compared to the industries common 2 piece steel rotor design that uses bolts to hold it to an aluminum hat. Most two piece steel rotors are taken from inferior steel burn-outs and require additional assembly after purchasing. The one piece forged steel rotor offers several advantages when compared to bolt together two piece designs: (1) Due to the strength of our one piece forged steel rotor, a considerable amount of weight is eliminated in the steel hat area (slotted version). Aluminum hats are .250" to .500" thick and are not lightened in the side of the hat. The Strange rotor is only .125" thick in the mounting surface and has additional lightening holes on the side and top of the hat. In most cases, the slotted version rotor is lighter than bolt together two piece designs. (2) It eliminates mounting bolts that conduce binding and require constant torquing and/or cumbersome safety wire. (3) It provides superior dissipation of heat created by braking- due to one integral design (4) It accommodates several axle bolt circles (5) It can be re-surfaced to eliminate brake pad material build-up.

TWO PIECE FLOATING ROTOR is standard in front and rear Pro Series II brake kits. The already successful 2 piece floating rotors have been further refined. Racers have depended upon the proven two piece design since 2008, including world champion Gary Stinnett. Through further R&D the 2012 version features a proprietary steel that has increased yield strength by 43%, tensile by 30% and significantly improved resistance to warping and creep at high temperatures. The floating rotor design allows for axial and radial growth of rotor as temperature increases, which greatly reduces warping and coning tendencies. In addition, the design eliminates bolts to attach the hat and rotor, which can become loose, require safety wire and require assembly. The rotor hat is fully machined from an aluminum forging which is strong, lightweight, and provides an ideal wheel mounting surface. The two-piece rotor, when compared to the already lightweight forged steel rotor, is .60 lbs lighter per corner (1.20 lbs per pair). The two piece rotor is ideal for weight reduction and abusive braking conditions.

Two Piece **Stainless Steel** Rotor (Above)

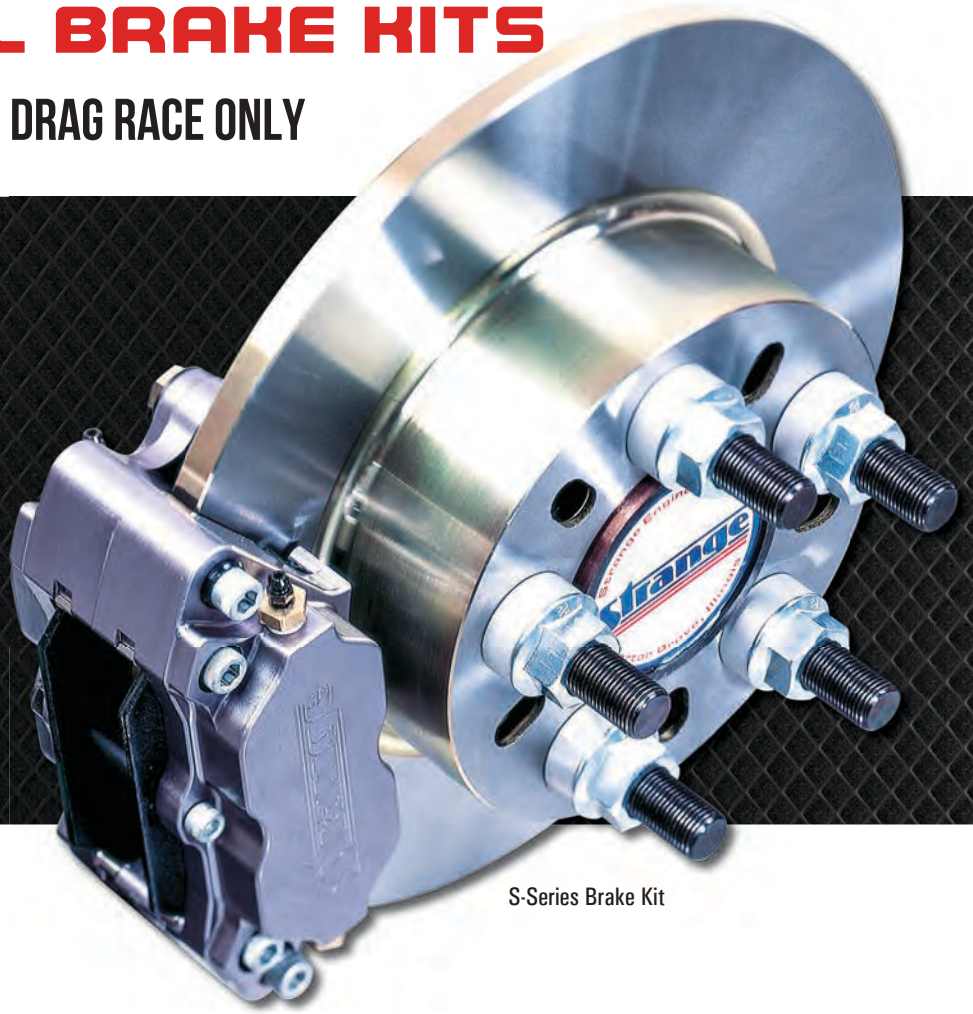
TWO PIECE FLOATING (STAINLESS STEEL) ROTOR offers a new enhancement to the two piece floating rotor design. Stainless steel is typically known to be corrosion resistant, but it's main purpose here is the superior strength it provides at elevated temperatures. Thermal stress relieving further improves material stability resulting in high speed braking ability, without the concerns of warping or distortion. This rotor is included in the new Strange Pro Series II Stainless brake kits. It is compatible with soft, medium, and hard metallic pads.

Two-Piece hat (pictured right) - Fully machined from forged aluminum. The attention to detail is seen in the lightening grooves and pockets. The unique lug design permits axial and radial growth of the rotor.

STEEL BRAKE KITS

DRAG RACE ONLY

S-SERIES REAR KIT is an economical alternative to the Pro Race brake kits. S-series rear drag race brake kits include: Forged aluminum 4-piston calipers with 1.75" diameter pistons, extra thick .430" solid forged rotors, billet caliper mounts, necessary mounting hardware and soft metallic pads. Optional pads are available at the same price. Use suffix "H" for high heat or "M" for hard metallic pads. (I.E. B6700WCH) The S-series brake kit weighs 29.10 lbs compared to 23.70 lbs for the Strange Pro Race brake kit. The Pro Race slotted rotor weighs 7.3 lbs, while the S-Series solid rotor weighs 10 lbs.



S-Series Brake Kit

Soft

B5010

High Heat

B5022

Hard

B5020

BRAKE PADS are offered in soft, high heat, and hard metallic compositions. Soft metallic, used in all front brake kits, are one of three pad options in rear kits. They have excellent starting line holding capabilities and, in rear applications, are best suited in vehicles traveling less than 150 mph. The high heat metallic pads are for rear only, have a much higher temperature rating, used in vehicles doing over 150 mph, but sacrifice on cold holding. Hard metallics have the same heat rating as the medium, but with better cold holding ability. The hard pads will transfer some additional pad material to the brake rotor surface which will eventually need to be removed when replacing the brake pads.

Billet aluminum caliper mounts - tailored to your application.

All Strange 4-piston and 2-piston Pro Race front brake kits feature a scalloped and drilled aluminum hub to ensure the greatest weight reduction

Pro Series II Brake Kit

Pro Series II **Stainless** Brake Kit

PRO SERIES II REAR BRAKE KIT with its two-piece floating rotor design, has been has been utilized by professional racers including world champion Gary Stinnett. The rotor and hat design allow for axial and radial growth of rotor as temperature increases, which greatly reduces warping and coning tendencies. In addition, it eliminates any bolts to attach the hat to the rotor which can become loose, require safety wire and additional labor. Pro Series II rear kits, when compared to the already lightweight Pro Series kit, is 1.20 lbs lighter. This kit features Strange 4-piston directional calipers (1.625" / 1.750" bores) with stainless steel pistons, caliper o-rings designed to minimize drag, billet aluminum caliper mounts, choice of brake pads (soft, high heat, or hard metallic) and mounting hardware. Dual calipers are optional. Brake kit weighs only 22.10 lbs with soft metallic pads. All brake pads materials are available in these rear kits.

PRO SERIES II (STAINLESS) REAR BRAKE KIT is an advancement in the two piece design by manufacturing the floating rotor out of stainless steel. While being corrosion resistant, the main benefit is the ability to survive under elevated temperatures without warping or distorting. The stainless steel is thermally stress relieved to further enhance material stability. The result, is a rotor that maintains superior strength at higher temperatures in comparison to carbon steel. Included are the new Strange billet calipers for steel brakes that share the same billet bodies as supplied in our Pro Series carbon brake kit. These calipers offer additional bridge strength and contain four longer and larger diameter (1.750") stainless steel pistons. This design provides more clamping force and piston stability. The result is the ability to quickly scrub off MPH in an index class and reduce the possibility of brake drag as the pads wear and pistons extend. Single or dual caliper kits are available with soft, high heat, or hard metallic brake pads. Add $150 to any Pro Series rear brake kit for low profile caliper option.

PRO SERIES REAR KIT features Strange forged steel one piece rotor, which is far superior to common bolt together two piece rotors in weight reduction, strength and longevity. All Strange Pro Race rotors are slotted. Slotting was developed by Strange to minimize warpage, while maximizing weight reduction. Every kit features the sought after Strange 4-piston directional calipers. The directional calipers accomplish superior bridge bolt strength at only 2.70 pounds. Strange directional calipers feature 1.750" and 1.625" OD stainless steel pistons to assure optimal pad wear and exceptional pedal / handle feel. Every Strange caliper is internally ported and is designed to assist piston retraction. Brake kit weighs only 23.70 lbs with soft metallic pads. All brake pads materials are available in these rear kits.

Pro Series
Dual Caliper Brake Kit

B4110WC pictured above - is a typical 4-piston front brake kit; however, kits vary per application

Strange Heavy Duty Front Brake Kits

Strange Heavy Duty front brake kits offer a tremendous weight savings over OEM brake components. The entire Pro Series 4-piston brake kit, with forged slotted rotors, weighs only 33.50 lbs. The Pro Series II, featuring 2 piece floating rotors, weighs 32.50 lbs. Both kit weights include bearings, hubs, rotors, pads, calipers, pads, etc... Strange Engineering's brake kits are unsurpassed in detail. One example of our unparalleled attention to detail is evident in our hub design. Each hub has one bolt circle. Instead of adding an additional bolt circle, the hub is scalloped and lightening holes are milled to reduce rotating weight. The hub cap is fully machined and hollowed out to maximize weight reduction. We feel that the extra effort into weight reduction is expected from customers who want a premium quality Drag Racing brake kit.

Typical Heavy Duty front kits Include: Strange 4-piston billet directional calipers, soft metallic pads, forged slotted steel rotors, scalloped aluminum hubs with Timken® bearings and races, seals, studs, billet aluminum mounts, and necessary mounting hardware.

STEEL FRONT BRAKE KITS

DRAG RACE ONLY

APPLICATIONS

MAKE	MODEL	YEAR	OEM	PART#	TYPE	BOLT CIRCLE	PRICE	NOTES
FORD								
	FAIRLANE	66-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	$795	
		66-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	
	FAIRMONT	81-83	DISC	B4142WC	HEAVY DUTY	4 3/4"	$795	
	FALCON	66-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	$795	
		66-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	
	FORD	42-48	DRUM	B4176WC	HEAVY DUTY	4 3/4"	$835	
	MAVERICK	1972	DRUM	B4136WC	HEAVY DUTY	4 3/4"	$795	
	MUSTANG*	1965	DRUM	B4135WC	HEAVY DUTY	4 1/2"	$795	* 289 Hardtop only
		1965	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	* 289 Hardtop only
		67-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	$795	
		67-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	
		70-73	DRUM	B4132WC	HEAVY DUTY	4 1/2"	$795	
		70-73	DRUM	B4133WC	HEAVY DUTY	4 3/4"	$795	
	MUSTANG II	74-78	DISC	B4140WC	HEAVY DUTY	4 3/4"	$795	
		74-78	DISC	B4141WC	HEAVY DUTY	4 1/2"	$795	
	MUSTANG	82-86	DISC	B4142WC	HEAVY DUTY	4 3/4"	$795	
		82-86	DISC	B4143WC	HEAVY DUTY	4 1/2"	$795	
		87-93	DISC	B4142WC	HEAVY DUTY	4 3/4"	$795	FOR 4 CYL SPINDLES
		87-93	DISC	B4143WC	HEAVY DUTY	4 1/2"	$795	FOR 4 CYL SPINDLES
	INCLUDES COBRA	87-93	DISC	B4144WC	HEAVY DUTY	4 3/4"	$795	FOR 8 CYL SPINDLES
	INCLUDES COBRA	87-93	DISC	B4145WC	HEAVY DUTY	4 1/2"	$795	FOR 8 CYL SPINDLES
		94-04	DISC	B4446WC	MEDIUM DUTY	4 1/2"	$549	MUST REUSE STOCK HUBS
		05-14	DISC	B4148WC	HEAVY DUTY	4 1/2"	$695	MUST REUSE STOCK HUBS
		05-14	DISC	B4152WC	HEAVY DUTY	4 1/2"	$895	
	PINTO	71-72	DRUM	B4136WC	HEAVY DUTY	4 3/4"	$795	
		71-72	DISC	B4138WC	HEAVY DUTY	4 3/4"	$795	
		74-80	DISC	B4140WC	HEAVY DUTY	4 3/4"	$795	
		74-80	DISC	B4141WC	HEAVY DUTY	4 1/2"	$795	
	RANCHERO	67-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	$795	
		67-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	
	THUNDERBIRD	82-86	DISC	B4142WC	HEAVY DUTY	4 3/4"	$795	
		82-86	DISC	B4143WC	HEAVY DUTY	4 1/2"	$795	
		87-88	DISC	B4142WC	HEAVY DUTY	4 3/4"	$795	FOR 6 & 8 CYL SPINDLES
		87-88	DISC	B4143WC	HEAVY DUTY	4 1/2"	$795	FOR 6 & 8 CYL SPINDLES
		87-88	DISC	B4144WC	HEAVY DUTY	4 3/4"	$795	FOR 4 CYL SPINDLES
		87-88	DISC	B4145WC	HEAVY DUTY	4 1/2"	$795	FOR 4 CYL SPINDLES
MERCURY								
	COMET	66-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	
	COUGAR	67-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	$795	
		81-88	DISC	B4142WC	HEAVY DUTY	4 3/4"	$795	
		81-88	DISC	B4143WC	HEAVY DUTY	4 1/2"	$795	

To order brake kit with two piece rotors- Include "2" at the end of he part number (i.e. B4110WC2)
Add $100 to prices shown for medium and heavy duty kits

STEEL REAR BRAKE KITS

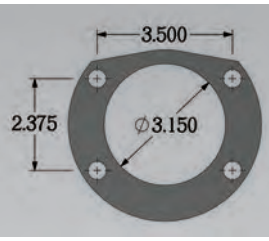
DRAG RACE ONLY

Brake kit part numbers listed below include soft metallic pads. Add suffix "H" for high heat metallic pads or "M" for hard metallic pads.
For example: B1700WCH / B1700WCM. Choice of pads will not increase price.

Pro Series II Kits, with two-piece floating rotors, are available for all rear kits except Small Ford. For a Pro Series II kit, add "2" to the end of the part number.
For example: B1700WC2 / B1700WCH2 / B1700WCM2 / B1700WCD2 / B1700WCDH2 / B1700WCDM2. The price will increase $100 over the price shown.

Pro Series II Stainless Kits, with two piece stainless steel rotors and billet calipers, are available for Symmetrical and Olds ends. Add "2S" after the part number for these kits. For example: B1700WC2S / B1700WCH2S / B1700WCM2S / B1700WCD2S / B1700WCDH2S / B1700WCDM2S. The price will increase $400 over the price shown.

Add $150 to any Pro Series rear brake kit for low profile caliper option.



FORD (EARLY BIG FORD)

B1707WC Pro Series rear steel brake kit
For Early Big Ford housing ends - F= 2.500"... $595

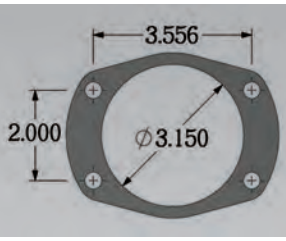
B1707WCD Pro Series rear steel DUAL caliper brake kit
For Early Big Ford housing ends - F= 2.500"... $1,020

B1708WC Pro Series rear steel brake kit
For Early Big Ford housing ends - F= 2.3325"... $595

B1708WCD Pro Series rear steel DUAL caliper brake kit
For Early Big Ford housing ends - F= 2.3325"... $1,020

B6707WC S-Series (non-slotted rotor) rear steel brake kit
For Early Big Ford housing ends - F= 2.500"... $469

B6708WC S-Series (non-slotted rotor) rear steel brake kit
For Early Big Ford housing ends - F= 2.3325"... $469

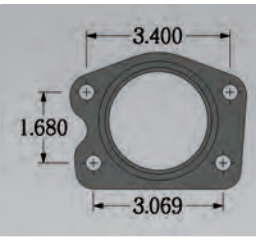


FORD (LATE BIG FORD)

B1706WC Pro Series rear steel brake kit For Late Big Ford housing ends - F= 2.500"... $595

B1706WCD Pro Series rear steel DUAL caliper brake kit For Late Big Ford housing ends - F= 2.500"... $1,020

B6706WC S-Series (non-slotted rotor) rear steel brake kit For Late Big Ford housing ends - F= 2.500"... $469



FORD (8.8") MUSTANG

B1714WC Pro Series rear steel brake kit
For OEM 8.8" Mustang housing ends using Strange axles & c-clip eliminator kit - F= 2.500"... $595

B1714WCD Pro Series rear steel DUAL caliper brake kit
For OEM 8.8" Mustang housing ends using Strange axles & c-clip eliminator kit - F= 2.500"... $1,020

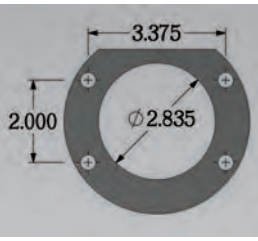
B6714WC S-Series (non-slotted rotors) rear steel brake kit For OEM 8.8" Mustang housing ends using Strange axles & c-clip eliminator kit - F= 2.500"... $469

FORD (STRANGE 8.8"/ 3.150")

B1715WC Pro Series rear steel brake kit
For Strange H1138 housing ends - F= 2.500"... $595

B1715WCD Pro Series rear steel DUAL caliper brake kit
For Strange H1138 housing ends - F= 2.500"... $1,020

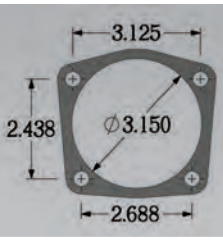
B6715WC S-Series (non-slotted rotor) rear steel brake kit
For Strange H1138 housing ends - F= 2.500"... $469



FORD (SMALL FORD)

B1712WC Pro Series rear steel brake kit For Small Ford housing ends - F= 2.625"... $595

B6712WC S-Series (non-slotted rotor) rear steel brake kit For Small Ford housing ends - F= 2.625"... $469

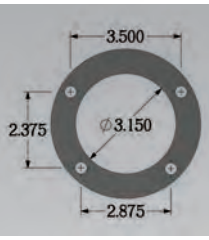


GM (STRANGE 3.150")

B1718WC Pro Series rear steel brake kit
For Strange H1143 GM housing ends - F= 2.832"... $595

B1718WCD Pro Series rear steel DUAL caliper brake kit
For Strange H1143 GM housing ends - F= 2.832"... $1,020

B6718WC S-Series (non-slotted) rear steel brake kit
For Strange H1143 GM housing ends - F= 2.832"... $469

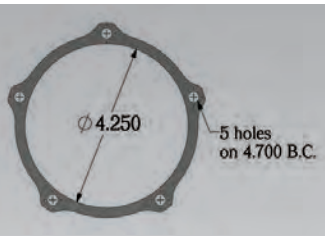


OLDS

B1700WC Pro Series rear steel brake kit
For 57-64 Olds housing ends - F= 2.832"... $595

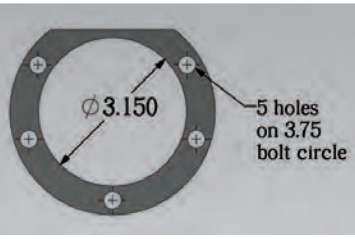
B1700WCD Pro Series rear steel DUAL caliper brake kit
For 57-64 Olds housing ends - F= 2.832"... $1,020

B6700WC S-Series (non-slotted rotor) rear steel brake kit
For 57-64 Olds housing ends - F= 2.832"... $469



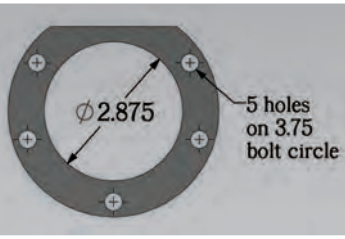
STRANGE (2-PC. AXLES)

B1711NBM Pro Series rear steel brake kit
For Strange L5500SBB housing ends
No caliper mounts - F= 2.832"... $545



MOPAR (STRANGE 3.150")

B1705WC Pro Series rear steel brake kit
For Strange H1147 Mopar patterned
housing ends F= 2.500"... $595

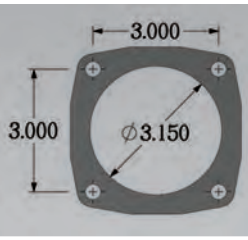


MOPAR

B1704WC Pro Series rear steel brake kit
For 65-73 Mopar housing ends. Includes A1022 axle bearings - F= 2.663"... $635

B1704WCD Pro Series rear steel DUAL caliper brake kit For 65-73 Mopar housing ends - Includes A1022 axle bearings - F= 2.663"... $1,020

B6704WC S-Series (non-slotted rotor) rear steel brake kit For 65-73 Mopar housing ends - Includes A1022 axle bearings - F= 2.663"... $509

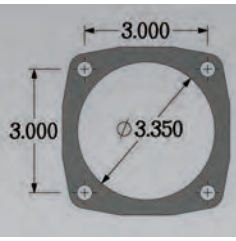


SYMMETRICAL (3.150")

B1710WC Pro Series rear steel brake kit
For Symmetrical housing ends - F= 2.832"... $595

B1710WCD Pro Series rear steel DUAL caliper brake kit
For Symmetrical housing ends - F= 2.832"... $1,020

B6710WC S-Series (non-slotted rotor) rear steel brake kit
For Symmetrical housing ends - F= 2.832"... $469



SYMMETRICAL (3.350")

B1711WC Pro Series rear steel brake kit For Strange H1136 / H1146 housing ends F= 2.832"... $595

B1711WCD Pro Series rear steel DUAL caliper brake kit For H1136 / H1146 housing ends- F= 2.832"... $1,020

STEEL REAR BRAKE KITS

CALIPER KITS

STRANGE 4-PISTON CALIPER KITS

Strange 4-piston directional caliper provides superior strength at only 2.70 lbs. The 1.750" and 1.625" OD stainless steel pistons assure optimal pad wear.

Strange 4-piston **Billet** non-directional caliper further increases bridge strength providing a firmer pedal feel. All four stainless steel pistons are 1.750" and are longer which creates 7% more clamping force and provides more piston stability.

Strange Low Profile billet calipers are designed with the maximum wheel clearance available. Essential when using some of the latest 15" bead lock wheels, this caliper fits where others don't. Ribs are added to increase stiffness and piston design improves retraction reducing brake drag. Each caliper uses 4 independent pads that eliminate backing plate warpage and the associated problems.

Strange S-Series non-directional caliper is equipped with 1.750" OD stainless steel pistons and are designed to fit .430" thick S-Series rotor.

B1850	Directional 4 piston calipers with soft metallic pads & hardware- kit..... $369
B1853	Directional 4 piston calipers with high heat metallic pads & hardware- kit..... $369
B1855	Directional 4 piston calipers with hard metallic pads & hardware- kit..... $369 (shown next page)
B1850LP	Billet low profile calipers with soft metallic pads & hardware kit..... $569
B1853LP	Billet low profile calipers with high heat metallic pads & hardware kit..... $569
B1855LP	Billet low profile calipers with hard metallic pads & hardware kit..... $569
B1950	Billet 4 piston calipers with soft metallic pads & hardware- kit..... $429
B1953	Billet 4 piston calipers with high heat metallic pads & hardware- kit $429
B1955	Billet 4 piston calipers with hard metallic pads & hardware- kit $429
B6850	S-Series 4 piston non-directional calipers with soft metallic pads & hardware- kit $323
B6853	S-Series 4 piston non-directional calipers with high heat metallic pads & hardware- kit ... $323
B6855	S-Series 4 piston non-directional calipers with hard metallic pads & hardware- kit $323

Caliper mounting bolt holes are on 5.250" centers on all above kits

B1850LP

B1855

Every Strange caliper is internally ported and includes square o-rings to assist in piston retraction and fluid retention.
Kits include calipers, pads, and necessary hardware.

STEEL REAR BRAKE KITS

COMPONENTS

STRANGE REPLACEMENT ROTORS

B2790 11.250" non-slotted .430" thick rotor for S-Series rear brakes $95

B2792 11.250" slotted rotor for Pro Series rear brakes- RH $137

B2793 11.250" slotted rotor for Pro Series rear brakes- LH $137

B2794R 11.250" slotted rotor for Pro Series II two piece rear brakes- RH $195

B2794L 11.250" slotted rotor for Pro Series II two piece rear brakes- LH $195

B2794RS 11.250" slotted **stainless steel** rotor for Pro Series II two piece rear brakes- RH $295

B2794LS 11.250" slotted **stainless steel** rotor for Pro Series II two piece rear brakes- LH $295

B2795 11.250" tapered slotted rotor for MD and HD front brake kits- RH $137

B2796 11.250" tapered slotted rotor for MD and HD front brake kits- LH $137

B3341 for most non-Strange single piston calipers. Specify brand & pad OD.

B4010 / B4020 / B4022 Strange four piston low profile caliper

B2510 Strange single piston & two piston caliper

B3330 Kelsey-Hayes 1200

B3325 / B3326 Wilwood & JFZ four piston cotter pin caliper

B5010 / B5020 / B5022 Strange four piston caliper

CALIPERS, PADS, & REBUILD KITS

B5001 Strange S-Series 4-piston (non-directional) caliper 5.250" bolt centers ... $139

B5002 Strange Pro Series 4-piston directional caliper 5.250" bolt centers - RH side ... $159

B5004 Strange Pro Series 4-piston directional caliper 5.250" bolt centers - LH side ... $159

B1900 Strange Pro Series 4-piston **Billet** caliper 5.250" bolt centers ... $189

B5010 Pad for Strange 4-piston caliper Soft metallic ... $17

B5022 Pad for Strange 4-piston caliper High Heat metallic $17

B5020 Pad for Strange 4-piston caliper Hard metallic $17

B5109 O-ring kit for Strange Pro Series 4-piston caliper Directional- 1.625" / 1.750" bores ... $9

B5109R O-ring kit for Strange Pro Series 4-piston caliper Directional- Low Drag conversion ... $9

B5106 O-ring kit for Strange S-Series 4-piston caliper Non-directional- 1.750" bores ... $9

B5106R O-ring kit for Strange S-Series 4-piston caliper Non-directional- Low Drag conversion ... $9

B5105 O-ring kit for early Strange 4-piston caliper Various o-rings for all versions- Pre 96 ... $11

Rebuild kits service one caliper
Brake pads are sold as each

Strange Billet Caliper
B1900

B3341 Pad for Airheart 175H, Kelsey-Hayes 400 / 500 & Wilwood 120-1064 caliper ...$8

B4010 Pad for Strange low profile four piston caliper - Soft Metallic ...$15

B4020 Pad for Strange low profile four piston caliper - Hard Metallic ...$15

B4022 Pad for Strange low profile four piston caliper - High Heat Metallic $15

B3325 Pad for Wilwood / JFZ 4-piston caliper Soft metallic - Cotter pin retention ...$17

B3326 Pad for Wilwood / JFZ 4-piston caliper Hard metallic - Cotter pin retention ...$17

B3330 Pad for Kelsey-Hayes 1200 caliper Hard metallic ...$20

Rebuild kits service one caliper
Brake pads are sold as each

CARBON BRAKES

Strange Engineering developed carbon brakes back in the 1980's, for Top Fuel and Funny Car teams, to eliminate brake fade and allow for safe braking under immense braking loads. Presently, Strange carbon brakes have become essential for all cars demanding optimum braking and maximum weight reduction. Rotating weight is decreased by over 8 lbs, and total weight by over 11 lbs compared to steel and cast iron kits.

The rotors and pads are manufactured from carbon-carbon material. This substance is carbon fiber that has been reinforced with a carbon matrix. The result is a medium that is very stable under extreme temperatures and can withstand "white hot" temperatures during braking. The rotors are virtually immune to thermal shock, which in heavy braking conditions may cause steel rotors to warp and cast iron rotors to crack and eventually shatter. Thermal shock occurs when the rotors start out cool, at the starting line, and then instantly become hot when the brakes are applied at the end of a run. Strange Carbon brakes offer several advantages when compared to steel or cast iron rotors, including the following:

- Safety and Performance
- Lightest kit on the market
- Eliminates rotor warpage and brake fade
- Immune to thermal shock
- Stopping power and efficiency is unsurpassed
- Entire 11" carbon rear brake kit is under 15 lbs
- Long rotor & pad life
- Less brake drag

There are several applications available from Strange Engineering and are explained in detail in the proceeding sections. The front brake kits offered for spindle mount wheels are 10" (with either 1.750" or 2" piston calipers), and 11" with 2" piston calipers. Strange Aluminum struts using 4 3/4" BC bolt-on wheels have a heavy duty carbon brake kit available that also includes hubs, studs, bearings, races, and seals. Rear carbon kits include 11" Pro Race, 11" Sportsman, and the 11.50" for the Strange Live Axle.

CARBON BRAKES

REAR CARBON BRAKE KITS

The Strange Pro Race 11" carbon brake kit was developed to satisfy one of the most demanding and competitive racers in NHRA history- Warren Johnson. After not being satisfied with other braking systems in the industry, he approached Strange Engineering to develop a carbon brake system to meet his stringent expectations. After intensive field testing and Warren's valued input, the result was a carbon system that surpassed his expectations. Strange 11" carbon has evolved beyond its competition and is widely used by past, present and future World Champions. The following are highlights of the Strange Pro Race Carbon kit.

(1) Ultra Caliper- This caliper offers the following improvements to the already race proven Strange directional caliper:

(A) Incorporates a unique two piece piston design, combining the exceptional thermal insulating characteristics of 303 stainless steel with the lightweight properties of aluminum. The result is substantially reduced heat transfer to the brake fluid, preventing boiling when the rotors become extremely hot. This design also eliminates heat shields which, if not periodically replaced, eventually warp causing brake drag and a spongy pedal.

(B) Stainless steel bushing to eliminate all shims and washers. Time is valuable between rounds, therefore we eliminated all spacers, washers and shims. The Ultra Caliper has a stainless steel flanged bushing that is pressed into each caliper mounting hole by Strange. The bushing guides the mounting bolt as well as provides a flat and wear-free mounting surface for the caliper mounting bolt.

(2) The least amount of rotating & static weight- The entire assembled rear 11" carbon brake kit weighs only 14.95 lbs. One 11" carbon disc weighs a meager 1.68 lbs. The same 11" carbon disc, after being assembled on an aluminum rotor hat, only weighs 3.10 lbs. An individual carbon pad weighs .20 pounds.

(3) 11" carbon rotors and carbon pads- The 11" carbon rotors are .50" smaller than other kits on the market. This generates heat more quickly than 11.50" carbon, providing optimum braking for Pro and Sportsman racers. The 11" carbon also provides the lightest rear disc weight on the market at a mere 1.68 lbs for the disc alone, and 3.10 lbs for the disc mounted to the aluminum hat. The less cumbersome rotor is more conveniently removed when making adjustments to the rear of the vehicle. Each brake pad has been slotted to allow carbon dust to escape, improving rotor and pad longevity.

(4) Aluminum carbon rotor hat The carbon rotor hat withstands the intense heat created by the release of energy through the braking system. They are manufactured from a heat resistant aluminum and hard coated to further insulate the material. By incorporating separate aluminum retaining rings, loads from the rotor mounting bolts are evenly spread across the surface.

Strange Pro Race Rear Carbon Kits include the following: Ultra calipers, billet aluminum caliper mounts, mounting hardware, 11" carbon rotor assemblies, and slotted carbon brake pads.

For 5" BC - Replace "4" with "5" in the part number (I.E. C18005UC)

C18004UC For Olds housing ends 4.75" BC- F= 2.832" $2,695
C18084UC For Early Big Ford housing ends 4.75" BC- F= 2.332" $2,695
C18104UC For Symmetrical housing ends 4.75" BC- F= 2.832" $2,695
C18104DBUC For Strange H1136 housing ends 4.75" BC- F= 2.832" ... $2,695

C18104NBUC For Strange L5500SBB housing ends using Strange two piece axles- 4.75" BC- F= 2.351"- Mounts not included $2,590

The 11" Sportsman Carbon rear brake kits feature the same carbon rotors as our Pro Carbon brake kits. The Sportsman kit surpasses the performance and wearing characteristics of our competitors higher priced, "top of the line" brake kits, while still maintaining an attractive price.

- Complete kit weighs 15.1 lbs.
- 11" rotor mounted on an aluminum hat weighs only 3.10 lbs - Less rotating weight
- Improved braking performance while providing maximum weight reduction
- Eliminates rotor warpage & drag - Common with steel and cast iron rotors
- Directional calipers with premium heat shields - Controls pad taper & blocks heat transfer
- Shields supplied in .024" & .060" - Use as shims for wear ensuring pistons do not over extend

Strange Sportsman Carbon Rear Kits include: Directional calipers, aluminum caliper mounts, hardware, heat shields, 11" carbon rotors and carbon brake pads.

C17004WC For Olds housing ends 4.75" BC- F= 2.832" $2,389
C17084WC For Early Big Ford housing ends 4.75" BC- F= 2.332" $2,389
C17104WC For Symmetrical housing ends 4.75" BC- F= 2.832" $2,389
C17104DBWC For Strange H1136 housing ends 4.75" BC- F= 2.832" ... $2,389
For 5" BC - Replace "4" with "5" in the part number- I.E. C17005WC

C2000WC Steel brake to Carbon brake conversion kit
For 2012+ Strange floater kit $2,395
C1200WC For pre 2012 Strange floater kit- 5.50" BC $2,995
C1209WC For pre 2012 Strange floater kit- 4.75" & 5" BC ... $2,995

STRANGE 11.50" REAR CARBON BRAKE KITS

Strange 11.50" kits are available for all Strange top loader Live Axle Designs - 9" / 9.50", 10.50", and 12". The 11.50" rotor is used in order to provide the largest braking surface practically possible. Funny cars and Top Fuel Dragsters have an enormous amount of energy to be released through the rotor during braking. Imagine trying to stop a vehicle traveling 330 mph with a parachute malfunction. The Strange 11.50" carbon brakes have saved several drivers involved in dangerous situations. Carbon 11.50" rotors provide a safe stop for the fastest cars in the world at a disc weight of only 1.88 lbs.

The 11.50" is standard issue on every Strange 10.50" and 12.00" Live Axle. The 11.50" carbon kit is optional on the Strange 9" / 9.50" live axle. An 11.50" carbon kit is also available for the Chrisman Live Axle. Call for more information.

CARBON REPLACEMENT COMPONENTS

C1790 11" carbon rotor- Front or rear $594
L4050B 11.50" rear carbon rotor $1,050
L4050H 4 piston carbon pad- Non-slotted $150
L4050H1 4 piston carbon pad- Slotted at 1:00 ..... $150
L4050H2 4 piston carbon pad- Slotted at 11:00 ..... $150
B5002 4 piston Sportsman directional caliper- RH side $159
B5004 4 piston Sportsman directional caliper- LH side $159
B5040 4 piston Pro Race Ultra Caliper
For floater kits & 10.5" & 12" Live Axles $385

B5042 4 piston Pro Race Ultra Caliper
For 9.5" Live Axle & Pro Race carbon brake kits $385
L4050S .024" Ti heat shield for Sportsman carbon caliper $13
L4050T .060" SS heat shield for Sportsman carbon caliper $9

B5109 O-ring kit- 4 piston Sportsman directional caliper $9
B5109R Low Drag o-ring kit- 4 piston Sportsman directional caliper ... $9
B5110 O-ring kit for 4 piston Pro Race Ultra Caliper $9

All components are sold as each - O-ring kits service one caliper

BRAKES

MASTER CYLINDERS, VALVES, BRAKE GAUGE, & BRAKE FITTINGS

The Strange dual in-line master cylinder is ideal for sportsman classes requiring four wheel braking. The 1.032" bore master cylinder should be used if single piston or 2-piston calipers are used for the front and 4-piston on the rear. The 1.125" bore master cylinder will allow optimum volume and pressure for vehicles using 4-piston calipers front and rear.

- Strange aluminum body
- Includes hard-line fittings
- Economical
- Holes provided for side mount application
- Both front and rear outlets are tapped 1/2-20

B3359	1.125" bore master cylinder with mounting hardware	$99
B3359TA	1.125" bore master cylinder without mounting hardware....	$85
B3360	1.032" bore master cylinder with mounting hardware.....	$99
B3360TA	1.032" bore master cylinder without mounting hardware...	$85

B3359M 1979-1993 Mustang Manual Brake conversion kit. Fits automatic & manual transmission pedal boxes. Includes 1.125" bore aluminum master cylinder, billet aluminum adapter plate, push rod, dust boot, rod end, banjo fittings, and all necessary mounting hardware..... $169

The B-3369 can replace an OEM non-adjustable proportioning valve, or used in new vehicle construction. Any brake system needs to be properly proportioned to effectively stop a vehicle. Drag race applications commonly have a much greater tire contact area on the rear tire in comparison to the front. The adjustable proportioning valve is installed into the front brake line, reducing front pressure until the desired front to rear bias is achieved. Street vehicles typically install the valve into the rear brake line, allowing reduction in rear brake pressure. A brake pressure gauge, such as the P2360, should be used to check pressures front and rear before the vehicle is driven. The adjustable proportioning valve will not increase line pressure, it can only reduce. The B-3369 is threaded 1/8" NPT.

B3369 Adjustable proportioning valve ... $49

EXTERNAL RESIDUAL PRESSURE VALVES are used when the master cylinder is mounted at or below the level of the calipers or when drum brakes are used. If not, a long pedal travel and poor braking can occur. The valve maintains a low pressure of fluid between the valve and the brake caliper or wheel cylinder. This keeps the pads or shoes ready to move as soon as the pedal is depressed. Drum brakes need a 10 lbs valve to keep the wheel cylinder cups expanded. Disc brake applications require a 2 lbs valve only when the master cylinder is mounted at or below the level of the calipers. External residual valves are best installed as close as possible to the master cylinder. Each valve is manufactured from billet aluminum and is tapped 1/8" NPT on both ends.

B3366 2 lbs external pressure valve ... $22

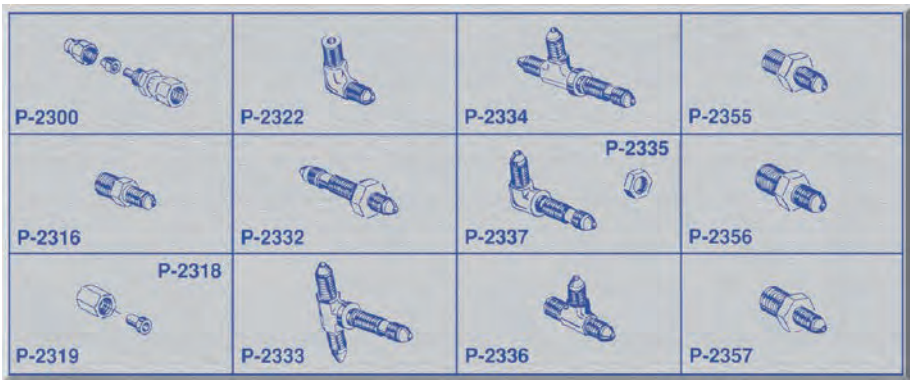
B3367 10 lbs external pressure valve ... $22

The P2360 GAUGE accurately measures brake line pressure. Without proper brake pressure, even quality braking systems can be rendered significantly less effective. This gauge verifies pressure and is essential for trouble shooting brake system problems. The Strange pressure gauge makes it easier to determine appropriate changes in pedal ratio or to select the proper master cylinder bore size. Each gauge is shipped with a bleeder adapter for further convenience.

P2360 Brake pressure gauge & adapter ... $32

BRAKE FITTINGS

P2316 3 AN x .125" NPT adapter $2
P2318 3 AN coupling nut $1
P2319 3 AN coupling nut sleeve $1
P2322 3 AN x .125" NPT 90º adapter ... $5
P2323 3 AN x .125" NPT 45º adapter ... $8
P2332 3 AN bulkhead union $5
P2333 3 AN bulkhead tee on branch $15
P2334 3 AN bulkhead tee on run $15



P2335 Nut for 3 AN bulkhead fitting $1
P2336 3 AN x .125" NPT tee on run $13
P2337 3 AN bulkhead 90º elbow $15
P2339 Weld-on bracket for bulkhead fitting- For round tubing $3
P2356 3 AN x 1/2-20 adapter for Strange B3360 / B3359 ..... $9
P2357 3 AN x 9/16-20 master cylinder adapter $9

BRAKES

BRAKE LINE & REAR BRAKE KITS

P2338 3/16" steel brake line- 25 ft roll ... $31

P2340 16" braided stainless flex line with 3 AN straight / 90º ends ... $18

P2341 18" braided stainless flex line with 3 AN straight ends $21

P2342 20" braided stainless flex line with 3 AN straight ends $21

P2343 22" braided stainless flex line with 3 AN straight ends $21

P2344 24" braided stainless flex line with 3 AN straight ends $21

P2382 Dragster 3 AN fitting & hose kit for plumbing from calipers to master cylinder- Hard line not included $92

P2383 Front door car 3 AN fitting & hose kit for plumbing from calipers to line lock- Hard line not included $88

P2384 Rear door car 3 AN fitting & hose kit for plumbing from calipers to master cylinder- Hard line not included ... $83

STREET AND STREET/TRACK BRAKE KITS

Brake components designed for Street / Track vehicles must be able to endure the elevated heat conditions that exist under constant use. Drum brakes are fine for many street cars, but do not offer sufficient heat dissipation for track use. In a drum brake assembly, the braking surface, shoes, and wheel cylinder are all enclosed limiting heat dissipation. A disc system has everything exposed to the surrounding air providing a more efficient braking system. When changing brakes, it is important to look at the master cylinder, pedal assembly, proportioning valve, and brake lines. What has worked well with the OEM brakes, may now be completely wrong for the new brake system.

WILWOOD REAR DISC BRAKE KITS

The Wilwood rear disc brake kits are an excellent value and ideal for street and street/track vehicles. These kits include rotors, calipers, internal parking brakes, mounting brackets, and attaching hardware. The rotors are for 5 lug wheels, and have 4 1/2", 4 3/4", and 5" bolt circles for use with 1/2" wheel studs. Rotors can have one bolt pattern modified for 5/8" studs for an additional $15. Caliper mounting brackets fit the Late Big Ford housing end (Strange H1137). These kits are designed for a 2.50" brake offset ("F" dimension), 3.060" brake register ("A" dimension), axle flange OD of 6.61" or less ("D" dimension), and require a 1.00" access hole on a 4.50" BC. The 11" Low Profile kit will fit some 14" wheels (minimum inside diameter of 13.14") and all 15" or larger. The 12.190" will fit some 15" wheels (minimum inside diameter of 14.2") and larger. The brake hoses and parking cables are not included.

B2708WC Wilwood 12.19" brake kit with parking brake for Late Big Ford ends - H1137
A=3.060" - F=2.500" - 4 1/2" & 4 3/4" for 1/2" studs ... $750

B2707WC * Wilwood 12.19" brake kit with parking brake for Late Big Ford ends - H1137
A=3.060" - F=2.500" - 4 1/2" & 4 3/4" for 1/2" studs ... $750

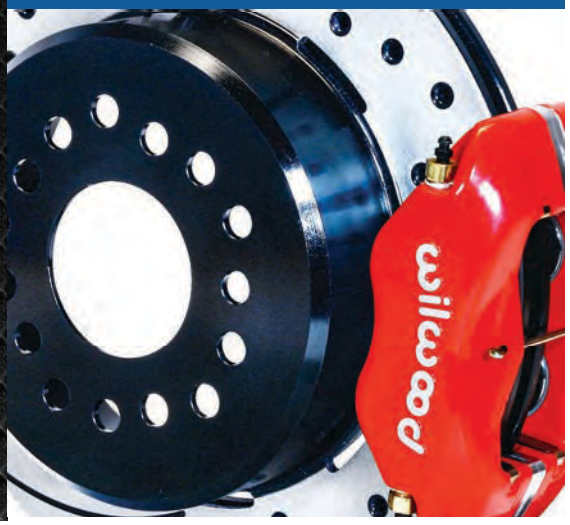
B2709WC Wilwood 11" Low Profile brake kit with parking brake for Late Big Ford ends - H1137
A=3.060" - F=2.500" - 4 1/2" & 4 3/4" for 1/2" studs ... $599

B2710WC * Wilwood 11" Low Profile brake kit with parking brake for Late Big Ford ends - H1137
A=3.060" - F=2.500" - 4 1/2" & 4 3/4" for 1/2" studs ... $599

* For staggered rear shocks - One caliper mounts forward and one rearward

All kits supplied with black calipers - Other colors available at an additional charge

Rotors can be drilled for 5/8" studs in one bolt circle for $15 pair



DRUM BRAKE KITS

Both 11" drum brake kits fit a brake register size of 2.780" ("A" dimension). Drums are drilled to accept 1/2" wheel studs and have 5 lug 4 1/2 & 4 3/4" bolt circles. They can be drilled for an additional bolt circle or machined to accept 5/8" studs for an additional $15[00]. The B1606 kit fits the Late Big Ford housing end, Strange H1137, with a brake offset of 2.50" ("F" dimension). The B1608 fits the Early Big Ford housing end, Strange H1135, with a brake offset of 2.332" ("F" dimension). The brake hoses and parking cables are not included.

B1606 Drum brake kit for Late Big Ford ends - H1137
A=2.780" - F=2.500" - 4 1/2" & 4 3/4" for 1/2" studs $475

B1608 Drum brake kit for Early Big Ford ends - H1135
A=2.780" - F=2.332" - 4 1/2" & 4 3/4" for 1/2" studs $575

B1600D Drill B1606 or B1608 for different bolt circle or stud size ... $15

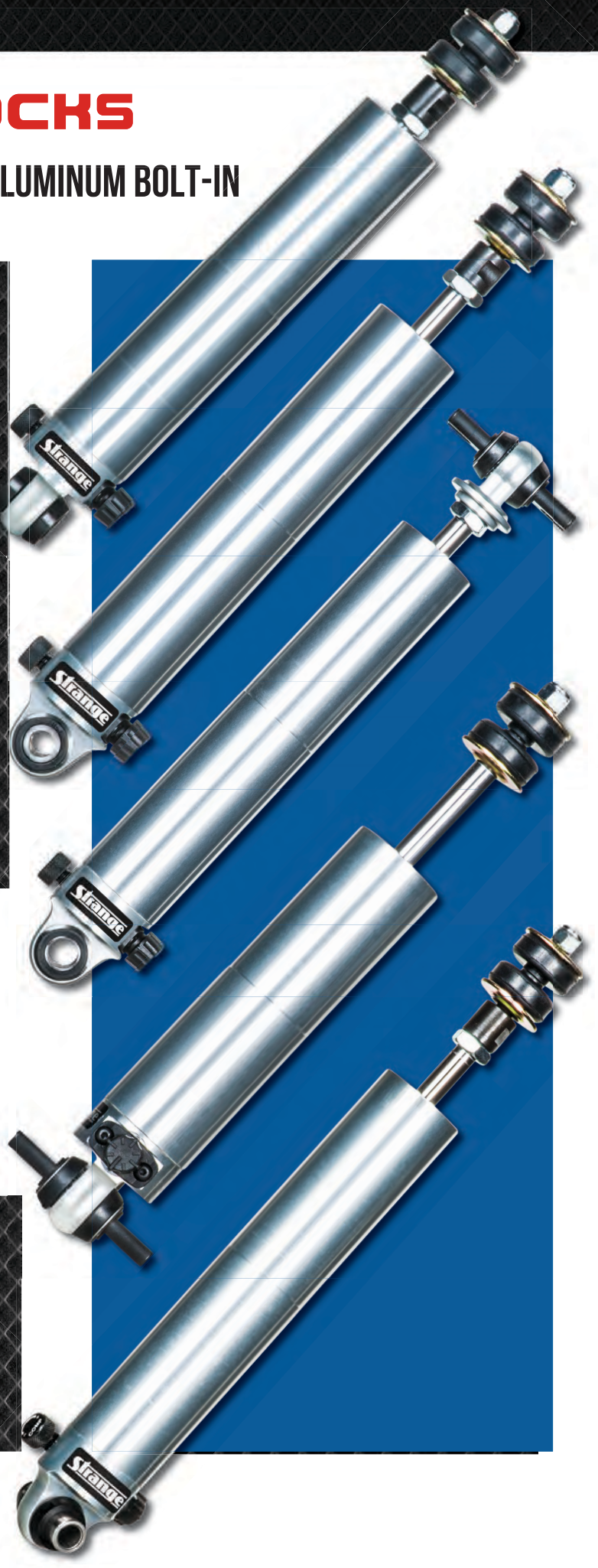
SHOCKS

STREET/TRACK ALUMINUM BOLT-IN

STREET / TRACK ALUMINUM BOLT-IN SHOCKS

Strange aluminum bolt-in shocks were developed with the help of several Sportsman racers, street / track competitors, and muscle car enthusiasts. This collaboration lead to the creation of a shock that is very responsive, consistent, and can be easily tailored to various conditions. The Strange shock body and eyelets are fully machined from high-grade aluminum, carefully assembled, and fully inspected. In-house dynamometer testing enables us to completely analyze shocks at all shaft speeds. This allows us to continue our valve development and stay ahead of the performance shock industry. Although Strange shocks offer a wide range of adjustment, re-valving is available to suit your specific requirements.

- Lightweight Aluminum Bolt-In Shocks
- Easily Accessible External Adjustment
- Extension Tuning Knob - Single & Double Adjustable
- Compression Tuning Knob - Double Adjustable
- Billet Steel Cross Bars & Polyurethane Bushings
- Wide Range of Adjustments are Ideal for Street & Track



STRANGE ALUMINUM BOLT-IN SINGLE ADJUSTABLE

Shocks give the customer ability to control the dampening effect of the shocks extension resistance. Whether you are adjusting the ride of your street machine, handling of a Pro Touring, or tuning a drag race vehicle, Strange shocks are a valuable tool to alter the response of your suspension to various conditions you may encounter. Shock extension (rebound) is easily adjusted by turning a conveniently located external knob. The external knob offers 10precise settings and allows for a wide range of adjustment.

STRANGE ALUMINUM BOLT-IN DOUBLE ADJUSTABLE:

Shocks are offered to those seeking the ultimate in suspension tuning. The double adjustable shock offers all the benefits of the single adjustable shock, but also incorporates an additional knob for accurately adjusting compression (bump). The ability to independently adjust both extension and compression allows the chassis tuner complete dampening control of the vehicles suspension.

SHOCKS

BOLT-IN ALUMINUM APPLICATIONS

Single Adjustable.... $150 each Unless Stated Otherwise Double Adjustable... $250 each

		Front		Rear		
		Single	Double	Single	Double	
FORD						
Crown Victoria	1983-91	S5263*	S5063*	NA	NA	
Galaxy 500, LTD	1971-82	S5263*	S5063*	NA	NA	
Ranchero	1972-79	S5263*	S5063*	NA	NA	
Mustang	1964-73	NA	S5045	NA	S5046	
	1979-04	NA	NA	S5248	S5048	(1)
	1985-93	NA	NA	S5244	S5044	
	1994-04	NA	NA	S5250	S5050	
	2005-14	NA	NA	S5242	S5042	
Thunderbird	1959-60	S5263*	S5063*	NA	NA	
	1967-79	S5263*	S5063*	S5262	S5062	
Torino	1972-76	S5263*	S5063*	S5262	S5062	

* Requires modification of stock lower control arm

(1) Rear coil-over shock with bracket (less spring) - Single $199 each / Double $322 each

(2) 89-91 CRX & Civic knuckles must be replaced with 92-01 OEM Civic knuckles - $294 each

Honda coil-over design requires 10" front & 12" rear springs - Available separately

SHOCKS/STRUTS

MUSTANG SINGLE ADJUSTABLE STEEL BOLT-IN SHOCKS / STRUTS

- 11 performance settings offer a wide range of adjustment
- Easily accessible external knob controls extension (rebound)
- Fits OEM applications
- Ideal for Street/Strip applications
- Steel construction
- Accepts most coil-over kits

79-93 MUSTANG S6000EM
Strange externally adjustable Rear Shock- each $70

87-93 MUSTANG S6001EM
Strange externally adjustable Front Strut- V8 Only- each $120

94-04 MUSTANG S6004LM
Strange externally adjustable Rear Shock- Not for IRS Cobra- each $70

94-04 MUSTANG S6005LM
Strange externally adjustable Front Strut- each $120

05-14 MUSTANG S6008LM
Strange externally adjustable Rear Shock- each $90

05-10 MUSTANG S6009LM
Strange externally adjustable Front Strut- each $140

11-14 MUSTANG S6011LM
Strange externally adjustable Front Strut- each $140

COIL-OVER KIT FOR 79-04 MUSTANG STRUT S6001
Includes aluminum body, spring seat, jam nut and bearings
Services one strut $71

Aftermarket caster / camber plates must be used with Strange Coil-Over kit
Requires 14" spring - Sold separately

See Spring Section for available 14" springs
- Hyperco $120 pair
- Knight $69 pair

MUSTANG DOUBLE ADJUSTABLE COIL-OVER STRUTS

- Easily accessible and independently adjustable extension and compression settings
- Lightweight construction with durable steel body
- Robust 22mm rod and large 1.375" piston diameter
- Coil-over body is designed to fit 2.5" ID springs
- Includes spring seat bearings for easy ride height adjustment
- Custom Valving available

STRANGE BOLT-IN DOUBLE ADJUSTABLE COIL-OVER: Competitive Drag Racing is won or lost by narrow margins making suspension tuning and consistency critical to winning races. Strange double externally adjustable coil-over struts easily permit independent control of both extension and compression, maximizing your car's performance. Besides reducing weight and allowing for adjustable ride height, the double adjustable Strange struts are a valuable tool to adapt to changing track conditions, control weight transfer, ET reduction, improve down track stability, and allow for consistent runs.

1987-93 (V8 ONLY) AND 94-04 MUSTANG* S2041

Double adjustable steel coil-over strut- For Drag Racing only- each $499

2005-14 MUSTANG** S2043

Double adjustable steel coil-over strut- For Drag Racing only- each $499

* For 1994-2004 applications that have been lowered 1"

** Body does not have sway bar mounts - Call before ordering if required

All struts above include spring seat bearings

14" springs are not included but are available separately

DRIVELINE

DRIVESHAFTS & YOKES

- All Shafts Feature Seamless Heat Treated Chrome-moly Tubing
- 3" or 3 1/2" OD Tubing
- Strange Forged Chrome-moly or Spicer HD Weld Ends
- Solid (non-crossdrilled) Spicer 1350 or 1480 U-Joints
- Total Run-Out Less Than .008"
- Electronically Balanced

STRANGE TUBULAR DRIVESHAFTS: Constructed from seamless heat treated chrome-moly tubing. The .083" wall thickness tubing is offered in both 3" OD and 3 1/2" OD to suit various applications. Custom designed fixtures ensure the 1350 or 1480 series weld-ends are properly phased to eliminate driveline vibrations. The U1699 driveshaft is MIG welded and utilizes Spicer HD 1350 series weld ends and solid (non-crossdrilled) u-joints. All other shafts are TIG welded and feature Strange HD forged chrome-moly weld ends and Spicer HD solid u-joints. Every shaft is electronically balanced with a total run-out of less than .008". Strange offers a complete line of transmission yokes, rear end yokes, and u-bolt kits to complete your custom driveshaft.

3" OR 3 1/2" DRIVESHAFT: Determined by driveshaft length and peak RPM. Critical speed is the point in which the driveshaft will begin to distort, vibrate, and eventually fail. Once measurements have been taken, consult a Strange Sales Associate to discuss the proper driveshaft diameter to order.

MEASUREMENTS: Should be taken on level ground, full weight on all four tires, vehicle at ride height, and pinion angle set. If the rear yoke is smaller than a 1350 series, it may be the time to replace it before proceeding. The driveline is only as strong as the weakest link and a new yoke will change your measurement.

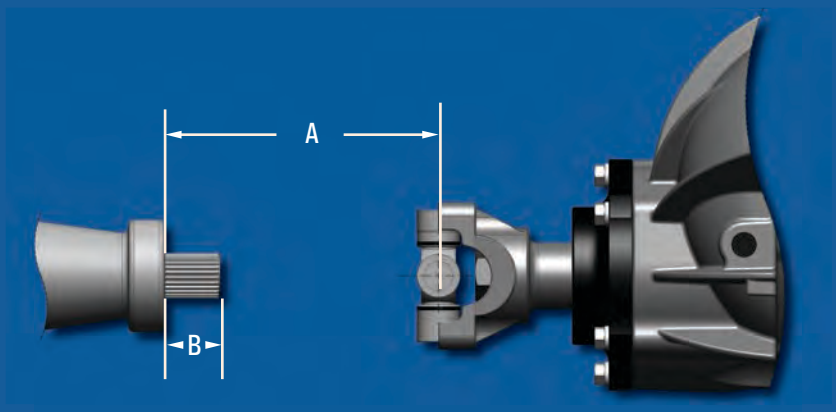
DRIVESHAFT INCLUDING TRANSMISSION YOKE: If you have a 1350 series yoke on the rear, only the "A" and "B" measurements are required. If you do not, also supply the "D" and "E" of the rear u-joint.* (See diagram on next page)

DRIVESHAFT ONLY - NO TRANSMISSION YOKE: Push the transmission yoke all the way in until it bottoms, pull it out 7/8" and measure center to center. This is the "C" dimension. If you are not using all 1350 series yokes, supply the "D" and "E" from any that are not and note which end they belong.* Your transmission yoke will need to be sent-in to properly balance the driveshaft. (See diagram on next page)

* This situation will require use of a conversion u-joint.
These are crossdrilled which will reduce overall driveline strength.


USA STRANGE


C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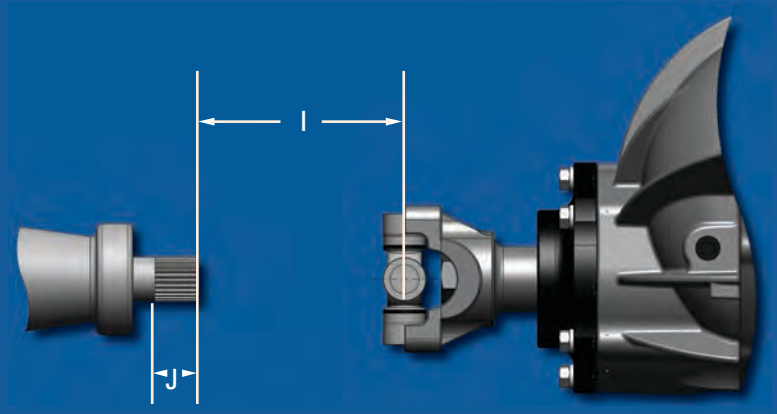
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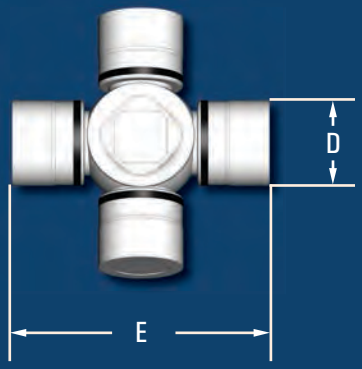

D
E


F

DRIVELINE

DRIVESHAFTS & YOKES

DRIVESHAFTS

U1699	3" seamless chrome-moly driveshaft / Spicer HD 1350 weld ends / Spicer HD 1350 non-crossdrilled u-joints	$250
U1702*	3" seamless chrome-moly driveshaft / Strange HD chrome-moly 1350 weld ends / Spicer HD 1350 non-crossdrilled u-joints	$335
U1704*	3 1/2" seamless chrome-moly driveshaft / Strange chrome-moly 1350 weld ends / Spicer HD 1350 non-crossdrilled u-joints	$435
U1706*	3 1/2" seamless chrome-moly driveshaft / Strange chrome-moly 1480 weld ends / Spicer HD 1480 non-crossdrilled u-joints	$565

* Available with SFI certification sticker for an additional $15

DRIVESHAFT COMPONENTS

U1670	Spicer HD 1350 series weld yoke for 3" .083" wall tubing	$23
U1672	Strange forged chrome-moly 1350 series weld yoke for 3" .083" wall tubing	$57
U1673	Strange forged chrome-moly 1350 series weld yoke for 3 1/2" .083" wall tubing	$65
U1674	Strange forged chrome-moly 1480 series weld yoke for 3 1/2" .083" wall tubing	$153
U1675	Spicer 1330 series weld yoke for 3" .083" wall tubing	$23
U1676	Spicer 1310 series weld yoke for 3" .083" wall tubing	$23
U1700T	3" x .083" wall seamless chrome-moly tubing- 5 ft piece	$83
U1703T	3 1/2" x .083" wall seamless chrome-moly tubing- 5 ft piece	$116
U1641	Spicer 1350 series u-joint- non-crossdrilled- D=1.187" / E=3.625"	$29
U1639	Spicer 1480 series u-joint- non-crossdrilled- D=1.375" / E=4.188"	$49
U1642	1330 series crossdrilled u-joint- D=1.062" / E=3.625"	$19
U1643	1310 series crossdrilled u-joint- D=1.062" / E=3.218"	$19
U1645	P55 55 675- D=1.125 / F=2.645" to 1350 crossdrilled conversion u-joint	$32
U1646	1310 to 1350 crossdrilled conversion u-joint	$32
U1647	1330- D=1.062" / E=3.625" to 1350 crossdrilled conversion u-joint	$32
U1648	1330- D=1.125" / E=3.625" to 1350 crossdrilled conversion u-joint	$32
U1610	U-bolts for 1350 series yoke- pair	$12
U1610HD	Billet cap kit for Strange 1350 series yokes- pair	$85
U1611	U-bolts for 1480 series yoke- pair	$25
U1611HD	Billet cap kit for Strange 1480 series yokes- pair	$100


U1670


U1673

TRANSMISSION YOKES

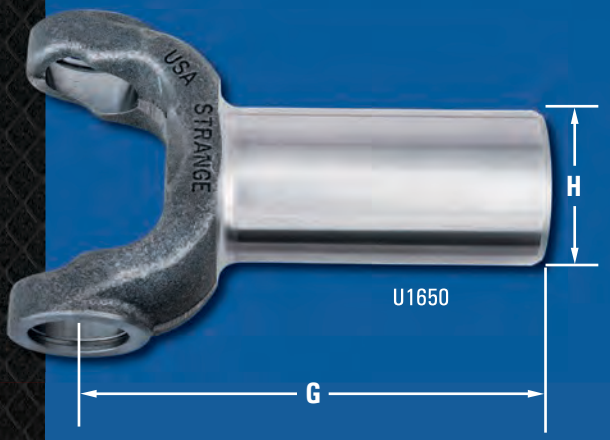
U1658	Ford C4, T5, Tremec 3550, & AOD 28 spline / 1350 series / Strange HD / G=5.81" / H=1.498"	$80
U1668	Ford C4, T5, Tremec 3550, & AOD 28 spline / 1350 series / Strange chrome-moly / G=5.81" / H=1.498"	$179
U1659	Ford C6, T45, Top Loader, & FMX 31 spline / 1350 series / Strange HD / G=6.06" / H=1.684"	$80
U1669	Ford C6, T45, Top Loader, & FMX 31 spline / 1350 series / Strange chrome-moly / G=6.06" / H=1.684"	$179
U1661	GM Powerglide, TH350, T56, 4L60, 4L60E, Muncie, & 1st design Super T-10 27 spline / 1310 series / Spicer / G=5.50" / H=1.500"	$57
U1662	GM Powerglide, TH350, T56, 4L60, 4L60E, Muncie, & 1st design Super T-10 27 spline / 1350 series / Strange HD / G=5.50" / H=1.500"	$80


U1658


U1668

TRANSMISSION YOKES

U1662FS	GM F-body 6 speed 27 spline / 1350 series / Strange HD / G=5.50" / H=1.503"	$80
U1667	GM Powerglide, TH350, T56, 4L60, 4L60E, Muncie, & 1st design Super T-10 27 spline / 1350 series / Strange chrome-moly / G=5.50" / H=1.500"	$179
U1667F	GM F-body 6 speed 27n spline / 1350 series / Strange chrome-moly / G=5.50" / H=1.500"	$179
U1667N	U1667 modified to use with roller bearing extension housing 27 spline / 1350 series / Strange chrome-moly / G=5.50" / H=1.499"	$196
U1677	Same specifications as U1667 - Features removable chrome-moly caps	$189
U1677N	U1677 modified to use with roller bearing extension housing 27 spline / 1350 series / Strange chrome-moly / G=5.50" / H=1.499"	$204
U1650	GM TH400, 4L80E, & 2nd design Super T-10 32 spline / 1350 series / Spicer HD / G=5.50" / H=1.885"	$80
U1664	GM TH400, 4L80E, & 2nd design Super T-10 32 spline / 1350 series / Strange chrome-moly / G=5.50" / H=1.885"	$179
U1664N	U1664 modified to use with roller bearing extension housing 32 spline / 1350 series / Strange chrome-moly / G=5.50" / H=1.888"	$196
U1684TH	GM TH400 for roller bearing extension housing only 32 spline / 1480 series / Strange chrome-moly / G=5.50" / H=1.888"	$295
U1684	G-Force & Liberty 32 spline / 1480 series / Strange chrome-moly / G=5.50" / H=1.888"	$295
U1651	Lenco 16 spline / 1350 series / Spicer HD / G=4.63" / H=1.812"	$105
U1665	Lenco 16 spline / 1350 series / Strange chrome-moly / G=4.00" / H=1.900"	$198
U1663	Lenco 32 spline / 1350 series / Strange chrome-moly / G=4.00" / H=1.812"	$182
U1683	Lenco 32 spline / 1480 series / Strange chrome-moly / G=4.00" / H=1.802"	$295
U1655	Mopar, Doug Nash, & Liberty 30 spline / 1350 series / Strange HD / G=6.062" / H=1.680"	$80
U1666	Mopar, Doug Nash, & Liberty 30 spline / 1350 series / Strange chrome-moly / G=6.06" / H=1.6795"	$179



U1650

U1677

U1664

U1663

DRIVELINE

REAR END YOKES

FORD 9" / FORD 8.8"

U1603 Ford 9" / 28 spline / 1350 series
Strange chrome-moly / 2.80 lbs / G=4.063" / H=1.812" $125

U1603P U1603 polished and chrome plated $195

U1603B Ford 9" / 28 spline / 1350 series
Strange billet chrome-moly / 2.50 lbs / G=4.063" / H=1.812" $280

U1604 Ford 9" / 35 spline / 1350 series
Strange chrome-moly / 2.86 lbs / G=4.063" / H=2.125" $125

U1604P U1604 polished and chrome plated $195

U1604B Ford 9" / 35 spline / 1350 series
Strange billet chrome-moly / 2.60 lbs / G=4.063" / H=2.125" $280

U1633 Ford 9" / 28 spline / 1350 series
Strange aluminum / 1.00 lbs / G=3.875" / H=1.804" $250

U1634 Ford 9" / 35 spline / 1350 series
Strange aluminum / 1.00 lbs / G=3.875" / H=2.113" $250

U2203 Ford 9" / 28 spline / 1350 series / with dust shield
Strange HD / G=4.060" / H=1.812" $90

U2203HDA Ford 9" / 28 spline / 1350 series / with dust shield / for HD Pro support
Strange HD / G=4.060" / H=1.812" $90

U2304 Ford 9" / 35 spline / 1480 series
Strange billet / 2.86 lbs / G=4.062" / H=2.125" $280

U1596 Ford 8.8" / 30 spline / 1350 series
Strange chrome-moly / G=3.150" / H=1.812" $142

U1630 Ford 8.8" / 30 spline / 1350 series
Strange HD / G=3.150" / H=1.812" $90

U1603

U1603B

U1603P


U2203


U1630

SENSOR COLLARS / U-BOLTS / CAP KITS

U1613	One magnet pick-up collar for U1603 / U1633	$48
U1613-2	Two magnet pick-up collar for U1603 / U1633	$52
U1613-4	Four magnet pick-up collar for U1603 / U1633	$60
U1613-8	Eight magnet pick-up collar for U1603 / U1633	$129
U1614	One magnet pick-up collar for U1604 / U1634 / U2304	$48
U1614-2	Two magnet pick-up collar for U1604 / U1634 / U2304	$52
U1614-4	Four magnet pick-up collar for U1604 / U1634 / U2304	$60
U1614-8	Eight magnet pick-up collar for U1604 / U1634 / U2304	$129
U1617 *	One magnet pick-up collar for U1594, U1596, U1598, U1601, & U1606	$48
U1617-2 *	Two magnet pick-up collar for U1594, U1596, U1598, U1601, & U1606	$52
U1617-4 *	Four magnet pick-up collar for U1594, U1596, U1598, U1601, & U1606	$60
U1617-8 *	Eight magnet pick-up collar for U1594, U1596, U1598, U1601, & U1606	$129
U1610	U-bolts for 1350 rear end yokes- pair	$12
U1610HD	Billet chrome-moly cap kit for 1350 yokes- Strange yokes only- pair	$85
U1611	U-bolts for 1480 rear end yokes- pair	$25
U1611HD	Billet chrome-moly cap kit for 1480 yokes- Strange yokes only- pair	$100

* Applications shown are for yokes produced after 1/1/15 - Call for more information

U1613-2

U1610

U1610HD

LABOR

AXLES

A1007***	Remove axle bearings- pair	$15
A1008*	Install axle bearings- pair	$10
A1008C*	Install clip eliminator kit- pair	$10
A1008SC*	Install studs and c-clip eliminator kit- pair	$15
A1008R*	Install retainer plates and axle bearings- pair	$10
A1008SRC*	Install studs, reluctor rings, and c-clip eliminator kit- pair	$20
A1009A**	Turn down brake register ("A") on customer's axle- pair	$30
A1009B**	Move back bearing shoulder ("B") on customer's axle- pair	$30
A1009F**	Turn down axle flange OD ("D") on customer's axle- pair	$30
A1009O**	Bore access hole in flange on customer's axle- pair	$30
A1065**	Drill and tap customer's Strange axles- pair One bolt pattern - Tapped 1/2x20 or 5/8x18	$80

* Labor only - Parts extra

** Axles must be sent-in bare without bearings or studs

*** Bearings and seals will be damaged and not be reusable
On axles sent with c-clip eliminator kits, halves may get damaged
Strange will not be responsible for any parts damaged during removal
Axles that have been tack welded are not serviceable

GEARS

D3590	Set-up new gear set in new Ford 9" & 12-bolt drop-out	$175
R5292	Set-up new gear set in new Chevy 12 bolt or Dana 60	$300
D3592	Gear change in Ford 9"- Labor only- Parts extra	$195
D3594*	Gear change in Dana 60, Ford 8.8, Chevy 10 & 12 bolt	$325
L7092*	Gear change in Strange Top-loader 9", 9.5", 10.50", & 12"	$450
D3596	Lighten new ring gear at time of purchase	$75
D3597	Lighten customer's ring gear	$100
D3598G	MicroBlue ring and pinion set	$220

* Labor only - Parts extra

BRAKES

B1260RB*	Rebuild Strange single piston caliper- each	$25
B2560RB*	Rebuild Strange two piston caliper- each	$25
B5000RB*	Rebuild '95 to present Strange four piston caliper- each	$40
B2799	Resurface Strange steel rotor- each	$20
B2800	Bake impurities out of carbon pads & rotors- set Send carbon material only - Remove rotors from aluminum hats	$50

HOUSING

H1130	Narrow housing using existing housing ends	$125
H1125	Modify housing ends for c-clip eliminator kit	$50
H1127	Check housing alignment	$50
H1123*	Install Strange billet aluminum main caps Chevy 10 or 12 bolt, Dana 60, or Ford 8.8	$90
H1128	Install back brace on customers 9" housing- Brace included	$185
H1129*	Install Fill & Drain plug on customers 9" housing	$40
H1130DF*	Install Strange Drag race floater spindles	$200
H1130SF*	Install Strange Pro Touring floater spindles	$150

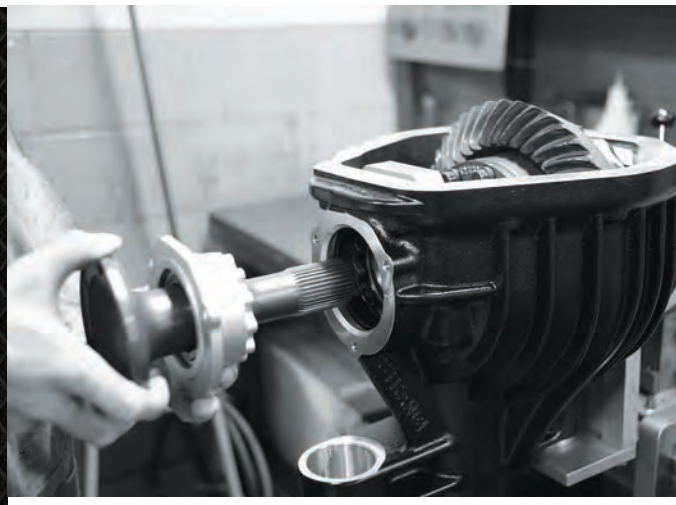
* Labor only - Parts extra

All rates are assuming parts are ready for work to be performed - Any labor required to prep parts will be an additional charge

SHOCKS

S5200NV*	Alter extension valving on New Strange single adjustable shocks- pair	N/C
S5000NV*	Alter one adjustment on New Strange double adjustable shocks- pair	N/C
	For both adjustments on New double adjustable shocks- pair	$25
S5200UV**	Alter extension valving on Used Strange single adjustable shocks- pair	$60
S5000UV**	Alter one adjustment for Used Strange double adjustable shocks- pair	$60
	For both adjustments on Used Strange double adjustable shocks- pair	$85
S5200UR**	Rebuild Strange single adjustable shocks- pair	$60
S5000UR**	Rebuild Strange double adjustable shocks- pair	$80

* At time of purchase
** Labor only- Parts extra- Send shocks in without springs



STRUTS

S3502AR**	Rebuild '87 to present Strange eye mount struts- pair	$100
S3510AR**	Rebuild '87 to present Strange stud mount struts- pair	$100
S3500NR*	Alter extension valving on New Strange struts- pair	N/C
S3500UR**	Alter extension on used Strange struts- pair	$70
S3500DC	Dyno check & graph Strange struts in "sent-in" setting- pair	$75
S3500DG	Dyno check & graph Strange struts per customer request- pair	$100

* At time of purchase
** Labor only- Parts extra- Send struts in without springs

SUSPENSION

S1415	Test spring rate- pair	$15
S1418	Remove and reinstall springs on shocks or struts- pair	$40
S3457WT*	Install weld tabs on S3453 spindles for Strange lightweight brake kit..	$70

* Labor only - Parts extra

All rates are assuming parts are ready for work to be performed - Any labor required to prep parts will be an additional charge

Strange Engineering

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