

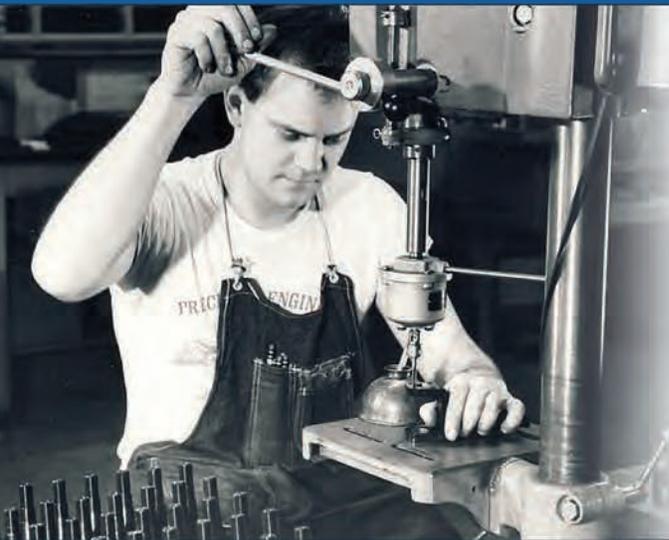
# Strange

HIGH PERFORMANCE COMPONENTS

**GET NOTICED. GET CONNECTED.  
GET STRANGE.**



**Strange**



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***



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# NEW FROM STRANGE

COMING IN MARCH OF 2018

## DRAGSTER MODULAR 4-LINK REAR END

### One Main Versatile Housing

#### Main Housing

- 206-T4 cast aluminum
- Black Enduraguard® finish
- Ribbed face plate for enhanced rigidity
- Large fill plug allows for gear inspection
- Lug design prevents 4-link rotation
- Integral upper wheelie bar mounts
- Accepts 9", 9 1/2", & 10" development ring gears

### 4-Link

- 16" or 17" centers
- Premium 100 XF steel plates
- Lug design prevents bolt hole elongation
- Billet aluminum bottom brace inhibits flex
- Alternate between centers with parts change

### Wheel to Wheel

- 32" or 33"
- Alternate WTW with parts change

## MULTIPLE CONFIGURATIONS



### FLANGED AXLE

- Utilizes high capacity ball bearings
- Shortened bearing overhang reduces axle stress

### TWO PIECE AXLE

- Low friction
- High misalignment bearings
- Retention system eliminates wedding ring

### FULL FLOATER

- Lightweight scalloped spindles
- Inside and outside spindle retention
- Solid preload spacers



## PRO MOD & MODULAR 4-LINK HOUSINGS

New 4-Link centers & widths. See pages 84-85

### LOW PROFILE BILLET CALIPER

- Provides maximum wheel clearance
  - Increased stiffness & piston retraction
- See pages 122 & 134 for complete product information



### QUICK RELEASE STEERING HUB

- For Sparco® six bolt steering wheels
- See page 118 for complete product information

### MUSTANG MANUAL BRAKE CONVERSION KIT

See page 142 for complete product information



### STRANGE DRAGSTER RACK & PINION

See page 119 for complete product information

### STRANGE DRAGSTER SPINDLES WITH TOW LOOPS

See page 118 for complete product information



### NEW BOLT IN TRUCK HOUSINGS

- 1967-1972 Chevy C10
  - 1973-1987 Chevy C10 / K10
  - 1973-1991 Blazer & Suburban 2WD & 4WD
- See page 79 for product information

# TERMS & CONDITIONS

## TERMS

Orders may be shipped Certified Check, VISA, MASTER CARD, AMERICAN EXPRESS, OR DISCOVER CARD.

## CLAIMS

Claims for damages in shipping, open or sealed, are to be made to freight forwarder.

## 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 and return freight must be prepaid.

## 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.

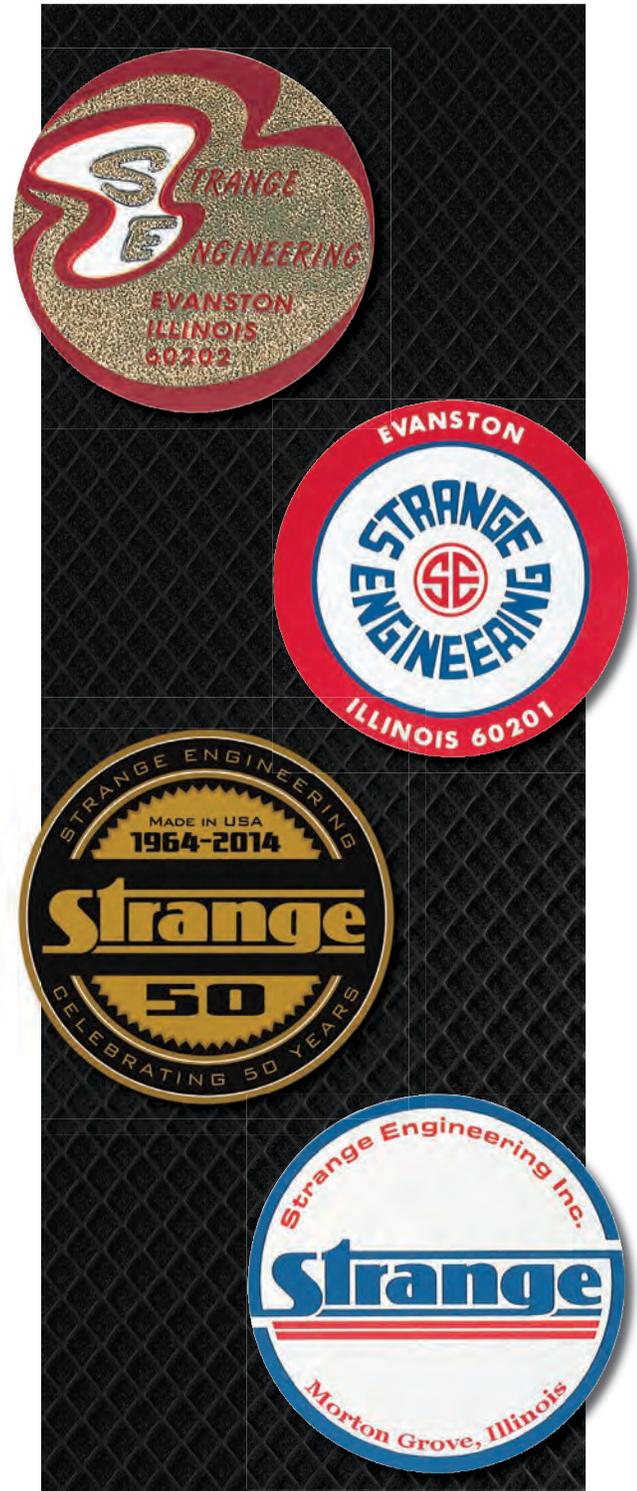
## SPOOL REPLACEMENT GUARANTEE

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 led 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

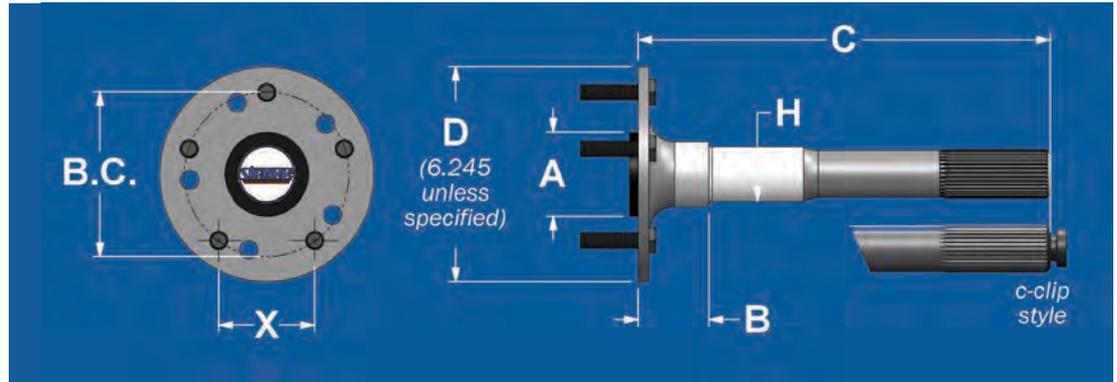
- A dimension - 2.780", 2.812", or 3.060"  
B dimension - 2.562", C-clip style axle (none)  
F dimension - 2.832"  
H dimension - 1.379", 1.400", 1.532", 1.563"  
1.626, or 1.773"  
Bolt circle - 5 on 4 3/4", 5 on 5", 5 on 5 1/2"

## Notes:

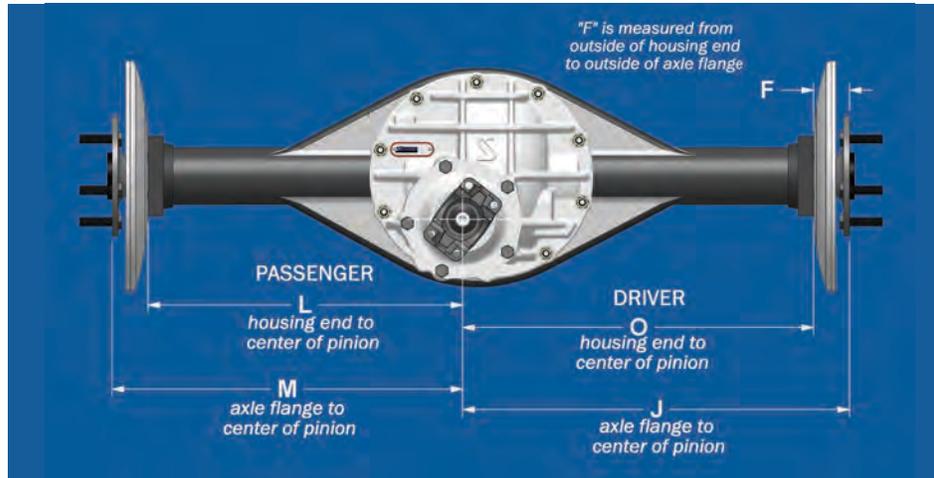
- Axle flange to axle flange is measured from the outside face of the axle flanges without any brakes installed.
- If you have listed only housing end to housing end or axle flange to axle flange, please specify pinion offset.
- The B dimension is from the outside face of axle flange to the bearing shoulder 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

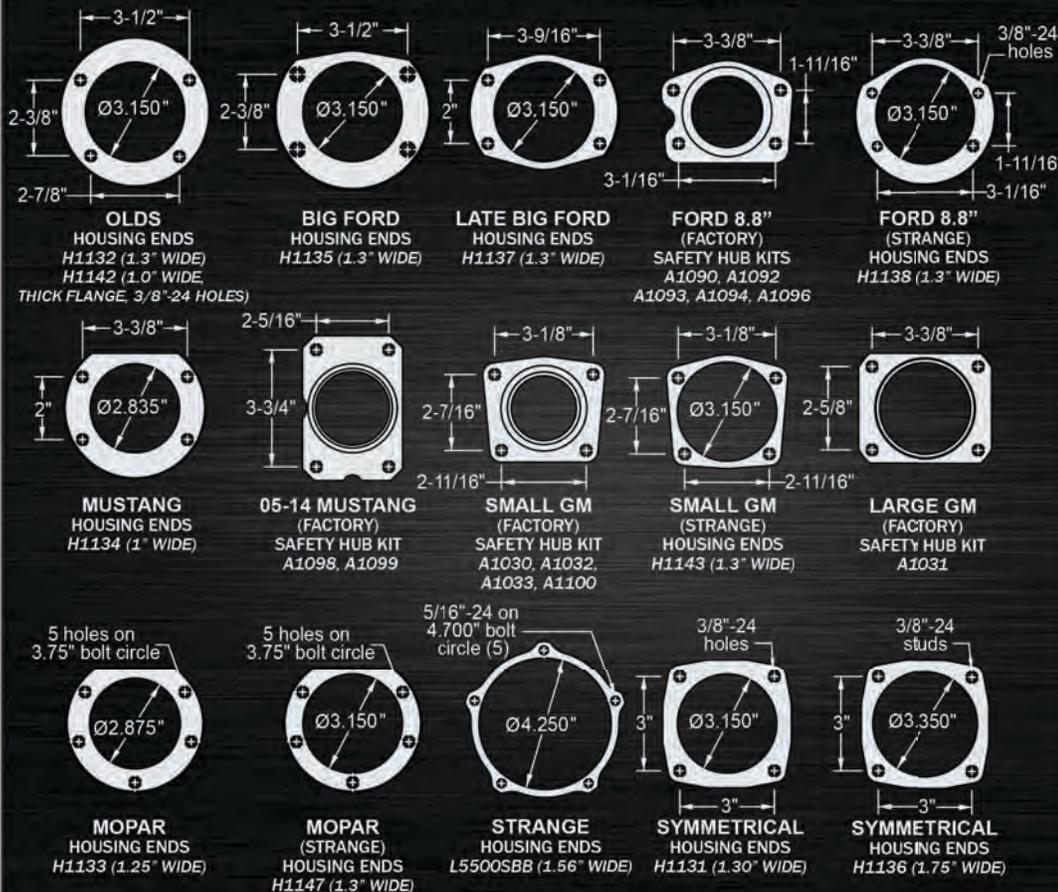
X	Bolt Circle
2.645"	4 1/2"
2.792"	4 3/4"
2.939"	5"
3.233"	5 1/2"



## HOUSING FORM



## HOUSING END IDENTIFICATION CHART



## 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 hobbled 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

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

**A1004** Additional charge for access hole or third bolt circle- pair





## 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 31 SPLINE C-CLIP AXLES

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

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

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

### GM 30 SPLINE C-CLIP AXLES

P3020 Strange 30 spline GM 12 bolt c-clip axles  
67-69 Camaro, 65-67 Chevelle, 68-72 Chevy II  
OEM drum applications- pair...

P3026 Strange 30 spline GM 12 bolt c-clip axles  
70-72 Camaro, 68-72 Chevelle  
OEM drum applications- pair...



## C-CLIP AXLE BEARINGS, SEALS & STUDS

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

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

A3130 GM press-in stud kit - 10 pieces  
Up to 81 car (7/16"-20) .472" knurl



# 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

**P310258** P3102 with upgrade to 5/8" stud kit

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

**P310458** P3104 with upgrade to 5/8" stud kit

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

**P330258** P3302 with upgrade to 5/8" stud kit

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

**P330458** P3304 with upgrade to 5/8" stud kit

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

**P350258** P3502 with upgrade to 5/8" stud kit

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

**P350458** P350458 with upgrade to 5/8" stud kit

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

**P3109F8658** With upgrade to A1027 5/8" stud kit

**P3509F86** With 35 spline Alloy axles

**P3509F8658** With 35 spline Alloy axles and A1027 5/8" stud kit

*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 brak

**P3109F9458** P3109F94 with upgrade to A1027 5/8" stud kit

**P3509F94** P3109F94 with Strange 35 spline Alloy axles

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

**OPAX01** Add optional Strange 1994-2004 ABS reluctor rings - pair

### 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

**P3109F0558** With upgrade to A1027 5/8" stud kit

**P3509F05** With Strange 35 spline Alloy axles

**P3509F0558** With Strange 35 spline Alloy axles and A1027 5/8" stud kit

**OPAX05** Add optional OEM 2005-2012 ABS reluctor rings - pair

*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

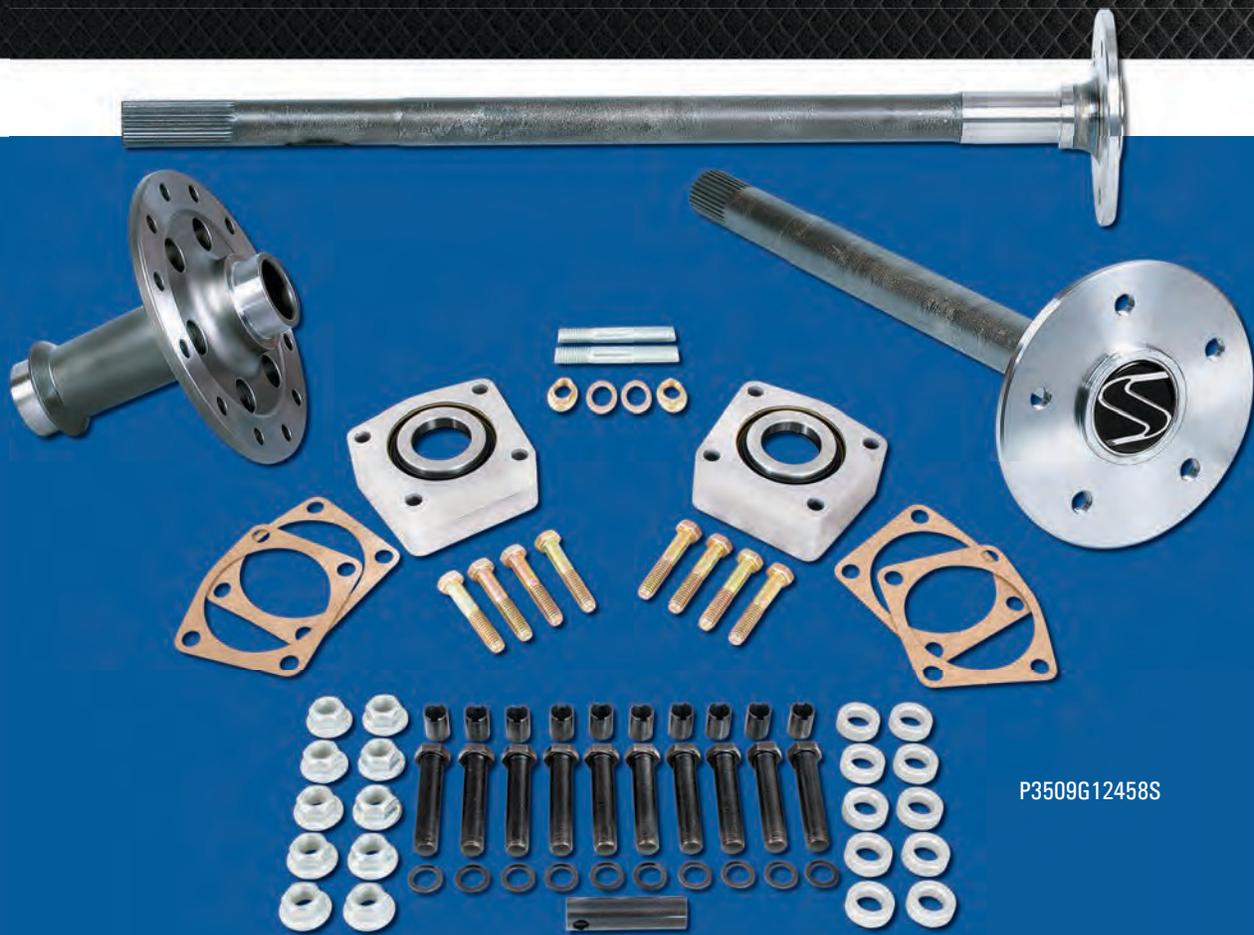
**P3502S** Strange 35 spline Alloy axles, axle bearings, 2" or 3" (1/2-20) stud kit, and Lightweight Pro Steel Spool

**P350258S** With upgrade to 5/8" stud kit

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

**P350458S** With upgrade to 5/8" stud kit





P3509G12458S

## 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

**P3509F8658S** With upgrade to A1027 5/8" stud kit

*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

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

**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

**P3509F0558S** With upgrade to A1027 5/8" stud kit  
**OPAX05** Add optional OEM 2005-2014 ABS reluctor rings - pair

*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
- Involute 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

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

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

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

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

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.



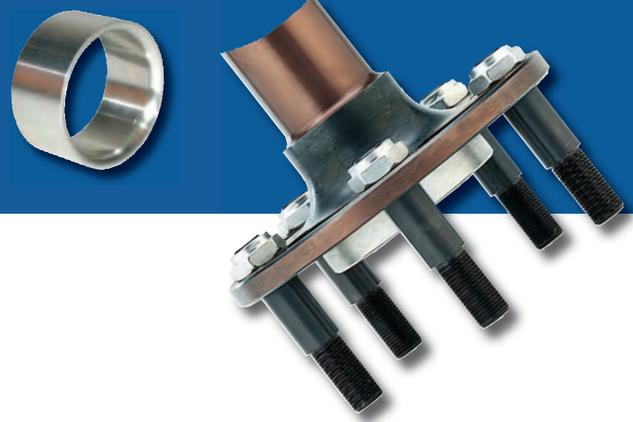
Strange Ultra Light flange for solid axle is pictured above



Strange Ultra Light axle for gun-drilled axle shown above



Strange 40 Spline Pro Race Axles



### 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.

**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

**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

**A1006** Ultra Lite flange - Pocket mill axle flange for solid or gun-drilled axles

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

# AXLES

## PRO RACE AXLE PACKAGES



Strange has combined quality axle components with money saving prices. As with all packages, Strange pro race axle packages are designed to allow for easy installation. Our packages save you shopping time, down time and money.

**A1100 c-clip eliminator kit** coupled with a thru-hardened Pro Race axle, that has been re-designed for circle track and hard-core street/strip use, offers GM 10 & 12 bolt rear end owners the best of both worlds.

Our specially designed A1100 c-clip eliminator kit employs giant Timken unit bearings, which survive severe side loads and constant use. Not to be confused with eliminator kits supplied with ball bearings that are for Drag Racing Only. The axle shaft is tapered to resist bending loads and the flange is machined with a generous radius for maximum side load strength.

### GM STREET / STRIP / OVAL TRACK AXLE PACKAGE WITH C-CLIP ELIMINATOR KIT

**P1011GOT** Special Design Pro Race Hy-Tuf axles for small GM housing ends - Chevy 8.20", 8.5" or 12 bolt car  
Choice of bolt circle, A1100 c-clip eliminator kit and 2" or 3" (1/2"-20) stud kit

**P1011GOT58** P1011GOT with upgrade to A1027 5/8" stud kit

### GM DRAG RACE AXLE PACKAGE WITH C-CLIP ELIMINATOR KIT

**P1011GDR** Pro Race Hy-Tuf axles for small or large GM housing ends - Chevy 8.20", 8.5" or 12 bolt car  
Choice of bolt circle, Drag Race Only c-clip eliminator kit, and 2" or 3" (1/2-20) stud kit

**P1011GDR58** P1011GDR with upgrade to A1027 5/8" stud kit

### 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

**P1011F8658** With upgrade to A1027 5/8" stud kit



## 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
- P1011F9458** With upgrade to A1027 5/8" stud kit
- OPAX01\*** Optional Strange ABS reluctor rings- pair
- 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
- P1011F0558** With upgrade to A1027 5/8" stud kit
- OPAX05** Optional OEM ABS reluctor rings- pair

\* Needs special A1094E reluctor rings for ABS applications

*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, GM, MOPAR AND MORE...

- 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
- P100758** P1007 with upgrade to 5/8" stud kit
- 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
- P100858** P1008 with upgrade to 5/8" stud kit
- 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
- A1006** Ultra Lite flange - Pocket mill axle flange for solid or gun-drilled axles- pair

# 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
- P1015** With upgrade to A1024 3.350" OD axle bearings
- 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
- P1017** With upgrade to A1024 3.350" OD axle bearings



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

OPPS01 Upgrade to HD spherical roller bearings

L5500SBB

C18104NBUC Pro Carbon brake Kit - 4 3/4" BC - for Strange 2 piece axles - caliper mounts not included

C18105NBUC Pro Carbon brake Kit - 5" BC - for Strange 2 piece axles - caliper mounts not included

B1711NBM Pro Steel brake kit - 4 3/4" & 5" BC - for Strange 2 piece axles - caliper mounts not included

# AXLES

## GM & FORD 8.8" PRO AXLE & SPOOL PACKAGES



### GM OVAL TRACK AXLE & SPOOL PACKAGE WITH C-CLIP ELIMINATOR KIT

**P2000GOT** Pro Race Hy-Tuf axles for Chevy 8.20", 8.50" or 12 bolt using Small GM housing ends & OEM drum brakes \* 30 or 33 spline axles, choice of bolt circle, A1100 c-clip eliminator kit for oval track & street / strip applications, choice of 2" or 3" (1/2-20) stud kit and Lightweight Pro Steel spool

**P2000GOT58** With upgrade to A1027 5/8" stud kit

**OPRA01** Upgrade to 35 spline axles and spool

### GM DRAG RACE AXLE & SPOOL PACKAGE WITH C-CLIP ELIMINATOR KIT

**P2000GDR** Pro Race Hy-Tuf axles for Chevy 8.20", 8.50" or 12 bolt using Small GM housing ends & OEM drum brakes \* 30 or 33 spline axles, choice of bolt circle, Dag Race Only c-clip eliminator kit with low friction ball bearing, choice of 2" or 3" (1/2-20) stud kit and Lightweight Pro Steel spool

**P2000GDR58** With upgrade to A1027 5/8" stud kit

**OPRA01** Upgrade to 35 spline axles and spool

## 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 \*

**P2000FM8658** With upgrade to A1027 5/8" stud kit

**OPRA01** Upgrade to 35 spline axles and spool

*\* 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)

**P2000FM9458** P2000FM94 with upgrade to A1027 5/8" stud kit

**OPRA01** Upgrade to 35 spline axles and spool

**OPAX01\*** Optional Strange ABS reluctor rings for 1994-2004 Mustang- pair

\* 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

**P2000FM0558** With upgrade to A1027 5/8" stud kit

**OPRA01** Upgrade to 35 spline axles and spool

**OPAX05** Optional OEM ABS reluctor rings for 2005-2014 Mustang- pair

*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*



P200FM94

# AXLES

## PRO RACE AXLE & SPOOL PACKAGES & AXLE ACCESSORIES



### 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 |
| P200558 | With upgrade to 5/8" stud kit  |
| 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                   |
| P200758 | With upgrade to 5/8" stud kit  |



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
- P2016      With upgrade to A1024 3.350" OD axle bearings
- 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)
- P2018      With upgrade to A1024 3.350" OD axle bearings



**OPTIONAL ULTRA LIGHT  
FLANGE AVAILABLE FOR ALL  
STRANGE AXLE PACKAGES  
A1006**

# AXLES

## PRO RACE AXLE & SPOOL PACKAGES & AXLE ACCESSORIES

### STRANGE STUD KITS

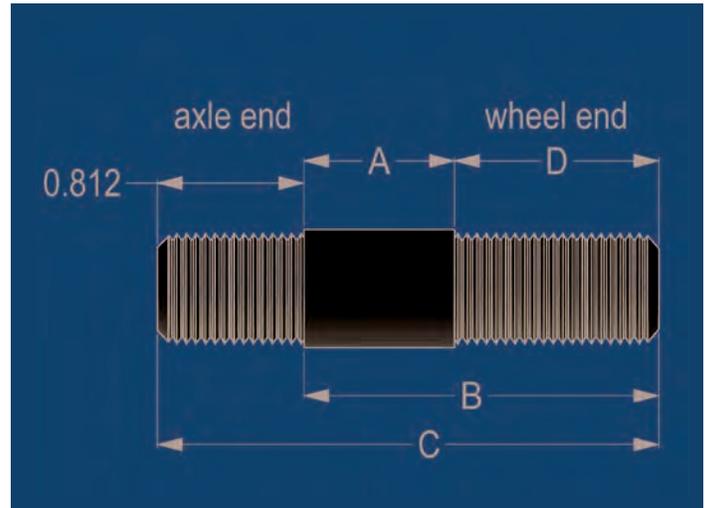
Strange offers the choice of two types of 5/8" stud kits.

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



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



## 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



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

## STRANGE CHROME-MOLY 5/8" STUD KITS



L7010NX  
Aluminum 5/8" lug nut  
With integral washer

- 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"

### ALL STRANGE 5/8" STUD KITS

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 *
A1093	Street / Strip c-clip eliminator kit for OEM c-clip axles 86-93 Mustang 8.8" using OEM drum brakes *
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
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
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
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
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
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
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
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
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
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

\* 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



## GM 10 & 12 BOLT C-CLIP ELIMINATOR KITS

**A1030** Drag Race Only c-clip eliminator kit for Strange axles @ 1.532" Chevy 8.2, 8.5, & 12 bolt car with Small GM housing ends using OEM drum brakes \*

**A1034** Drag Race Only c-clip eliminator kit for Strange axles @ 1.563" Chevy 8.2, 8.5, & 12 bolt car with Small GM housing ends Using OEM drum brakes \*

**A1031** Drag Race Only c-clip eliminator kit for Strange axles @ 1.532" Chevy 12 bolt with Large GM housing ends using OEM drum brakes \*

**A1100** Street/Strip/Oval c-clip eliminator kit for Strange axles @ 1.7735" Chevy 8.2, 8.5, & 12 bolt car with Small GM housing ends Using OEM drum brakes \*

**A1031Z** Drag Race Only c-clip eliminator kit for Strange axles @ 1.563" Chevy 12 bolt with Large GM housing ends using OEM drum brakes \*

\* Can use aftermarket disc brake kits designed for c-clip eliminator kits

**A1033** Street / Strip c-clip eliminator kit for OEM c-clip axles Chevy 8.2, 8.5, & 12 bolt car with Small GM housing ends using OEM drum brakes \*

## AXLE BEARINGS

**A1013** Timken tapered axle bearing, locking ring & outboard seal 1.562" bore for 3.150 ID housing

**A1019** Ball style axle bearing and locking ring 1.772" bore for 3.150" ID housing

**A1020** Ball style axle bearing and locking ring 1.531" bore for 3.150" ID housing

**A1021** Ball style axle bearing and locking ring 1.562" bore for 3.150" ID housing

**A1022** Mopar non-adjustable axle bearing, locking ring, spirolox, retainer plate - 1.562" bore for 2.875" housing

**A10220B** Mopar non-adjustable axle bearing, locking ring, fixed retainer plate - 1.562" bore for 2.875" housing

**A1023** Small Ford axle bearing, locking ring, and retainer plate 1.562" bore for 2.835" ID housing

**A1024** Ball style axle bearing, locking ring and o-ring 1.772" bore for 3.350" housing end

## RETAINER PLATES

**A1114** Small GM retainer plate for Strange H1143

**A1015** Oldsmobile retainer plate

**A1016** Early Big Ford retainer plate with 1/2" bolt holes

**A1018** Late big Ford retainer plate with 3/8" bolt holes

**A1023B** Small Ford retainer plate

**H1138B** Ford 8.8" retainer plate for Strange H1138 ends

**H1147B** Mopar retainer plate for Strange H1147 ends

# 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  
D3597

Lighten purchased new ring gear  
Lighten customer supplied new ring gear



## 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  
12.50 - 105 mph

12.00 - 108 mph  
11.50 - 116 mph

11.00 - 121 mph  
10.50 - 127 mph

10.00 - 132 mph  
9.50 - 139 mph

9.00 - 147 mph  
8.50 - 158 mph

8.00 - 165 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
- D3598B Pinion & side (bearings/races)
- D3598BT Pinion & side (bearings/races), and tail bearing



# GEARS

## US GEAR, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE CHRYSLER, DODGE & MOPAR

### DANA 60 STANDARD GEAR SETS

D3550	Spicer	3.54 ratio 3 Series
D3551	Spicer	3.73 ratio 3 Series
D3552	Spicer	4.10 ratio 3 Series
D3570	Richmond	4.10 ratio 3 Series
RS05897430H	Hoosier	4.30 ratio 3 Series

D3553	Spicer	4.56 ratio 5 Series
RSD60488	Richmond	4.88 ratio 5 Series
RSD60513	Richmond	5.13 ratio 5 Series
D3555	Richmond	5.38 ratio 5 Series

\* 3-series fits 4.10 & numerically lower carrier

\* 5-series fits 4.56 & numerically higher carrier

### DANA 60 DRAG RACE / PRO GEAR SETS (5-SERIES)

RP05997410US	US Gear	4.10 ratio
RP05997410	Motive	4.10 ratio
RPD60410	Richmond	4.10 ratio
RP05997430US	US Gear	4.30 ratio
RP05997456US	US Gear	4.56 ratio
RP05997456	Motive	4.56 ratio
RPD60456	Richmond	4.56 ratio
RP05997488US	US Gear	4.88 ratio
RP05997488	Motive	4.88 ratio

RPD60488	Richmond	4.88 ratio
RP05997514	Motive	5.14 ratio
RP05997538US	US Gear	5.38 ratio
RPD60538	Richmond	5.38 ratio
RP05997557US	US Gear	5.57 ratio
RP05997586US	US Gear	5.86 ratio
RP05997617US	US Gear	6.17 ratio
RPD60617	Richmond	6.17 ratio

### DANA 60 / STRANGE S60 INSTALLATION KITS

D3512	Strange S60 Master installation kit
D3513	OEM Dana 60 Master installation kit
D3525	Front pinion bearing
D3526	Front pinion race
D3527	Rear pinion bearing
D3528	Rear pinion race
D1592	Side bearings & races for Strange S60

D1580	Side bearings & races for OEM Dana 60
D3502A	Pinion seal
D3502	Pinion seal, pinion nut, & washer
D3504	Ring gear bolts
D3503	Cover gasket, pinion nut, & shim kit
D3508	Cover gasket
D3508F	Cover gasket- Fel-Pro High Performance



## MOPAR 8.75" (742 CASE) STANDARD GEAR SETS AND INSTALLATION KITS

- 10 bolt Drop-Out
- Ring gear = 8.75"
- Pinion shaft = 1.750" (straight pinion shaft)
- Pinion spline = 10
- 3/8"-24 LH bolt holes

Barracuda 64-68  
 Belvedere 57-68  
 B200, B250, W100 & W150 65-68  
 Chrysler 300 57-68  
 Challenger 68 only

Charger (Daytona) 66-68  
 Coronet 63-68  
 Dart, Swinger 66-68  
 Fury 57-68  
 Imperial, New Yorker 57-68

Monaco, Polara 63-68  
 Road Runner 68 only  
 Satellite 68 only  
 Super Bee 68 only  
 Valiant 60-68

RS03887373E  
 RS03887391E

Motive 3.73 ratio  
 Motive 3.91 ratio

RS03887430E  
 RS03887486E

Motive 4.30 ratio  
 Motive 4.86 ratio

R5261  
 R5261SP

Master installation kit for 742 case \*  
 Master installation kit for 742 case \*\*

R5260  
 R5258

Basic installation kit  
 Ring gear bolts \*\*\*

\* For OEM carrier      \*\* For Strange spool or Auburn carrier      \*\*\* Included in kits

## MOPAR 8.75" (489 CASE) STANDARD GEAR SETS AND INSTALLATION KITS

- 10 bolt Drop-Out
- Ring gear = 8.75"
- Pinion shaft = 1.875"
- Pinion spline = 29
- 3/8"-24 LH bolt holes

Barracuda 69-73  
 Belvedere 69-70  
 B200, B250, W100 & W150 69-73  
 Chrysler 300 69-73  
 Challenger 70-73

Charger (Daytona) 69-73  
 Dart, Swinger 69-73  
 Fury 69-73  
 Newport, New Yorker 69-73  
 Monaco, Polara 69-73

Road Runner 69-73  
 Satellite 69-73  
 Super Bee 69-70  
 Valiant 69-73

RS03887323LUS  
 RS03887355LUS  
 RS03887355L  
 RS03887373LUS  
 RS03887373L  
 RS03887391LUS  
 RS03887391L

US Gear 3.23 ratio  
 US Gear 3.55 ratio  
 Motive 3.55 ratio  
 US Gear 3.73 ratio  
 Motive 3.73 ratio  
 US Gear 3.91 ratio  
 Motive 3.91 ratio

RS03887410LUS  
 RS03887410L  
 RS03887430LUS  
 RS03887456LUS  
 RS03887456L  
 RS03887486LUS  
 RS03887513LUS

US Strange 4.10 ratio  
 Motive 4.10 ratio  
 US Gear 4.30 ratio  
 US Gear 4.56 ratio  
 Motive 4.56 ratio  
 US Gear 4.86 ratio  
 US Gear 5.13 ratio

R5266  
 R5265  
 R5258  
 D1584

Master installation kit for 489 case  
 Basic Kit  
 Ring gear bolts \*  
 Side bearings & races for 489 case

\* Included in kit



# GEARS

## US GEAR, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE FORD

### 9" FORD STANDARD GEAR SETS - 28 SPLINE PINION

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

### 9" FORD DRAG RACE PRO GEAR SETS

RP07990340US	US Gear	3.40 ratio *	RPF90486S	Richmond	4.86 ratio
RPF90340	Richmond	3.40 ratio *	RP07990500US	US Gear	5.00 ratio
RP07990350US	US Gear	3.50 ratio *	RPF90500	Richmond	5.00 ratio
RPF90350	Richmond	3.50 ratio *	RP07990514US	US Gear	5.14 ratio
RP07990360US	US Gear	3.60 ratio *	RP07990514	Motive	5.14 ratio
RPF90360	Richmond	3.60 ratio *	RPF90514	Richmond	5.14 ratio
RP07990370US	US Gear	3.70 ratio *	RP07990529US	US Gear	5.29 ratio
RP07990370	Motive	3.70 ratio *	RP07990529	Motive	5.29 ratio
RPF90370	Richmond	3.70 ratio *	RPF90529	Richmond	5.29 ratio
RP07990389US	US Gear	3.89 ratio *	RP07990543US	US Gear	5.43 ratio
RP07990389	Motive	3.89 ratio *	RP07990543	Motive	5.43 ratio
RPF90389	Richmond	3.89 ratio *	RPF90543	Richmond	5.43 ratio
RP07990411US	US Gear	4.11 ratio *	RP07990567US	US Gear	5.67 ratio
RP07990411	Motive	4.11 ratio *	RP07990567	Motive	5.67 ratio
RPF90411	Richmond	4.11 ratio *	RPF90567	Richmond	5.67 ratio
RP07990429US	US Gear	4.29 ratio *	RP07990583US	US Gear	5.83 ratio
RP07990429	Motive	4.29 ratio *	RP07990583	Motive	5.83 ratio
RPF90429	Richmond	4.29 ratio *	RPF90583	Richmond	5.83 ratio
RP07990457US	US Gear	4.57 ratio *	RP07990600US	US Gear	6.00 ratio
RP07990457	Motive	4.57 ratio *	RP07990600	Motive	6.00 ratio
RPF90457	Richmond	4.57 ratio *	RP07990620US	US Gear	6.20 ratio
RP07990471US	US Gear	4.71 ratio *	RP07990620	Motive	6.20 ratio
RPF90471	Richmond	4.71 ratio *	RP07990633US	US Gear	6.33 ratio
RP07990486US	US Gear	4.86 ratio *	RP07990650US	US Gear	6.50 ratio
RP07990486	Motive	4.86 ratio *	RP07990650	Motive	6.50 ratio
RPF90486	Richmond	4.86 ratio *	RPF90650	Richmond	6.50 ratio
RP07990486S	Motive	4.86 ratio			

\* 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
RP07995340	US Gear	3.40 ratio
RP07995350	US Gear	3.50 ratio
RP07995360	US Gear	3.60 ratio
RP07995370	US Gear	3.70 ratio
RP07995389	US Gear	3.89 ratio
RP07995389MOT	Motive	3.89 ratio
RP07995411	US Gear	4.11 ratio
RP07995411MOT	Motive	4.11 ratio

RPF95411	Richmond	4.11 ratio
RP07995429	US Gear	4.29 ratio
RP07995429MOT	Motive	4.29 ratio
RPF95429	Richmond	4.29 ratio
RP07995456MOT	Motive	4.56 ratio
RP07995457	US Gear	4.57 ratio
RP07995486	US Gear	4.86 ratio
RP07995500	US Gear	5.00 ratio
RP07995514	US Gear	5.14 ratio

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
RP07910411	US Gear	4.11 ratio
RP07910411MOT	Motive	4.11 ratio
RP07910429	US Gear	4.29 ratio
RP07910429MOT	Motive	4.29 ratio
RP07910457	US Gear	4.57 ratio
RP07910457MOT	Motive	4.57 ratio
RP07910471	US Gear	4.71 ratio
RP07910471MOT	Motive	4.71 ratio
RP07910500	US Gear	5.00 ratio
RP07910500MOT	Motive	5.00 ratio
RP07910514	US Gear	5.14 ratio

RP07910514MOT	Motive	5.14 ratio
RP07910529MOT	Motive	5.29 ratio
RP07910533MOT	Motive	5.33 ratio
RP07910537MOT	Motive	5.37 ratio
RP07910543	US Gear	5.43 ratio
RP07910543MOT	Motive	5.43 ratio
RP07910567	US Gear	5.67 ratio
RP07910583	US Gear	5.83 ratio
RP07910620	US Gear	6.20 ratio

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
R7111	10.5"	4.11 ratio
R7422	12.25"	3.20 ratio

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  
R5242 Basic installation kit for open carriers

Basic kits include center section gasket

### ULTRA CASE GEAR CHANGE KITS

R5237UC For tapered bearing and 28 spline pinion \*  
R5237UCR For tapered bearing and 28 spline pinion  
R5237UCB For ball bearing and 28 spline pinion \*  
R5237UCBR For ball bearing and 28 spline pinion

R5238UC For tapered bearing and 35 spline pinion \*  
R5238UCR For tapered bearing and 35 spline pinion  
R5238UCB For ball bearing and 35 spline pinion \*  
R5238UCBR For ball bearing and 35 spline pinion

\* 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 \*  
R5237WR N1922 or N2322 support and 28 spline pinion

R5238 N1922 or N2322 support and 35 spline pinion \*  
R5238WR N1922 or N2322 support and 35 spline pinion

R5236 N1917 or Ford Daytona support \*  
R5236WR N1917 or Ford Daytona support

R5235 Stock Ford (non-Daytona) support \*  
R5235WR Stock Ford (non-Daytona) support

R5237B N1920 or N2323 support and 28 spline pinion\*  
R5237BR N1920 or N2323 support and 28 spline pinion

R5237B N1921 or N2323 support and 35 spline pinion\*  
R5237B N1921 or N2323 support and 35 spline pinion

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

R5237WR



## 9" FORD INSTALLATION COMPONENTS

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

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
N1960L	Low drag pinion seal for 28 spline pinion
N1961	Pinion seal for 35 spline pinion
N1961L	Low drag pinion seal for 35 spline pinion
N1922A	Pinion nut for 28 spline pinion
N1922B	Pinion nut for 35 spline pinion
N1930	Front pinion bearing for N1923 & Ultra case (28 spline pinion)
N1936	Front pinion bearing for N1924
N1925H	Front pinion bearing for N1916
N1931	Front pinion race for N1922 & Ultra case
N1914C	Front pinion race for N1917 & N1914
N1938	Rear pinion bearing for N1923 & N1924
N1925J	Rear pinion bearing for N1917 & N1914
N2001F	Rear pinion bearing for Ultra case
N1920B	Rear pinion bearing for 28 spline ball bearing supports
N1920BM	Rear pinion bearing for 35 spline ball bearing supports
N1939	Rear pinion race for N1922
N1914B	Rear pinion race for N1917 & N1914
N2001E	Rear pinion race for Ultra case

N1926A	Pinion bearing adapter sleeve from N1923
N1926D	Torrington washer from N1923
N1920G	Pinion bearing adapter sleeve from N2323S
N1920D	220" thick ball bearing spacer (35 spline pinion)
N1919	Two piece preload assembly from N1921, N1923 & N1924
N1920HK	Two piece preload assembly from N1920
N1925	Two piece preload assembly from N1916
N1924A	Solid preload spacer from N1924
N1920F	Solid preload spacer to replace N1920HK
N2001C	Solid preload spacer for Ultra case using tapered bearings
N1940	Tail bearing
N1941	Tail bearing retainer
N1943	Tail bearing for HD Pro & Ultra case
N1943R	T/B retainer plate w/screws for HD Pro & Ultra case
N1962	Pinion depth shim kit
N1962UC	Pinion depth shim kit for Ultra case
N1958A	Pinion support o-ring
N1950B	Pinion support o-ring for Ultra case
N1965	Ring gear bolt kit (7/16"-20 x .875")
D1565RK*	Ring gear bolt kit
N1967	Ring gear bolt kit (7/16"-20 x .1.00")
N1968	Ring gear bolt kit (7/16"-20 x 1.250")
N1964	Ring gear bolt kit (1/2"-20 x .875")
N1973	ARP bolt kit (7/16" for D2004 spool)
N1975	ARP bolt kit (7/16" for Strange steel spools)
N1976	ARP bolt kit (1/2" for Strange steel spools)
N1910H	Load bolt assembly for Ultra case
N1950HK	Pinion support spacer kit for Ultra case using 10" gear

\* 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
RS07888331	Motive	3.31 ratio
RS07888355US	US Gear	3.55 ratio
RS07888355	Motive	3.55 ratio
RS07888373US	US Gear	3.73 ratio
RS07888373	Motive	3.73 ratio
RSF888390US	US Gear	3.90 ratio
RSF888390	Motive	3.90 ratio
RS07888410US	US Gear	4.10 ratio
RS07888410	Motive	4.10 ratio
RS07888430US	US Gear	4.30 ratio
RS07888430	Motive	4.30 ratio

RS07888456US	US Gear	4.56 ratio*
RS07888456	Motive	4.56 ratio*
RS07888471US	US Gear	4.71 ratio*
RS07888488US	US Gear	4.88 ratio*
RS07888488	Motive	4.88 ratio*
RS07888513US	US Gear	5.13 ratio*
RS07888514	Motive	5.14 ratio*
RS07888571	Motive	5.71 ratio*

\* Posi units require modified cross pin

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

\*\* Will NOT fit Super 8.8 Mustang

## 8.8" FORD PRO GEAR SETS

RPF88375L	Richmond	3.75 ratio - Lightened
RP07888390	Motive	3.90 ratio
RPF88411L	Richmond	4.11 ratio - Lightened
RPF88429L	Richmond	4.29 ratio - Lightened

## 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
RS07888391-15US	US Gear	3.91 ratio
RS07888411-15US	Motive	4.11 ratio

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
RS07880300US	US Gear	3.00 ratio
RS07880300	Motive	3.00 ratio
RS07880325US	US Gear	3.25 ratio
RS07880325	Motive	3.25 ratio
RS07880340	Motive	3.40 ratio
RS07880355US	US Gear	3.55 ratio

RS07880355	Motive	3.55 ratio
RS07880380US	US Gear	3.80 ratio
RS07880380	Motive	3.80 ratio
RS07880411US	US Gear	4.11 ratio
RS07880411	Motive	4.11 ratio
RS07880462US	US Gear	4.62 ratio
RSF80462	Richmond	4.62 ratio

R5226	Master installation kit
R5225	Basic installation kit

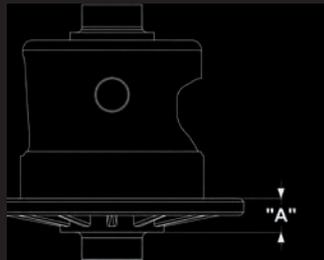
# GEARS

## US GEAR, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE GENERAL MOTORS

### GM 12 BOLT CAR STANDARD GEAR SETS

- 12 bolt cover
- Ring gear = 8.875"
- Pinion shaft = 1.625"
- Pinion spline = 30
- 3/8" .24 RH bolt holes

Chevelle 64-72  
Camaro 67-72  
Chevy II & Nova 65-72  
El Camino 65-72  
Impala 65-72  
F85 68-70  
Firebird 67-72  
Grand Prix 70-72  
GTO 65-72  
Le Mans 65-72  
Monte Carlo 70-72



2 series carrier- A = .600" (OEM 2.76-down)  
3 series carrier- A = 1.00" (OEM 3.07-3.73)  
4 series carrier- A = 1.315" (OEM 4.11-up)

RS01888308US	US Gear	3.08 ratio
RS12B308	Richmond	3.08 ratio
RS01888331US	US Gear	3.31 ratio
RS01888342US	US Gear	3.42 ratio
RS12B342	Richmond	3.42 ratio
RS01888355US	US Gear	3.55 ratio
RS12B355	Richmond	3.55 ratio
RS01888373US	US Gear	3.73 ratio*
RS12B373	Richmond	3.73 ratio**
RS01888373-4US	US Gear	3.73 ratio**
RS12B373X	Richmond	3.73 ratio**
RS01888391US	US Gear	3.91 ratio*
RS12B390	Richmond	3.90 ratio*
RS12B390X	Richmond	3.90 ratio**
RS12B410	Richmond	4.10 ratio**
RS12B410X	Richmond	4.10 ratio*
RS01888411US	US Gear	4.11 ratio**
RS01888411XUS	US Gear	4.11 ratio*

RS01888430US	US Gear	4.30 ratio
RS12B433	Richmond	4.33 ratio
RS01888456US	US Gear	4.56 ratio**
RS01888456	Motive	4.56 ratio**
RS01888456XUS	US Gear	4.56 ratio*
RS12B456X	Richmond	4.56 ratio*
RS01888488US	US Gear	4.88 ratio
RS01888488	Motive	4.88 ratio
RS01888514US	US Gear	5.14 ratio#
RS01888514	Motive	5.14 ratio#
RS01888538US	US Gear	5.38 ratio#
RS12B538	Richmond	5.38 ratio#
RS12B586	Richmond	5.86 ratio#
RS12B614	Richmond	6.14 ratio#

\* For 3 series carrier fits 3.90 & numerically lower carrier  
\*\* For 4 series carrier fits 4.11 & numerically higher carrier  
# Differentials require special cross pin

### GM 12 BOLT CAR DRAG RACE PRO GEARS - 4 SERIES

RP01988411US	US Gear	4.11 ratio
RP01988411	Motive	4.11 ratio
RP01988430US	US Gear	4.30 ratio
RP01988430	Motive	4.30 ratio
RP01988456US	US Gear	4.56 ratio
RP01988456	Motive	4.56 ratio
RP01988488US	US Gear	4.88 ratio
RP01988488	Motive	4.88 ratio
RP01988500US	US Gear	5.00 ratio
RP01988514US	US Gear	5.14 ratio

RP01988514	Motive	5.14 ratio
RP01988538US	US Gear	5.38 ratio
RP12B538	Richmond	5.38 ratio
RP01988557US	US Gear	5.57 ratio
RP12B557	Richmond	5.57 ratio
RP01988586US	US Gear	5.86 ratio
RP12B586	Richmond	5.86 ratio
RP01988600US	US Strange	6.00 ratio
RP01988614US	US Strange	6.14 ratio

# GEARS

## US STRANGE, SPICER, RICHMOND, MOTIVE GEAR PERFORMANCE GENERAL MOTORS

### GM 12 BOLT CAR INSTALLATION KITS & COMPONENTS

R5211	Master installation kit	R5214B	Pinion nut
R5210	Basic installation kit	R5214BA	Pinion nut washer
R5215	Two piece pinion preload assembly	D1582	Side bearings & races
R5211B	Rear pinion bearing	R5211A	Side bearing shim kit
R5211C	Rear pinion race	R5214C	Pinion depth shim kit
N1925H	Front pinion bearing	R5212	Ring gear bolts with lock washers
N1914C	Front pinion race	H1106G	12 bolt cover gasket
R5211D	Pinion seal		

### GM 12 BOLT TRUCK STANDARD GEAR SETS & INSTALLATION KIT

- 12 bolt cover
- Ring gear = 8.875"
- Pinion shaft = 1.438"
- Pinion spline = 30
- 3/8"x24 RH bolt holes

K10 (15), C10 (15) 64-82  
G20 & G25 69-81

<b>RS01888308T</b>	Richmond	3.08 ratio	<b>RS01888456T</b>	Richmond	4.56 ratio**
<b>RS01888342T</b>	Richmond	3.42 ratio	<b>RS01888456TX</b>	Richmond	4.56 ratio*
<b>RS01888373T</b>	Richmond	3.73 ratio**	<b>RS01888488T</b>	Richmond	4.88 ratio
<b>RS01888373TX</b>	Richmond	3.73 ratio*	<b>RS01888513T</b>	Richmond	5.13 ratio
<b>RS01888410T</b>	Richmond	4.10 ratio**	<b>RS01888538T</b>	Richmond	5.38 ratio
<b>RS01888410TX</b>	Richmond	4.10 ratio*	<b>R5211T</b>		Master installation kit

\* Fits 2.76-3.42 carrier

\*\* Fits 3.73 & numerically higher carrier

### GM 8.6 STANDARD GEAR SETS

- Ring gear = 8.6"
- Pinion shaft = 1.875"
- Pinion spline = 32
- 7/16" - 20 LH bolt holes

2010-2015 Camaro

<b>RS01886308US</b>	US Gear	3.08 ratio	<b>RS01886391</b>	Motive	3.91 ratio
<b>RS01886323US</b>	US Gear	3.23 ratio	<b>RS01886410US</b>	US Gear	4.10 ratio
<b>RS01886373US</b>	US Gear	3.73 ratio	<b>RS01886410</b>	Motive	4.10 ratio
<b>RSG86373</b>	Richmond	3.73 ratio			



## GM 8.5 10 BOLT STANDARD GEAR SETS & INSTALLATION KITS

- 10 bolt cover
- Ring gear = 8.5"
- Pinion shaft = 1.625"
- Pinion spline = 30
- 7/16"-20 LH bolt holes
- OEM carriers: 2.56 & num. lower/ 2.73 & num. higher

K10 (15) Fmt. w/o IFS  
77-87  
K10, K15 rear 82-pres.  
C10 (15) 77-pres.  
G10, G15 71-pres.  
G20 (25) 79-pres.  
Buick (full) 71-pres.  
Apollo 73-77  
Biscayne 71-74  
Century 73-77

Chevy (full) 71-pres.  
Chevy II, Nova 70-79  
Camaro 70-81  
Cutlass 71-77  
El Camino 71-77  
Electra 73-78  
Firebird/GTO 70-81  
Grandport 73-84  
Grand Prix 71-77  
LaSabre 73-74

Lemans 71-77  
Monte Carlo 71-77  
Olds (full) 71-89  
Olds (Hurst) 85-88  
Omega 73-75 & 77-79  
Pontiac (full) 71-89  
Roadster 71-74  
Trans Am/ Z28 70-81  
Ventura 71-77

RSG85308	Richmond	3.08 ratio
RSG85323	Richmond	3.23 ratio
RSG85342	Richmond	3.42 ratio
RSG85373	Richmond	3.73 ratio
RSG85390	Richmond	3.73 ratio
RSG85410	US Strange	4.10 ratio

RS01885430	Motive	4.30 ratio
RSG85456	Richmond	4.56 ratio
RSG85488	Richmond	4.88 ratio
RS01885513	Motive	4.30 ratio
RS01885538	Motive	5.38 ratio
RS01885557	Motive	5.57 ratio

R5205	Master installation kit
R5205-SP	Master installation kit*
R5204	Basic installation kit
R5202	Ring gear spacer with bolts
D1583	8.5 side bearings & races (for 28 spline)
D1585*	8.5 side bearings & races

\* For 8.5 using Strange 30 or 33 spline spools

## GM 8.2 1964-1972 CHEVY 10 BOLT STANDARD GEAR SETS & INSTALLATION KITS

- 10 bolt cover
- Ring gear = 8.2"
- Pinion shaft = 1.438"
- Pinion spline = 25
- 3/8"-24 RH bolt holes

Camaro 67-69  
Impala 65-72  
Chevelle, Chevy II, Nova 64-72  
Monte Carlo 70-72  
Caprice 65-71

El Camino 64-71  
Sprint 71-72

- All ratios fit 3.08 and higher carrier

RSG82308	Richmond	3.08 ratio
RS01882336	Motive	3.36 ratio
RS01882355	Motive	3.55 ratio
RS01882355	Motive	3.73 ratio

RS01882390	Motive	3.90 ratio
RS01882411	Motive	4.11 ratio
RS01882456	Motive	4.56 ratio

R5217	Master installation kit
R5217-SP	Master installation kit *
R5200	Basic installation kit
D1585*	8.2 side bearings & races

\* For 8.2 using Strange 33 spline spool

## GM BUICK / OLDS / PONTIAC 8.2 10 BOLT STANDARD GEAR SETS & INSTALLATION KITS

- 10 bolt cover
- Ring gear = 8.2"
- Pinion shaft = 1.438"
- Pinion spline = 27
- 3/8"x20 RH bolt holes

Buick (full) 64-71  
 Firebird 67-71  
 Olds F85 64-71  
 Pontiac (full) 64-71

Tempest GTO 64-71

- All gear sets are for 3.55 & numerically higher carriers

**RS01882355BOP** Motive 3.55 ratio  
**RS01882373BOP** Motive 3.73 ratio  
**RS01882390BOP** Motive 3.90 ratio

**RS01882411BOP** Motive 4.11 ratio  
**R52170P** Master Installation Kit\*  
**D1585\*** 8.2 side bearings & races

\* Installation kit will not fit Buick

## 10 BOLT GM 7.5" / 7.625" STANDARD GEAR SETS & INSTALLATION KITS

- 10 bolt cover
- Ring gear = 7.5"
- Pinion shaft = 1.438"
- Pinion spline = 27
- 7/16"-20 RH bolt holes

- OEM carriers: 3.08 & numerically lower (2-Series)
- OEM carriers: 3.23 & numerically higher (3-Series)

S10 & S15 82-present  
 Astro & Safari 85-present

Buick (full) 77-85  
 Camaro (Z28) 82-02  
 Century 78-81  
 Chevy (full) 77-96  
 Cutlass 78-88

Firebird (TA) 82-02  
 Monte Carlo 78-88  
 Olds (full) 77-89  
 Omega 75-79  
 Pontiac (full) 77-89

Phoenix 78-81  
 Regal 78-83  
 Skylark 76-79  
 Ventura 78-81

Note: Gear sets will not fit Vega, Monza or Starfire

RSG75273 Richmond 2.73 ratio  
 RSG75308 Richmond 3.08 ratio  
 RSG75323 Richmond 3.23 ratio  
 RSG75342 Richmond 3.42 ratio\*  
 RSG75342X Richmond 3.42 ratio\*\*  
 RSG75373 Richmond 3.73 ratio\*  
 RSG75373X Richmond 3.73 ratio\*\*  
 RSG75390 Richmond 3.90 ratio\*  
 RSG75390X Richmond 3.90 ratio\*\*  
 RSG75410 Richmond 4.10 ratio\*

RSG75410X Richmond 4.10 ratio\*\*  
 RSG75456 Richmond 4.56 ratio\*  
 RSG75456X Richmond 4.56 ratio\*\*

\* Fits 3.23 & numerically higher carrier

\*\* Fits 3.08 & numerically lower carrier

R5218 Master installation kit  
 R5219 Ring gear spacer with bolts



## GM 1963-1979 CORVETTE 8.4

- Ring gear = 8.32"
- Pinion shaft = 1.626"
- Pinion spline = 30
- 3/8"-24 RH bolt holes

RSO1884308C	US Gear	3.08 ratio
RSG84308C	Richmond	3.08 ratio
RSO1884336C	US Gear	3.36 ratio
RSG84336C	Richmond	3.36 ratio
RSO1884355C	US Gear	3.55 ratio
RSG84355C	Motive	3.55 ratio

RSG84370C	Motive	3.70 ratio
RSO1884373C	US Gear	3.73 ratio
RSG84390C	Richmond	3.90 ratio
RSO1884411CX	US Gear	4.11 ratio*
RSO1884433CX	US Gear	4.33 ratio*
RSO1884456CX	US Gear	5.57 ratio*

\* Fits 3.90 & numerically lower carrier

## GM 1980-1982 CORVETTE DANA 44

- Ring gear = 8.87"
- Pinion shaft = 1.626"
- Pinion spline = 29
- 3/8"-24 RH bolt holes

RSO5844411	US Gear	4.11 ratio
RSO5844433	US Gear	4.33 ratio
RSO5844456	US Gear	4.56 ratio
RSO5844488	US Gear	4.88 ratio

Fits 3.92 & numerically higher carrier

## GM 1984-1996 CORVETTE DANA 36

- Ring gear = 7.75"
- Pinion shaft = 1.375"
- Pinion spline = 26
- 3/8"-24 RH bolt holes

RSO5878354CUS	US Gear	3.54 ratio
RSO5878354CXUS	US Gear	3.54 ratio*
RSO5878373CUS	US Gear	3.73 ratio
RSO5878373CXUS	US Gear	3.73 ratio*
RSD36354CX	Richmond	3.54 ratio
RSD36375CX	Richmond	3.75 ratio

\* Fits 2.73 & numerically lower carrier

## GM 1997-2013 CORVETTE

Excludes Grand Sport, Z06, ZR1, & A/T after 2004

- Ring gear = 8.25"
- Pinion shaft = 2.535"
- Pinion spline = 27

RSO1885342C	Motive	3.42 ratio
RSO1885373C	Motive	3.73 ratio
RSO1885390C	Motive	3.90 ratio
RSO1885390CX	Motive	3.90 ratio*
RSO1885410C	Motive	4.10 ratio
RSO1885411CX	Motive	4.11 ratio*

\* Fits 2.75 & numerically lower carrier

## GM 2014-2017 CORVETTE

RSO1888390C	Motive	3.90 ratio
RSO1888410C	Motive	4.10 ratio



# 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.

**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.

**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.

**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.

**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 its 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.

**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 its 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.

**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.



Spicer Clutch



Eaton Clutch



Strange Clutch



Auburn Cone



Eaton Locker



Eaton Helical Truetrack



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

## DANA 60 / STRANGE S60 / MOPAR 8.75" DIFFERENTIAL

D3537 *	Dana 60 / S60	Spicer	Clutch	35 spline
D3538 **	Dana 60 / S60	Spicer	Clutch	35 spline
D3523 *	Dana 60 / S60	Strange	Helical Gear	35 spline
D3533 *	Dana 60 / S60	Eaton	Helical Gear	35 spline
D3534 **	Dana 60 / S60	Eaton	Helical Gear	35 spline
D3535 *	Dana 60 / S60	Eaton	Locker	35 spline
D3536 **	Dana 60 / S60	Eaton	Locker	35 spline
R542051	Mopar 8.75"	Auburn	H/D Cone	30 spline
D3532T	Mopar 8.75"	Eaton	Helical Gear	30 spline

\* 3 series carrier \*\* 5 series carrier



Spicer Clutch

## FORD 9" / FORD 8.8 / FORD 8" DIFFERENTIAL

N1974	Ford 9"	US Gear	Clutch	28 spline
N1981	Ford 9"	Eaton	Helical Gear	28 spline
R542036	Ford 9"	Auburn	H/D Cone	31 spline
N1970H *	Ford 9"	Hoosier	Clutch	31 spline
N1970F *	Ford 9"	Strange	Clutch	31 spline
N1979	Ford 9"	Eaton	Helical Gear	31 spline
N1972	Ford 9"	Eaton	Locker	31 spline
N1980 *	Ford 9"	Strange	H/D Helical Gear	35 spline
N1971T	Ford 9"	Eaton	Helical Gear	35 spline
N1971	Ford 9"	Eaton	Locker	35 spline
R542080	Ford 8.8	Auburn	H/D Cone	28 spline
R542054	Ford 8.8	Auburn	H/D Cone	31 spline
N1869	Ford 8.8	Eaton	H/D Clutch	31 spline
N1869T	Ford 8.8	Eaton	Helical Gear	31 spline
N1865	Ford 8.8	Eaton	Locker	31 spline
N1882 **	Ford 8.8	Strange	Helical Gear	35 spline
R542059	Ford 8"	Auburn	H/D Cone	28 spline

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



Eaton Locker

## GM 12 BOLT CAR / 10 BOLT 8.5 / 10 BOLT 8.2 / 10 BOLT 7.5 / 7.625 DIFFERENTIAL

R5087 *	12 bolt car	Eaton	H/D Clutch	30 spline
R5086 **	12 bolt car	Eaton	H/D Clutch	30 spline
R5087T *	12 bolt car	Eaton	Helical Gear	30 spline
R5091 ***	12 bolt car	Yukon	H/D Clutch	33 spline
R542018	10 bolt 8.5	Auburn	Std Cone	28 spline
R542050	10 bolt 8.5	Auburn	H/D Cone	28 spline
R5085	10 bolt 8.5	Eaton	H/D Clutch	28 spline
R5085T	10 bolt 8.5	Eaton	Helical Gear	28 spline
R542022	10 bolt 8.5	Auburn	Std Cone	30 spline
R5083	10 bolt 8.5	Eaton	H/D Clutch	30 spline
R5083T	10 bolt 8.5	Eaton	Helical Gear	30 spline
R542061	Chevy 8.2	Auburn	H/D Cone	28 spline
R5084	Chevy 8.2	Eaton	H/D Clutch	28 spline
R542060	Buick / Olds / Pontiac 8.2	Auburn	H/D Cone	28 spline
R5084BOP	Buick / Olds / Pontiac 8.2	Eaton	H/D Clutch	28 spline
R542057	10 bolt 7.5	Auburn	Std Cone	26 spline
R542044	10 bolt 7.5	Auburn	H/D Cone	26 spline
R542040	10 bolt 7.5	Auburn	Std Cone	28 spline
R542046	10 bolt 7.5	Auburn	H/D Cone	28 spline

\* 3 series carrier \*\* 4 series carrier \*\*\* 3 series for Strange axles only



Eaton Clutch

## DANA 60 / STRANGE S60 / MOPAR 8.75" SPOOL

D1547 *	Dana 60 / S60	Strange	L/W Steel Spool	35 spline	13.30 lbs
D1548 **	Dana 60 / S60	Strange	L/W Steel Spool	35 spline	13.20 lbs
D1544 *	Dana 60 / S60	Strange	L/W Steel Spool	40 spline	12.05 lbs
D1546 **	Dana 60 / S60	Strange	L/W Steel Spool	40 spline	12.05 lbs
D1545 **	Dana 60 / S60	Strange	Aluminum Spool	40 spline	7.00 lbs
D1556	Mopar 8.75"	Strange	L/W Steel Spool	30 spline	8.95 lbs
D1557	Mopar 8.75"	Strange	L/W Steel Spool	35 spline	8.35 lbs
D1566	Mopar 8.75"	Strange	Aluminum Spool	35 spline	4.50 lbs

\* 3 series carrier

\*\* 5 series carrier



L/W Steel Spool

## FORD 9" / FORD 8.8 SPOOL

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

\* 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

## GM 12 BOLT CAR / 10 BOLT 8.5 / 10 BOLT 8.2 / '57-'64 OLDS / STRANGE DROP-OUT SPOOL

D1526	12 bolt car	Strange	Steel Spool	30 spline	10.85 lbs
D1551	12 bolt car	Strange	L/W Steel Spool	30 spline	9.35 lbs
D1540 *	12 bolt car	Strange	L/W Steel Spool	33 spline	8.85 lbs
D1549 **	12 bolt car	Strange	L/W Steel Spool	33 spline	8.85 lbs
D1530 ****	12 bolt car	Strange	Aluminum Spool	33 spline	4.20 lbs
D1542 *	12 bolt car	Strange	L/W Steel Spool	35 spline	8.20 lbs
D1541 **	12 bolt car	Strange	L/W Steel Spool	35 spline	8.20 lbs
D1522	10 bolt 8.5	Strange	Steel Spool	28 spline	10.24 lbs
D1523 ***	10 bolt 8.5	Strange	Steel Spool	30 spline	10.08 lbs
D1524 ***	10 bolt 8.5	Strange	Steel Spool	33 spline	9.68 lbs
D1521 ***	10 bolt 8.2	Strange	Steel Spool	33 spline	9.46 lbs
D1550	'57 - '64 Olds	Strange	L/W Steel Spool	35 spline	14.50 lbs
D1535	12 blt Drop-out	Strange	L/W Steel Spool	35 spline	7.68 lbs
D1537	12 blt Drop-out	Strange	Aluminum Spool	35 spline	4.40 lbs

\* 3 series carrier

\*\*\* Requires D1585 side bearing kit

\*\* 4 series carrier

\*\*\*\* 4 series - requires D1531 bearing kit



Steel 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.

### COVERS / BILLET ALUMINUM MAIN CAPS

#### Dana 60 / S60

D3505	Spicer plain steel cover	Stock
D3517	Strange S logo aluminum cover Black powder coat finish	Cosmetic
D3509	LPW HD aluminum cover Ready for back-brace	Supportive
D3515	LPW Axle tube back-brace kit	Chrome moly tubing
H1122	Strange Dana 60 billet aluminum main caps with bolts	Requires machining

#### FORD 8.8

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



Strange S logo aluminum cover



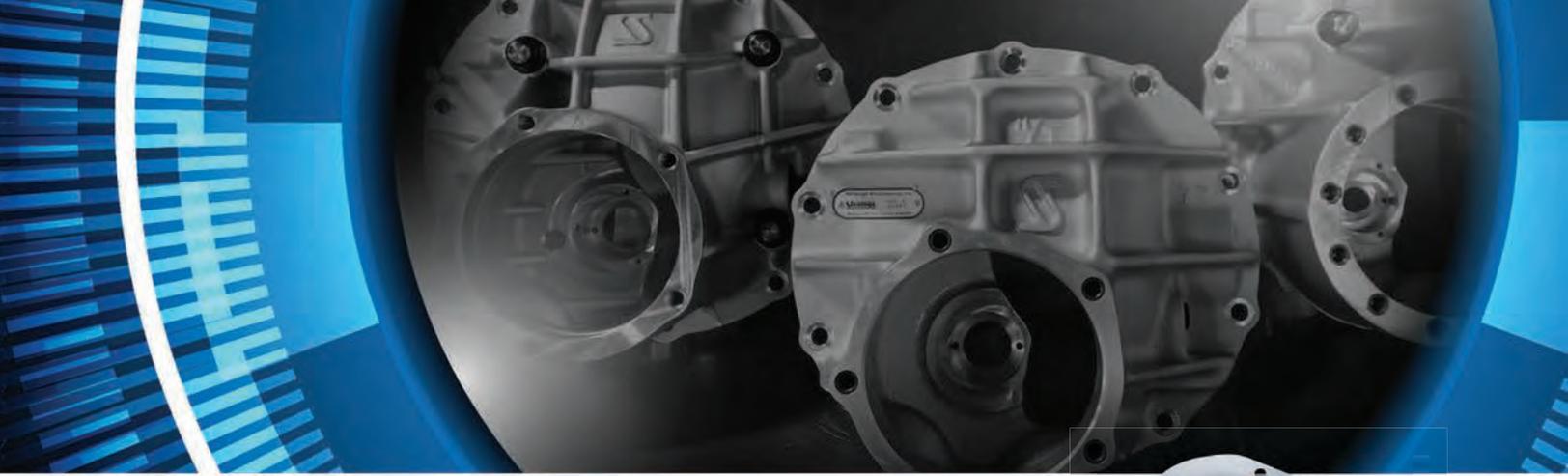
LPW HD aluminum cover



LPW HD aluminum cover  
ready for back-brace



LPW axle tube back-brace kit



## COVERS / BILLET ALUMINUM MAIN CAPS *Continued*

### GM 12 BOLT

R5199	Chrome cover for passenger car	Cosmetic
R5206	LPW HD car aluminum cover	Supportive
R5207	LPW HD car aluminum cover Ready for back-brace	Supportive
R5221	LPW HD truck aluminum cover Ready for back-brace	Supportive
R5209	LPW axle tube back-brace kit	Chrome moly tubing
H1121	Strange 12 bolt car billet aluminum main caps with bolts	Requires machining

### GM 10 BOLT

R5219	LPW HD 7.5 aluminum cover Ready for back-brace	Supportive
R5201	LPW HD 8.2 / 8.5 aluminum cover	Supportive
R5203	LPW HD 8.2 / 8.5 aluminum cover Ready for back-brace	Supportive
R5209	LPW axle tube back-brace kit	Chrome moly tubing
H1120	Strange GM 8.5 billet aluminum main caps with bolts	Requires machining

### LABOR

H1123	Fit and install Strange billet aluminum main caps Labor only- parts extra
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Steel cover



Chrome cover



Strange Ford 8.8 Billet aluminum  
main caps with bolts



Strange GM 8.5 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
N2206	3.250" bore case	Nodular Iron main caps	27.2 lbs



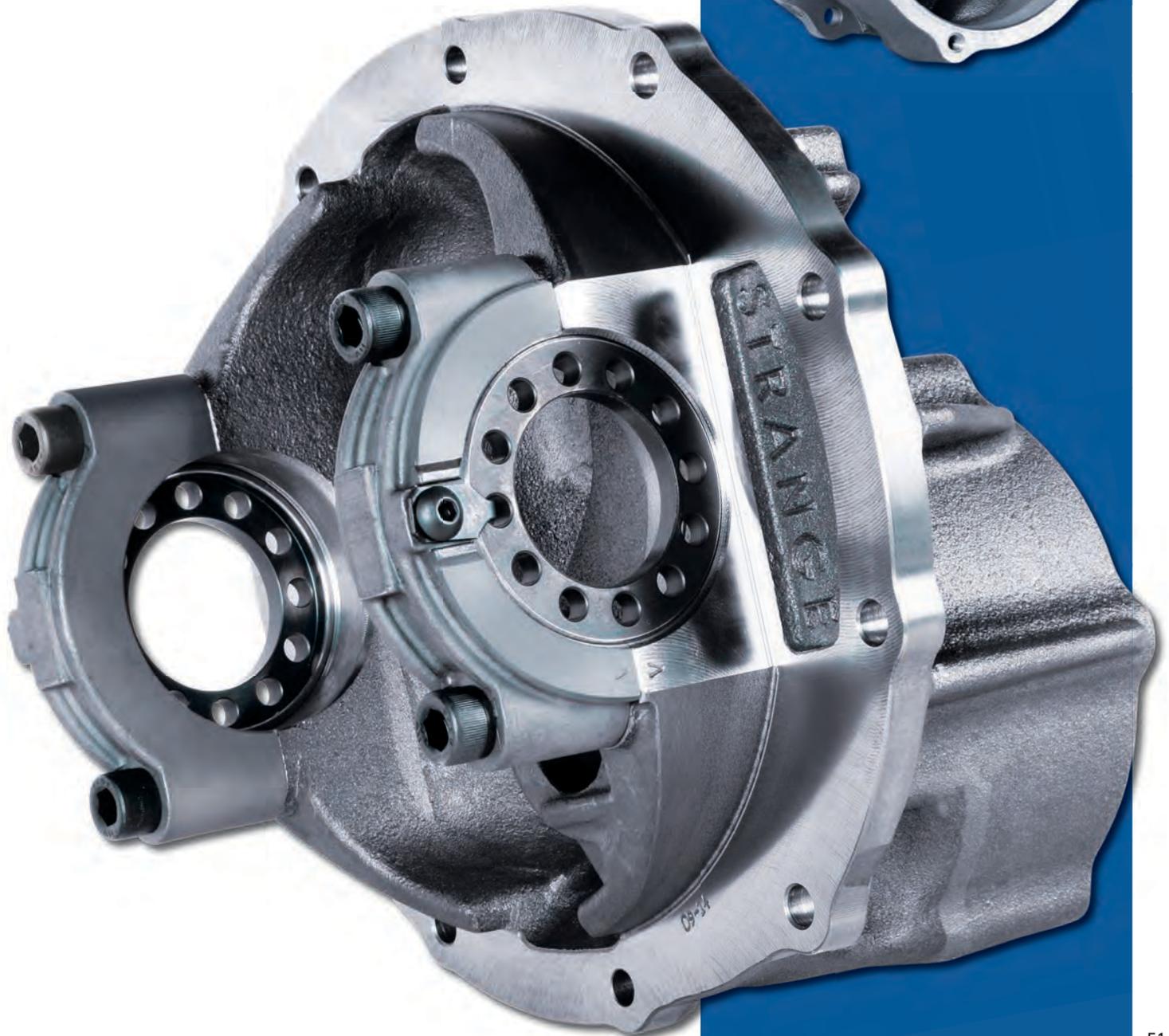
## STRANGE PRO SERIES NODULAR IRON

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

<b>N1905</b>	3.062" bore case	Chrome moly main caps	31.5 lbs
<b>N1906</b>	3.250" bore case	Chrome moly main caps	31.2 lbs



# 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, Alters, 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

<b>N1901</b>	3.062" bore case	Aluminum	Case only .....	14.0 lbs
<b>N1901P</b>	3.062" bore case	Polished aluminum	Polished case only	
<b>N1904</b>	3.250" bore case	Aluminum	Case only .....	13.9 lbs
<b>N1904P</b>	3.250" bore case	Polished aluminum	Polished case only	



### 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 360° 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

<b>N2300</b>	3.062" bore case	Aluminum HD Pro	Case only .....	16.8 lbs
<b>N2300P</b>	3.062" bore case	Polished Alum HD Pro	Polished Case only	
<b>N2303</b>	3.250" bore case	Aluminum HD Pro	Case only .....	16.8 lbs
<b>N2303P</b>	3.250" bore case	Polished Alum HD Pro	Polished Case only	
<b>N2307</b>	3.812" bore case	Aluminum HD Pro	Case only .....	15.7 lbs

## 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.

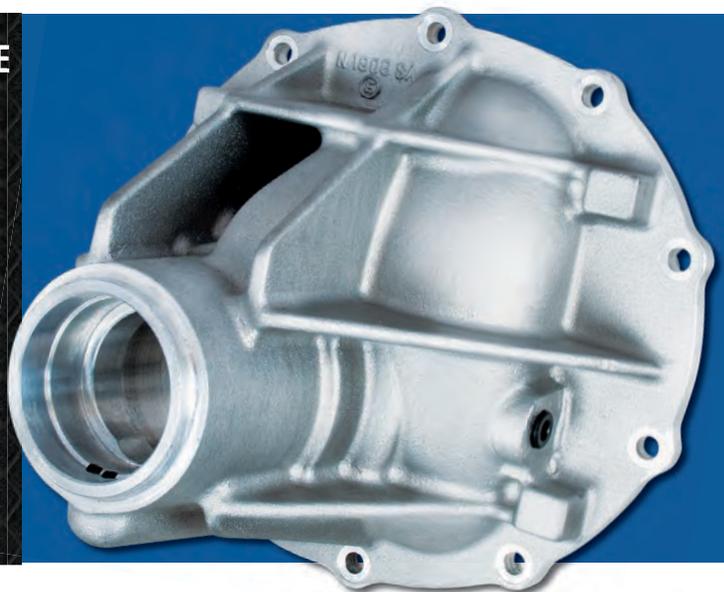


### Ultra Case

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

## 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
N1202	3.250" bore case	For Strange D1535 / D1537 35 spline spool .....	15.7 lbs

# 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.



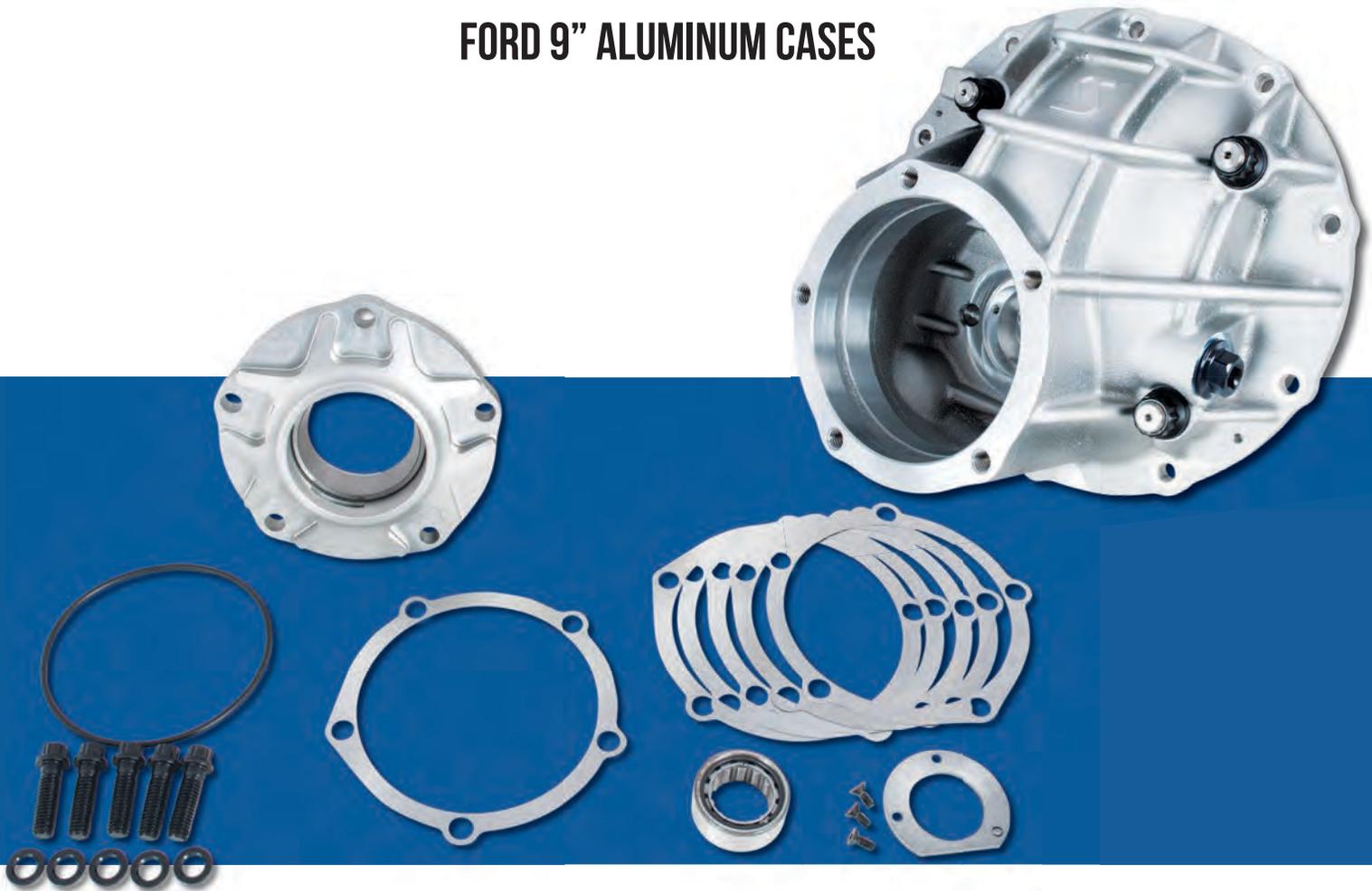
### BILLET CASE PACKAGES

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

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
P3203	3.250" case	Case & support kit for tapered pinion bearing
P3207	3.812" case	Case & support kit for tapered pinion bearing
P3200BB	3.062" case	Case & support kit for ball pinion bearing
P3203BB	3.250" case	Case & support kit for ball pinion bearing
P3207BB	3.812" case	Case & support kit for ball pinion bearing

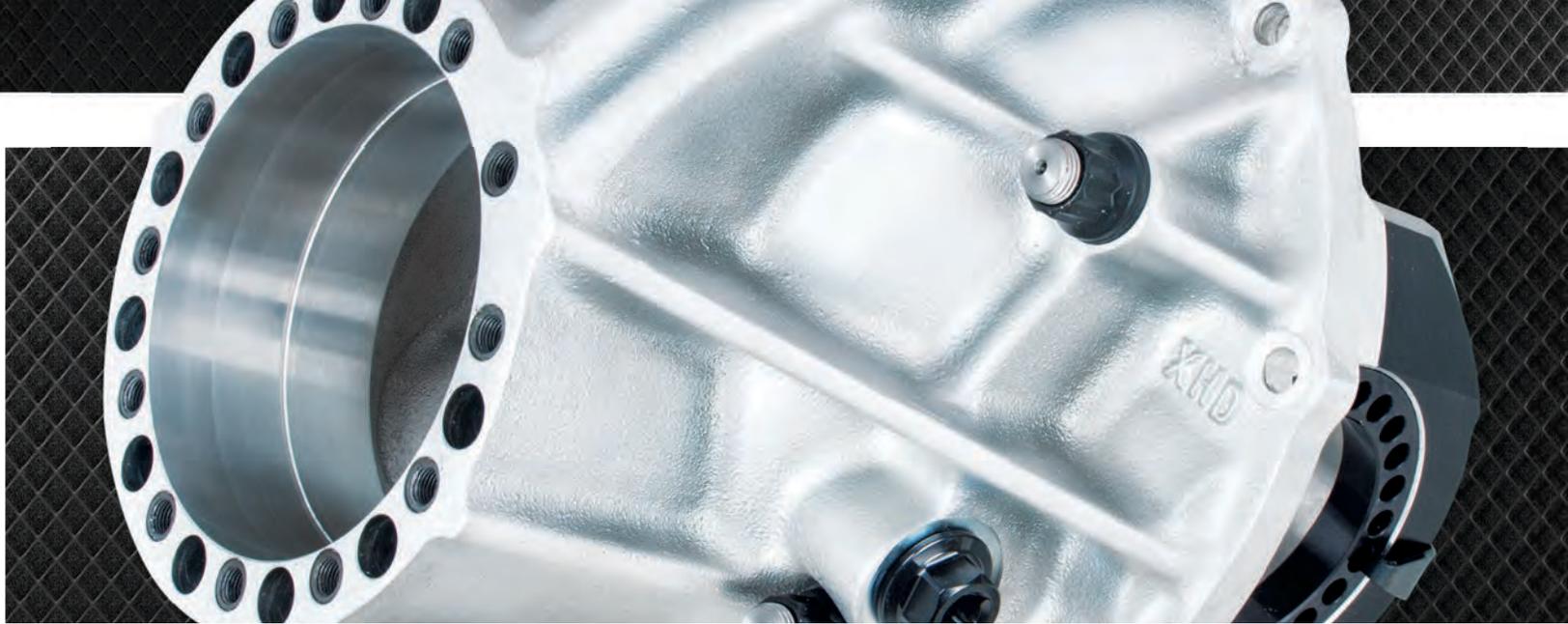
Kit includes case, pinion support with races, o-ring, support bolts, depth shims, tail bearing and retainer

### HD PRO COMPLETION KITS

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

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

<b>P3250ST</b>	3.250" case	Case & support package with tapered pinion bearings using 28 spline pinion
<b>P3250LT</b>	3.250" case	Case & support package with tapered pinion bearings using 35 spline pinion
<b>P3250SB</b>	3.250" case	Lightened case & support package with ball pinion bearing using 28 spline pinion
<b>P3250LB</b>	3.250" case	Lightened case & support package with ball pinion bearing using 35 spline pinion
<b>P3812ST</b>	3.812" case	Case & support package with tapered pinion bearings using 28 spline pinion
<b>P3812LT</b>	3.812" case	Case & support package with tapered pinion bearings using 35 spline pinion
<b>P3812LT10</b>	3.812" case	Case & 10" support package with tapered pinion bearings using 10" gear set
<b>P3812LTC*</b>	3.812" case	Case & CC support package with tapered pinion bearings using 35 spline pinion
<b>P3812SBHD</b>	3.812" case	Case & support package with ball pinion bearing using 28 spline pinion
<b>P3812LBHD</b>	3.812" case	Case & support package with ball pinion bearing using 35 spline pinion
<b>P3812SB</b>	3.812" case	Lightened case & support package with ball pinion bearing using 28 spline pinion
<b>P3812LB</b>	3.812" case	Lightened case & support package with ball pinion bearing 35 spline pinion
<b>P400LT</b>	4.000" case	Case & support package with tapered pinion bearings using 35 spline pinion
<b>P400LTC*</b>	4.000" case	Case & CC support package with tapered pinion bearings using 35 spline pinion

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
N1917	Forged Aluminum	HD Street / Track
N1917P	Forged Aluminum- Polished	HD Street / Track
N1922	Forged Aluminum	Drag Race
N1922P	Forged Aluminum- Polished	Drag Race
N2322	HD Pro Aluminum	HD Street / Track / Drag Race
N2322P	HD Pro Aluminum- Polished	HD Street / Track / Drag Race

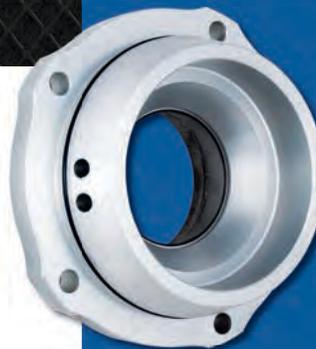
All supports have Timken races installed. Supports include o-ring except for Daytona.



N1914



N1922



N1920



N1917

## BALL BEARING SUPPORTS

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

\* Bearing & Seal Kit included

## RACES / O-RING

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



N1921

## BEARING & SEAL KITS \*

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

\* 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

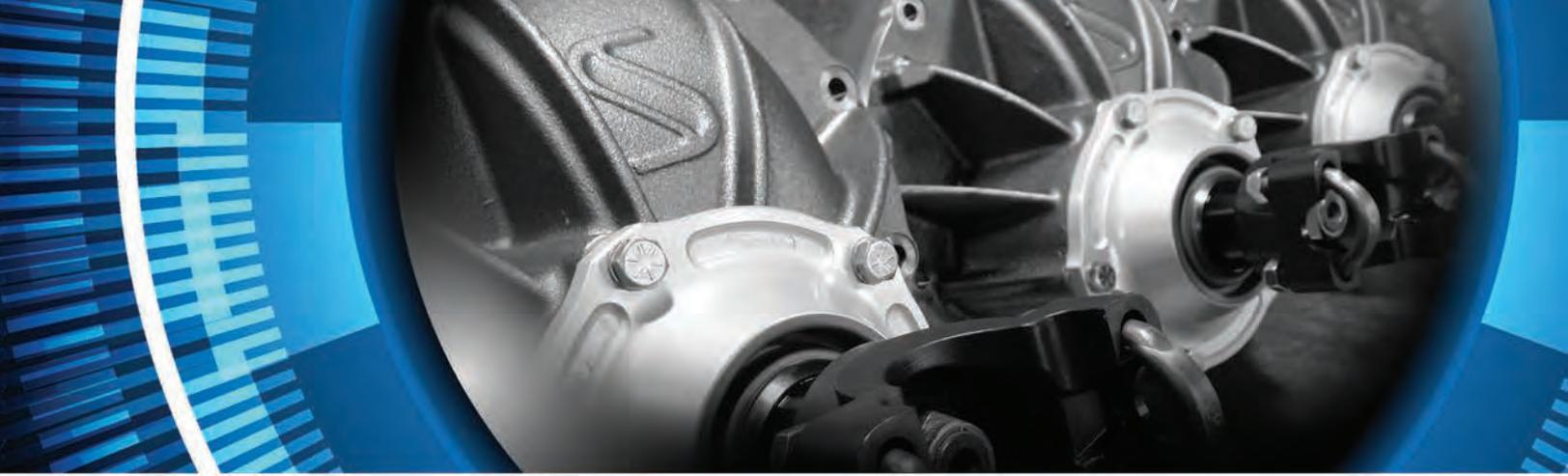
**PRF130:** The S-Series nodular iron case is a stout foundation for any Street / Track application. The package contains the S-series iron case, Ford cast iron Daytona pinion support, clutch style posi unit, Standard gear, and S-series

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.



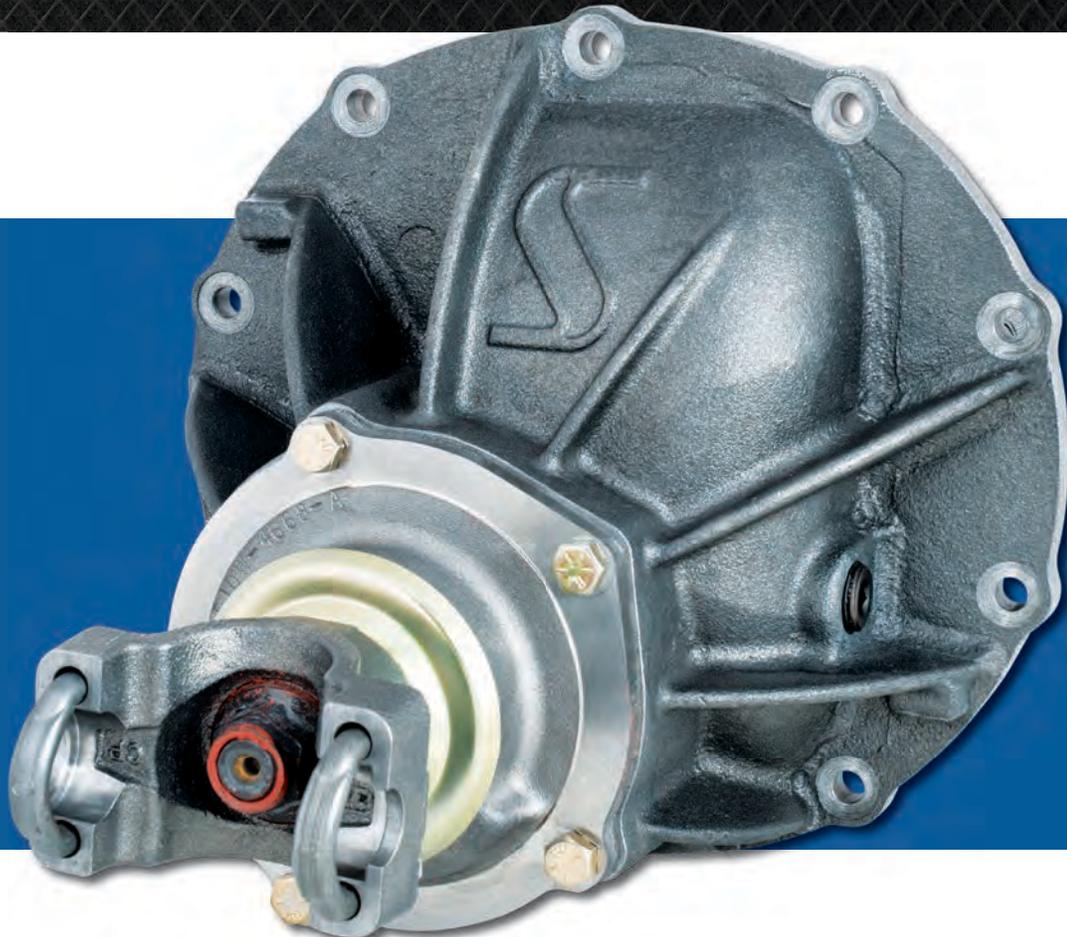


PRF130 S-Series case / Iron Daytona pinion support- N1914 / Clutch style 28-31 spline posi unit  
Standard gear set / S-Series 1350 yoke- U2203 / U-bolts

- Upgrades:**
- |        |   |
|--------|---|
| OPRF16 | Upgrade to Strange black forged aluminum support- N1917 |
| OPRF09 | Upgrade to Eaton 28 or 31 spline Truetrack              |
| OPRF17 | Upgrade to Eaton 28, 31, or 35 spline Detroit Locker    |
| OPRF11 | Upgrade to Eaton 35 spline Truetrack                    |
| OPRF10 | Upgrade to Strange 35 spline S-Trac- N1980              |
| OPRF07 | Upgrade to Chrome moly pinion yoke- U1603               |
| OPRF37 | Upgrade to HD cap kit for rear end yoke                 |

PRF135 S-Series Case / Iron Daytona pinion support- N1914 / 28-35 spline spool  
Standard gear set / S-Series 1350 yoke- U2203 / U-bolts

- Upgrades:**
- |        |   |
|--------|---|
| OPRF16 | Upgrade to Strange black forged aluminum support- N1917 |
| OPRF07 | Upgrade to Chrome moly pinion yoke- U1603               |
| OPRF37 | Upgrade to HD cap kit for rear end yoke                 |



# 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.

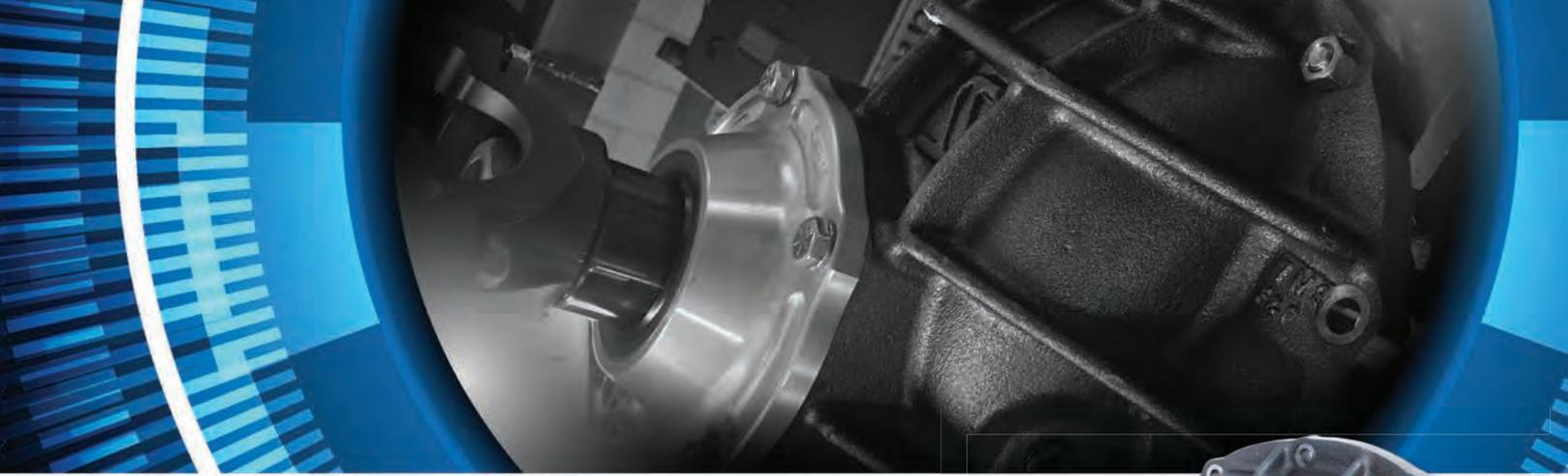
## PRO IRON CASE WITH SPOOL & COUPLER

**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

**Upgrades:** OPRF16 Upgrade to Strange black forged aluminum support- N1917  
OPRF09 Upgrade to Eaton 28 or 31 spline Truetrack  
OPRF17 Upgrade to Eaton 28, 31, or 35 spline Detroit Locker  
OPRF11 Upgrade to Eaton 35 spline Truetrack  
OPRF10 Upgrade to Strange 35 spline S-Trac- N1980  
OPRF07 Upgrade to Chrome moly pinion yoke- U1603



**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

**Upgrades:** OPRF01 Upgrade to 40 spline spool

**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

**Upgrades:** OPRF05 Upgrade to 35 spline Pro gear  
OPRF01 Upgrade to 40 spline spool



**PRF100** support- N1922 / 31-35 spline L/W steel spool  
Standard gear set / Female coupler

**Upgrades:** OPRF01 Upgrade to 40 spline spool

**PRF110** Pro Iron Case / Forged aluminum support- N1922 / 31-35 spline L/W steel spool  
28 spline Pro gear / Female coupler

**Upgrades:** OPRF05 Upgrade to 35 spline Pro gear  
OPRF01 Upgrade to 40 spline spool



**Options  
for all  
packages  
above**

- D3596** Lighten ring gear
- OPRF42** MicroBlue gear set and bearings
- OPRF03** Ball bearing support
- OPRF37** Upgrade to HD cap kit for rear end yoke
- U1613** 1 magnet pick-up collar for 28 spline pinion
- U1613-2** 2 magnet pick-up collar for 28 spline pinion
- U1613-4** 4 magnet pick-up collar for 28 spline pinion
- U1613-8** 8 magnet pick-up collar for 28 spline pinion
- U1614** 1 magnet pick-up collar for 35 spline pinion
- U1614-2** 2 magnet pick-up collar for 35 spline pinion
- U1614-4** 4 magnet pick-up collar for 35 spline pinion
- U1614-8** 8 magnet pick-up collar for 35 spline pinion
- N1927S** Sensor bracket for pinion support

# 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, Alters, 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, Alters, 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

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

**Upgrades:** OPRF16 Upgrade to Strange black forged aluminum support- N1917  
OPRF09 Upgrade to Eaton 28 or 31 spline Truetrack  
OPRF17 Upgrade to Eaton 28, 31, or 35 spline Detroit Locker  
OPRF11 Upgrade to Eaton 35 spline Truetrack  
OPRF10 Upgrade to Strange 35 spline S-Trac- N1980  
OPRF07 Upgrade to Chrome moly pinion yoke- U1603

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

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

**Upgrades:** OPRF01 Upgrade to 40 spline spool  
OPRF19 Upgrade to 35 spline aluminum spool

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

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

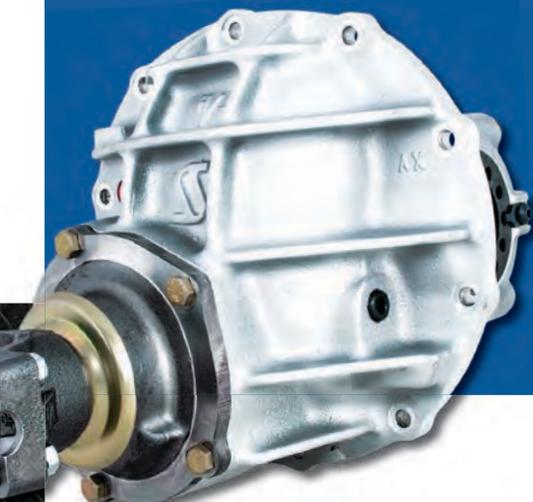
**Upgrades:** OPRF05 Upgrade to 35 spline 9" Pro gear  
OPRF01 Upgrade to 40 spline spool  
OPRF19 Upgrade to 35 spline aluminum spool

**Options  
for all  
packages  
above**

D3596 Lighten ring gear  
OPRF42 MicroBlue gear set and bearings  
OPRF03 Ball bearing support- Not available in polished  
OPRF35S Replace S-Series yoke with Chromed chrome moly yoke  
OPRF35 Replace Chrome moly yoke with Chromed chrome moly yoke  
OPRF37 Upgrade to HD cap kit for rear end yoke  
OPRF13 Replace Chrome moly yoke with Aluminum yoke  
U1613 1 magnet pick-up collar for 28 spline pinion  
U1613-2 2 magnet pick-up collar for 28 spline pinion  
U1613-4 4 magnet pick-up collar for 28 spline pinion  
U1613-8 8 magnet pick-up collar for 28 spline pinion  
U1614 1 magnet pick-up collar for 35 spline pinion  
U1614-2 2 magnet pick-up collar for 35 spline pinion  
U1614-4 4 magnet pick-up collar for 35 spline pinion  
U1614-8 8 magnet pick-up collar for 35 spline pinion  
N1927S Sensor bracket for pinion support

PRG500 12 bolt Drop-out case / Ultra lite 35 spline steel spool  
Standard gear set / Chrome moly 1350 yoke / U-bolts

**Upgrades:** OPRG01 Upgrade to Pro gear  
OPRG03 Upgrade to 35 spline aluminum spool  
D3596 Lighten ring gear  
OPRF42 MicroBlue gear set & bearings  
OPRF37 Upgrade to HD cap kit for rear end yoke



# 9" LIGHTWEIGHT ALUMINUM 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.

## 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 Altered. This package contains the Lightweight aluminum case, Strange forged aluminum pinion support, lightweight steel spool, Standard gear, and female coupler. The PRF150P

**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 Altered. 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

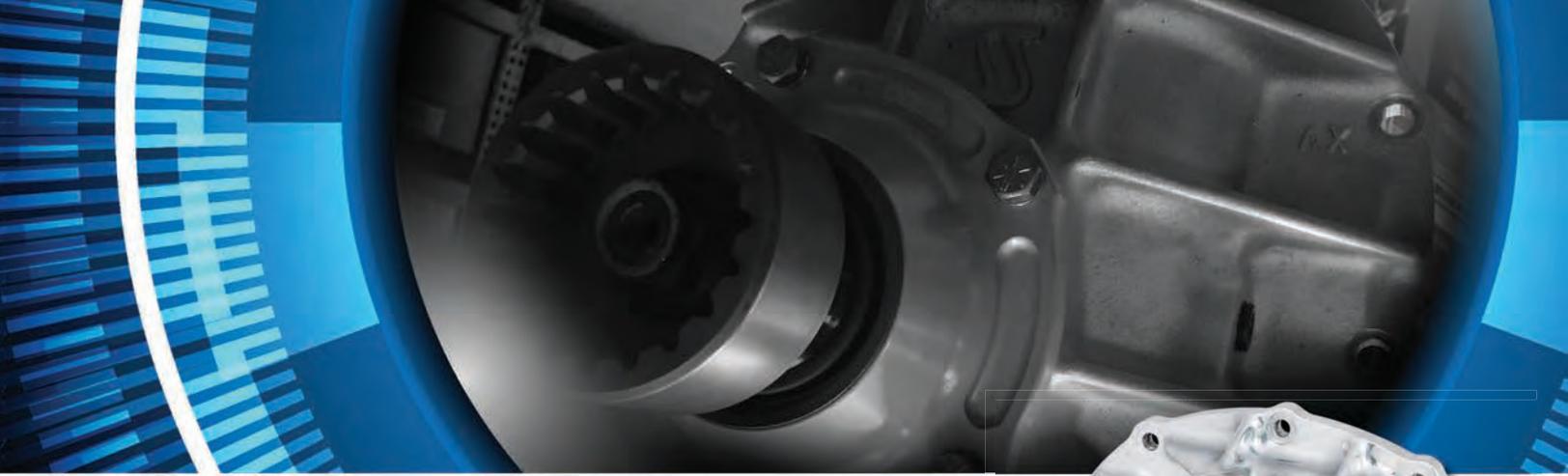
a polished case and support. Upgrades are available to a 40 spline L/W steel spool or 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, and computer pick-up collar. Current Super Comp vehicles that use a throttle stop will opt for the PRF160 which contains a Pro gear, and also upgrade to the 40 spline L/W steel spool.

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

- Upgrades:** **OPRF01** Upgrade to 40 spline spool
- OPRF19** Upgrade to 35 spline aluminum spool

- PRF160** Lightweight Aluminum case / 1922 Strange forged aluminum support  
31-35 spline L/W steel spool / 28 spline Pro gear / Female coupler
- PRF160P** Polished Lightweight Aluminum case / N1922P polished support  
31-35 spline L/W steel spool / 28 spline Pro gear / Female coupler

- Upgrades:** **OPRF05** Upgrade to 35 spline 9" Pro gear
- OPRF01** Upgrade to 40 spline spool
- OPRF19** Upgrade to 35 spline aluminum spool

**Options  
for all  
packages  
above**

- D3596** Lighten ring gear
- OPRF42** MicroBlued gear set and bearings
- OPRF03** Ball bearing support- Not available in polished
- OPRF37** Upgrade to HD cap kit for rear end yoke
- U1613** 1 magnet pick-up collar for 28 spline pinion
- U1613-2** 2 magnet pick-up collar for 28 spline pinion
- U1613-4** 4 magnet pick-up collar for 28 spline pinion
- U1613-8** 8 magnet pick-up collar for 28 spline pinion
- U1614** 1 magnet pick-up collar for 35 spline pinion
- U1614-2** 2 magnet pick-up collar for 35 spline pinion
- U1614-4** 4 magnet pick-up collar for 35 spline pinion
- U1614-8** 8 magnet pick-up collar for 35 spline pinion
- N1927S** Sensor bracket for pinion support

- PRG505** 12 bolt Drop-out case / Ultra lite 35 spline steel spool  
Standard gear set / Female coupler

- Upgrades:** **OPRG01** Upgrade to Pro gear
- OPRG03** Upgrade to 35 spline aluminum spool
- D3596** Lighten ring gear
- OPRF42** MicroBlue gear set & bearings
- OPRF37** Upgrade to HD cap kit for rear end yoke



# 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

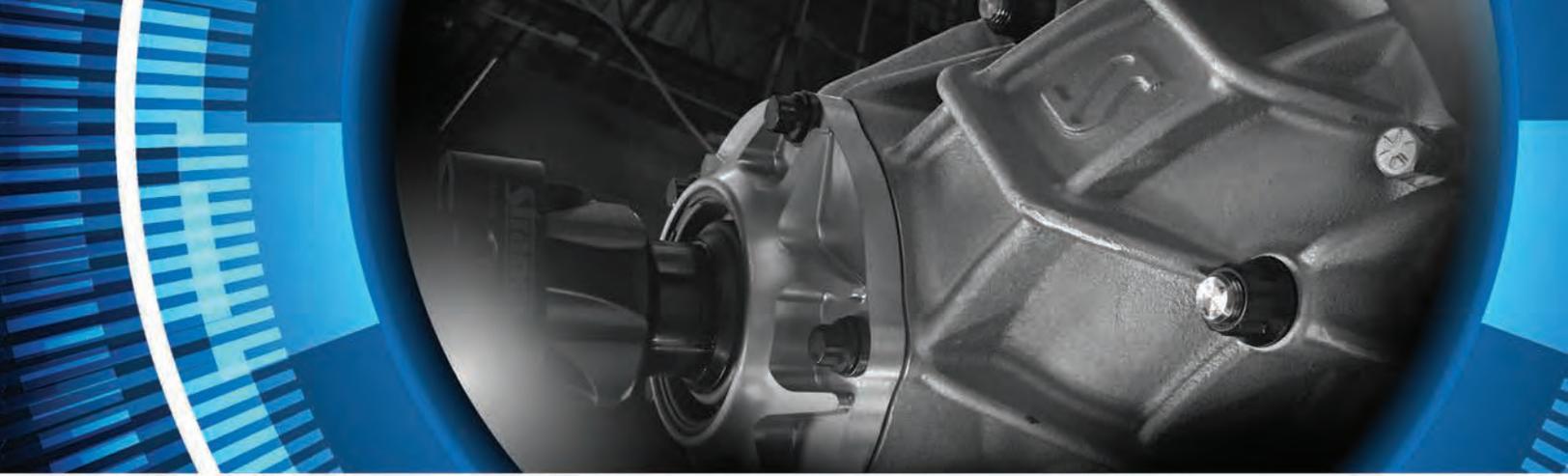
spool, Standard gear, and a chrome moly 1350 yoke with u-bolts. Upgrades available are a 40 spline L/W steel spool or 35 spline aluminum spool. Options include a ball bearing pinion support, lightened ring gear, MicroBlue service, computer pick-up collar, polished case and support, polished and chromed 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

**Upgrades:** **OPRF09** Upgrade to Eaton 28 or 31 spline Truetrack  
**OPRF17** Upgrade to Eaton 28, 31, or 35 spline Detroit Locker  
**OPRF11** Upgrade to Eaton 35 spline Truetrack  
**OPRF10** Upgrade to Strange 35 spline S-Trac- N1980  
**OPRF07** Upgrade to Chrome moly pinion yoke- U1603

**RF184** HD Pro aluminum case and support / 31-35 spline L/W steel spool  
Standard gear set / Chrome moly 1350 yoke- U1603 / U-bolts

**Upgrades:** **OPRF01** Upgrade to 40 spline L/W steel spool- D2000  
**OPRF19** Upgrade to 35 spline aluminum spool- D1565

**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

**Upgrades:** **OPRF05** Upgrade to 35 spline 9" Pro gear  
**OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF01** Upgrade to 40 spline L/W steel spool- D2000  
**OPRF19** Upgrade to 35 spline aluminum spool- D1565

**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

**Upgrades:** **OPRF05** Upgrade to 35 spline 9" Pro gear  
**OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF29** Upgrade to 40 spline aluminum spool- D2004

**Options  
for all  
packages  
above**

**D3596** Lighten ring gear  
**OPRF42** MicroBlue gear set and bearings  
**OPRF03** Ball bearing pinion support- Not available in polished  
**OPRF33** Polished case  
**OPRF34** Polished pinion support  
**OPRF37** Upgrade to HD cap kit for rear end yoke  
**OPRF35S** Replace S-Series yoke with Chromed chrome moly yoke  
**OPRF35** Replace Chrome moly yoke with Chromed chrome moly yoke  
**OPRF13** Replace Chrome moly yoke with Aluminum yoke  
**N1910H** Load bolt- Can not be used with lightened ring gear  
**U1613** 1 magnet pick-up collar for 28 spline pinion  
**U1613-2** 2 magnet pick-up collar for 28 spline pinion  
**U1613-4** 4 magnet pick-up collar for 28 spline pinion  
**U1613-8** 8 magnet pick-up collar for 28 spline pinion  
**U1614** 1 magnet pick-up collar for 35 spline pinion  
**U1614-2** 2 magnet pick-up collar for 35 spline pinion  
**U1614-4** 4 magnet pick-up collar for 35 spline pinion  
**U1614-8** 8 magnet pick-up collar for 35 spline pinion  
**N2300S** Sensor bracket for HD Pro pinion support



# 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

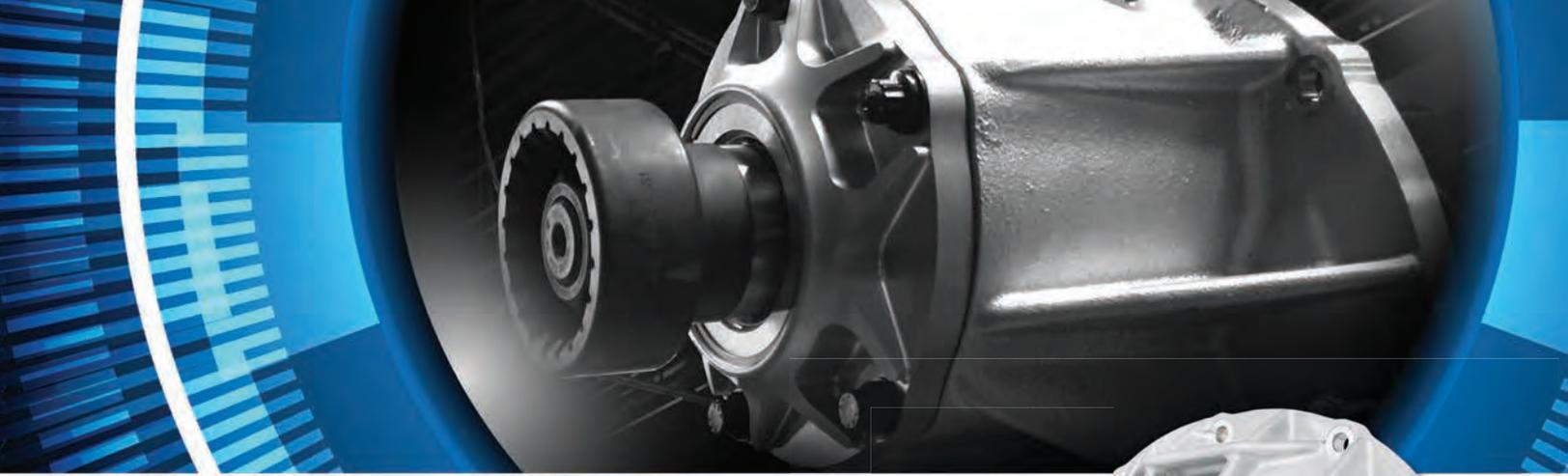
**PRF186:** The HD Pro Aluminum case with a lightweight steel spool and 28 spline Pro gear is used when weight savings and gear life are both very important and shock loads are too high for a Standard gear. The case and pinion support design offer a very stout foundation to support the spool and gear set. The tail bearing is oversized further adding to the support of the pinion. Solid mount Dragsters and Altered are the most common applications. This package includes the HD Pro case and support,

**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. If shock loads are going to be more extreme, the PRF188 which contains a Pro gear would be the better choice.

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.

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

**Upgrades:** **OPRF01** Upgrade to 40 spline L/W steel spool- D2000  
**OPRF19** Upgrade to 35 spline aluminum spool- D1565

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

**Upgrades:** **OPRF05** Upgrade to 35 spline 9" Pro gear  
**OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF01** Upgrade to 40 spline L/W steel spool- D2000  
**OPRF19** Upgrade to 35 spline aluminum spool- D1565

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

**Upgrades:** **OPRF05** Upgrade to 35 spline 9" Pro gear  
**OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF29** Upgrade to aluminum 40 spline spool- D2002

<b>Options for all packages above</b>	D3596	Lighten ring gear
	OPRF42	MicroBlue gear set and bearings
	OPRF03	Ball bearing pinion support- Not available in polished
	OPRF33	Polished case
	OPRF34	Polished pinion support
	OPRF37	Upgrade to HD cap kit for rear end yoke
	N1910H	Load bolt- Can not be used with lightened ring gear
	U1613	1 magnet pick-up collar for 28 spline pinion
	U1613-2	2 magnet pick-up collar for 28 spline pinion
	U1613-4	4 magnet pick-up collar for 28 spline pinion
	U1613-8	8 magnet pick-up collar for 28 spline pinion
	U1614	1 magnet pick-up collar for 35 spline pinion
	U1614-2	2 magnet pick-up collar for 35 spline pinion
	U1614-4	4 magnet pick-up collar for 35 spline pinion
U1614-8	8 magnet pick-up collar for 35 spline pinion	
N2300S	Sensor bracket for HD Pro pinion support	



# 9" ULTRA 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.

**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 an 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

**Upgrades:** **OPRF01** Upgrade to 40 spline L/W steel spool- D2000  
**OPRF05** Upgrade to 35 spline 9" Pro gear  
**OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF26** Upgrade to Ball bearing support  
**OPRF19** Upgrade to 35 spline aluminum spool- D1565



**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

**Upgrades:** **OPRF26** Upgrade to Ball bearing support  
**OPRF25** Upgrade to Lightened case and ball bearing support  
**OPRF29** Upgrade to 40 spline aluminum spool- D2004



**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

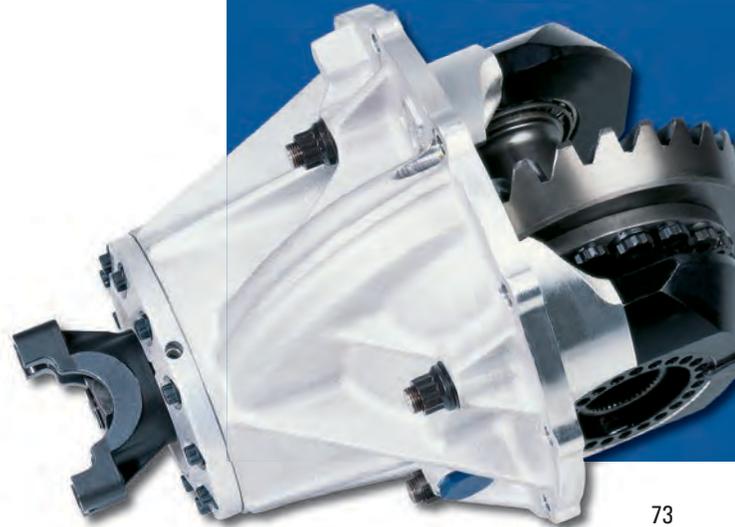
**Upgrades:** **OPRF23** Upgrade to 9 1/2" Pro gear  
**OPRF20** Upgrade to 1480 yoke  
**OPRF26** Upgrade to Ball bearing support  
**OPRF25** Upgrade to Lightened case and ball bearing support  
**OPRF29** Upgrade to 40 spline aluminum spool- D2004

**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

**Upgrades:** **OPRF26** Upgrade to Ball bearing support  
**OPRF20** Upgrade to 1480 yoke

**Options  
for all  
packages  
above**

- D3596** Lighten ring gear
- OPRF42** MicroBlue gear set and bearings
- OPRF13** Replace Chrome moly yoke with Aluminum yoke
- OPRF37** Upgrade to HD cap kit for rear end yoke
- N1910H** Load bolt- Can not be used with lightened ring gear
- U1613** 1 magnet pick-up collar for 28 spline pinion
- U1613-2** 2 magnet pick-up collar for 28 spline pinion
- U1613-4** 4 magnet pick-up collar for 28 spline pinion
- U1613-8** 8 magnet pick-up collar for 28 spline pinion
- U1614** 1 magnet pick-up collar for 35 spline pinion
- U1614-2** 2 magnet pick-up collar for 35 spline pinion
- U1614-4** 4 magnet pick-up collar for 35 spline pinion
- U1614-8** 8 magnet pick-up collar for 35 spline pinion
- N1952S** Sensor bracket for lightened case & ball support



# 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

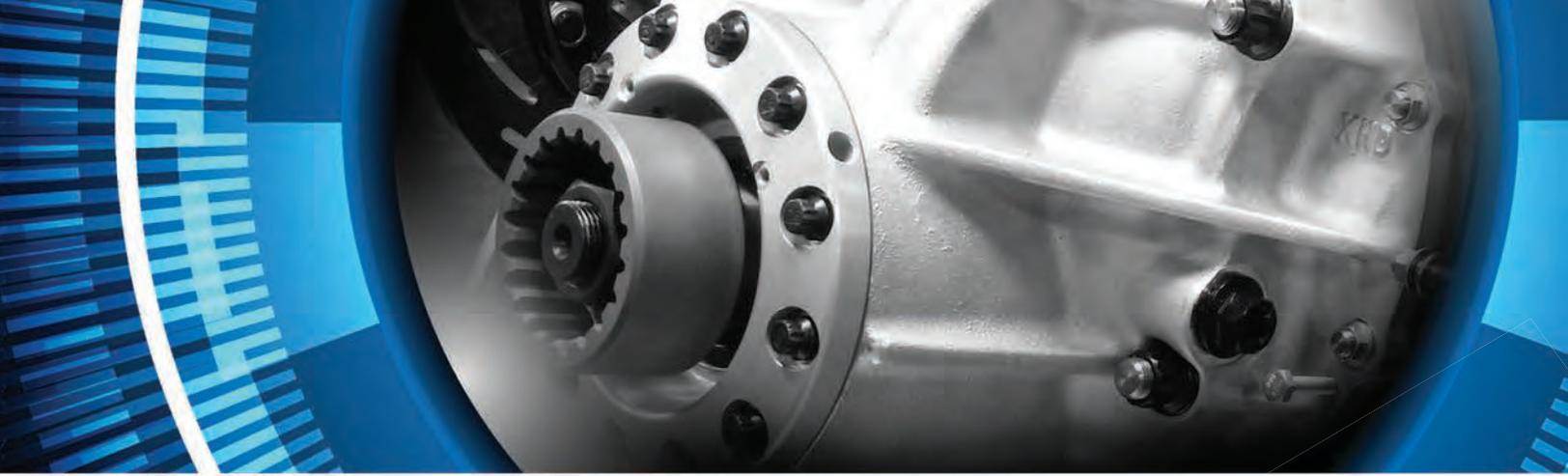
bearing support, Lightened case with ball bearing support, 40 spline aluminum spool, 35 spline 9" Pro gear, and 9 1/2" Pro gear. Options include a lightened ring gear, MicroBlue service, computer pick-up collar, and load bolt.

**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

**Upgrades:** **OPRF01** Upgrade to 40 spline L/W steel spool- D2000  
**OPRF05** Upgrade to 35 spline 9" Pro gear  
**OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF26** Upgrade to Ball bearing support  
**OPRF31** Upgrade to Coupler cover support- Not available in ball bearing  
**OPRF19** Upgrade to Aluminum 35 spline spool- D1565

**PRF210** Ultra 3.812" case and support / 40 spline HD L/W steel spool- D2002  
28 spline Pro gear / Female coupler

**Upgrades:** **OPRF26** Upgrade to Ball bearing support  
**OPRF25** Upgrade to Lightened case & ball bearing support  
**OPRF31** Upgrade to Coupler cover support- Not available in ball bearing  
**OPRF29** Upgrade to Aluminum 40 spline spool- D2004

**PRF220** Ultra 3.812" case and support / 40 spline HD L/W steel spool- D2002  
35 spline Pro gear / Female coupler

**Upgrades:** **OPRF23** Upgrade to 9 1/2" Pro gear  
**OPRF26** Upgrade to Ball bearing support  
**OPRF25** Upgrade to Lightened case and ball bearing support  
**OPRF31** Upgrade to Coupler cover support- Not available in ball bearing  
**OPRF29** Upgrade to Aluminum 40 spline spool- D2004

**PRF230** Ultra 4.00" case and support / Live Axle 36 spline lightweight steel spool  
35 spline Pro gear / Female coupler

**Upgrades:** **OPRF23** Upgrade to 9 1/2" Pro gear  
**OPRF31** Upgrade to Coupler cover support- Not available in ball bearing

**Options  
for all  
packages  
above**

**D3596** Lighten ring gear  
**OPRF37** Upgrade to HD cap kit for rear end yoke  
**OPRF42** MicroBlue gear set and bearings  
**N1910H** Load bolt- Can not use with lightened ring gear  
**U1613** 1 magnet pick-up collar for 28 spline pinion  
**U1613-2** 2 magnet pick-up collar for 28 spline pinion  
**U1613-4** 4 magnet pick-up collar for 28 spline pinion  
**U1613-8** 8 magnet pick-up collar for 28 spline pinion  
**U1614** 1 magnet pick-up collar for 35 spline pinion  
**U1614-2** 2 magnet pick-up collar for 35 spline pinion  
**U1614-4** 4 magnet pick-up collar for 35 spline pinion  
**U1614-8** 8 magnet pick-up collar for 35 spline pinion  
**N1952S** Sensor bracket for lightened case & ball support



# 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

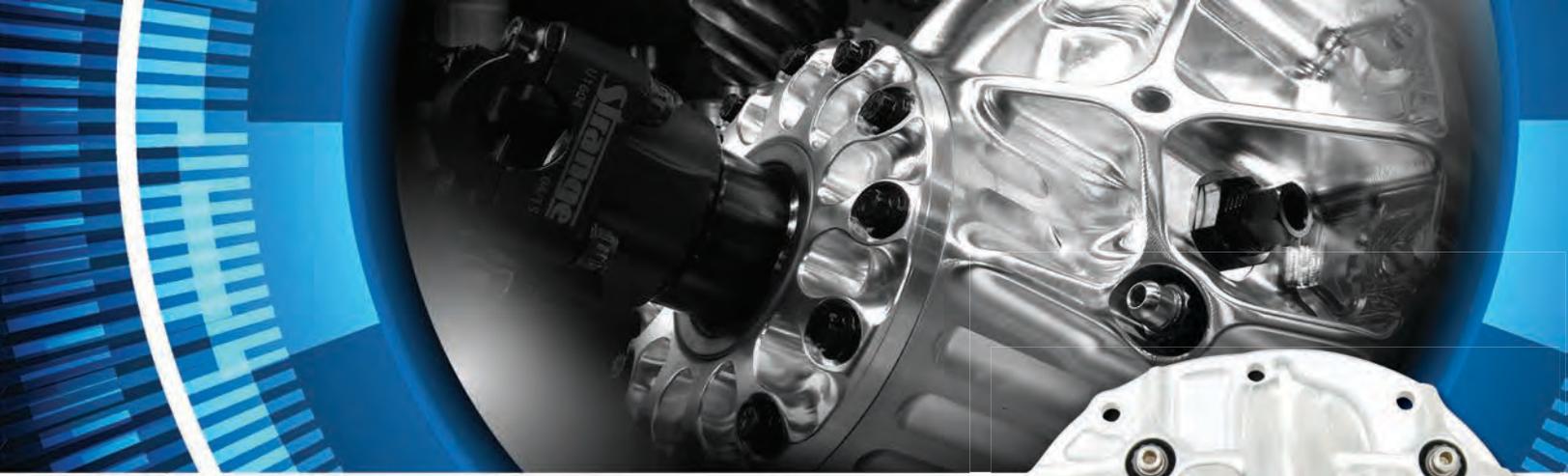
**PRF425:** This assembly includes the Strange 3.812 bore Billet case, billet pinion support, sensor holder, HD 40 spline lightweight steel spool, 35 spline Pro gear set, and a chrome moly 1350 yoke with HD cap kit. A ball bearing support upgrade is available. Options include a 9 1/2" Pro gear, lightened 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

**Upgrades:** **OPRF52** Upgrade to 35 spline 9 1/2" Pro gear  
**OPRF08** Upgrade to 1350 Billet yoke  
**OPRF20** Upgrade to 1480 Billet yoke  
**OPRF26** Upgrade to Ball bearing support



**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

**Upgrades:** **OPRF08** Upgrade to 1350 Billet yoke  
**OPRF20** Upgrade to 1480 Billet yoke  
**OPRF26** Upgrade to Ball bearing support

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

**Upgrades:** **OPRF23** Upgrade to 9 1/2" Pro gear  
**OPRF26** Upgrade to Ball bearing support

**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

**Upgrades:** **OPRF26** Upgrade to Ball bearing support  
**OPRF37** Upgrade to HD cap kit for rear end yoke

**Options for all packages above**

<b>D3596</b>	Lighten ring gear
<b>OPRF42</b>	MicroBlue gear set and bearings
<b>N1910T</b>	Load bolt - Can not be used with lightened gear
<b>N1952T</b>	Additional Sensor holder
<b>U1614</b>	1 magnet pick-up collar
<b>U1614-2</b>	2 magnet pick-up collar
<b>U1614-4</b>	4 magnet pick-up collar
<b>U1614-8</b>	8 magnet pick-up collar



# 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

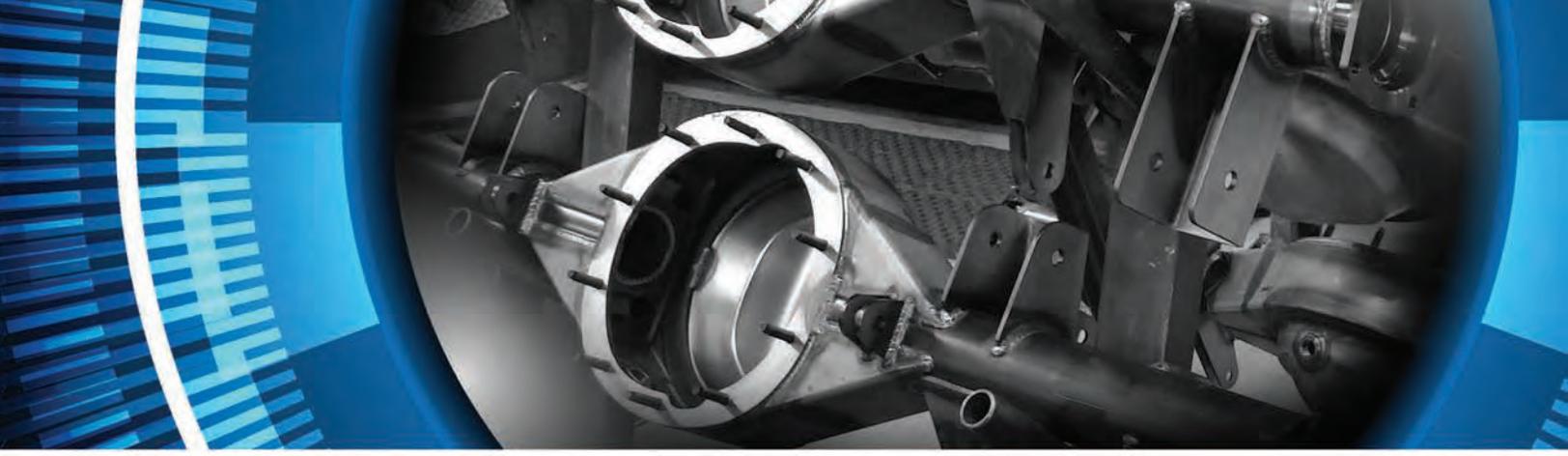
their own mounts, extreme care must be taken during the welding process as housing end alignment can be compromised. An alignment jig should be used afterwards to ensure that warping did not occur.

**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
- H1112** HD bare housing center for use with 3 1/4" O.D. tubes
  
- HF9** HD housing tubed with fill and drain- No ends or mounts
- HF9E** HD housing with fill, drain, and ends- No mounts
  
- HF9L** HD housing with fill, drain, and leaf spring mounts- No ends
- HF9LE** HD housing with fill, drain, leaf spring mounts, and ends
  
- HF9GA** HD GM A-body housing tubed with ears, fill, and drain- No mounts or ends
- HF9GAE** HD GM A-body housing with ears, fill, drain, and ends- No mounts
- HF9GAM** HD GM A-body housing with ears, fill, drain, and mounts- No ends
- HF9GAME** HD GM A-body housing with ears, fill, drain, mounts, and ends
  
- HF9GG** HD GM G-body housing tubed with ears, fill, and drain- No mounts or ends
- HF9GGE** HD GM G-body housing with ears, fill, drain, and ends- No mounts
- HF9GGM** HD GM G-body housing with ears, fill, drain, and mounts- No ends
- HF9GGME** HD GM G-body housing with ears, fill, drain, mounts, and ends
  
- HF9GBM** HD GM B-body housing with fill, drain, and mounts- No ends
- HF9GBME** HD GM B-body housing with fill, drain, mounts, and ends
  
- HF9LEG67C10** HD GM Truck 67-72 C10 housing with fill, drain, trailing arm mounts, & ends
- HF9LEG73C10** HD GM Truck 73-87 C10 housing with fill, drain, leaf spring mounts, & ends
  
- HF9M86** HD Mustang 79-04 housing tubed with ears, fill, and drain- No mounts or ends
- HF9M86E** HD Mustang 79-04 housing with ears, fill, drain, and ends- No mounts
- HF9M86M** HD Mustang 79-04 housing with ears, fill, drain, and mounts- No ends
- HF9M86ME** HD Mustang 79-04 housing with ears, fill, drain, mounts, and ends
  
- HF9M05** HD Mustang 05-14 housing tubed with ears, fill, and drain- No mounts or ends
- HF9M05E** HD Mustang 05-14 housing with ears, fill, drain, and ends- No mounts
- HF9M05M** HD Mustang 05-14 housing with ears, fill, drain, and mounts- No ends
- HF9M05ME** HD Mustang 05-14 housing with ears, fill, drain, mounts, and ends

- Options**
- H1128N** Install back brace on new housing- Parts & Labor
  - H1199P-BLK** Powder coat housing satin black
  
  - H1130DF** Install Drag Race floater spindles- Labor only
  - H1130SF** Install Pro Touring floater spindles- Labor only



# 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**  
**H1112UF**

Ultra Fab Bare Housing Center for use with 3" OD tubes  
Ultra Fab Bare Housing Center for use with 3 1/4" OD tubes

**HF9UF**  
**HF9EUF**

Ultra Fab Housing tubed with fill and drain- No ends or mounts  
Ultra Fab Housing with fill, drain, and ends- No mounts

**HF9LUF**  
**HF9LEUF**

Ultra Fab Housing with fill, drain, and leaf spring mounts- No ends  
Ultra Fab Housing with fill, drain, leaf spring mounts, and ends

**HF9GAUF**  
**HF9GAEUF**  
**HF9GAMUF**  
**HF9GAMEUF**

Ultra Fab GM A-body housing tubed with ears, fill, and drain- No mounts or ends  
Ultra Fab GM A-body housing with ears, fill, drain, and ends- No mounts  
Ultra Fab GM A-body housing with ears, fill, drain, and mounts- No ends  
Ultra Fab GM A-body housing with ears, fill, drain, mounts, and ends

**HF9GGUF**  
**HF9GGEUF**  
**HF9GGMUF**  
**HF9GGMEUF**

Ultra Fab GM G-body housing tubed with ears, fill, and drain- No mounts or ends  
Ultra Fab GM G-body housing with ears, fill, drain, and ends- No mounts  
Ultra Fab GM G-body housing with ears, fill, drain, and mounts- No ends  
Ultra Fab GM G-body housing with ears, fill, drain, mounts, and ends

**HF9GBMUF**  
**HF9GBMEUF**

Ultra Fab GM B-body 65-70 housing with fill, drain, and mounts- No ends  
Ultra Fab GM B-body 65-70 housing with fill, drain, mounts, and ends

**HF9M86UF**  
**HF9M86EUF**  
**HF9M86MUF**  
**HF9M86MEUF**

Ultra Fab Mustang 79-04 housing tubed with ears, fill, and drain- No mounts / ends  
Ultra Fab Mustang 79-04 housing with ears, fill, drain, and ends- No mounts  
Ultra Fab Mustang 79-04 housing with ears, fill, drain, and mounts- No ends  
Ultra Fab Mustang 79-04 housing with ears, fill, drain, mounts, and ends

**HF9M05UF**  
**HF9M05EUF**  
**HF9M05MUF**  
**HF9M05MEUF**

Ultra Fab Mustang 05-14 housing tubed with ears, fill, and drain- No mounts / ends  
Ultra Fab Mustang 05-14 housing with ears, fill, drain, and ends- No mounts  
Ultra Fab Mustang 05-14 housing with ears, fill, drain, and mounts- No ends  
Ultra Fab Mustang 05-14 housing with ears, fill, drain, mounts, and ends

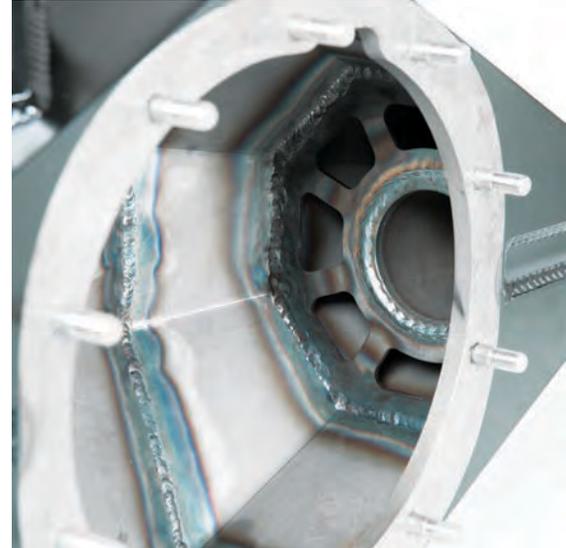
**Options**

**H1128N**  
**H1199P-BLK**

Install back brace on new housing- Parts & Labor  
Powder coat housing satin black

**H1130DF**  
**H1130SF**

Install Drag Race floater spindles- Labor only  
Install Pro Touring floater spindles- Labor only



# 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.

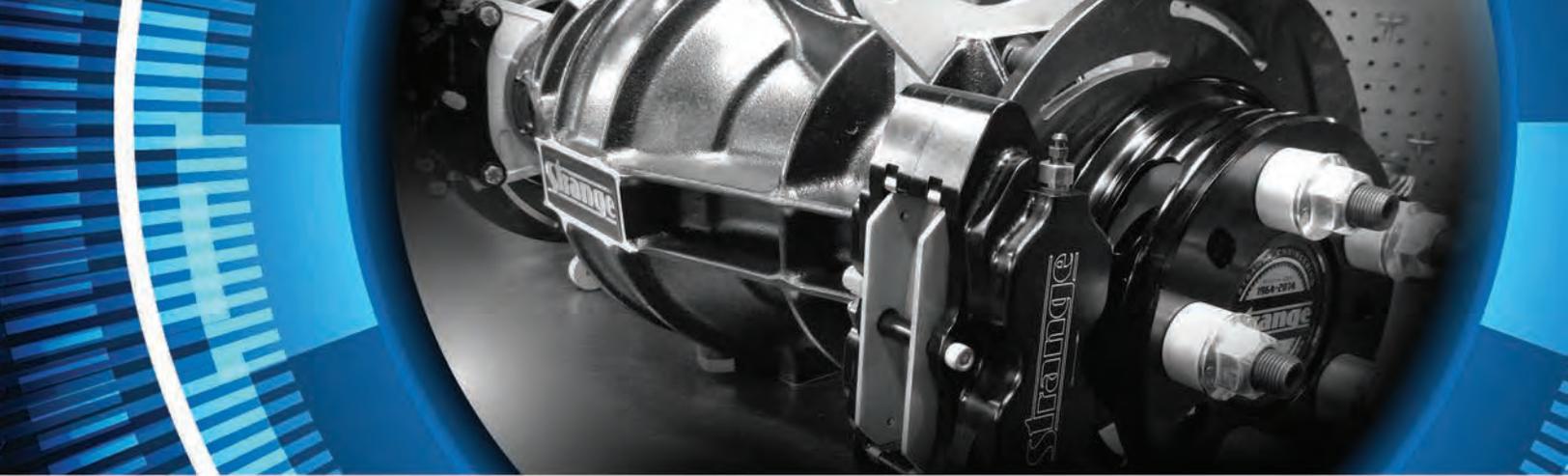
**Packages:** Packages are available that include a choice of a 26 or 27" wide housing, solid or 4-Link mount, 35 spline solid or 40 spline gun-drilled axles, Pro Steel brake kit, and come with or without a center section. The 26" housing package ordered with an Olds brake kit would result in 31.914" 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. 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  
 H1161 Dragster / Altered 27" housing on 17" centers for use with 4-Link plates

**Option**

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

**Housing**

H1152 Dragster / Altered 26" solid mount housing with choice of plates  
 H1162 Dragster / Altered 27" solid mount housing with choice of plates  
 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  
 PRF305 Choice of width, solid or 4-Link, Pro 35 spline axle package- P100758, Pro Steel brake kit, & PRF150 or PRF155 center section

PRF310 Choice of width, solid or 4-Link, Pro 40 spline axle package- P1014, and Pro Steel brake kit  
 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

Complete solid mount packages includes choice of plates and spacing Complete 4-Link packages do not include 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.

**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 cleared 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

**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.

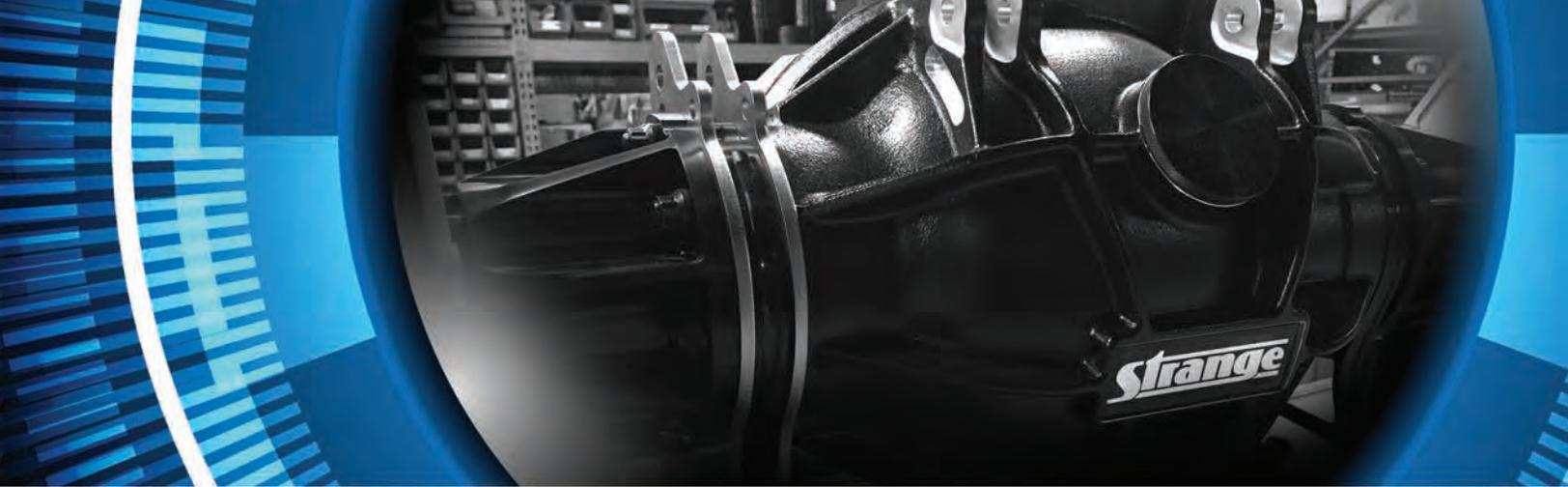
**Note: 20", 21", 22" & 23" 4-link centers available in early 2018**

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**

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### 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
- 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
- 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
- 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
- H1194 Modular 4-Link housing with caliper mounts- No plates, axles, brakes, or center section

- Options**
- OPRH40 Supply with Std duty chrome moly 4-link plates
  - OPRH44 Supply with HD chrome moly 4-link plates
  - OPRH45 Supply with HD chrome moly 4-link plates & adjustable shock mounts
  - B1955\* Billet 4 piston calipers with hard metallic pads and mounting hardware kit

\*For H1182 (Included in H1192)

# S60

## BARE HOUSINGS

**Bare Castings:** The Strange S60 casting is a vast improvement over the factory Dana 60, while still accepting the same components. The casting and oversized main caps are constructed from a proprietary nodular iron which is substantially stronger than cast iron. This has allowed the casting to be made not only thinner and lighter, but also stronger. The heavy duty main caps are fitted with adjuster nuts that eliminate the side carrier shims. Backlash

and preload are adjusted by a turn of a wrench, greatly reducing the time and effort to change a gear or differential. All castings feature a drain plug located at the bottom. Mopar applications have a machined provision to accept factory or aftermarket pinion snubbers. GM F-body applications have the torque arm mounting location cast into the unit, while A-body and G-body feature the upper control mounts.

**Welded Housings:** All below housings begin with the S60 bare casting as described above. The 3" O.D. mild steel tubing, .250" wall thickness, is pressed deep into the casting. A welding fixture is attached and the tubes are welded 360 degrees around the outside of the casting and plug welded. The

mounts are positioned by the jig and welded to the tubes. The housing ends are installed after all other welding is complete, ensuring perfect alignment with the carrier. An optional satin black powdercoat finish is available on completely welded housings.

**Housing Tubed:** The S60 casting is fitted with 3"x.250" wall mild steel tubing and welded & plugged as described above. A housing like this is for a builder that will be installing their own mounts and may also trim the

tubing further. An alignment jig will be required to install the housing ends after all other welding has been completed.

**Housing with Ends- no mounts:** The S60 casting is fitted with 3" .250 wall mild steel tubing and fixture welded with your choice of housing ends. 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.

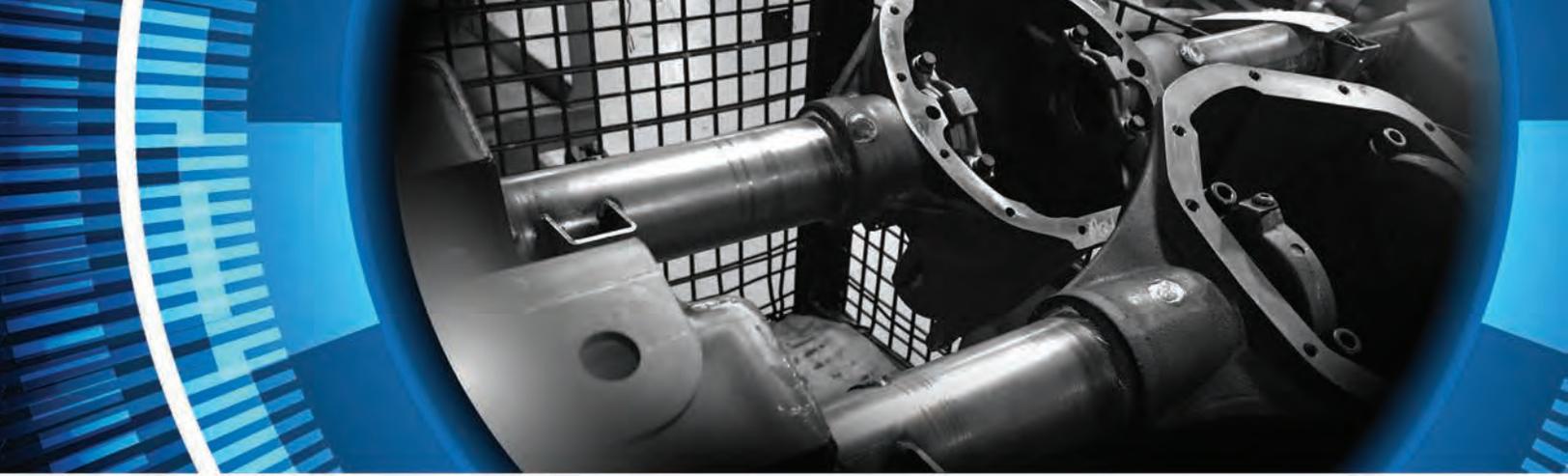
**Housing with Mounts- no ends:** The S60 casting is fitted with 3" .250 wall mild steel tubing and fixture welded with your choice of mounts. A builder might order this if they are unsure of the final width, or already has housing ends and an alignment jig. It may also be the base for a

housing that will use a floater kit. Strange floater spindles can be fitted and welded for 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 S60 casting is fitted with 3" .250 wall mild steel tubing and fixture welded with your choice of mounts and housing ends. This configuration is the safest way to maintain

the proper alignment since welding of the housing ends is always our last operation. An optional satin black powdercoat finish is also available.





H1109A\*  
H1107A  
H1108A  
H1105A

Bare Mopar casting for use with 3" O.D. tubes  
Bare GM A-body casting for use with 3" O.D. tubes  
Bare GM G-body casting for use with 3" O.D. tubes  
Bare GM F-body casting for use with 3" O.D. tubes

H60\*  
H60E\*

Mopar casting tubed- No ends or mounts  
Mopar casting with ends- No mounts

H60L  
H60LE

Mopar casting with leaf spring mounts- No ends  
Mopar casting with leaf spring mounts, and ends

H60GA  
H60GAE  
H60GAM  
H60GAME

GM A-body casting tubed- No mounts or ends  
GM A-body casting with ends- No mounts  
GM A-body casting with mounts- No ends  
GM A-body casting with mounts and ends

H60GG  
H60GGE  
H60GGM  
H60GGME

GM G-body casting tubed- No mounts or ends  
GM G-body casting with ends- No mounts  
GM G-body casting with mounts- No ends  
GM G-body casting with mounts and ends

H60GF  
H60GFE  
H60GFM  
H60GFME

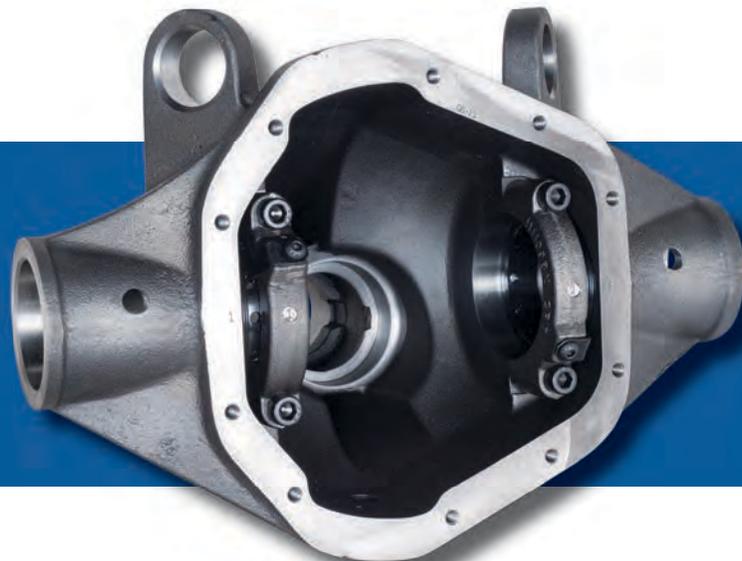
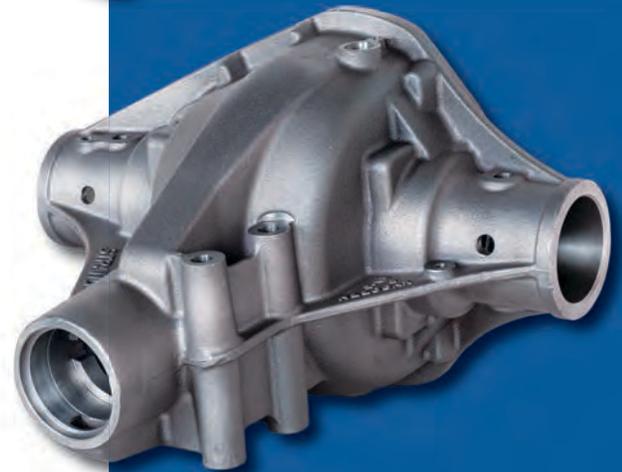
GM F-body casting tubed- No mounts or ends  
GM F-body casting with ends- No mounts  
GM F-body casting with mounts- No ends  
GM F-body casting with mounts and ends

\*Can be used for Mopar or any leaf spring application

### Options

H1199P-BLK  
H1130DF  
H1130SF  
H1109D

Powder coat housing satin black  
Install Drag Race floater spindles- Labor only  
Install Pro Touring floater spindles- Labor only  
Adjuster nut wrench for S60



# 12 BOLT BARE HOUSINGS

**Bare Casting:** The Strange 12 bolt casting is much stronger than the OEM 12 bolt, while still accepting the same components. The casting is poured from proprietary nodular iron which is substantially stronger than cast iron. The main caps are constructed from forged chrome moly instead of cast iron like the originals. These improvements in materials have allowed the

casting to be made not only thinner and lighter, but also stronger. The casting is machined to accept 3" O.D. tubing, has a torque arm mount cast as part of the case, and a location for a Strange 3 channel sensor. It is designed as an F-body replacement for the extremely weak 7.625", but can also be used as an upgraded 12 bolt in any leaf spring application.

**Welded Housings:** All below housings begin with the Strange 12 bolt casting as described above. The 3" O.D. mild steel tubing, .250" wall thickness, is pressed deep into the casting. A welding fixture is attached and the tubes are welded 360 degrees around the outside of the casting and

plug welded. The mounts are positioned by the jig and welded to the tubes. The housing ends are installed after all other welding is complete, ensuring perfect alignment with the carrier. An optional satin black powdercoat finish is available on completely welded housings.

**Housing Tubed:** The Strange 12 bolt casting is fitted with 3" x .250" wall mild steel tubing and welded & plugged as described above. A housing like this is for a builder that will be installing their own mounts and may also trim

the tubing further. An alignment jig will be required to install the housing ends after all other welding has been completed.

**Housing with Ends- no mounts:** The Strange 12 bolt casting is fitted with 3" .250 wall mild steel tubing and fixture welded with your choice of housing ends. 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.

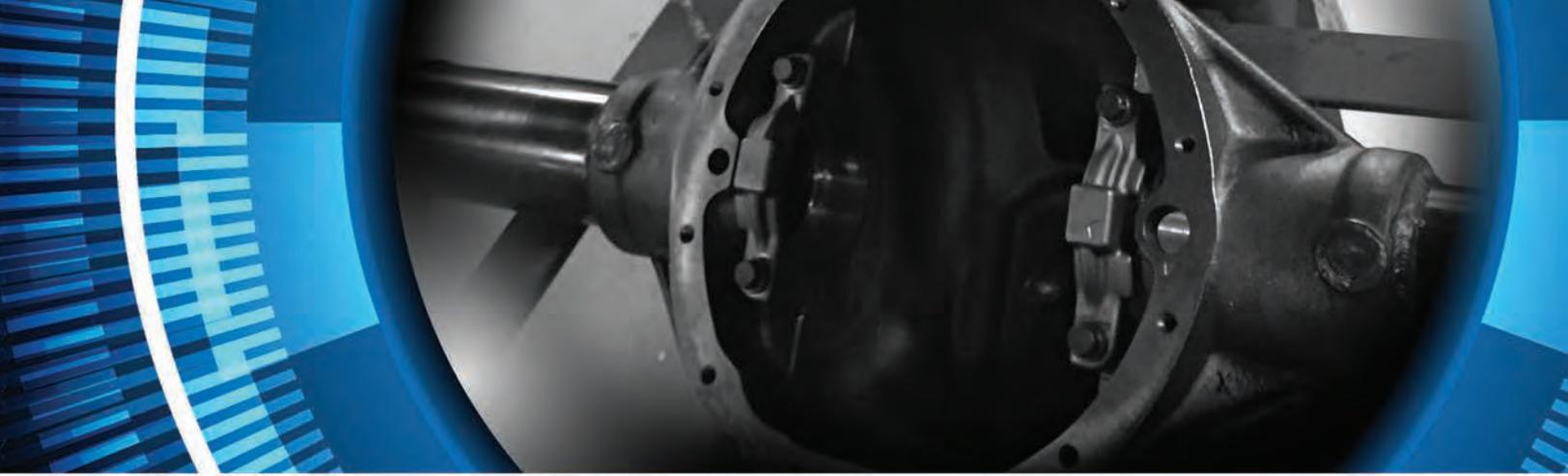
**Housing with Mounts- no ends:** The Strange 12 bolt casting is fitted with 3" .250 wall mild steel tubing and fixture welded with your choice of mounts. A builder might order this if they are unsure of the final width, or already has housing ends and an alignment jig. It may also be the base

for a housing that will use a floater kit. Strange floater spindles can be fitted and welded for 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 Strange 12 bolt casting is fitted with 3" .250 wall mild steel tubing and fixture welded with your choice of mounts and housing ends. This configuration is the safest way

to maintain the proper alignment since welding of the housing ends is always our last operation. An optional satin black powdercoat finish is also available.





H1106A\* Bare 12 bolt F-body casting for use with 3" O.D. tubes

H12F\* 12 bolt F-body casting tubed- No ends or mounts

H12FE\* 12 bolt F-body casting with ends- No mounts

H12FL 12 bolt F-body casting with leaf spring mounts- No ends

H12FLE 12 bolt F-body casting with leaf spring mounts and ends

H12FM 12 bolt F-body casting with F-body mounts- No ends

H12FME 12 bolt F-body casting with F-body mounts and ends

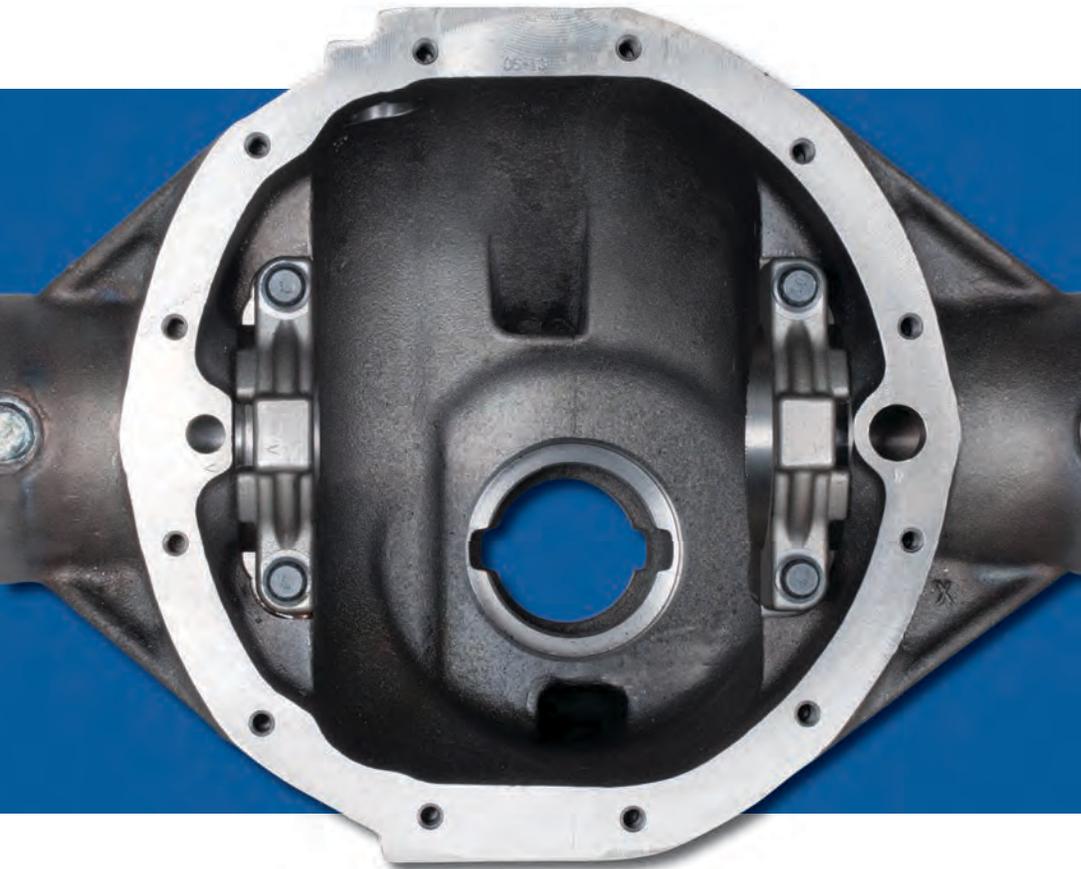
\*Can be used for F-body or any leaf spring application

### Options

H1199P-BLK Powder coat housing satin black

H1130DF Install Drag Race floater spindles- Labor only

H1130SF Install Pro Touring floater spindles- Labor only

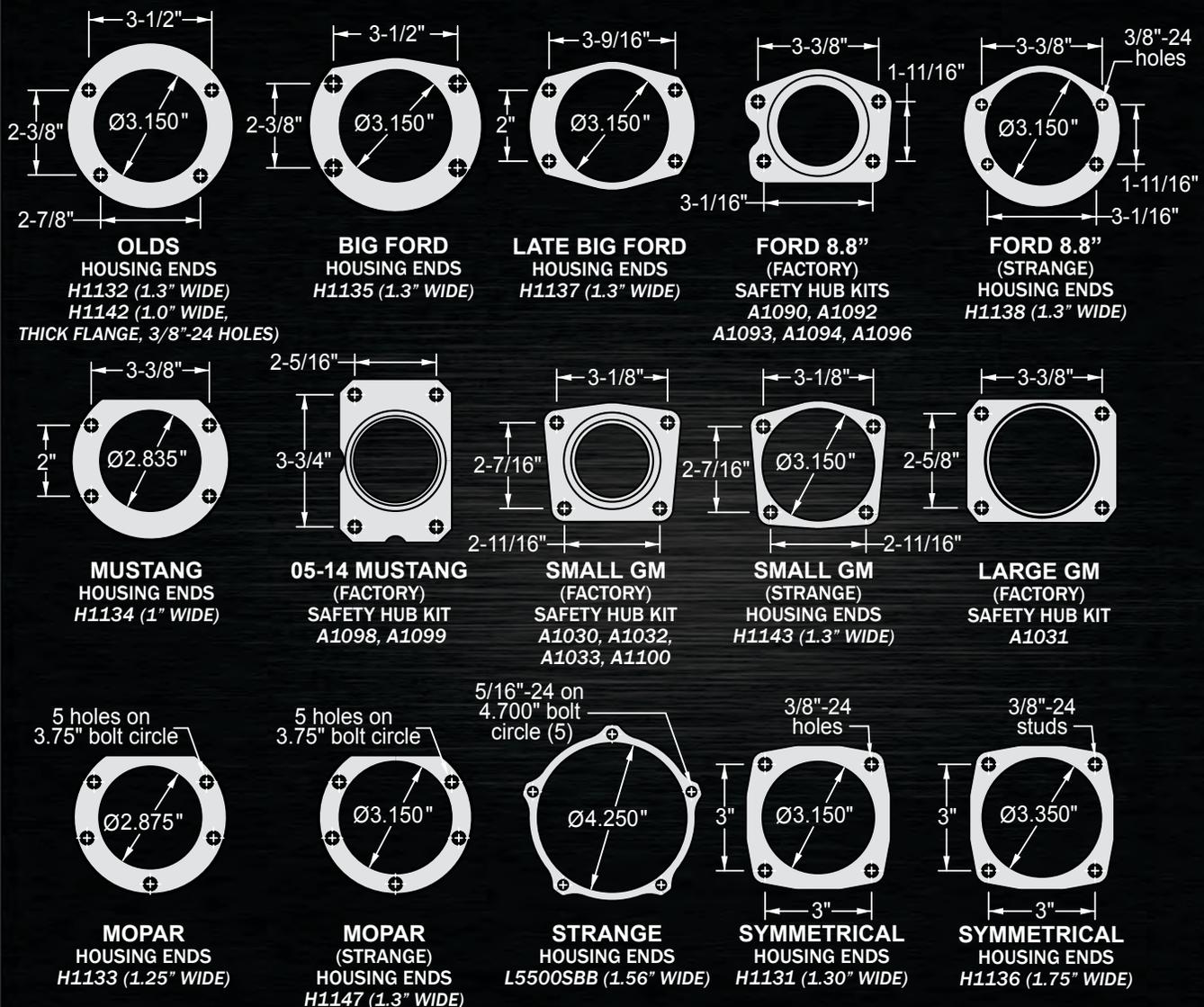


# HOUSING ENDS & COMPONENTS

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

\* 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  
 H1133STKIT 3/8" housing end tee bolt kit- includes washers and lock nuts for 10 holes  
 H1135STKIT 1/2" housing end tee bolt kit- includes washers and lock nuts for 8 holes

H1112A 9" press-in center section housing stud- each  
 F1282 3/8" x 24 reduced hex self locking flanged nut- each

H1112G Fel Pro 9" center section gasket  
 H1111\*\* Fel Pro high performance 9" Teflon Center Section gasket  
 H1111S\*\* LubLocker Premium Gasket

D3508 Fel Pro S60 / Dana 60 cover gasket  
 D3508F\*\* Fel Pro S60 / Dana 60 high performance Teflon gasket

H1106G Fel Pro 12 bolt passenger car cover gasket

\*\*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.

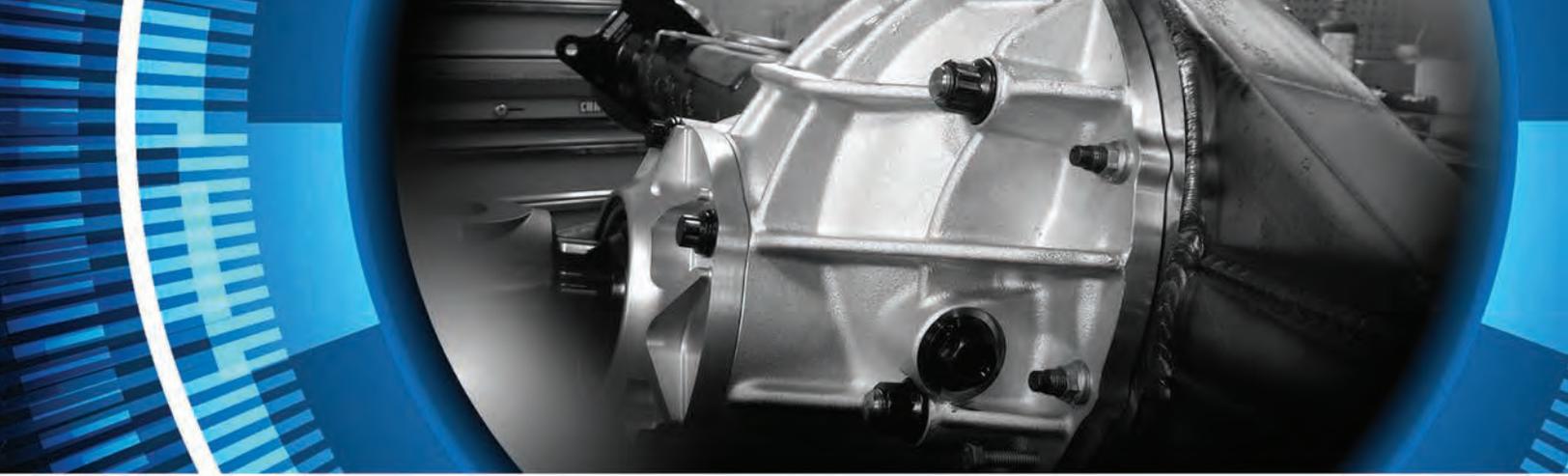
Strange Engineering sales staff is always happy to guide you through the ordering process, even if you are ordering from one of our many valued distributors. We will ensure you are not only well informed, but also confident that you will be receiving a product that will deliver many years of enjoyment 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		
Buick	Grand National	85-87	9"	S60	
	Grand Sport / GSX	68-72	9"	S60	
	Regal	73-77	9"		
	Regal	78-88	9"	S60	
	Skylark	64-72	9"	S60	
Chevy	Bel Air	58-64	9"		
	Bel Air	65-70	9"	S60	12 blt
	Biscayne	58-64	9"		
	Biscayne	65-70	9"	S60	12 blt
	Blazer	82-03	9"	S60 12 blt	
	Blazer 2WD/4WD	73-91	9"		
	C10	67-72	9"		
	C10 / K10	73-87	9"		
	Camaro	67-81	9"	S60	12 blt
	Camaro	82-02		S60	12 blt
	Caprice	65-70	9"	S60	12 blt
	Chevelle	64-72	9"	S60	
	Chevelle	73-77	9"		
	Chevy	55-57	9"	S60	12 blt
	Chevy II	62-67	9"	S60 12 blt	
	El Camino	64-72	9"	S60	
	El Camino	73-77	9"		
	El Camino	78-87	9"	S60	
	Impala	58-64	9"		
	Impala	65-70	9"	12 blt	
	Laguna	73-77	9"		
	Malibu	64-72	9"	S60	
	Malibu	73-77	9"		
	Malibu	78-87	9"	S60	
	Monte Carlo	70-72	9"	S60	
	Monte Carlo	73-77	9"		
	Monte Carlo	78-88	9"	S60	
Nova	68-79	9"	S60	12 blt	
S-10 2WD	82-03	9"	S60 12 blt		
Suburban 2WD/4WD	73-91	9"			
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"		
	Mopar	Barracuda	64-74	9"	S60
Belvedere		68-75	9"	S60	
Challenger		70-74	9"	S60	
Charger		66-78	9"	S60	
Coronet		65-79	9"	S60	
Dart		64-76	9"	S60	
Duster		70-76	9"	S60	
Fury		65-79	9"	S60	
GTX		67-71	9"	S60	
R/T		65-79	9"	S60	
Road Runner		68-79	9"	S60	
Satellite		65-72	9"	S60	
Scamp		71-76	9"	S60	
Super Bee		68-79	9"	S60	
Swinger	69-76	9"	S60		
Valiant	70-76	9"	S60		
Olds	442	68-72	9"	S60	
	442	73-77	9"		
	Cutlass	64-72	9"	S60	
	Cutlass	73-77	9"		
	Cutlass	78-88	9"	S60	
	Hurst	78-88	9"	S60	
Pontiac	Firebird	67-81	9"	S60	12 blt
	Firebird	82-02		S60	12 blt
	Gran Prix	70-72	9"	S60	
	Gran Prix	73-77	9"		
	Gran Prix	78-87	9"	S60	
	GTO	64-72	9"	S60	
	Le Mans	64-72	9"	S60	
	Le Mans	73-77	9"		
	Le Mans	78-87	9"	S60	
Tempest	64-67	9"	S60		

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 / GM / Mopar 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.

**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 / GM / Mopar leaf spring housing- HF9LE / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102

Mustang 1979-2004 housing- HF9M86ME / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102

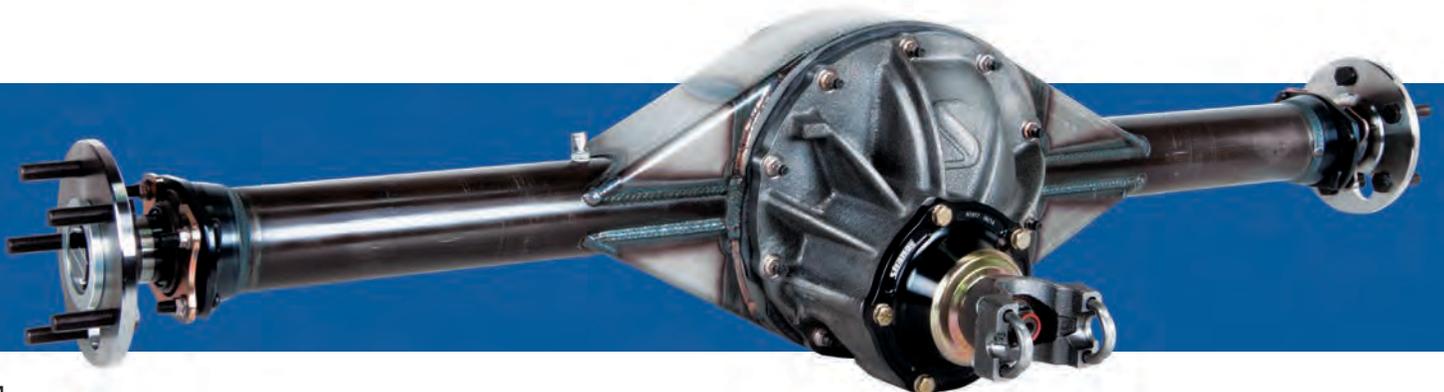
Mustang 2005-2014 housing- HF9M05ME / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102

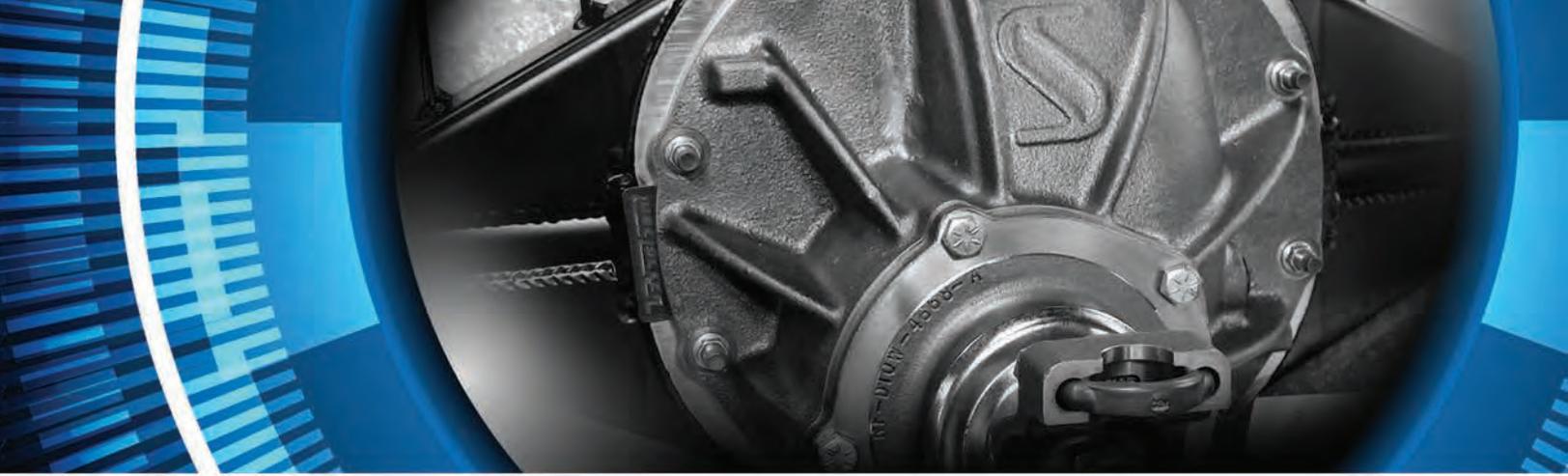
GM A-body housing- HF9GAME / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102

GM G-body housing- HF9GGME / S-Series iron center with clutch posi unit- PRF130 / 31 spline alloy axle package- P3102

## Popular Options

Housing	Upgrade to Ultra Fab housing Powder coat satin black- H1199P-BLK
Differential	Eaton 31 spline helical gear Truetrack- OPRF09
Center Section	HD Pro Aluminum - Replace PRF130 with PRF180
Brakes	Wilwood 11" Pro street disc brake kit installed Wilwood 12" Pro Street disc brake kit installed Late Big Ford 11" drum brake kit installed





## Street/Track

Ford / GM / Mopar leaf spring housing- HF9LE / Pro Iron center with upgrades / 35 spline alloy axle package- P3502

Mustang 1979-2004 housing- HF9M86ME / Pro Iron center with upgrades / 35 spline alloy axle package- P3502

Mustang 2005-2014 housing- HF9M05ME / Pro Iron center with upgrades / 35 spline alloy axle package- P3502

GM A-body housing- HF9GAME / Pro Iron center with upgrades / 35 spline alloy axle package- P3502

GM G-body housing- HF9GGME / Pro Iron center with upgrades / 35 spline alloy axle package- P3502



## Popular Options

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

## Brake Kit Options

Brakes	Wilwood 11" Pro Street disc brake kit installed Wilwood 12" Pro Street disc brake kit installed Late Big Ford 11" Drum brake kit installed
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# 9" DRAG RACE

## FEATURING PRO IRON CENTER SECTION

**Ford / GM / Mopar 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.

**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

Ford / GM / Mopar leaf spring housing- HF9LE / Pro Iron center with standard gear- PRF105 / 35 spline Pro axle package- P1007

Mustang 1979-2004 housing- HF9M86ME / Pro Iron center with standard gear- PRF105 / 35 spline Pro Race axle package- P1007

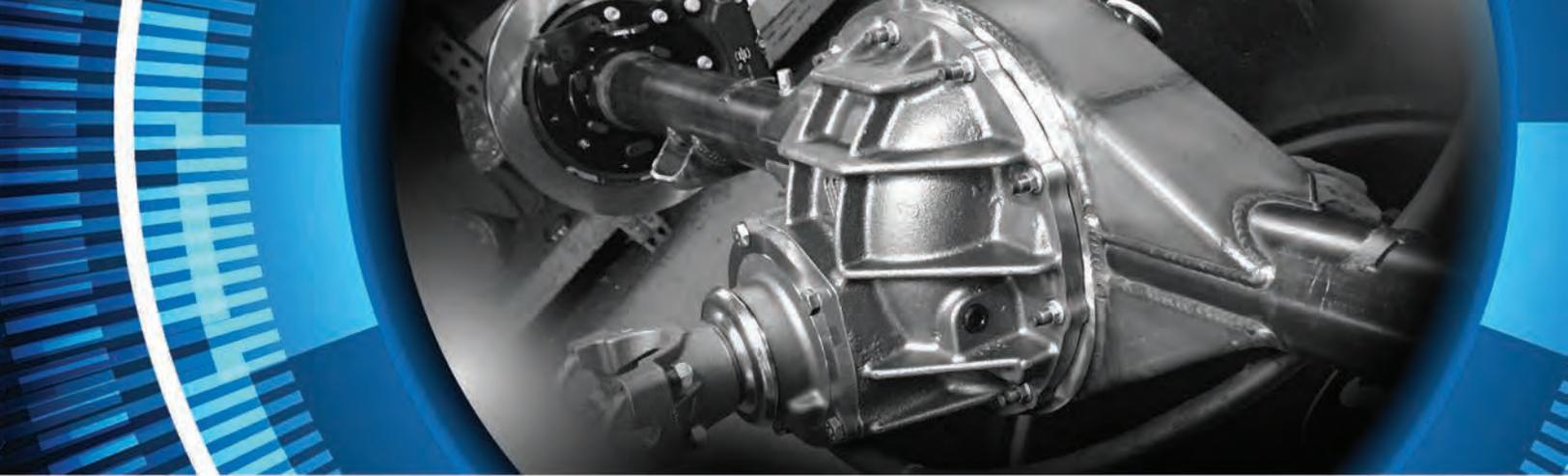
Mustang 2005-2014 housing- HF9M05ME / Pro Iron center with standard gear- PRF105 / 35 spline Pro Race axle package- P1007

GM A-body housing- HF9GAME / Pro Iron center with standard gear- PRF105 / 35 spline Pro axle package- P1007

GM G-body housing- HF9GGME / Pro Iron center with standard gear- PRF105 / 35 spline Pro axle package- P1007

## Popular Options

Housing	Upgrade to Ultra Fab housing Install back brace- H1128N Powder coat satin black- H1199P-BLK
Center Section	Option for Small stem Pro gear- Replace PRF105 with PRF115 Option for Large stem Pro gear- Replace PRF105 with PRF115 + OPRF05
Axles	Option for 5/8" stud kit- Replace P1007 with P100758
Brakes	S-Series disc brake kit installed Pro Race disc brake kit installed Dual Pro Race disc kit installed Sportsman Carbon disc brake installed



## Drag Race - 40 Spline Axles

Bare 9" housing without mounts- HF9E / Pro Iron center with upgrade \* / 40 spline solid Pro Race axle package- P1016

Ford / GM / Mopar leaf spring housing- HF9LE / Pro Iron center with upgrade \* / 40 spline solid Pro Race axle package- P1016

Mustang 1979-2004 housing- HF9M86ME / Pro Iron center with upgrade \* / 40 spline solid Pro Race axle package- P1016

Mustang 2005-2014 housing- HF9M05ME / Pro Iron center with upgrade \* / 40 spline solid Pro Race axle package- P1016

GM A-body housing- HF9GAME / Pro Iron center with upgrade \* / 40 spline solid axle package- P1016

GM G-body housing- HF9GGME / Pro Iron center with upgrade \* / 40 spline solid axle package- P1016

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

### Popular Options

Housing	Upgrade to Ultra Fab housing Install back brace- H1128N Powder coat satin black- H1199P-BLK
Center Section	Option for Small stem Pro gear- Replace PRF105 + OPRF01 with PRF115 + OPRF01 Option for Large stem Pro gear- Replace PRF105 + OPRF01 with PRF115 + OPRF01 + OPRF05
Axles	Option for Gun-drilled axles - Replace P1016 with P1014
Brakes	S-Series disc brake kit installed Pro Race disc brake kit installed Dual Pro Race disc kit installed Sportsman Carbon disc brake installed



# 9" DRAG RACE

## FEATURING LIGHT WEIGHT ALUMINUM CENTER SECTION

**Ford / GM / Mopar 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 In these examples, the brake kit prices include.

**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

Ford / GM / Mopar leaf spring housing- HF9LE / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007

Mustang 1979-2004 housing- HF9M86ME / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007

Mustang 2005-2014 housing- HF9M05ME / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007

GM A-body housing- HF9GAME / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007

GM G-body housing- HF9GGME / L/W Aluminum center with standard gear- PRF155 / 35 spline Pro axle package- P1007

### Popular Options

Housing	Upgrade to Ultra Fab housing Install back brace- H1128N Powder coat satin black- H1199P-BLK
Center Section	Option for Small stem Pro gear- Replace PRF155 with PRF165 Option for Large stem Pro gear- Replace PRF155 with PRF165 + OPRF05
Axles	Option for 5/8" stud kit- Replace P1007 with P100758
Brakes	S-Series disc brake kit installed Pro Race disc brake kit installed Dual Pro Race disc kit installed Sportsman Carbon disc brake installed





## 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

Ford / GM / Mopar leaf spring housing- HF9LE / L/W Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

Mustang 1979-2004 housing- HF9M86ME / L/W Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

Mustang 2005-2014 housing- HF9M05ME / L/W Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

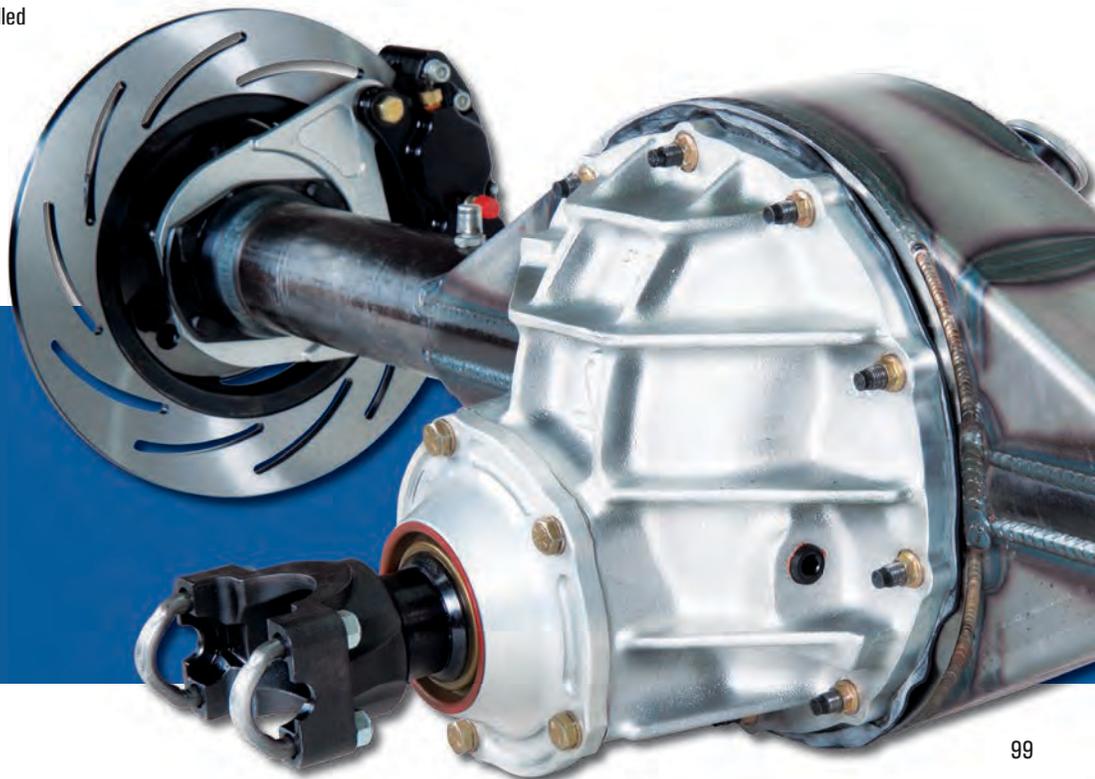
GM A-body housing- HF9GAME / L/W Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

GM G-body housing- HF9GGME / L/W Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

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

## Popular Options

Housing	Upgrade to Ultra Fab housing Install back brace- H1128N Powder coat satin black- H1199P-BLK
Center Section	Option for Small stem Pro gear- Replace PRF155 + OPRF01 with PRF165 + OPRF01 Option for Large stem Pro gear- Replace PRF155 + OPRF01 with PRF165 + OPRF01 + OPRF05
Axles	Option for Gun-drilled axles- Replace P1016 with P1014
Brakes	S-Series disc brake kit installed Pro Race disc brake kit installed Dual Pro Race disc kit installed Sportsman Carbon disc brake installed



# 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.

**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

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

Mustang 1979-2004 housing- HF9M86ME / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007

Mustang 2005-2014 housing- HF9M05ME / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007

GM A-body housing- HF9GAME / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007

GM G-body housing- HF9GGME / HD Pro Aluminum center with standard gear- PRF184 / 35 spline Pro axle package- P1007

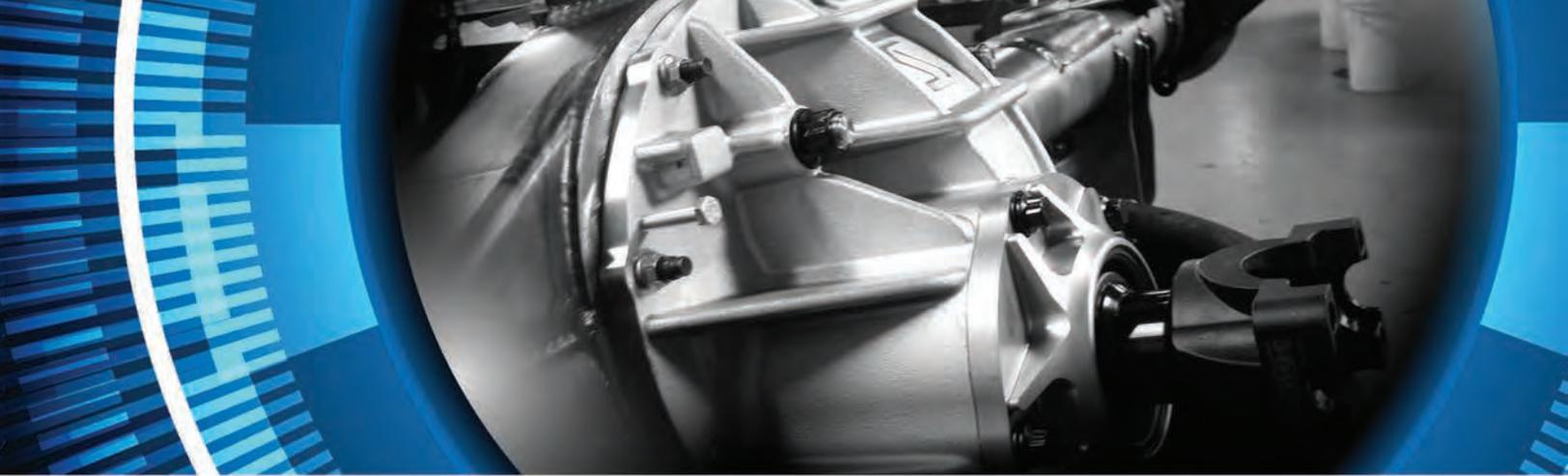
## Popular Options

Housing Upgrade to Ultra Fab housing  
Install back brace- H1128N  
Powder coat satin black- H1199P-BLK

Center Section Small stem pro gear- Replace PRF184 with PRF188  
Large stem pro gear- Replace PRF184 with PRF188 + OPRF05  
9 1/2" large stem pro- Replace PRF184 with PRF188 + OPRF52

Axles: 5/8" stud kit- Replace P1007 with P100758

Brakes S-series disc brake kit installed  
Pro Race disc brake kit installed  
Dual Pro Race disc kit installed  
Sportsman Carbon disc brake installed



## Drag Race - 40 Spline Axles

Bare 9" housing without mounts- HF9E / HD Pro Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

Ford / GM / Mopar leaf spring housing- HF9LE / HD Pro Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

Mustang 1979-2004 housing- HF9M86ME / HD Pro Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

Mustang 2005-2014 housing- HF9M05ME / HD Pro Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

GM A-body housing- HF9GAME / HD Pro Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

GM G-body housing- HF9GGME / HD Pro Aluminum center with upgrade \* / 40 spline solid Pro axle package- P1016

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

### Popular Options

**Housing** Upgrade to Ultra Fab housing  
Install back brace- H1128N  
Powder coat satin black- H1199P-BLK

**Center Section** Small stem pro gear- Replace PRF184 + OPRF01 with PRF188 + OPRF01  
Large stem pro gear- Replace PRF184 + OPRF01 with PRF188 + OPRF01 + OPRF05  
9 1/2" large stem pro- Replace PRF184 + OPRF01 with PRF188 + OPRF01 + OPRF52

**Axles:** Gun-drilled axles- Replace P1016 with P1014

**Brakes** S-series disc brake kit installed  
Pro Race disc brake kit installed  
Dual Pro Race disc kit installed  
Sportsman Carbon disc brake installed



# 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.

**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

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

Mustang 1979-2004 housing- HF9M86ME / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007

Mustang 2005-2014 housing- HF9M05ME / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007

GM A-body housing- HF9GAME / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007

GM G-body housing- HF9GGME / Ultra Case center with small stem pro gear- PRF205 / 35 spline Pro axle package- P1007

### Popular Options

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





## Drag Race - 40 Spline Axles

Bare 9" housing without mounts- HF9E / Ultra Case center with upgrade \* / 40 spline solid Pro axle package- P1016

Ford / GM / Mopar leaf spring housing- HF9LE / Ultra Case center with upgrade \* / 40 spline solid Pro axle package- P1016

Mustang 1979-2004 housing- HF9M86ME / Ultra Case center with upgrade \* / 40 spline solid Pro axle package- P1016

Mustang 2005-2014 housing- HF9M05ME / Ultra Case center with upgrade \* / 40 spline solid Pro axle package- P1016

GM A-body housing- HF9GAME / Ultra Case center with upgrade \* / 40 spline solid Pro axle package- P1016

GM G-body housing- HF9GGME / Ultra Case center with upgrade \* / 40 spline solid Pro axle package- P1016

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

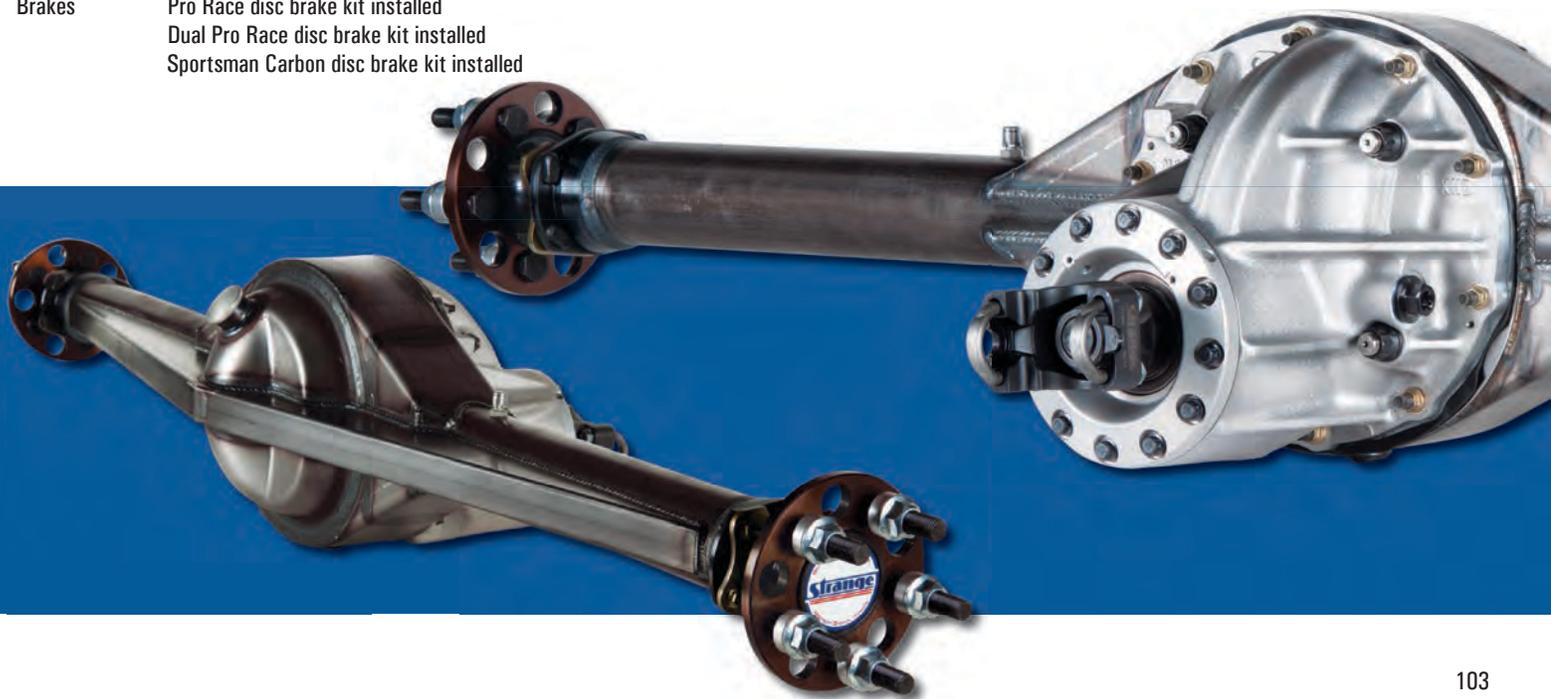
## Popular Options

**Housing** Upgrade to Ultra Fab housing  
Install back brace- H1128N  
Powder coat satin black- H1199P-BLK

**Center Section** Large stem pro gear- Add option OPRF05  
Large stem pro gear and 3.812" case- Replace PRF205 + OPRF01 with PRF225  
9 1/2" large stem pro- Replace PRF205 + OPRF01 with PRF225 + OPRF52  
1480 chrome moly yoke- Add option OPRF20  
Gun-drilled axles- Replace P1016 with P1014

**Axles**

**Brakes** Pro Race disc brake kit installed  
Dual Pro Race disc brake kit installed  
Sportsman Carbon disc brake kit installed



# 9.75 INDEPENDENT REAR END

## CAMARO 2010-2014

### Strange 9.75" Aluminum Independent Rear End Camaro 2010-2014

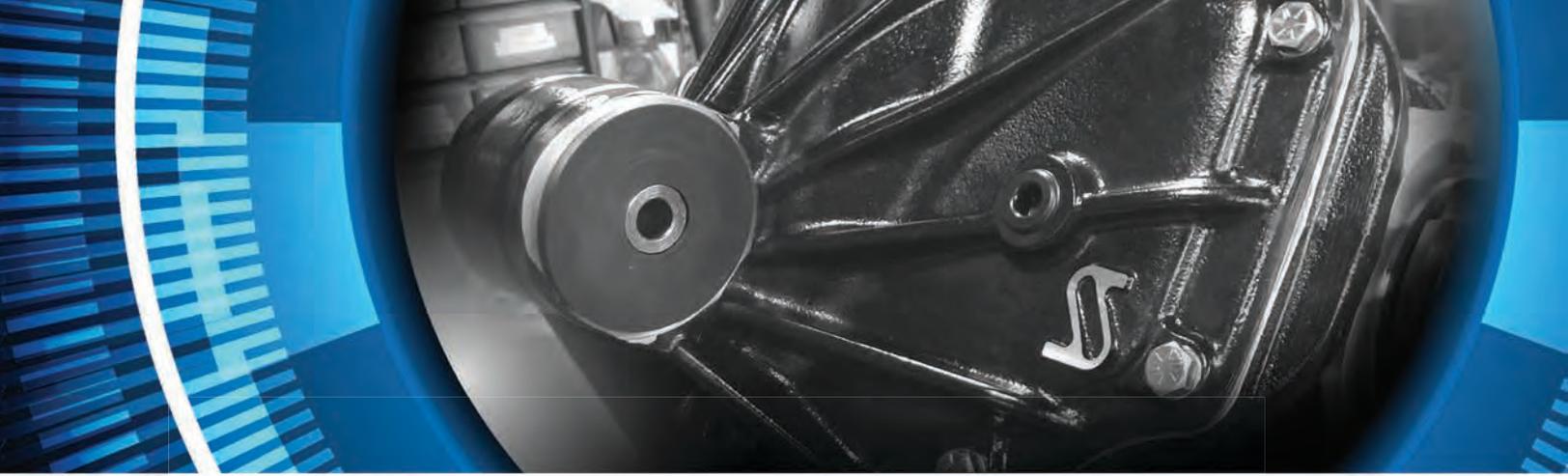
Strange Engineering has developed and stringently tested its new ALL aluminum independent rear end. As opposed to 9" steel fabricated units, the Strange "one piece" aluminum unit provides a seamless installation, comparable strength, and quieter operation compared to 9" aftermarket gear sets at a weight that is only 20 lbs. greater than the OEM 218mm unit.

The Strange 9.75" utilizes proven components- including the Strange 35-spline S-Trac (helical design) and Hy-Tuf axle shafts. Manufactured from lightweight 206-T4 aluminum, which provides exceptional strength and toughness at a reduced weight. Strange designed the 9.75" unit with a radial design- for both the main unit and the support cover, which provides outstanding strength and increased rigidity. Aircraft grade 2024-T351 billet aluminum main caps and steel adjuster nuts for easy and precise gear set-up. The main caps are further supported by the cover, increasing strength and decreasing deflection. The 9.75" is coated with black Enduraguard™ to maintain a clean finish.



Strange offers 35-spline Hy-Tuf stub shafts to adapt it's 9.75" to popular existing aftermarket axle shaft assemblies. Including shafts for 14.313" axle flange to axle flange dimension, which will fit The Driveshaft Shop axle assemblies for OEM rear end/ center configurations. Stub axles are also available for 17.30", which will fit The Driveshaft Shop and \*G-Force 9" shaft assembly configurations. Custom Strange axle shafts are also available- call to discuss your application.

*\* G-force stamped steel CV joint dust caps are not compatible with Strange stub axles- Must be sealed with RTV*



*Inside cover- main cap support  
(pictured)*

- Seamless "Bolt-In" Installation
- Exceptional Strength, High Toughness, Lightweight Premium 206-T4 Aluminum
- Finned Housing and Radial Ribbed Cover Design Provides Substantial Strength and Rigidity
- Support Style Rear Cover Reinforces Main Caps to Increase Overall Strength and Minimizes Deflection (pictured above right)
- Aircraft Grade 2024-T351 Billet Aluminum Main Caps and Steel Adjuster Nuts for Easy and Precise Gear Set-Up
- 35-SplineHyTuf Axle Shafts & Helical Differential
- Ratios Available from 3.54-6.50
- Robust Enduraguard™ Black Coating for Extensive Surface Protection and Provides a clean and easily maintained surface finish

\* H-1400 9.75" Independent rear end, choice of gear ratio from 3.54-6.50, 1350 series standard pinion yoke (optional chrome-moly pinion yoke available at additional cost). U-bolts, polyurethane bushings included (will fit OEM bushings that Strange does not offer), 35-spline S-Trac- fully assembled with choice of 35-spline Hy-Tuf stub shafts.

# S60 BOLT-IN REAR ENDS

**OVERVIEW:** The Strange S60 is a vast improvement over a factory Dana 60, while still accepting the same components. The casting and oversized main caps are constructed from a proprietary nodular iron which is substantially stronger than cast iron. This has allowed the casting to be made not only thinner and lighter, but also stronger. The heavy duty main caps are fitted with adjuster nuts that eliminate the side carrier shims. Backlash and preload are adjusted by a turn of a wrench, greatly reducing the time and effort to change a gear or differential. The 9.750" ring gear can endure a tremendous amount of abuse- equal to a 9" Ford at a fraction of the price. It is also more

efficient, taking less horsepower to drive the ring and pinion. The S60 weighs 15 lbs. more than a comparable 9" rear end, and only 20-25 lbs. more than an aftermarket 12-bolt. The S60 rear end is equipped with 35-spline axle shafts without costly upgrades. All castings feature a drain plug located at the bottom. Mopar applications have a machined provision to accept factory or aftermarket pinion snubbers. GM F-body applications have the torque arm mounting location cast into the unit, while A-body and G-body feature integrated upper control mounts. The HD 1350 series pinion yoke is larger than any factory yoke and needs to be accounted for when ordering the driveshaft.

**STREET/TRACK:** The S60 is equipped with a Spicer Trac-lock (clutch style) posi unit, Standard gear set, 35 spline Alloy axles, 7/16" or 1/2" wheel studs, HD 1350 series yoke, u-bolt kit, and steel rear cover. The Trac-lock is designed for street use in vehicles that will not be raced. The optional Truetrack (helical gear) differential is a great choice for a Street / Track applications. Gear ratio choices are 3.54, 3.73, 4.10, 4.30, 4.56, 4.88, 5.13, & 5.38. Upgrades are available to the differential and wheel studs. Options include a chrome moly 1350 series yoke, Strange aluminum black powder coated cover, LPW HD aluminum cover, and satin black powder coated housing. The steel cover would also be powder coated when this option is ordered.

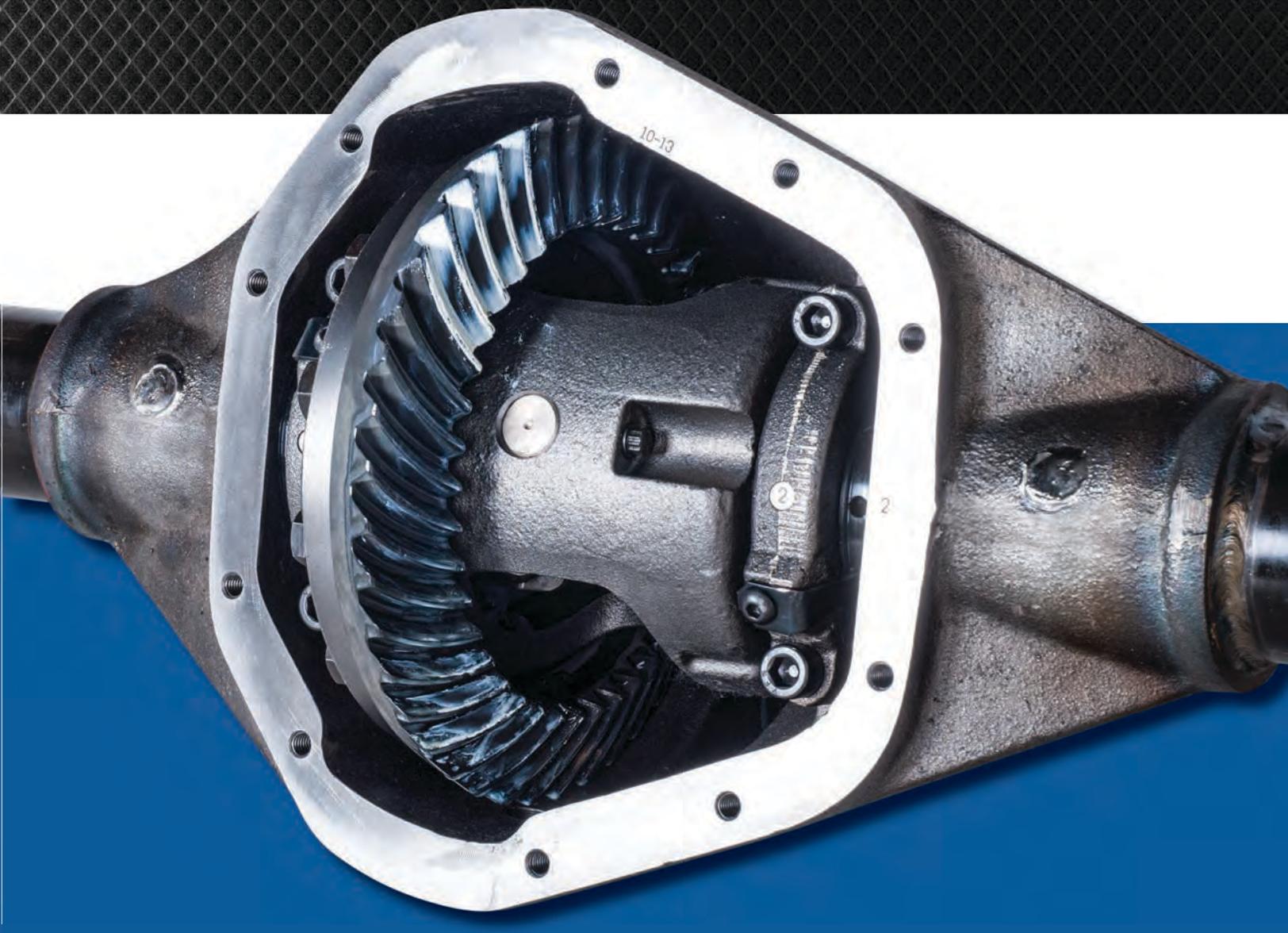
**F-BODY:** This assembly comes standard with the upgrade to the Truetrack (helical gear) differential, Standard gear set, 35 spline Alloy axles, 12 mm or 1/2" wheel studs, HD 1350 series yoke, u-bolt kit, and steel rear cover. Gear ratio choices are the same as above. The rear can be configured for 82-92, 1993-1997 or 1998-2002 factory disc brakes and 3 or 4 channel ABS. Aluminum covers can not be used due to the close proximity of the rear end to the gas tank. Upgrades include provisions for ABS. Options are a chrome moly 1350 series yoke and satin black powder coated housing. The steel cover would also be powder coated when this option is ordered.





**DRAG RACING:** The S60 35 spline packages are equipped with a Pro Series lightweight steel spool, Standard gear set, 35 spline Pro Race axles, 1/2" wheel studs, HD 1350 series yoke, u-bolt kit, and steel rear cover. The 40 spline packages are supplied with a Pro Series lightweight steel spool, Standard gear set, 40 spline solid Pro Race axles, 5/8" stud kit, and steel rear cover. Standard gear ratio choices are 3.54, 3.73,

4.10, 4.30, 4.56, 4.88, 5.13, & 5.38. Pro gear are 4.10, 4.30, 4.56, 4.88, 5.38, & 6.17. Options include gun drilled 40-spline axles, pro gear set, chrome moly yoke, Strange aluminum black powder coated cover, LPW HD aluminum cover, and satin black powder coated housing. The steel cover would also be powder coated when this option is ordered.



# 560 GM

## STREET/TRACK & DRAG RACE

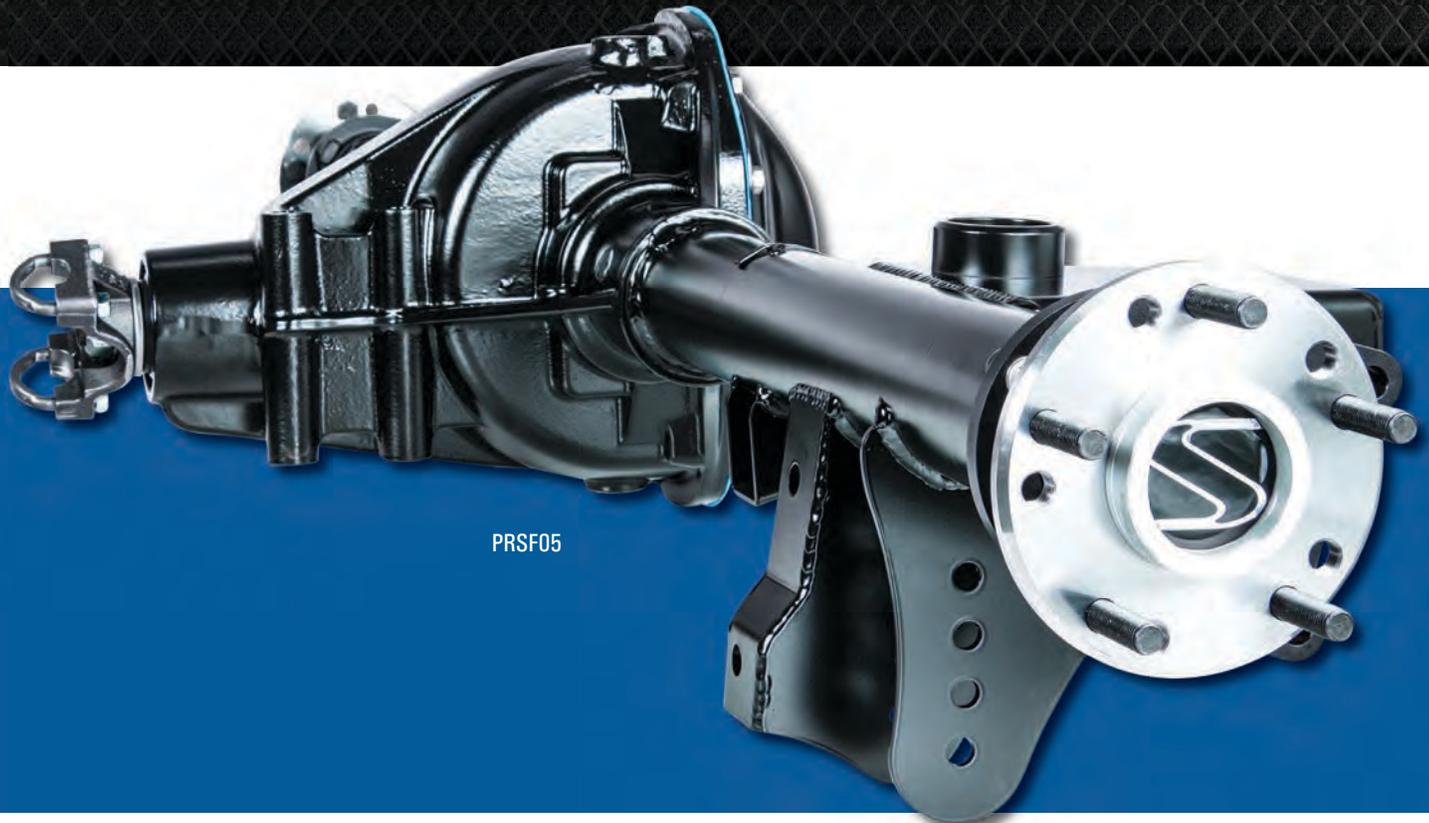
### A-Body / G-Body / F-Body / Leaf spring / Bolt-in Assemblies / Bare (Custom widths are available at no additional charge)

PRSB05	Bare housing - no mounts / Spicer Trac-lock posi / 35 spline Alloy axles
PRSL05	Leaf spring housing / Spicer Trac-lock posi / 35 spline Alloy axles
PRSA05	GM A-body housing / Spicer Trac-lock posi / 35 spline Alloy axles
PRSG05	GM G-body housing / Spicer Trac-lock posi / 35 spline Alloy axles
PRSF05	GM F-body housing / Eaton Truetrack / 35 spline Alloy axles

<b>Upgrades</b>	OPRS01	From Trac-lock to Detroit locker
	OPRS02	From Trac-lock to Truetrack helical gear differential
	OPRS12	To 5/8" stud kit
	OPRG13	F-Body upgrade- Strange supplies 4 channel ABS reluctor rings
	OPRS30	F-body upgrade- Install 3 channel ABS reluctor ring on differential

<b>Options</b>	OPRS06	LPW HD aluminum cover
	OPRS08	Strange black powder coat aluminum cover
	OPRS18	Chrome moly pinion yoke
	H1199P-BLK	Powder coat housing- satin black

<b>Brakes</b>	Wilwood 11" Pro street disc brake kit installed
	Wilwood 12" Pro street disc brake kit installed
	Late Big Ford 11" drum brake kit installed



PRSF05

## A-Body / G-Body / F-Body / Leaf spring / Bolt-in Assemblies / Bare (Custom widths are available at no additional charge)

<b>PRSB10</b>	Bare housing - no mounts / L/W spool / standard gear / 35 spline Pro axles
<b>PRSL10</b>	Leaf spring housing / L/W spool / standard gear / 35 spline Pro axles
<b>PRSA10</b>	GM A-body housing / L/W spool / standard gear / 35 spline Pro axles
<b>PRSG10</b>	GM G-body housing / L/W spool / standard gear / 35 spline Pro axles
<b>PRSF10</b>	GM F-body housing / L/W spool / standard gear / 35 spline Pro axles

**Upgrades**     **OPRS14**     To 5/8" stud kit

<b>PRSB15</b>	Bare housing - no mounts / L/W spool / standard gear / 40 spline solid Pro axles
<b>PRSL15</b>	Leaf spring housing / L/W spool / standard gear / 40 spline solid Pro axles
<b>PRSA15</b>	GM A-body housing / L/W spool / standard gear / 40 spline solid Pro axles
<b>PRSG15</b>	GM G-body housing / L/W spool / standard gear / 40 spline solid Pro axles
<b>PRSF15</b>	GM F-body housing / L/W spool / standard gear / 40 spline solid Pro axles

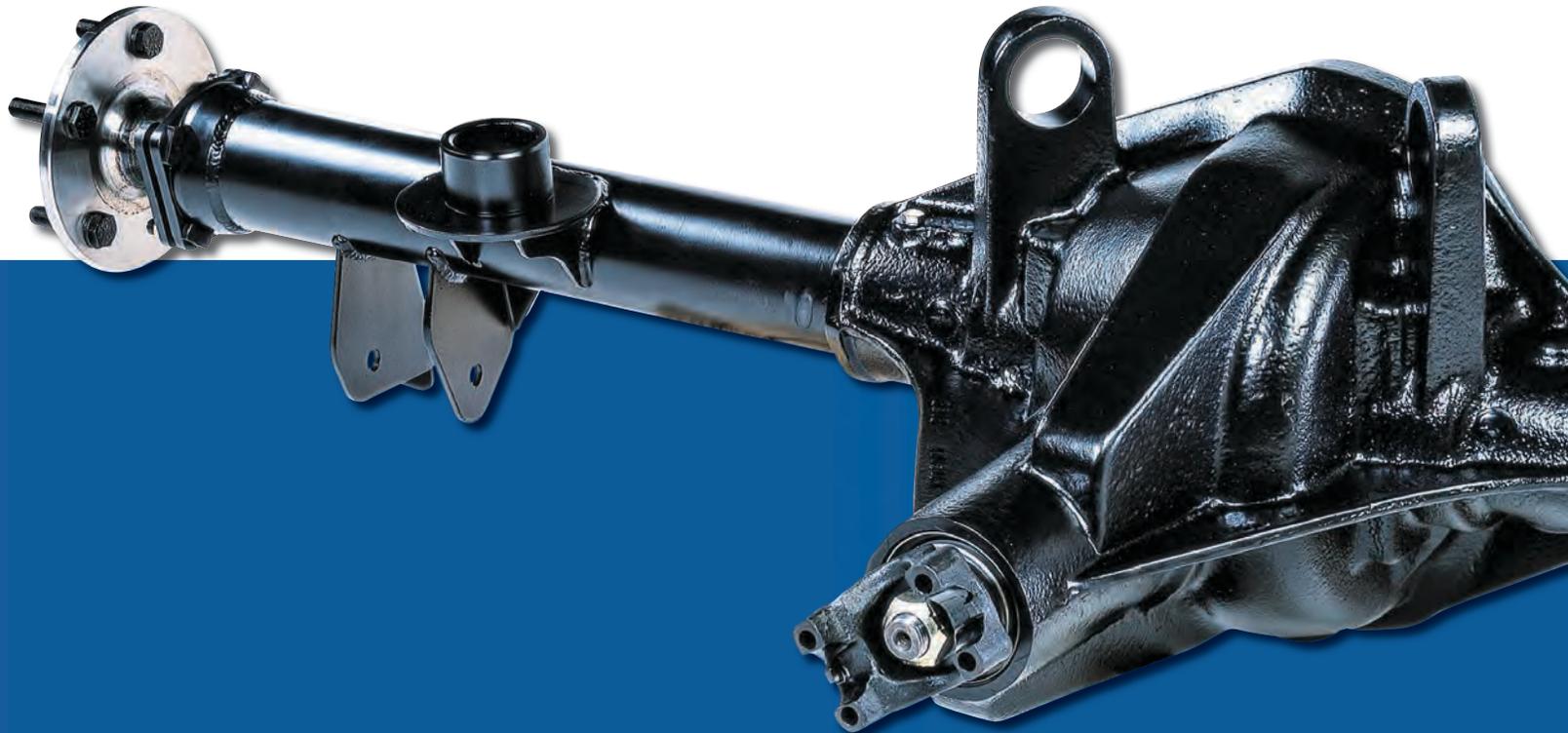
**Upgrades**     **OPRS16**     To gun drilled 40 spline axles

**Options**

<b>OPRS22</b>	Pro gear set
<b>OPRS06</b>	LPW HD aluminum cover
<b>OPRS08</b>	Strange black powder coat aluminum cover
<b>OPRS18</b>	Chrome moly pinion yoke
<b>H1199P-BLK</b>	Powder coat housing- satin black

**Brakes**

- Pro Race disc brake kit installed
- S-Series disc brake kit installed
- Sportsman Carbon disc brake installed
- Dual Pro Race disc kit installed



# 560 MOPAR

## STREET/TRACK & DRAG RACE

### MOPAR / LEAF SPRING / BARE (Custom widths are available at no additional charge)

**PRSB05** Bare housing - no mounts / Spicer Trac-lock posi / 35 spline Alloy axles  
**PRSL05** Leaf spring housing / Spicer Trac-lock posi / 35 spline Alloy axles

**Upgrades**

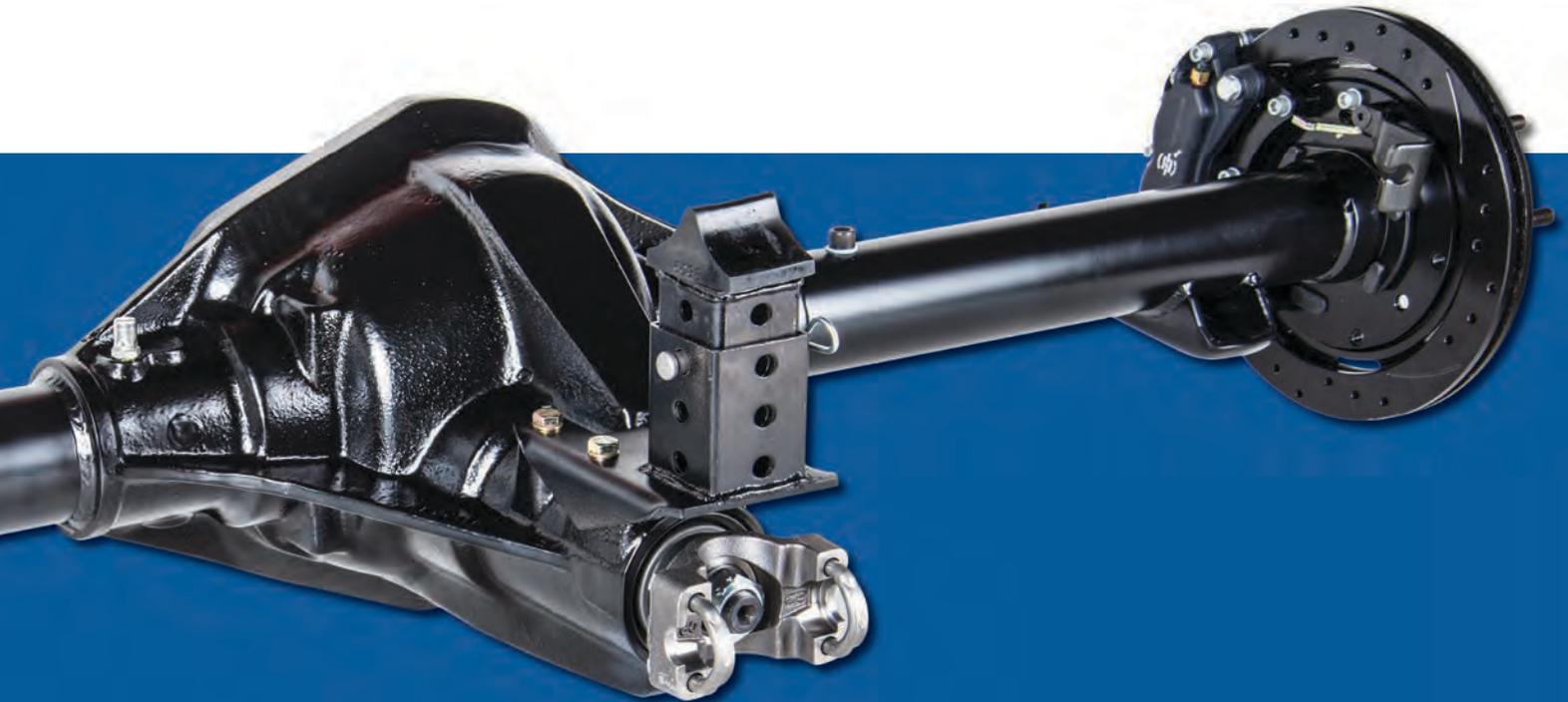
<b>OPRS01</b>	From Trac-lock to Detroit locker
<b>OPRS02</b>	From Trac-lock to Truetrack helical gear differential
<b>OPRS12</b>	To 5/8" stud kit

**Options**

<b>OPRS06</b>	LPW HD aluminum cover
<b>OPRS08</b>	Strange black powder coat aluminum cover
<b>OPRS18</b>	Chrome moly pinion yoke
<b>H1199P-BLK</b>	Powder coat housing- satin black

**Brakes**

- Late Big Ford 11" Drum brake kit installed
- Wilwood 11" Pro Street disc brake kit installed
- Wilwood 12" Pro Street disc brake kit installed



## Mopar / Leaf spring / Bare (Custom widths are available at no additional charge)

PRSB10 Bare housing - no mounts / L/W spool / standard gear / 35 spline Pro axles  
PRSL10 Leaf spring housing / L/W spool / standard gear / 35 spline Pro axles

**Upgrades** OPRS14 To 5/8" stud kit .

PRSB15 Bare housing - no mounts / L/W spool / standard gear / 40 spline solid Pro axles  
PRSL15 Leaf spring housing / L/W spool / standard gear / 40 spline solid Pro axles

**Upgrades** OPRS16 To gun drilled 40 spline axles

**Options** OPRS22 Pro gear set  
OPRS06 LPW HD aluminum cover  
OPRS08 Strange black powder coat aluminum cover  
OPRS18 Chrome moly pinion yoke  
H1199P-BLK Powder coat housing- satin black

**Brakes** S-Series disc brake kit installed  
Pro Race disc brake kit installed  
Dual Pro Race disc kit installed  
Sportsman Carbon disc brake installed



# 12 BLT BOLT-IN REAR ENDS

## CUSTOM WIDTHS AVAILABLE AT NO ADDITIONAL CHARGE

**Overview:** The Strange 12 bolt casting is much stronger than the OEM 12 bolt, while still accepting the same components. The casting is poured from proprietary nodular iron which is substantially stronger than cast iron. The main caps are constructed from forged chrome moly, instead of cast iron like the originals. These improvements in materials, have allowed the casting to be made not only thinner and lighter, but also stronger. The casting has a torque arm mount cast as part of the

case and a location for a Strange 3 channel sensor. It is designed as an F-body replacement for the extremely weak 7.625", but can also be used as an upgraded 12 bolt in any leaf spring application. The 3" O.D. tubes are plug welded and feature a 360° weld to the main casting. Large 3.150" ID housing ends are used along with a HD 1350 series yoke and u-bolts.

**Street/Track:** The 12 bolt is equipped with a Eaton heavy duty clutch style posi unit, Standard gear set, 30 spline Alloy axles, 7/16" or 1/2" wheel studs, HD 1350 series yoke, u-bolt kit, and chrome rear cover. Standard gear ratio choices are 3.08, 3.42, 3.55, 3.73, 3.90, 4.11, 4.30, 4.56, 4.88, 5.14, & 5.38. Upgrades are available to the differential or differential and axle spline. Options include a chrome moly 1350 series yoke, LPW aluminum cover, and satin black powder coated housing. A powder coated housing is also supplied with the chrome cover.

series yoke, u-joint, u-bolt kit, and chrome rear cover.

12 bolt rear end available for 82-92 - will not fit OEM brakes (call). The PRG200 is designed for non ABS vehicles. An upgrade is available to custom caliper mounts that will adapt 1993-1997 F-body factory disc brakes.

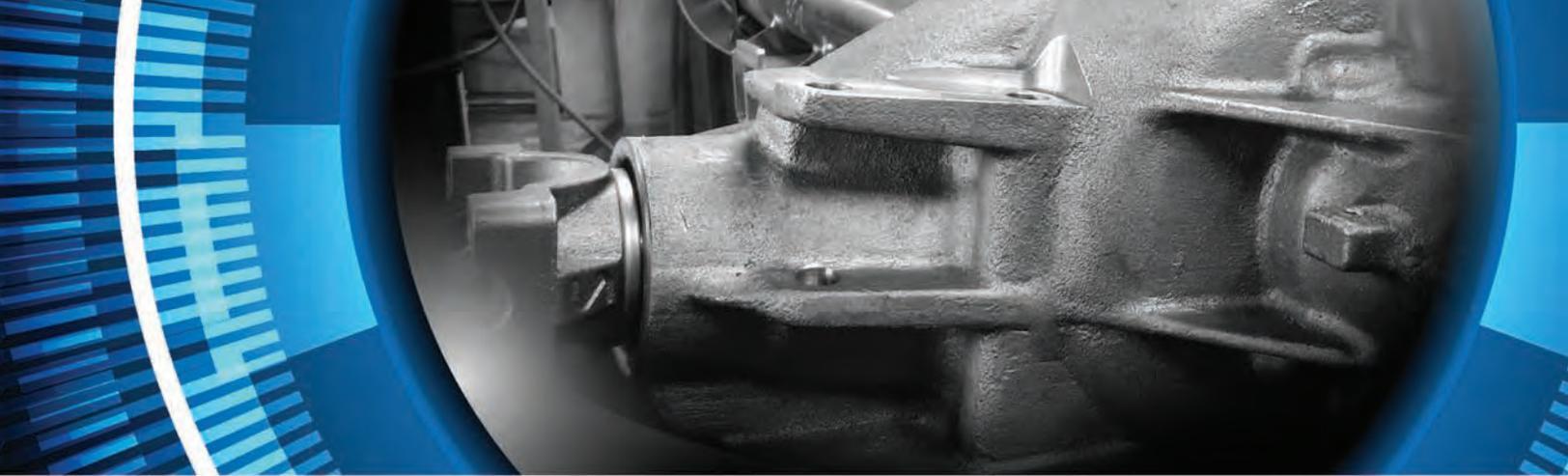
The PRG210 is for 1998-2002 ABS applications and can be ordered for three or four channel systems. Options include a chrome moly yoke, LPW aluminum cover, and satin black powder coated housing. A powder coated housing is also supplied with the chrome cover.

The F-body 12 bolt is equipped with a Yukon heavy duty clutch style posi unit, Standard gear set, 33 spline Alloy axles, 12 mm or 1/2" wheel studs, HD 1350

**Drag Racing:** The 12 bolt comes standard with a Pro Series lightweight steel spool, Standard gear set, 33 or 35 spline Pro Race axles, 1/2" wheel studs, HD 1350 series yoke, u-bolt kit, and chrome rear cover. It is available without mounts, with leaf spring mounts, or F-body mounts. Standard gear ratio choices are 3.08, 3.42, 3.55, 3.73, 3.90, 4.11, 4.30, 4.56, 4.88, 5.14, & 5.38. Pro

gear are 4.11, 4.30, 4.56, 4.88, 5.14, 5.38, & 5.57, 5.86, & 6.14. Upgrades are available to 5/8" wheel studs, Pro gear set, aluminum 33 spline spool, and Ultra Lite axle flanges. Options include a chrome moly yoke, LPW aluminum cover, lightened ring gear, MicroBlue services, and satin black powder coated housing. A powder coated housing is also supplied with the chrome cover.





PRG300 Bare housing without mounts / Eaton HD posi / 30 spline Alloy axles  
 PRG310 Leaf spring housing / Eaton HD posi / 30 spline Alloy axles

**Upgrades**     OPRG08     To Eaton Truetrack 30 spline helical gear differential  
                      OPRG06     To Yukon HD 33 spline clutch style posi & Strange 33 Alloy axles

PRG200 F-Body housing / Yukon HD posi / 33 spline Alloy axles

**Upgrades**     OPRG12     Billet caliper mounts to adapt 1993-1997 OEM disc brakes

PRG210 F-Body housing for ABS / Yukon HD posi / 33 spline Alloy axles

**Upgrades**     OPRG13     4 channel ABS reluctor rings

**Options**        OPRG17     Chrome moly 1350 yoke  
                      OPRG10     LPW aluminum cover

**Street / Track Brakes**     Wilwood 11" Pro Street disc brake kit installed  
    Wilwood 12" Pro Street disc brake kit installed  
    Late Big Ford 11" Drum brake kit installed

PRG320 Bare housing - no mounts / L/W steel spool and Pro Race axles  
 PRG330 Leaf spring housing / L/W steel spool and Pro Race axles

**Upgrades**     OPRG01     To Pro gear set  
                      OPRS14     To 5/8 stud kit  
                      OPRG16     To Aluminum 33 spline spool  
                      A1006     To Ultra Lite axle flange

PRG235 F-Body housing, L/W steel spool, Standard gear, and Pro Race axles  
 PRG230 F-Body 12 bolt with mounts, L/W steel spool, Pro gear, and Pro Race axles

**Upgrades**     OPRS14     To 5/8 stud kit  
                      OPRG16     To Aluminum 33 spline spool  
                      A1006     To Ultra Lite axle flange

**Options**        OPRG17     Chrome moly 1350 yoke  
                      OPRG10     LPW aluminum cover  
                      D3596     Lighten ring gear  
                      D3598G     MicroBlue gear set  
                      D3598B     MicroBlue bearings  
                      H1199P-BLK     Powder coat housing- satin black- with chrome steel cover

**Drag Race Brakes**     S-Series Drag Race disc brake kit installed  
    Pro Race disc brake kit installed  
    Dual Pro Race disc kit installed  
    Sportsman Carbon disc brake installed

# 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  
**F22065WC** 5" Bolt circle Floater kit with carbon brake kit  
**F22064WC** 4 3/4" Bolt circle Floater kit with carbon brake kit

**F2206** 5 1/2" Bolt circle Floater kit with steel brake rotors  
**F22065** 5" Bolt circle Floater kit with steel brake rotors  
**F22064** 4 3/4" Bolt circle Floater kit with steel brake rotors

**B1855** Caliper & metallic pad kit for steel brakes- pair

**A2040H24** Hy-Tuf gun drilled 40 spline floater axle- 24" or less- each  
**A2040H28** Hy-Tuf gun drilled 40 spline floater axle- 24 1/8" to 28"- each  
**A2040H32** Hy-Tuf gun drilled 40 spline floater axle- 28 1/8" to 32"- each  
**A2040H36** Hy-Tuf gun drilled 40 spline floater axle- 32 1/8" to 36"- each

**A2140H24** Hy-Tuf solid 40 spline floater axle- 24" or less- each  
**A2140H28** Hy-Tuf solid 40 spline floater axle- 24 1/8" to 28"- each  
**A2140H32** Hy-Tuf solid 40 spline floater axle- 28 1/8" to 32"- each  
**A2140H36** Hy-Tuf solid 40 spline floater axle- 32 1/8" to 36"- each

**A2040M\*** 300M gun drilled 40 spline floater axle- 20" or less- each  
**A2040M24\*** 300M gun drilled 40 spline floater axle- 20 1/8" to 24"- each  
**A2040M28\*** 300M gun drilled 40 spline floater axle- 24 1/8" to 28"- each  
**A2040M32\*** 300M gun drilled 40 spline floater axle- 28 1/8" to 32"- each  
**A2040M36\*** 300M gun drilled 40 spline floater axle- 32 1/8" to 36"- each

**A2140M\*** 300M solid 40 spline floater axle- 20" or less- each  
**A2140M24\*** 300M solid 40 spline floater axle- 20 1/8" to 24"- each  
**A2140M28\*** 300M solid 40 spline floater axle- 24 1/8" to 28"- each  
**A2140M32\*** 300M solid 40 spline floater axle- 28 1/8" to 32"- each  
**A2140M36\*** 300M solid 40 spline floater axle- 32 1/8" to 36"- each

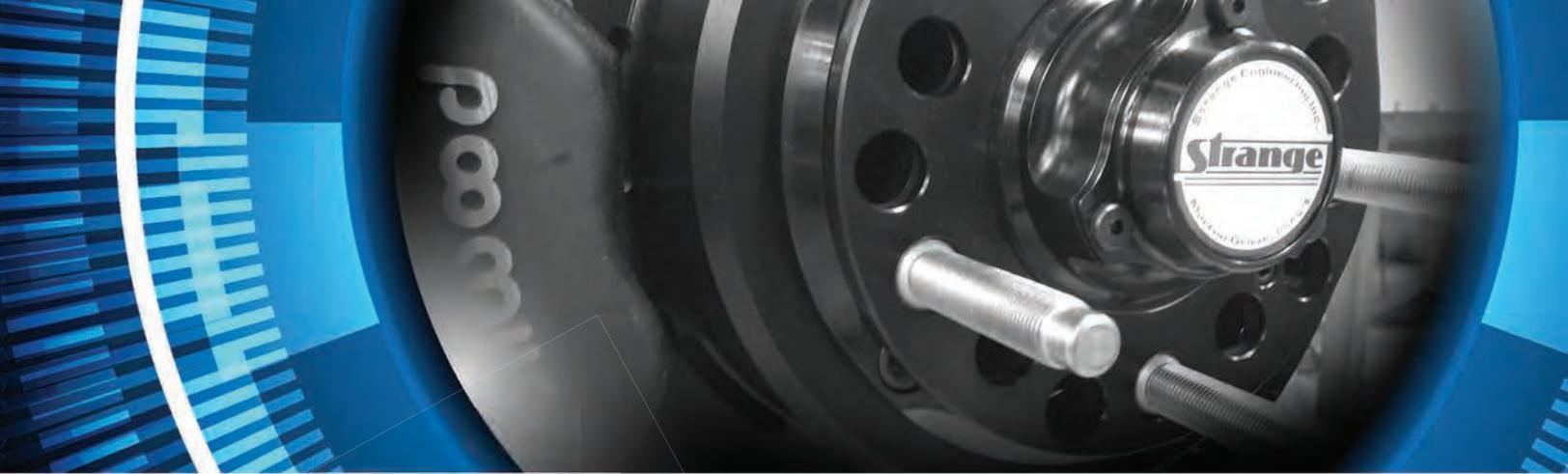
\* For extreme applications such as heavy high-powered drag radial vehicles, Strange strongly recommends 300M axles as they are 21% stronger than Hy-Tuf axles



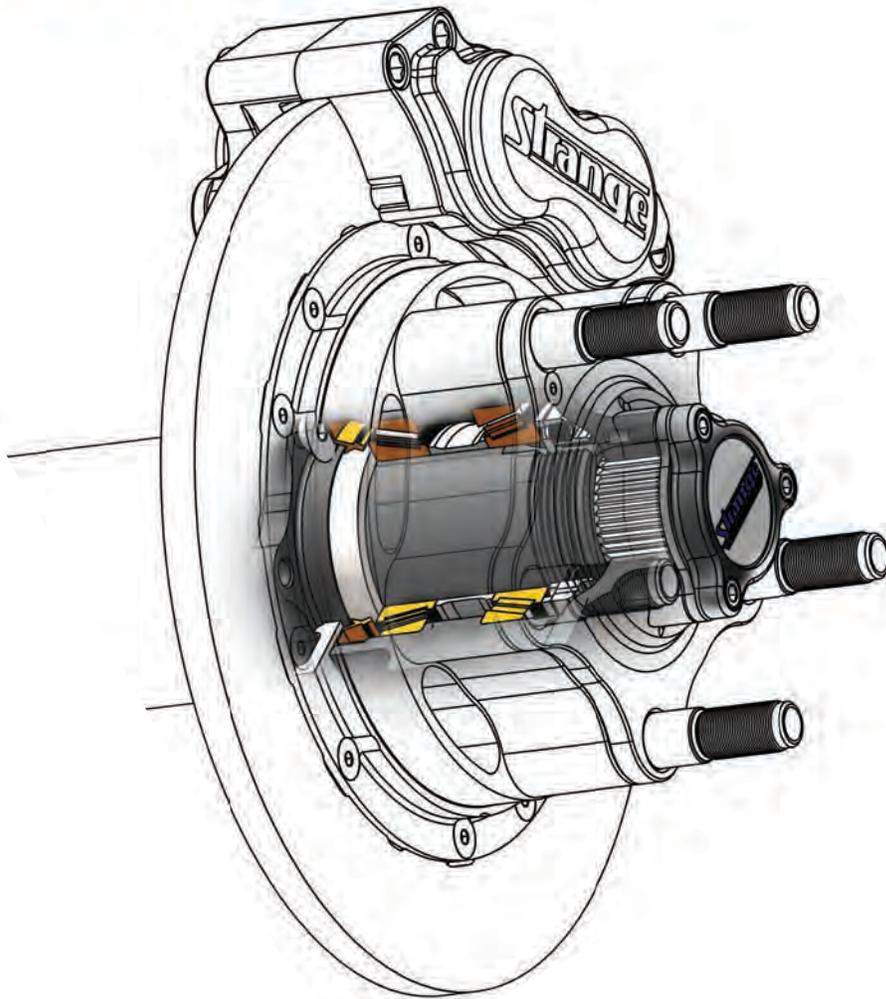
### CURRENT REPLACEMENT PARTS

**C1790** 11" Carbon rotor- each  
**L4050H** Carbon pad- each  
**F2056NL** Steel rotor- LH  
**F2056NR** Steel rotor- RH  
**B5020** Metallic pad- each  
**F2056K** Hub seal- each  
**F2056I** Hub bearing- 4 3/4" & 5"- Inner only  
 5 1/2"- Inner & outer- each  
**F2056J** Hub race- 4 3/4" & 5"- Inner only  
 5 1/2"- Inner & outer- each  
**F1270** Hub bearing- 4 3/4" & 5"- Outer- each  
**F1271** Hub race- 4 3/4" & 5"- Outer- each  
**F2056M** Spindle nut wrench- 5 1/2" BC floater kit  
**F2058W** Spindle nut wrench- 4 3/4" & 5" BC floater kit

**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

### Options

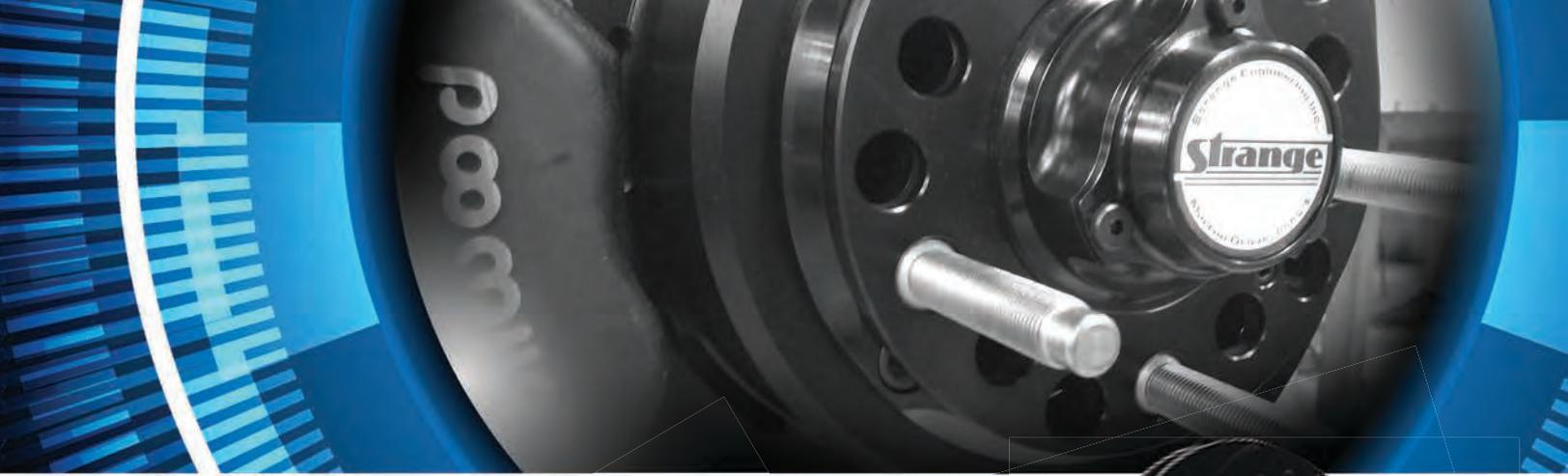
**OPRS14** Replace 1/2" studs with 5/8" stud kit  
**ABSFM10** Adapt to accept 2005-2010 Mustang ABS sensor  
**ABSFM11** Adapt to accept 2011-2014 Mustang ABS sensor

**A1040H24** Hy-Tuf solid 35 spline floater axle- 24" or less- each  
**A1040H28** Hy-Tuf solid 35 spline floater axle- 24 1/8" to 28"- each  
**A1040H32** Hy-Tuf solid 35 spline floater axle- 28 1/8" to 32"- each  
**A1040H36** Hy-Tuf solid 35 spline floater axle- 32 1/8" to 36"- each

**B2712WC** Wilwood Pro Touring brake kit / 11" rotors / for 15" beadlock wheels / black calipers  
**B2711WC** Wilwood Pro Touring brake kit / 12.19" rotors / black calipers  
**B2711WCR** Wilwood Pro Touring brake kit / 12.19" rotors / red calipers  
**B2714WC** Wilwood Pro Touring brake kit / 14" rotors / black calipers  
**B2714WCR** Wilwood Pro Touring brake kit / 14" rotors / red calipers

**N1948** Hub bearing- Inner and outer- each  
**N1949** Hub race- Inner and outer- each  
**F5056J** Hub seal- each  
**F5056W** Spindle nut wrench- Included in floater kit





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

4 piston calipers



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

Internal Parking  
Brake

2" O.D. Spindle

4-1/2", 4-3/4 or 5" bolt circles

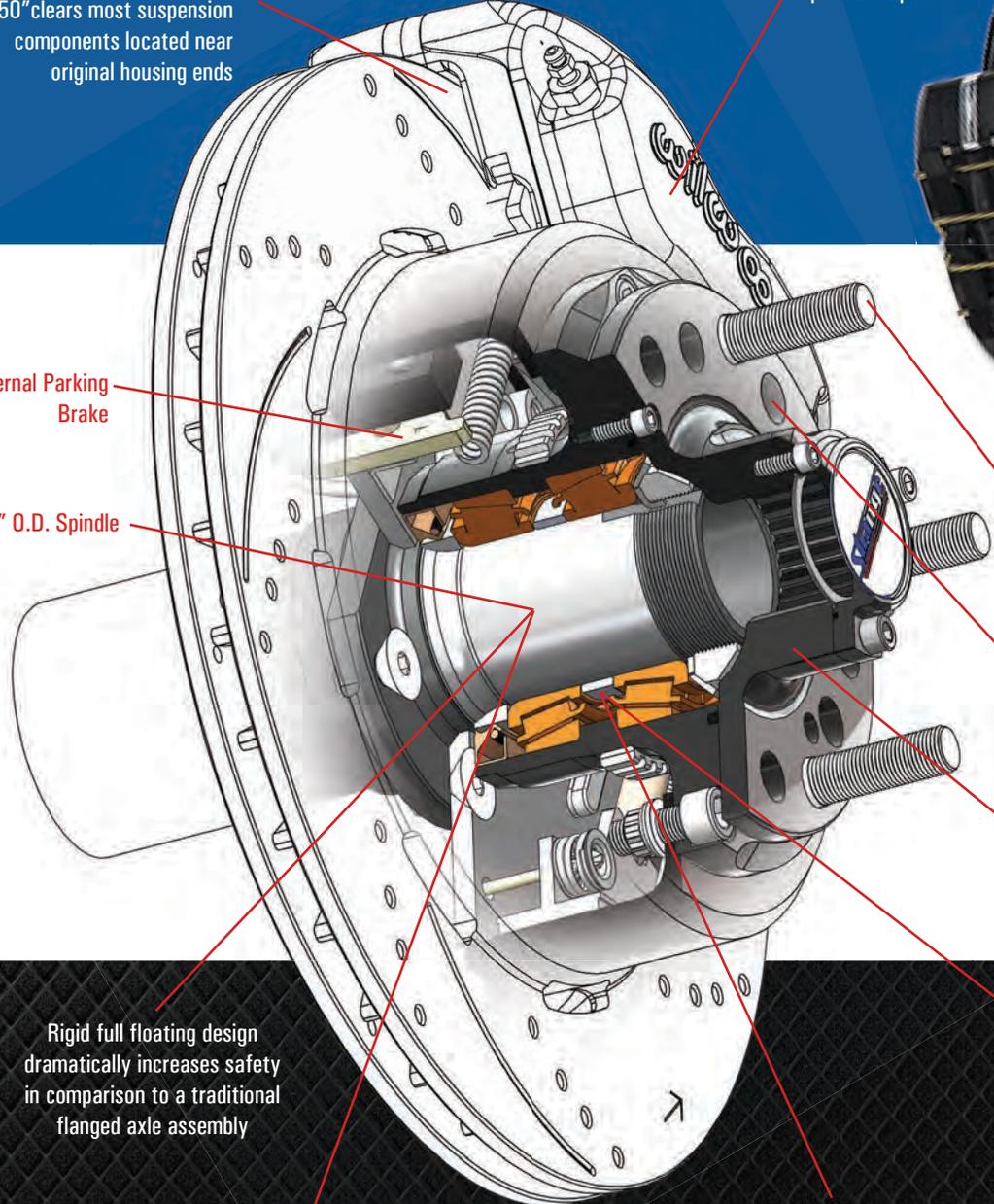
Rigid full floating design  
dramatically increases safety  
in comparison to a traditional  
flanged axle assembly

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

35 spline drive plate

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



# STEERING COMPONENTS

## STREET/TRACK & DRAG RACE

**Dragster / Altered Steel Spindles:** Strange Dragster / Altered spindles are machined to exacting standards from forged 4130 chrome-moly heat treated steel. The spindles are finish ground, black oxide coated and bushed. Hollow king pins are machined for lubricant delivery, heat treated, and finish ground. These pins feature a grease fitting allowing convenient lubrication of bushings. Two 5" steering arms, end caps, thrust washers, spindle nuts, cotter pins, and weld bosses are included.

- S3453 Strange forged steel front spindle kit
- S3453TL Strange forged steel front spindle kit with tow loops
- S3453K Strange front spindle tow loop - each
- S3457WT Labor only - Install brake mounting tabs on S3453



**Funny Car Adjustable Height Spindles:** Strange Funny Car adjustable height spindles allow for chassis preload adjustments to be made at the track by simply relocating spacers. Our billet aluminum spindle body and heat treated spindle accept all existing Anglia style spindle mount wheels. The spindle diameter for the inner bearing has been increased for strength. New inner bearings, races, and seals are provided to adapt Anglia wheels. Hollow king pins feature a unique system to provide lubrication to the bushings via an easily accessible grease fitting. The spindles include adjustable height shims, weld bosses, inner wheel bearings, races, seals, semi-finished steering arms, end caps, spindle nuts, and cotter pins. Steel or carbon front brake kits are available featuring our single piston caliper with square pads.

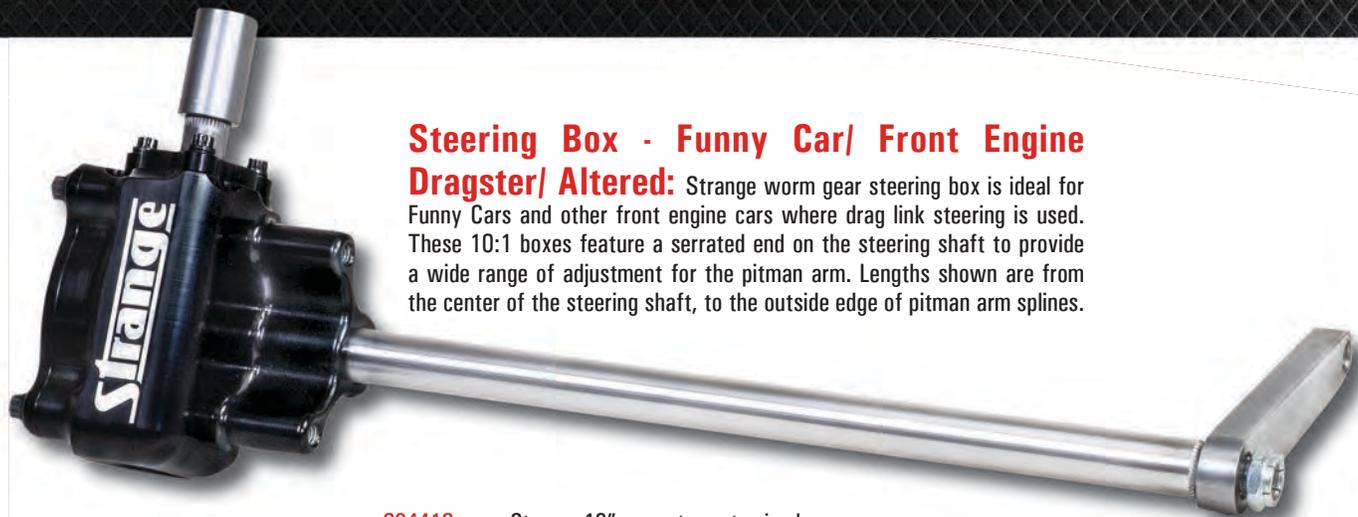
- S3423 Funny Car adjustable height spindle kit
- S3423NA Spindle kit without steering arms



**Quick Release Steering Hub:** Strange quick release steering hubs are SFI certified. The billet aluminum hubs are a completely self contained mechanism. A 4130 stub shaft is furnished for ease of installation and the keyed spline design allows for easy wheel orientation. The Q-1000 is designed for butterfly steering wheels, the Q-1200 fits Grant style wheels, and the Q1200SPAR fits 6 bolt Sparco wheels.

- Q1000 Strange quick release steering hub for Butterfly wheel
- Q1200 Strange quick release steering hub for Grant wheel
- Q1200NB Strange quick release steering hub for Grant wheel- No horn button
- Q1200SPAR Strange quick release steering hub for Sparco wheel
- Q1200SPARNB Strange quick release steering hub for Sparco wheel- No horn button





## Steering Box - Funny Car/ Front Engine

**Dragster/ Altered:** Strange worm gear steering box is ideal for Funny Cars and other front engine cars where drag link steering is used. These 10:1 boxes feature a serrated end on the steering shaft to provide a wide range of adjustment for the pitman arm. Lengths shown are from the center of the steering shaft, to the outside edge of pitman arm splines.

- S3441S** Strange 13" worm type steering box
- S3441M** Strange 14" worm type steering box
- S3441MNA** Strange 14" worm type steering box without pitman arm
- S3441L** Strange 15" worm type steering box

## Steering Rack - Dragster / Door Car:

Strange Engineering has expanded their line of steering components to include rack & pinions. Dragster racks were first and are soon to be followed by door car applications. These racks provide the quality and workmanship our customers have grown to expect from Strange. High end materials ensure many years of service, and are rebuildable at our factory. Stiletto products continue to be offered to complement our line. They have been around for a long time and continue to offer quality components.

The Stiletto Dragster rack is offered in two ratios. The 12:1 is common for most applications including Super Comp and Top Dragsters. It provides 4.813" of total rack travel with 2.625" of movement for each full turn of the pinion gear. The 15:1 is slower and used in some Top Fuel Dragsters based on driver preference. These lightweight boxes have two 3/8" holes on 1.313" centers providing secure chassis mounting.

The Stiletto Pro Box is a door car rack & pinion designed for full bodied vehicles requiring a professional alternative to OEM based steering racks. The 7075-T6 aluminum clevises are drilled on 24.5" centers for 3/8" bolts. Three turns lock-to-lock provide 4.750" of rack travel resulting in a 20 to 1 steering ratio when using 5" spindle arms. An adjustable mounting system adapts to a

variety of chassis designs. The pinion housing features two 7/16" tapped mounting holes on 1.250" centers and the adjustable mounting block has two 3/8"-16 holes on 1.375" centers.

The Strange Tie rod kit is an excellent compliment to the Stiletto Pro Box, offering the utmost in safety and durability. This kit features T-bushing adapters, that press into the ball of the rod ends, which allow increased range of movement without binding. The tie rod kit includes two pieces of .625" OD x .120" wall 12" long chrome-moly tubing, two each LH and RH 4130 chrome-moly rod ends, and T-bushing adapters. Tubing needs to be cut to length and threaded to accept the rod ends.

- S3442** Strange Dragster 12:1 rack & pinion with 11" rod end center
- S3442-14** Strange Dragster 12:1 rack & pinion with 14" rod end centers
- S3437** Stiletto Dragster 12:1 rack & pinion with 11" rod end center
- S3438** Stiletto Dragster 15:1 rack & pinion with 11" rod end center
- S3440** Stiletto Pro Box door car rack & pinion
- S3447** Strange Tie rod kit for S3440



# 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 contaminants.

	Advantages	Disadvantages	Boiling Point	
			Dry	Wet
<b>DOT 3</b>	Inexpensive / Absorbs water / Mixes with DOT 4 & 5.1	Lowest boiling point / Eats paint	400	285
<b>DOT 4</b>	Higher boiling point / Absorbs water / Mixes with DOT 3 & 5.1	Eats paint	445	310
<b>DOT 5</b>	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
<b>DOT 5.1</b>	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 Stainless Steel Rotor (Above)**

**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 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



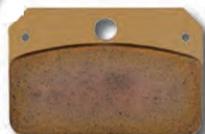
B5010

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 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.

**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

# STEEL FRONT BRAKE KITS

## DRAG RACE ONLY



**Strange Lightweight Front Kits** (pictured left - mounted on a Strange Ultra Strut) are designed for spindle mount wheels. This kit features the Strange single piston caliper kit. The caliper kit employs a unique slider assembly that features internal bearings and precision ground sliders to prevent the caliper from binding or sticking, which is common with other brands. The single piston caliper utilizes a square pad that slides freely, which prolongs pad life.

The lightweight spindle mount kit includes compact 10" diameter directional slotted rotors. Kits are offered in Pro Series (one piece forged steel rotors) and Pro Series II (two piece floating rotors). Billet caliper mounts and hardware complete the kit.



**Each Front Kit Includes:** Strange single piston billet calipers, slider assembly, soft square pads, slotted steel rotors, and billet aluminum caliper mounts. Due to numerous spindle mount wheel designs, kits do not include wheel bearings and seals- contact your wheel manufacturer. Pro Series Kit (forged steel rotors) weighs 16 lbs and the Pro Series II (two piece floating rotor) kit weighs 15.2 lbs.



**Strange Medium Duty Front Kits** come standard with Strange 2-piston calipers and would be a lighter option in comparison to the 4-piston calipers found in Heavy Duty kits. Medium Duty brakes are offered for Strange aluminum struts that utilize 5 lug bolt-on wheels. The kits include forged slotted steel rotors, calipers, soft metallic pads, billet caliper mounts, forged aluminum hubs, bearings, races, seals, and 1/2" stud kit. Other medium duty kits do not include hubs and bearings as the stock hubs need to be reused. Two piston calipers are a weight reduction option for vehicles under 2,600 pounds. Two piston brake kits are 5 lbs lighter, compared to 4-piston.



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	NOTES
<b>BUICK</b>							
	APOLLO	73-74	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		73-74	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		75	DISC	B4114WC	HEAVY DUTY	4 3/4"	
	CENTURY	73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
	SKYLARK	75-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
	GRAND NATIONAL	79-87	DISC	B4122WC	HEAVY DUTY	4 3/4"	
	REGAL	79-87	DISC	B4122WC	HEAVY DUTY	4 3/4"	
<b>CHEVY</b>							
	BLAZER 4X2	83-89	DISC	B4122WC	HEAVY DUTY	4 3/4"	FOR 100.5" WHEEL BASE
	CAMARO	67-69	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		67-69	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		70-78	DISC	B4114WC	HEAVY DUTY	4 3/4"	
		79-81	DISC	B4116WC	HEAVY DUTY	4 3/4"	
		82-92	DISC	B4118WC	HEAVY DUTY	4 3/4"	
		93-01	DISC	B4180WC	HEAVY DUTY	4 3/4"	
	CHEVELLE	67-72	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		67-72	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
	CHEVY II / NOVA	67-74	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		67-74	DISC	B4112WC	HEAVY DUTY	4 3/4"	
	CHEVY	49-53	DRUM	B4164WC	HEAVY DUTY	4 3/4"	
		55-57	DRUM	B4172WC	HEAVY DUTY	4 3/4"	
	CORVETTE	63-64	DRUM	B4166WC	HEAVY DUTY	4 3/4"	
		65-68	DRUM	B4168WC	HEAVY DUTY	4 3/4"	
		69-82	DISC	B4170WC	HEAVY DUTY	4 3/4"	
		91-96	DISC	B4183WC	HEAVY DUTY	4 3/4"	
		97-04	DISC	B4178WC	HEAVY DUTY	4 3/4"	REUSES STOCK HUBS
			EL CAMINO	67-72	DRUM	B4110WC	HEAVY DUTY
		67-72	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
		79-87	DISC	B4122WC	HEAVY DUTY	4 3/4"	
			IMPALA	77-78	DISC	B4114WC	HEAVY DUTY
	MALIBU	73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
		79-87	DISC	B4122WC	HEAVY DUTY	4 3/4"	
			MONTE CARLO	70-72	DRUM	B4110WC	HEAVY DUTY
		70-72	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
		79-88	DISC	B4122WC	HEAVY DUTY	4 3/4"	
			NOVA	62-74	DRUM	B4110WC	HEAVY DUTY
		75-78	DISC	B4114WC	HEAVY DUTY	4 3/4"	
			NOVA - SPECIAL	75-78	DISC	B4122WC	HEAVY DUTY
	S10 4X2	82-90	DISC	B4122WC	HEAVY DUTY	4 3/4"	
<b>DODGE</b>							
	CORONET	66-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
		70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	

## APPLICATIONS - CONTINUED

MAKE	MODEL	YEAR	OEM	PART#	TYPE	BOLT CIRCLE	NOTES
<b>DODGE</b>	CHALLENGER	70-72	DRUM	B4158WC	HEAVY DUTY	4 1/2"	FOR 10" DRUM SPINDLES
		70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
		73-74	DISC	B4160WC	HEAVY DUTY	4 1/2"	
		09-12	DISC	B4184WC	HEAVY DUTY	4 1/2"	
	CHARGER	66-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
		70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
	DART	63-72	DRUM	B4156WC	HEAVY DUTY	4 1/2"	FOR 9" DRUM SPINDLES
		65-72	DRUM	B4162WC	HEAVY DUTY	4 1/2"	FOR 10" DRUM SPINDLES
		73-76	DISC	B4160WC	HEAVY DUTY	4 1/2"	
		65-72	DRUM	B4162WC	HEAVY DUTY	4 1/2"	FOR 10" DRUM SPINDLES
	LANCER	61-62	DRUM	B4156WC	HEAVY DUTY	4 1/2"	FOR 9" DRUM SPINDLES
	ROAD RUNNER	70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
	R/T	67-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
	SATELLITE	70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
	SUPER BEE	68-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
		70	DISC	B4159WC	HEAVY DUTY	4 1/2"	
<b>FORD</b>	FAIRLANE	66-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	
		66-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	
	FAIRMONT	81-83	DISC	B4142WC	HEAVY DUTY	4 3/4"	
	FALCON	66-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	
		66-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	
	FORD	42-48	DRUM	B4176WC	HEAVY DUTY	4 3/4"	
	MAVERICK	1972	DRUM	B4136WC	HEAVY DUTY	4 3/4"	
	MUSTANG*	1965	DRUM	B4135WC	HEAVY DUTY	4 1/2"	* 289 Hardtop only
		1965	DRUM	B4134WC	HEAVY DUTY	4 3/4"	* 289 Hardtop only
		67-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"	
		67-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	
		70-73	DRUM	B4132WC	HEAVY DUTY	4 1/2"	
		70-73	DRUM	B4133WC	HEAVY DUTY	4 3/4"	
	MUSTANG II	74-78	DISC	B4140WC	HEAVY DUTY	4 3/4"	
		74-78	DISC	B4141WC	HEAVY DUTY	4 1/2"	
	MUSTANG	82-86	DISC	B4142WC	HEAVY DUTY	4 3/4"	
		82-86	DISC	B4143WC	HEAVY DUTY	4 1/2"	
		87-93	DISC	B4142WC	HEAVY DUTY	4 3/4"	FOR 4 CYL SPINDLES
		87-93	DISC	B4143WC	HEAVY DUTY	4 1/2"	FOR 4 CYL SPINDLES
		INCLUDES COBRA	87-93	DISC	B4144WC	HEAVY DUTY	4 3/4"
	INCLUDES COBRA	87-93	DISC	B4145WC	HEAVY DUTY	4 1/2"	FOR 8 CYL SPINDLES
		94-04	DISC	B4446WC	MEDIUM DUTY	4 1/2"	MUST REUSE STOCK HUBS
		05-14	DISC	B4148WC	HEAVY DUTY	4 1/2"	MUST REUSE STOCK HUBS
		05-14	DISC	B4152WC	HEAVY DUTY	4 1/2"	
		PINTO	71-72	DRUM	B4136WC	HEAVY DUTY	4 3/4"
	71-72		DISC	B4138WC	HEAVY DUTY	4 3/4"	
	74-80		DISC	B4140WC	HEAVY DUTY	4 3/4"	
	74-80		DISC	B4141WC	HEAVY DUTY	4 1/2"	
	RANCHERO		67-69	DRUM	B4135WC	HEAVY DUTY	4 1/2"
		67-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	
	THUNDERBIRD	82-86	DISC	B4142WC	HEAVY DUTY	4 3/4"	
		82-86	DISC	B4143WC	HEAVY DUTY	4 1/2"	
87-88		DISC	B4142WC	HEAVY DUTY	4 3/4"	FOR 6 & 8 CYL SPINDLES	
87-88		DISC	B4143WC	HEAVY DUTY	4 1/2"	FOR 6 & 8 CYL SPINDLES	
87-88		DISC	B4144WC	HEAVY DUTY	4 3/4"	FOR 4 CYL SPINDLES	
87-88		DISC	B4145WC	HEAVY DUTY	4 1/2"	FOR 4 CYL SPINDLES	
87-88		DISC	B4145WC	HEAVY DUTY	4 1/2"		

# STEEL FRONT BRAKE KITS

## DRAG RACE ONLY

### APPLICATIONS - CONTINUED

MAKE	MODEL	YEAR	OEM	PART#	TYPE	BOLT CIRCLE	NOTES
<b>GMC</b>							
	SPRINT	71-72	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		71-72	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	
		79-87	DISC	B4122WC	HEAVY DUTY	4 3/4"	
	JIMMY 4X2	83-90	DISC	B4122WC	HEAVY DUTY	4 3/4"	FOR 100.5" WHEEL BASE
	S15 4X2	82-90	DISC	B4122WC	HEAVY DUTY	4 3/4"	
<b>MERCURY</b>							
	COMET	66-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	
	COUGAR	67-69	DRUM	B4134WC	HEAVY DUTY	4 3/4"	
		81-88	DISC	B4142WC	HEAVY DUTY	4 3/4"	
		81-88	DISC	B4143WC	HEAVY DUTY	4 1/2"	
<b>OLDSMOBILE</b>							
	F85	67-72	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		67-69	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES
	CUTLASS	73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES
		79-88	DISC	B4122WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES
	DELTA 88	77-78	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES
	OMEGA	73-74	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		73-74	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		75-78	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES
<b>PLYMOUTH</b>							
	BARRACUDA	64-69	DRUM	B4156WC	HEAVY DUTY	4 1/2"	FOR 9" DRUM SPINDLES
		65-69	DRUM	B4162WC	HEAVY DUTY	4 1/2"	FOR 10" DRUM SPINDLES
		70-72	DRUM	B4158WC	HEAVY DUTY	4 1/2"	FOR 10" DRUM SPINDLES
		70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
		73-74	DISC	B4160WC	HEAVY DUTY	4 1/2"	
	BELVEDERE	66-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
		70	DISC	B4159WC	HEAVY DUTY	4 1/2"	
	GTX	67-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
		70-71	DISC	B4159WC	HEAVY DUTY	4 1/2"	
	PLYMOUTH	62-64	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
	ROAD RUNNER	68-69	DRUM	B4158WC	HEAVY DUTY	4 1/2"	
		70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
		70-72	DISC	B4159WC	HEAVY DUTY	4 1/2"	
	VALIANT	60-72	DRUM	B4156WC	HEAVY DUTY	4 1/2"	FOR 9" DRUM SPINDLES
		65-72	DRUM	B4162WC	HEAVY DUTY	4 1/2"	FOR 10" DRUM SPINDLES
		73-76	DISC	B4160WC	HEAVY DUTY	4 1/2"	

## APPLICATIONS - CONTINUED

MAKE	MODEL	YEAR	OEM	PART#	TYPE	BOLT CIRCLE	NOTES
<b>PONTIAC</b>							
	BONNEVILLE	82-86	DISC	B4122WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	FIREBIRD	67-69	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		67-69	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		70-78	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
		82-92	DISC	B4118WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	FIREBIRD	93-01	DISC	B4180WC	HEAVY DUTY	4 3/4"	TRIM CONTROL ARMS *
	GRAND PRIX	73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
		79-87	DISC	B4122WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	LEMANS	73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
		79-81	DISC	B4122WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	PONTIAC	77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	PHOENIX	77-78	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	TEMPEST	73-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
	VENTURA II	71-74	DRUM	B4110WC	HEAVY DUTY	4 3/4"	
		71-74	DISC	B4112WC	HEAVY DUTY	4 3/4"	
		75-77	DISC	B4114WC	HEAVY DUTY	4 3/4"	MODIFY SPINDLES *
<b>SANTHUFF STRUT</b>							
				B4500WC	LIGHTWEIGHT	SPINDLE MOUNT	FOR 1 PIECE WHEELS
				B4100WC	HEAVY DUTY	4 3/4"	
<b>STRANGE STRUT</b>							
	ALUMINUM	87 - PRESENT		B4597WC	LIGHTWEIGHT	SPINDLE MOUNT	FOR 1 PIECE WHEELS
				B4598WC	LIGHTWEIGHT	SPINDLE MOUNT	FOR 2 PIECE WHEELS
				B4453WC	MEDIUM DUTY	4 1/2"	
				B4454WC	MEDIUM DUTY	4 3/4"	
				B4153WC	HEAVY DUTY	4 1/2"	
				B4154WC	HEAVY DUTY	4 3/4"	
	ULTRA STRUT	ALL		B4600WC	LIGHTWEIGHT	SPINDLE MOUNT	FOR ANGLIA WHEELS
	ALTERED ULTRA	ALL		B4593WC	LIGHTWEIGHT	SPINDLE MOUNT	FOR ANGLIA WHEELS
	ALTERED						
	S3423 SPINDLES	ALL		B4196WC	LIGHTWEIGHT	SPINDLE MOUNT	
	STEEL SPINDLES	ALL		B4595WC	LIGHTWEIGHT	SPINDLE MOUNT	WELD-ON KIT
<b>TOYOTA</b>							
	SUPRA	93-02		B4182WC	HEAVY DUTY	4 1/2" (114.3mm)	REUSES STOCK HUBS

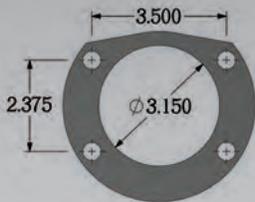
# STEEL REAR BRAKE KITS

## 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.

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.



### FORD (EARLY BIG FORD)

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

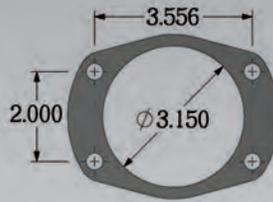
**B1707WCD** Pro Series rear steel **DUAL** caliper brake kit For Early Big Ford housing ends - F= 2.500"

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

**B1708WCD** Pro Series rear steel **DUAL** caliper brake kit For Early Big Ford housing ends - F= 2.3325"

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

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

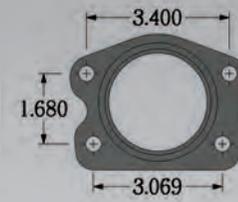


### FORD (LATE BIG FORD)

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

**B1706WCD** Pro Series rear steel **DUAL** caliper brake kit For Late Big Ford housing ends - F= 2.500"

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

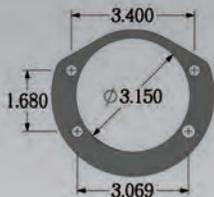


### FORD (8.8") MUSTANG

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

**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"

**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"

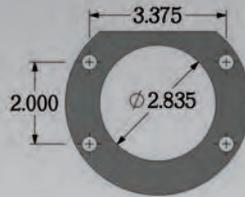


### FORD (STRANGE 8.8" / 3.150")

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

**B1715WCD** Pro Series rear steel **DUAL** caliper brake kit For Strange H1138 housing ends - F= 2.500"

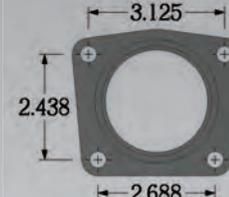
**B6715WC** S-Series (non-slotted rotor) rear steel brake kit For Strange H1138 housing ends - F= 2.500"



### FORD (SMALL FORD)

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

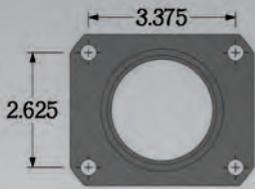
**B6712WC** S-Series (non-slotted rotor) rear steel brake kit For Small Ford housing ends - F= 2.625"



### GM (SMALL)

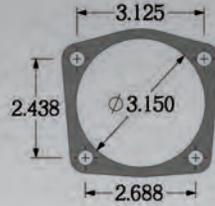
**B1716WC** Pro Series rear steel brake kit For 67-77 OEM small GM housing ends using Strange axles & c-clip eliminator kit - F= 2.832"

**B6716WC** S-Series (non-slotted rotor) rear steel brake kit For 67-77 OEM small GM housing ends using Strange axles & c-clip eliminator kit - F= 2.832"



### GM (LARGE)

**B1717WC** Pro Series rear steel brake kit  
For OEM large GM housing ends using Strange  
axles & c-clip eliminator kit - F= 2.832"

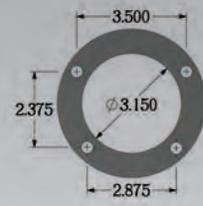


### GM (STRANGE 3.150")

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

**B1718WCD** Pro Series rear steel **DUAL** caliper brake kit  
For Strange H1143 GM housing ends - F= 2.832"

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

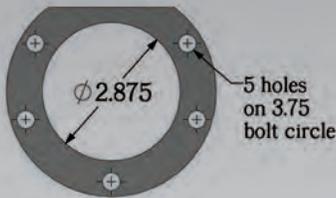


### OLDS

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

**B1700WCD** Pro Series rear steel **DUAL** caliper brake kit  
For 57-64 Olds housing ends - F= 2.832"

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

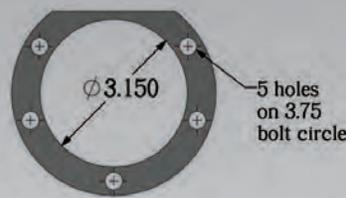


### MOPAR

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

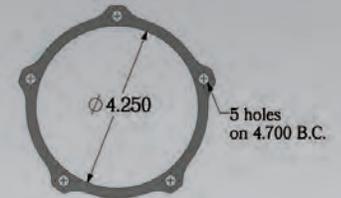
**B1704WCD** Pro Series rear steel **DUAL** caliper brake  
kit For 65-73 Mopar housing ends - Includes A1022  
axle bearings - F= 2.663"

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



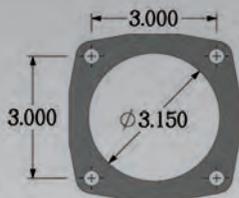
### MOPAR (STRANGE 3.150")

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



### STRANGE (2-PC. AXLES)

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

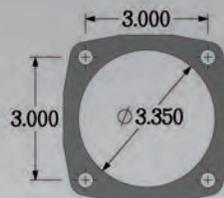


### SYMMETRICAL (3.150")

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

**B1710WCD** Pro Series rear steel **DUAL** caliper brake kit  
For Symmetrical housing ends - F= 2.832"

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



### SYMMETRICAL (3.350")

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

**B1711WCD** Pro Series rear steel **DUAL** caliper brake kit  
For H1136 / H1146 housing ends- F= 2.832"

### TOYOTA

**B1720WC** Pro Series rear steel brake kit  
For 93-02 Toyota Supra.

# 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
- B1853 Directional 4 piston calipers with high heat metallic pads & hardware- kit
- B1855 Directional 4 piston calipers with hard metallic pads & hardware- kit (shown next page)
- B1850LP Billet low profile calipers with soft metallic pads & hardware kit
- B1853LP Billet low profile calipers with high heat metallic pads & hardware kit
- B1855LP Billet low profile calipers with hard metallic pads & hardware kit
- B1950 Billet 4 piston calipers with soft metallic pads & hardware- kit

- B1953 Billet 4 piston calipers with high heat metallic pads & hardware- kit
- B1955 Billet 4 piston calipers with hard metallic pads & hardware- kit
- B6850 S-Series 4 piston non-directional calipers with soft metallic pads & hardware- kit
- B6853 S-Series 4 piston non-directional calipers with high heat metallic pads & hardware- kit
- B6855 S-Series 4 piston non-directional calipers with hard metallic pads & hardware- kit

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



B1850LP



## Strange 2-Piston Caliper Kit

Manufactured from aircraft quality aluminum and machined to exacting tolerances. This caliper kit is recommended for vehicles weighing under 2,600 lbs.

B1825 2 piston calipers with soft metallic pads and mounting hardware mounting bolt holes are on 3.250" centers- kit



## Strange Single Piston Caliper Kit

Employs a unique slider assembly that features internal bearings and precision ground sliders to prevent the caliper from binding and sticking, which is common with other brands. The caliper body is fully machined and lightened- satisfying the most weight conscious racer.

B1816 Single piston calipers and slider assemblies with soft metallic pads- kit



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

- |         |   |         |   |
|---------|---|---------|---|
| B2780   | Lightweight 10" slotted rotor for Strange Aluminum Strut using single piston caliper with 1.50" offset rotor- RH side   | B2790   | 11.250" non-slotted .430" thick rotor for S-Series rear brakes                    |
| B2781   | Lightweight 10" slotted rotor for Strange Aluminum Strut using single piston caliper with 1.50" offset rotor- LH side   | B2792   | 11.250" slotted rotor for Pro Series rear brakes- RH                              |
| B2782   | Lightweight 10" slotted rotor for Strange Ultra Strut, Anglia style spindle, and Strange Aluminum Strut using single piston caliper with 1.00" offset rotor- RH side                              | B2793   | 11.250" slotted rotor for Pro Series rear brakes- LH                              |
| B2783   | Lightweight 10" slotted rotor for Strange Ultra Strut, Anglia style spindle, and Strange Aluminum Strut using single piston caliper with 1.00" offset rotor- LH Side                              | B2794R  | 11.250" slotted rotor for Pro Series II two piece rear brakes- RH                 |
| B2786R  | Pro Series II two piece 10" slotted rotor for Strange Ultra Strut, Anglia style spindle, and Strange Aluminum Strut using single piston caliper with 1.00" offset rotor - RH side                 | B2794L  | 11.250" slotted rotor for Pro Series II two piece rear brakes- LH                 |
| B2786RS | Pro Series II two piece 10" slotted stainless steel rotor for Strange Ultra Strut, Anglia style spindle, and Strange Aluminum Strut using single piston caliper with 1.00" offset rotor - RH side | B2794RS | 11.250" slotted stainless steel rotor for Pro Series II two piece rear brakes- RH |
| B2786L  | Pro Series II two piece 10" slotted rotor for Strange Ultra Strut, Anglia style spindle, and Strange Aluminum Strut using single piston caliper with 1.00" offset rotor - LH side                 | B2794LS | 11.250" slotted stainless steel rotor for Pro Series II two piece rear brakes- LH |
| B2786LS | Pro Series II two piece 10" slotted stainless steel rotor for Strange Ultra Strut, Anglia style spindle, and Strange Aluminum Strut using single piston caliper with 1.00" offset rotor - LH side | B2795   | 11.250" tapered slotted rotor for MD and HD front brake kits- RH                  |
|         |   | B2796   | 11.250" tapered slotted rotor for MD and HD front brake kits- LH                  |

## CALIPERS, PADS, & REBUILD KITS



**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

**B1260** Strange 1.750" single piston floating caliper  
For steel brakes- slider not included

**B1262** Strange 1.750" single piston floating caliper  
For 10" carbon brakes- slider not included

**B1263** Strange 2.00" single piston floating caliper  
For 10" carbon brakes- slider not included

**B1264** Strange 2.00" single piston floating caliper  
For 11" carbon brakes- slider not included

**B2560** Strange 2-piston caliper  
3.250" bolt centers

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

**B5002** Strange Pro Series 4-piston directional caliper  
5.250" bolt centers - RH side

**B5004** Strange Pro Series 4-piston directional caliper  
5.250" bolt centers - LH side

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

**B2510** Pad for Strange single and 2-piston caliper  
For steel rotors

**B1212** Pad for Strange single piston caliper  
For aluminum rotors

**B5010** Pad for Strange 4-piston caliper  
Soft metallic

**B5022** Pad for Strange 4-piston caliper  
High Heat metallic

**B5020** Pad for Strange 4-piston caliper  
Hard metallic

**B1260RK** Strange single piston caliper o-ring kit  
Various o-rings for all versions

**B2607** O-ring kit for late Strange 2-piston caliper  
using stainless steel pistons- 96 to pres

**B2605** O-ring kit for early Strange 2-piston caliper  
using aluminum pistons- Pre 96

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

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

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

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

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

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

**B4010** Pad for Strange low profile four piston caliper - Soft Metallic

**B4020** Pad for Strange low profile four piston caliper - Hard Metallic

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

**B3325** Pad for Wilwood / JFZ 4-piston caliper  
Soft metallic- Cotter pin retention

**B3326** Pad for Wilwood / JFZ 4-piston caliper  
Hard metallic- Cotter pin retention

**B3330** Pad for Kelsey-Hayes 1200 caliper  
Hard metallic

Rebuild kits service one caliper  
Brake pads are sold as each

# CARBON BRAKES

## FRONT CARBON BRAKE KITS



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



Strange has developed a new carbon material that has excellent static and non-static characteristics, while still yielding exceptional life. Strange front carbon brakes offer many advantages over front steel and cast iron rotors. The advantages include the elimination of cracked or warped rotors, less brake drag, and a significant reduction in weight. The complete carbon front brake kit weighs a total of 8.50 lbs.

This proven carbon kit features a perfected caliper kit that employs a unique slider assembly, which includes internal bearings and precision ground sliders to prevent the caliper from binding or sticking. Square carbon pads have a generous surface area allowing for optimum braking.

Strange now has available a single piston front caliper incorporating a 2" diameter piston. This design offers additional clamping force while stabilizing the piston within the caliper bore. When used with 11" front rotors, the braking ability is further enhanced. Chassis construction may need to be reinforced to handle the additional stresses imposed. Some older spindle mount wheels may not provide the proper clearances required for the 2" caliper or the 11" rotor.

The Strange front carbon kit is the choice of prominent Fuel Funny Car teams, Competition Eliminator contestants, Pro-Mod and Pro Stock cars.

C4594WC For '09+ Strange adjustable height spindles (S3423) 1.750" piston calipers with 10" carbon rotors

C4694WC For '09+ Strange adjustable height spindles (S3423) 2" piston calipers\* with 11" rotors

C4595WC For Pre '09 Strange adjustable height spindles (S3422) 1.750" piston calipers with 10" carbon rotors

C4591WC For Pre '09 Strange adjustable height spindles (S3422) 2" piston calipers\* with 10" carbon rotors

C4695WC For Pre '09 Strange adjustable height spindles (S3422) 2" piston calipers\* with 11" rotors

C4598WC For Strange Aluminum Struts (spindle mount wheels) 1.750" piston calipers with 10" rotors

C4154WC For Strange Aluminum Struts (4 3/4" BC bolt-on wheels) Four piston calipers with 11" rotors

C4600WC For Strange Ultra Struts 1.750" piston calipers with 10" rotors

C4690WC For Strange Ultra Struts 2" piston calipers\* with 11" rotors

C4596WC For Lamb struts 1.750" piston calipers with 10" rotors

\* 2" piston calipers are for 1 piece wheels only. American and Sanders wheels require calipers to be clearanced

Strange Front Carbon Kits include the following: calipers with slider assemblies, billet aluminum caliper mounts, carbon rotors and carbon brake pads. The Heavy Duty kit for Strange Aluminum struts have fixed four piston calipers, billet mounts, 11" carbon rotors, carbon pads, 4 3/4" BC hubs, studs, bearings, races, and seals.

# 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"

C18084UC For Early Big Ford housing ends 4.75" BC- F= 2.332"

C18104UC For Symmetrical housing ends 4.75" BC- F= 2.832"

C18104DBUC For Strange H1136 housing ends 4.75" BC- F= 2.832"

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

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"  
 C17084WC For Early Big Ford housing ends 4.75" BC- F= 2.332"  
 C17104WC For Symmetrical housing ends 4.75" BC- F= 2.832"  
 C17104DBWC For Strange H1136 housing ends 4.75" BC- F= 2.832"  
 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  
 C1200WC For pre 2012 Strange floater kit- 5.50" BC  
 C1209WC For pre 2012 Strange floater kit- 4.75" & 5" BC

## 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.

**C3000WC** For Chrisman live axle- Includes rotors, pads & calipers  
 Chrisman hubs must be modified

**L4050WC** Carbon brake kit for 11/12 and older Strange 9" / 9 1/2"  
 Top Load Live Axle

## CARBON REPLACEMENT COMPONENTS

C1780	10" front carbon rotor	B5040	4 piston Pro Race Ultra Caliper For floater kits & 10.5" & 12" Live Axles
C1790	11" carbon rotor- Front or rear	B5042	4 piston Pro Race Ultra Caliper For 9.5" Live Axle & Pro Race carbon brake kits
L4050B	11.50" rear carbon rotor	L4050S	.024" Ti heat shield for Sportsman carbon caliper
B1250P	Single piston front carbon pad	L4050T	.060" SS heat shield for Sportsman carbon caliper
L4050H	4 piston carbon pad- Non-slotted	B1260RK	O-ring kit- single piston caliper with 1.750" or 2" piston
L4050H1	4 piston carbon pad- Slotted at 1:00	B5109	O-ring kit- 4 piston Sportsman directional caliper
L4050H2	4 piston carbon pad- Slotted at 11:00	B5109R	Low Drag o-ring kit- 4 piston Sportsman directional caliper
B5002	4 piston Sportsman directional caliper- RH side	B5110	O-ring kit for 4 piston Pro Race Ultra Caliper
B5004	4 piston Sportsman directional caliper- LH side		

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.

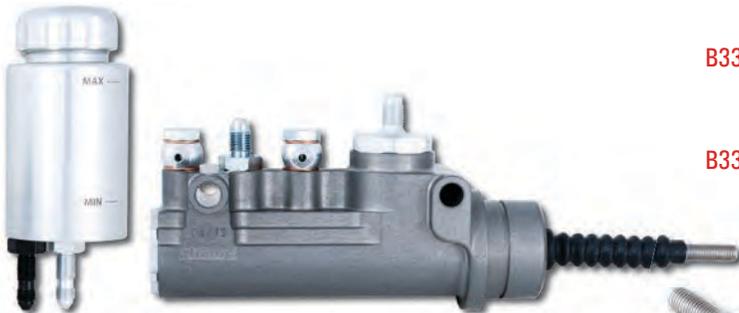
- Strange aluminum body • Includes hard-line fittings
- Economical • Holes provided for side mount application
- Both front and rear outlets are tapped 1/2-20

- B3359** 1.125" bore master cylinder with mounting hardware  
**B3359TA** 1.125" bore master cylinder without mounting hardware  
**B3360** 1.032" bore master cylinder with mounting hardware  
**B3360TA** 1.032" bore master cylinder without mounting hardware

**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



The **B3370** is for professional racers who demand the best foundation for superior four wheel braking. The fast fill design allows the rear calipers to achieve exceptional caliper pressure with minimum pedal/handle travel. The body design further ensures maximum rigidity, while minimizing weight. The B3370 is self proportioned, which in most cases eliminates the use of an external proportioning valve. The external billet aluminum remote reservoir eliminates residual valves and its compact design eases mounting.



**B3370** Strange billet aluminum Funny Car fast fill master cylinder and remote reservoir

**B3370R** Rebuild kit for B3370 master cylinder

The B3362 fast fill master cylinder allows for maximum consistency and a pedal / handle feel which is unparalleled. Designed for two wheel braking applications, the lightweight body and reservoir weigh only 1 lb. The forged aluminum body features a premium grade banjo fitting for plumbing adaptability. The remote reservoir and filler cap is machined from billet aluminum that resists heat and will not easily melt like plastic. The remote feature enables the builder to eliminate external residual valves and its compact design offers freedom in mounting and plumbing.

**B3362** Strange aluminum Dragster fast fill master cylinder and remote reservoir

**B3362R** Rebuild kit for B3362 master cylinder



Standard is 22mm - 7/8" and 11/16" bore sizes are also available

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



**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

**B3367** 10 lbs external pressure valve



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



## BRAKE FITTINGS

**P2316** 3 AN x .125" NPT adapter

**P2318** 3 AN coupling nut

**P2319** 3 AN coupling nut sleeve

**P2322** 3 AN x .125" NPT 90° adapter

**P2323** 3 AN x .125" NPT 45° adapter

**P2332** 3 AN bulkhead union

**P2333** 3 AN bulkhead tee on branch

**P2334** 3 AN bulkhead tee on run

**P2335** Nut for 3 AN bulkhead fitting

**P2336** 3 AN x .125" NPT tee on run

**P2337** 3 AN bulkhead 90° elbow

 P-2300	 P-2322	 P-2334	 P-2355
 P-2316	 P-2332	 P-2337	 P-2356
 P-2319	 P-2333	 P-2336	 P-2357

**P2339** Weld-on bracket for bulkhead fitting- For round tubing

**P2356** 3 AN x 1/2-20 adapter for Strange B3360 / B3359

**P2357** 3 AN x 9/16-20 master cylinder adapter

# BRAKES

## BRAKE LINE & REAR BRAKE KITS



**P2338** 3/16" steel brake line- 25 ft roll

**P2340** 16" braided stainless flex line with 3 AN straight / 90° ends

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

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

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

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

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

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

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



## 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. 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

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

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

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

\* 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



## 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. 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

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

B1600D Drill B1606 or B1608 for different bolt circle or stud size



# SHOCKS

## DRAG RACE ALUMINUM COIL-OVER, STRANGE ALUMINUM, KONI ALUMINUM

### DRAG RACE ALUMINUM COIL-OVER SHOCKS:

Strange Drag Race aluminum coil-over shocks were developed with the help of several chassis builders, Pro-Mod racers, and World Champion Sportsman racers. The hard work culminated into a shock that is highly responsive, consistent, and can be easily adjusted to adapt to slight changes in atmospheric conditions. Each Strange shock body, eyelets, spring seat and jam nut are fully machined from high-grade aluminum. Strange fully assembles and inspects each shock. The Strange dynamometer facility enables us to analyze shocks at all shaft speeds and continue our valve development to stay at the forefront of Drag Racing shock technology. The shocks incorporate a wide range of adjustments that suit most needs, but custom valving is always available.

### STRANGE ALUMINUM SINGLE ADJUSTABLE:

These coil-over shocks are designed to simplify the process of tuning your suspension. When adjustments become necessary to a drag race vehicle, Strange shocks prove to be a valuable tool to alter the reaction of the suspension to compensate for the change in conditions. Shock extension is easily adjusted by turning a conveniently located external knob. The external knob offers 10 precise extension (rebound) settings and allows for a wide range of adjustment.

### STRANGE ALUMINUM DOUBLE ADJUSTABLE:

Double adjustable coil-over shocks are offered to drag racers requiring more control of the suspension system. 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 vehicle's suspension.

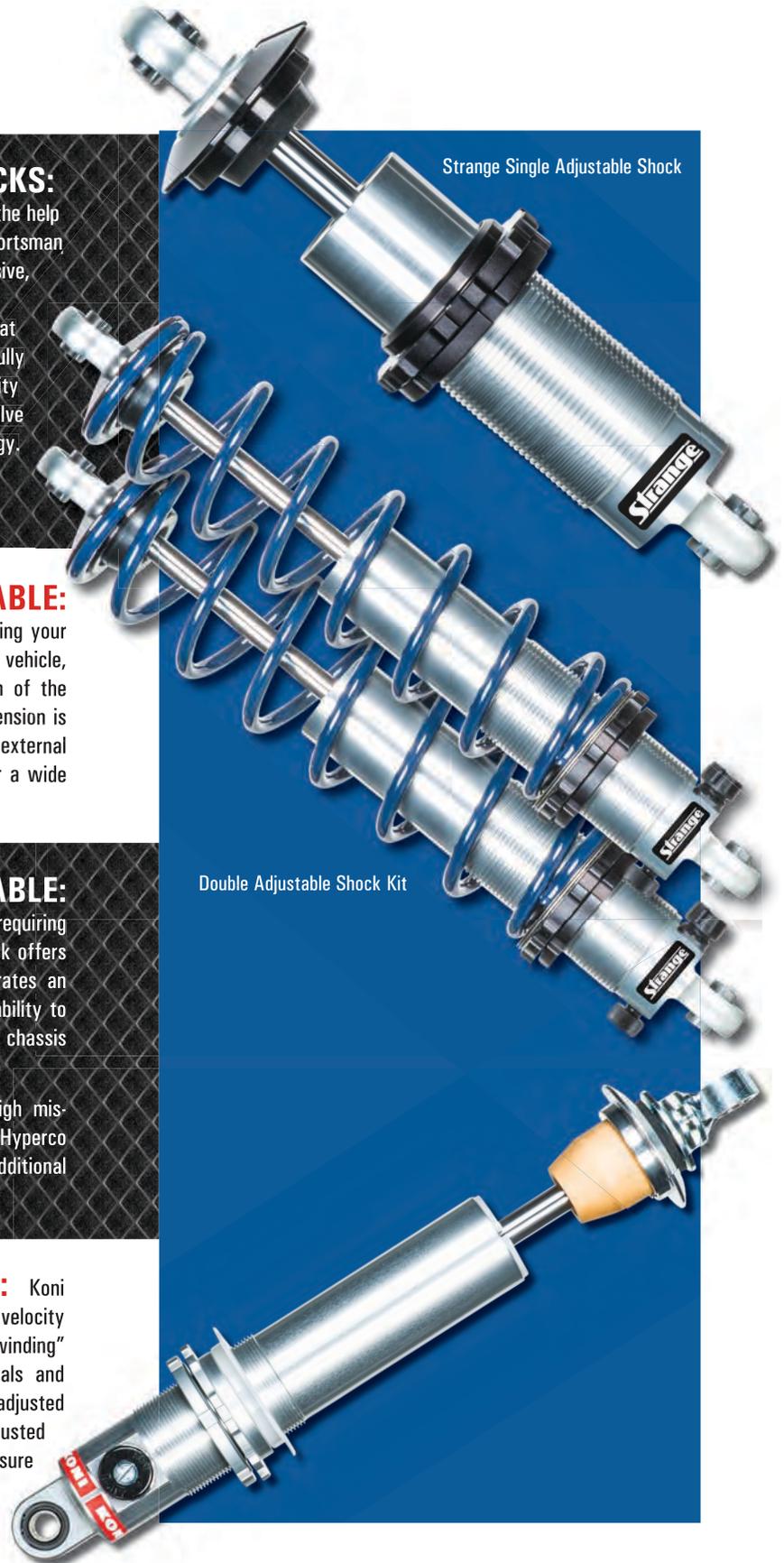
Strange double adjustable shock package include Teflon lined high misalignment bearings, spring seat bearings and Hyperco Springs. Hyperco springs are supplied to ensure consistent performance and alleviate additional problems that may be introduced with lesser grade springs.

### KONI ALUMINUM DOUBLE ADJUSTABLE:

Koni coil-over shock absorbers feature SPA 1 valving. SPA 1 valving is velocity sensitive, which allows for hard launches and allows proper "unwinding" of the rear suspension. They are produced from quality materials and surfaces are machined to close tolerances. Extension (rebound) is adjusted through a slot under the top eye, while compression (bump) is adjusted above the bottom eye. Every Koni shock is 100% dyno tested to assure optimum performance.

Strange Single Adjustable Shock

Double Adjustable Shock Kit



Part Number	Extended Length	Collapsed Length without Bumper	Recommended Ride Height	*Stroke	Suggested Spring Length	Adjustment Type
S5209	22.40"	14.25"	17"-20"	8.15"	14"-16"	Strange Single
S5009	22.40"	14.25"	17"-20"	8.15"	14"-16"	Strange Double
S5207	19.15"	12.64"	15.25"-16.00"	6.52"	14"	Strange Single
S5007	19.15"	12.64"	15.25"-16.00"	6.52"	14"	Strange Double
S5206	17.15"	11.64"	13.875"-14.50"	5.52"	12"	Strange Single
S5006	17.15"	11.64"	13.875"-14.50"	5.52"	12"	Strange Double
S5205	15.40"	10.76"	12.625"-13.250"	4.64"	12"	Strange Single
S5005	15.40"	10.76"	12.625"-13.250"	4.64"	12"	Strange Double
S5204	13.84"	10.00"	11.750"-12.125"	3.86"	10"	Strange Single
S5004	13.84"	10.00"	11.750"-12.125"	3.86"	10"	Strange Double
S5203	12.84"	9.50"	11.00"-11.375"	3.36"	7"-8"	Strange Single
S5003	12.84"	9.50"	11.00"-11.375"	3.36"	7"-8"	Strange Double
S5202	11.36"	8.74"	10.00"-10.375"	2.62"	7"-8"	Strange Single
S5002	11.36"	8.74"	10.00"-10.375"	2.62"	7"-8"	Strange Double
S1123A	19.5"	12.5"	16.625"-17.38"	7"	14"	Koni Double
S1126A	17.5"	11.5"	15.25"-15.875"	6"	12"	Koni Double
S1121A	15.875"	10.75"	14"-14.625"	5.125"	12"	Koni Double

\* Stroke is stated without the bump rubber installed to comply with the industry standard and be comparable to other brands. Deduct .563" from Strange shock stroke and 2.1875" from the Koni to obtain usable stroke. Shocks should not be operated without the bump rubber.

**KONI DOUBLE ADJUSTABLE SHOCK:** Includes .625" wide bearings, spring seat, and jam nut

**STRANGE DOUBLE ADJUSTABLE SHOCK PACKAGE:** Includes 1" wide\* Teflon lined high mis-alignment bearings, spring seats, jam nuts, Hyperco springs, and spring seat bearing kit

**STRANGE SINGLE ADJUSTABLE SHOCK:** Includes 1" wide\* high mis-alignment bearings, spring seat, and jam nut

Part numbers for Strange Single Adjustable Shocks are for one shock. Part numbers for Strange Double Adjustable are for Shock Package (specify spring rate). For Strange Double Adjustable shock sold individually (less spring and spring seat bearings) add "A" to the end of the part number (i.e. S5007A).

\* Upon request, 1" wide bearings may be replaced on Strange shocks with either .5" or 1.5" wide bearings.

S1409 Torrington spring seat bearing kit eases spring height adjustment



S1413 Spanner wrench for coil-over shocks



# SHOCKS

## ULTRA SERIES DRAG RACE COIL-OVER SHOCKS

### STRANGE ULTRA SERIES DOUBLE ADJUSTABLE SHOCK

Strange Engineering brings advanced shock technology into the Drag Racing market. As racers become more knowledgeable in chassis tuning, many are seeking qualities normally reserved for tier one vehicles used in other forms of motorsports. These double adjustable shocks address the internal events that normally occur during use, drastically reducing undesired changes in shock dampening. Monotube construction is lighter (and less unsprung weight) than a twin tube design, and dissipates heat more efficiently. The shock features a hollow shock rod, which has less inertia making it more responsive to changes in direction; In addition, the shaft is optimally hardened for increased strength, chromed, and super finished to provide superior life and reduce both deflection and friction. The ultra low friction guide and seal are self-aligning, which reduces low speed abrasion and wear that occurs during side loading and temperature changes. The large 48mm piston is manufactured from billet aluminum, hard anodized, and Teflon<sup>®</sup> coated. The larger piston area achieves higher dampening forces with lower internal pressures. A thin Teflon<sup>®</sup> coated piston band further reduces friction while allowing a straighter port design that minimizes changes in fluid direction. The result is faster frequency response and lowered hysteresis, which permits a more progressive dampening force without the downside of additional lag that would normally accompany it. The extension and compression oil paths are completely sealed from each other eliminating any cross talk between them.

The strange ultra monotube shocks are available in common configurations (listed below) and are revalvable. Custom configurations and valving are available upon request (additional cost may apply). The ultra shock is a key component in the suspension system that will deliver consistency, improved launch, down track stability and ultimately allow you to better tune your vehicle for superior performance. All shocks are hand assembled by Strange in the USA.

#### IN-LINE Shorter Oil Path Provides Quicker Response to Compression Forces / Compact Design

Part Number	Extended Length	Collapsed Length without Bumper	Recommended Ride Height	*Stroke	Suggested Spring Length
S7210I	25.68"	16.30"	18.50"-22.50"	9.38"	14"-16"
S7209I	23.45"	15.20"	17.50"-20.50"	8.25"	14"
S7207I	19.59"	13.26"	15.25"-16.50"	6.33"	12"
S7205I	16.69"	11.81"	13.25"-14.25"	4.88"	10"
S7204I	15.30"	11.14"	12.50"-13.50"	4.16"	8"
S7203I	13.79"	10.36"	11.50"-12.25"	3.43"	7"

#### Piggyback Shorter Length to Stroke / Accepts Longer Spring / Easily Converts to Air Adjustable

Part Number	Extended Length	Collapsed Length without Bumper	Recommended Ride Height	*Stroke	Suggested Spring Length
S7210S	25.15"	15.80"	18"-22"	9.35"	14"-16"
S7209S	22.95"	14.70"	17"-20"	8.25"	14"-16"
S7207S	19.00"	12.80"	14.75"-16.00"	6.20"	12"-14"
S7205S	16.28"	11.28"	12.75"-13.75"	5.00"	10"-12"
S7204S	14.94"	10.64"	12"-13"	4.30"	8"-10"
S7203S	13.38"	9.85"	11"-11.75"	3.53"	7"-8"

\* Stroke is stated without the bump rubber installed to comply with industry standards and be comparable to other brands. Shocks should not be operated without the bump rubber / Contact Strange Engineering for available bumper lengths

## INTEGRAL (PIGGYBACK) RESERVOIR



Extension Adjustment

Compression Adjustment



- MONOTUBE CONSTRUCTION**
  - Lighter weight / High heat dissipation
  - Can be operated inverted- Reduces unsprung weight and provides consistent chassis reaction
- GAS CHARGED INTEGRAL RESERVOIR**
  - Floating piston compensates for oil displaced by piston rod as shock is compressed
- WIDE RANGE OF TUNING ADJUSTMENT**
  - 24 clicks for both compression & rebound
  - Clicks are Independent and positively lock
  - Allows for fine tuning for varying conditions
  - Adjustments are made with a standard 5/32" Allen wrench
- ULTRA LOW FRICTION GUIDE AND SEAL**
  - Reduces wear during side loading and temperature variations, which maximizes performance consistency
- HOLLOW INDUCTION HARDENED SUPER FINISHED CHROME ROD**
  - Lowers inertia, while minimizing deflection and friction
- 48MM HARDENED PISTON WITH TEFLON® COATING**
  - Provides precise low speed control while maintaining consistency
  - Large working pressure area allows for higher dampening forces
  - Straighter port design improves oil flow for a quicker response time
  - Hysteresis is minimized resulting in improved grip and stability
  - Improved stability and traction at launch and down track
- PISTON BASED VALVING SYSTEM**
  - Isolates compression and extension adjustments from affecting each other
  - Decreases blow off force requirements / Improves frequency response
  - Superior low speed control
  - Allows for improved launch control and reduced tire shake
- LOCKING ANODIZED SPRING SEAT**
  - Spring seat and body threads have dissimilar coating for corrosion & galling resistance
- INTEGRAL (PIGGYBACK) RESERVOIR (pictured left)**
  - Can be converted to air adjustable
  - Compression adjustment is located in-line with oil flow (working pressure column) reducing oil shear, hysteresis and improving small amplitude frequency response- compared to designs that are adjustable at the canister
  - Allows for easier spring installation over a wide range of shock lengths
  - Enables use of a longer and lighter spring for improved stored energy

### ULTRA SERIES MONOTUBE DOUBLE ADJUSTABLE SHOCK

## IN-LINE RESERVOIR



Compression Adjustment

Extension Adjustment

# 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 led 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.

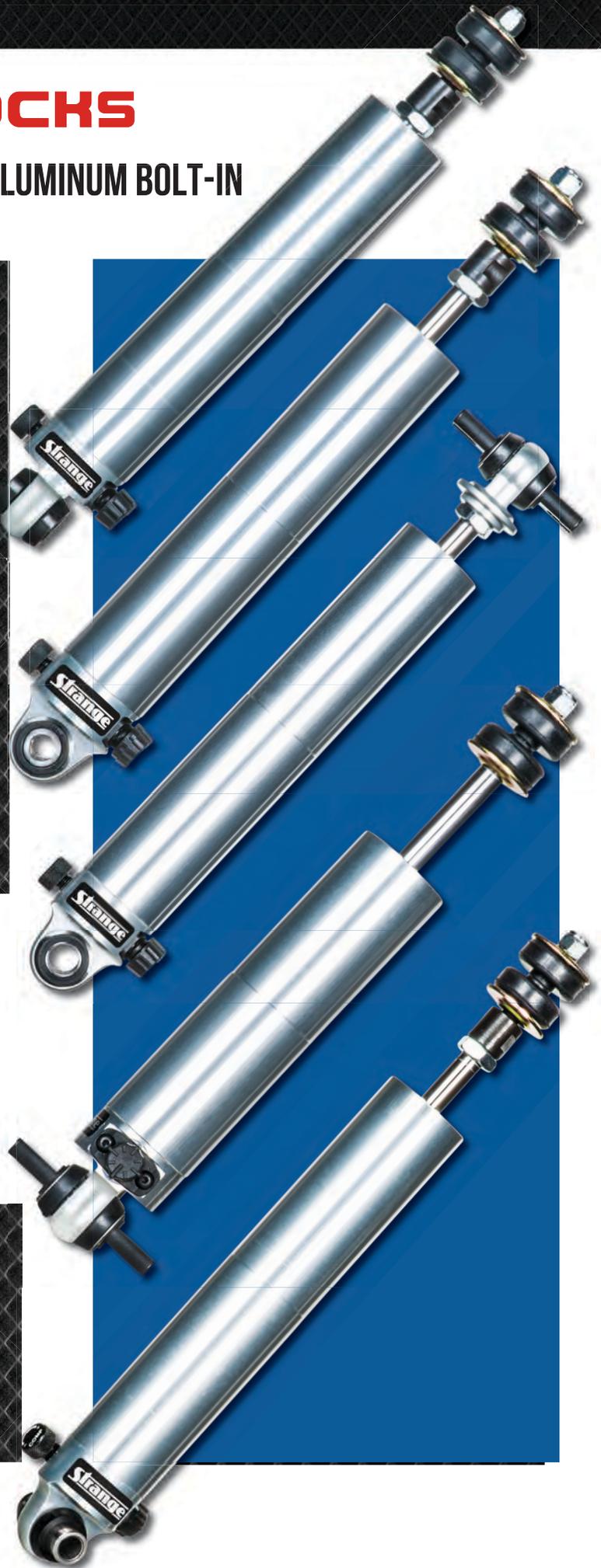
- Lightweight Aluminum Bolt-In Shocks
- Easily Accessible External Adjustment
- Extension Tuning Knob - Single & Double Adjustable
- Compression Tuning Knob - Double Adjustable
- Billet Steel Cross Bars & Polyurethane Bushings
- Wide Range of Adjustments are Ideal for Street & Track

### 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 10 precise 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.



## BOLT-IN ALUMINUM SHOCK APPLICATIONS

Unless Stated Otherwise

		Front		Rear		
		Single	Double	Single	Double	
<b>BUICK</b>						
Apollo	1973-75	S5263*	S5063*	S5264	S5064	
Century	1973-81	S5263*	S5063*	S5264	S5064	
Regal	1973-87	S5263*	S5063*	S5264	S5064	
Skylark	1975-79	S5263*	S5063*	S5264	S5064	
<b>CHEVROLET</b>						
Bel Air	1971-75	S5267*	S5067*	S5264	S5064	
Biscayne	1971-72	S5267*	S5067*	S5264	S5064	
Camaro	1967	S5263*	S5063*	S5276	S5076	Mono leaf (non-staggered)
	1967-69	S5263*	S5063*	S5266	S5066	Mono leaf
	1968-69	S5263*	S5063*	S5262	S5062	Multi leaf
	1970-81	S5267*	S5067*	S5268	S5068	
	1982-92	NA	NA	S5270	S5070	
	1982-02	NA	NA	S5284	S5084	(1)
	1993-02	S5269**		S5270	S5070	
Drag Race Only	1993-02	S5271	S5071	NA	NA	Requires 2.5 x 14" spring
	2010-14	NA	NA	S5290	S5090	(1)
Caprice	1971-96	S5267*	S5067*	S5264	S5064	
Chevelle, Malibu	1964-67	S5267*	S5067*	S5264	S5064	
	1968-83	S5263*	S5063*	S5264	S5064	
Chevette	1976-87	NA	NA	S5262	S5062	
Chevy II, Nova	1962-67	NA	NA	S5270	S5070	
	1968-79	S5263*	S5063*	S5274		
El Camino	1968-88	S5263*	S5063*	S5264	S5064	
Impala	1955-57	S5267*	S5067*	S5272	S5072	
	1958-96	S5267*	S5067*	S5264	S5064	
Monte Carlo	1970-88	S5263*	S5063*	S5264	S5064	
Pick-up Truck	1983-93	S5263*	S5063*	NA	NA	2 WD only

\* Requires modification of stock lower control arm

\*\* Uses aftermarket spring or Strange spring SPC300A

(1) Rear coil-over shock with bracket (less spring)

Applications Continue on Following Pages

# SHOCKS

## BOLT-IN ALUMINUM APPLICATIONS

Unless Stated Otherwise

		Front		Rear		
		Single	Double	Single	Double	
<b>DODGE</b>						
Challenger	1970-74	S5281	S5081	S5282	S5082	
	2008-10	NA	S5085	NA	S5086	Front / Rear - Drag Race only
Charger, Coronet	1965-72	S5281	S5081	S5282	S5082	
	1973-76	S5283	S5083	S5282	S5082	
Dart, Swinger,						
Demon	1962-76	S5281	S5081	S5282	S5082	
Pick-up Truck	1982-91	S5263*	S5063*	NA	NA	4 WD only
<b>FORD</b>						
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	
<b>GMC</b>						
Caballero, Sprint	1971-88	S5263*	S5063*	NA	NA	
Jimmy, Sonoma	1983-93	S5263*	S5063*	NA	NA	2 WD only
<b>HONDA</b>						
CRX	1989-91	NA	S5015	NA	S5016	(2)
Civic	1989-01	NA	S5015	NA	S5016	(2)

\* Requires modification of stock lower control arm

(1) Rear coil-over shock with bracket (less spring)

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

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

Unless Stated Otherwise

OLDSMOBILE		Front		Rear		
		Single	Double	Single	Double	
Cutlass, 442	1964-67	S5267*	S5067*	S5264	S5064	
	1968-88	S5263*	S5063*	S5264	S5064	
Omega, 442	1973-79	S5263*	S5063*	S5264	S5064	
PLYMOUTH						
Barracuda	1964-74	S5281	S5081	S5282	S5082	
Belvedere, Satellite	1962-72	S5281	S5081	S5282	S5082	
	1973-74	S5283	S5083	S5282	S5082	
Duster, Valiant,						
Scamp	1960-76	S5281	S5081	S5282	S5082	
Fury	1962-64	S5281	S5081	S5282	S5082	
	1965-78	NA	NA	S5282	S5082	
PONTIAC						
Bonneville	1971-81	S5267*	S5067*	S5264	S5064	
	1982-86	S5263*	S5063*	S5262	S5062	
Firebird, Trans Am	1967-69	S5263*	S5063*	S5266	S5066	Mono Leaf
	1968-69	S5263*	S5063*	S5262	S5062	Multi Leaf
	1970-81	S5267*	S5067*	S5268	S5068	
	1982-92	NA	NA	S5270	S5070	
	1982-02	NA	NA	S5284	S5084	(1)
	1993-02	S5269**	S5069**	S5270	S5070	
Drag Race Only	1993-02	S5271	S5071	NA	NA	Requires 2.5 x 14" spring
Grand Prix	1969-87	S5263*	S5063*	S5264	S5064	
GTO	1964-67	S5267*	S5067*	S5264	S5064	
	1968-81	S5263*	S5063*	S5264	S5064	
Lemans, Tempest	1964-67	S5267*	S5067*	S5264	S5064	
	1968-81	S5263*	S5063*	S5264	S5064	
Phoenix	1977-79	S5263*	S5063*	NA	NA	
Ventura	1971-77	S5263*	S5063*	S5264	S5064	

\* Requires modification of stock lower control arm

\*\* Uses aftermarket spring or Strange spring SPC300A

(1) Rear coil-over shock with bracket (less spring)

# SHOCKS/STRUTS

## MUSTANG & CAMARO

### 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

#### **87-93 MUSTANG** S6001EM

Strange externally adjustable **Front Strut**- V8 Only- each

#### **94-04 MUSTANG** S6004LM

Strange externally adjustable **Rear Shock**- Not for IRS Cobra- each

#### **94-04 MUSTANG** S6005LM

Strange externally adjustable **Front Strut**- each

#### **05-14 MUSTANG** S6008LM

Strange externally adjustable **Rear Shock**- each

#### **05-10 MUSTANG** S6009LM

Strange externally adjustable **Front Strut**- each

#### **11-14 MUSTANG** S6011LM

Strange externally adjustable **Front Strut**- each

#### **COIL-OVER KIT FOR 79-04 MUSTANG STRUT** S6001

Includes aluminum body, spring seat, jam nut and bearings

Serves one strut

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
- Knight



## MUSTANG & CAMARO / FIREBIRD 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

### 2005-14 MUSTANG\*\* S2043

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

### 1982-92 CAMARO / FIREBIRD S2061

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

### 2010-14 CAMARO\*\* S2063

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

\* 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



# STRUTS

## STRANGE FORGED ALUMINUM



### FORGED ALUMINUM STRUT PACKAGES

- Forged aluminum body liquid penetrant inspected to ensure quality
- Lightened 17-4 stainless steel spindles
- Custom valving available
- Large & fully ground strut shaft
- Stud mount or Eye mount
- Externally adjustable for extension
- Available in double externally adjustable for extension and compression
- Packages offer three brake kit options
- Choice of Hyperco springs
- Includes chrome-moly lower control arm kit - Choice of 1/2" or 7/16" 4130 rod ends

**STRANGE FORGED ALUMINUM STRUT PACKAGES:** Provides the basis for a lightweight front suspension. Frame construction is much simpler, suspension geometry is more easily established, and header clearance is improved over conventional A-frame suspension. Every Strange strut is externally adjustable for extension (rebound) for more convenient tuning. Strange double adjustable strut packages provide an additional external adjustment for compression (bump). Strange aluminum strut bodies are forged from 2000 series aluminum alloy to provide high strength at a minimal weight. Heat treated 17-4 stainless steel spindles provide an exceptionally strong wheel mounting surface. Fatigue resistant steel steering arms can be formed easily to obtain proper steering geometry. Brake mounting bosses are an integral part of the forged housing, providing simplicity for brake kit mounting on either side of the strut. Every Strange strut package features integral designed components ensuring proper fit, ease of assembly, maximum performance and an unsurpassed regard for safety. All Strange forged aluminum struts are for Drag Racing only.

**GT STRUT PACKAGE:** Designed with the cooperation of F.J. Smith Race Cars to create a package that met NHRA's SS/GT stringent criteria. This 6.5" stroke strut has been further utilized by innovative chassis builders seeking a competitive advantage in other classes. Custom Mustangs, Camaros, Imports, and other Drag Racing vehicles have enjoyed the benefits offered by this strut. The GT strut is an extremely versatile drag racing strut system. Custom configurations can include custom dimensions, custom valving and custom stroke. Also offered in double adjustable for external adjustment of compression and extension, the GT Strut becomes an unsurpassed suspension option. GT struts are supplied with choice of lower control arm end. A weld end with bearing, if a factory lower control is used, or our traditional end for construction of an A-Arm system. To complete A-Arm construction, either the S3420 or S3421 tubing and rod end kit would be required.

**LIGHTWEIGHT STRUT PACKAGE:** Designed for spindle mount wheels. The brake kit uses single piston calipers and 10" slotted steel rotors to fit within the tight clearances available. Due to the limited braking, they should only be used in vehicles weighing less than 2,600 lbs that deploy a parachute.

**MEDIUM DUTY STRUT PACKAGE:** Designed for a vehicle using 5 lug bolt-on wheels and weighs less than 2,600 lbs. The brake kit includes forged aluminum wheel hubs, bearings, races, seals, studs, caliper mounts, 2-piston calipers, soft metallic pads, and 11.25" rotors.

**HEAVY DUTY STRUT PACKAGE:** Fits 5 lug bolt-on wheels and used on race cars weighing more than 2,600 lbs. The brake kit features forged aluminum wheel hubs, bearings, races, seals, studs, caliper mounts, 4-piston calipers, soft metallic pads, and 11.25" rotors.

## LIGHTWEIGHT ALUMINUM STRUT PACKAGES

### STRANGE EYE MOUNT LIGHTWEIGHT STRUT PACKAGE PSS100

Includes single externally adjustable eye mount struts, lower control arm kit, Lightweight spindle mount brake kit, Hyperco springs and spring seat bearing kit

**PSS100DBL** PSS100 package with double externally adjustable struts

### STRANGE STUD MOUNT LIGHTWEIGHT STRUT PACKAGE PSS105

Includes single externally adjustable stud mount struts, lower control arm kit, Lightweight spindle mount brake kit, Hyperco springs and spring seat bearing kit

**PSS105DBL** PSS105 package with double externally adjustable struts

### STRANGE STUD MOUNT LIGHTWEIGHT GT STRUT PACKAGE PSS305

Includes GT single externally adjustable stud mount struts, lower control arm ends, and L/W spindle mount brake kit- 14" springs, LCA tubing, & rod ends are not included

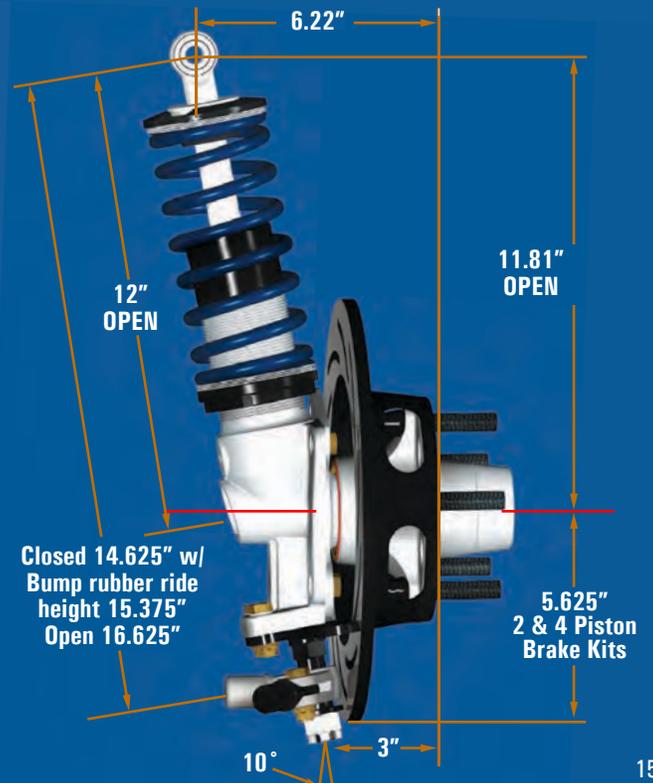
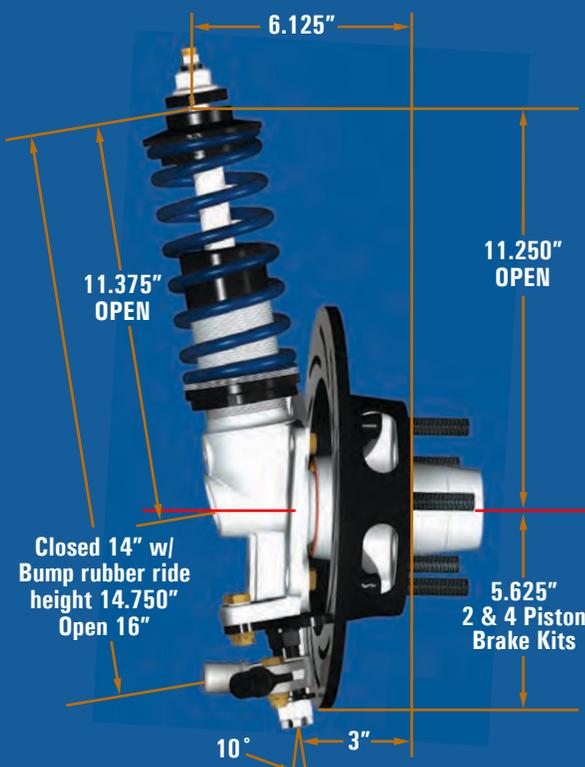
**PSS305DBL** PSS305 package with double externally adjustable struts

All above packages do not include wheel bearings, races, or seals  
Use spindle mount wheels designed specifically for Strange spindle dimensions

Single adjustable struts control extension forces only  
Double adjustable have individual adjusters to alter extension and compression



PSS105



# STRUTS

## MEDIUM & HEAVY DUTY ALUMINUM STRUT PACKAGES

### MEDIUM DUTY

#### **EYE MOUNT MEDIUM DUTY STRUT PACKAGE** PSS110

Includes single externally adjustable eye mount struts, lower control arm kit, Medium Duty brake kit, Hyperco springs and spring seat bearing kit

**PSS110DBL** PSS110 package with double externally adjustable struts

#### **STUD MOUNT MEDIUM DUTY STRUT PACKAGE** PSS115

Includes single externally adjustable stud mount struts, lower control arm kit, Medium Duty brake kit, Hyperco springs and spring seat bearing kit

**PSS115DBL** PSS115 package with double externally adjustable struts

Single adjustable struts control extension forces only

Double adjustable have individual adjusters to alter extension and compression



PSS115



## HEAVY DUTY

### EYE MOUNT HEAVY DUTY STRUT PACKAGE PSS120

Includes single externally adjustable eye mount struts, lower control arm kit, Heavy Duty brake kit, Hyperco springs and spring seat bearing kit

**PSS120DBL** PSS120 package with double externally adjustable struts

### STUD MOUNT HEAVY DUTY STRUT PACKAGE PSS125

Includes single externally adjustable stud mount struts, lower control arm kit, Heavy Duty brake kit, Hyperco springs and spring seat bearing kit

**PSS125DBL** PSS125 package with double externally adjustable struts

### STUD MOUNT HEAVY DUTY GT STRUT PACKAGE PSS325

Includes GT single externally adjustable stud mount struts, lower control arm ends, and Heavy Duty brake kit- 14" springs, LCA tubing, & rod ends are not included

**PSS325DBL** PSS325 package with double externally adjustable struts

Single adjustable struts control extension forces only  
Double adjustable have individual adjusters to alter extension and compression



# STRUTS

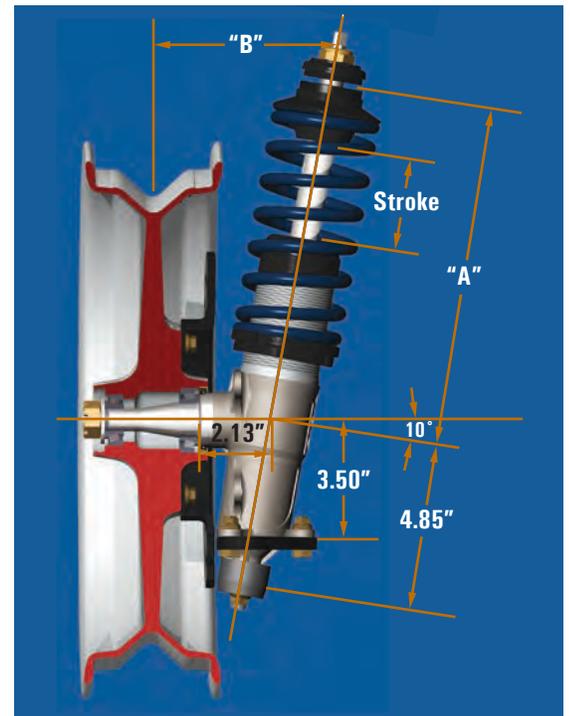
## ULTRA & ALTERED ULTRA STRUT PACKAGES

### ULTRA STRUT PACKAGES

- Based on Anglia style spindles
- Includes wheel bearings, races, & seals
- Aluminum steering arms
- Lightweight Stainless steel bases
- NAS hardware
- Superior stability
- Externally adjustable for extension
- Available in double externally adjustable for extension and compression
- Choice of Hyperco springs
- Includes chrome-moly lower control arm kit - Choice of 1/2" or 7/16" 4130 rod ends

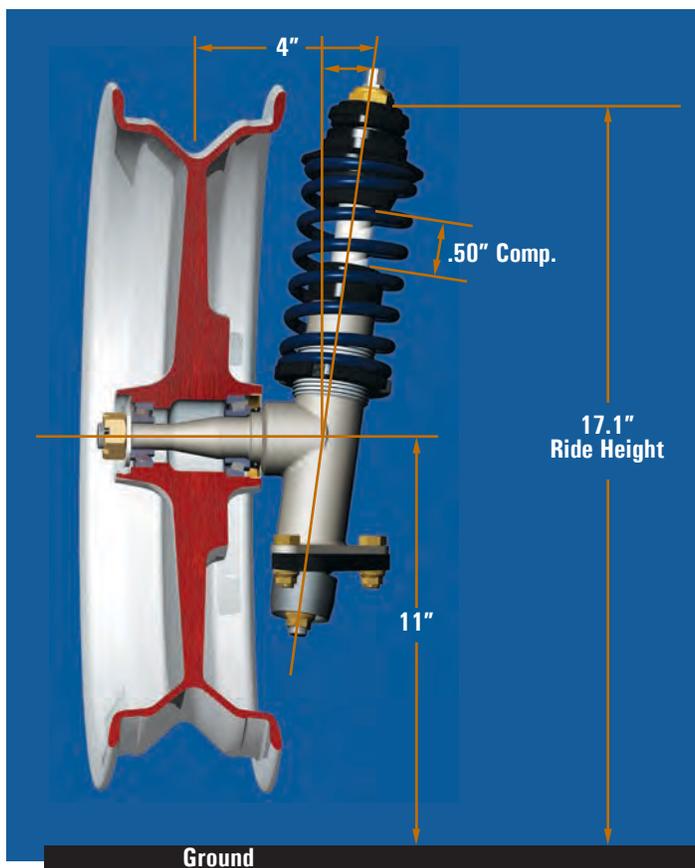


**STRANGE ULTRA STRUT PACKAGES:** Designed to satisfy the most demanding Pro and Sportsman racers. This package was meticulously developed to assure unsurpassed quality and durability. The innovative stainless steel base assembly allows for the construction of a lighter strut, while offering unmatched integral strength. The Strange externally adjustable cartridge features a piston located below spindle centerline. This provides a longer stroke, less stress, and increased stability. The provided NAS hardware ensures vital components remain secure. The design of the aluminum steering arm permits an ideal trapezoid linkage to create the proper Ackerman steering geometry. The asymmetry in the geometry improves handling as the wheels are steered left or right. The Ultra Strut features a wide range of adjustment to meet the requirements of the vast majority of vehicles. If required, it can be re-valved to a different range of adjustment to suit your needs. The double adjustable version of the Strange Ultra strut was first developed with the assistance of Warren and Kurt Johnson. The versatility of the double adjustable strut permits the ultimate in fine tuning of the front suspension. Hyperco springs, included with every Ultra Strut package, offer the advantage of lighter spring rates without the risk of coil bind.



Stroke	Spring Length	A			B		
		Extended	At Ride Height	Compressed	Extended	At Ride Height	Compressed
2.50"	7"	9.40"	7.90"	6.90"	5.17"	4.91"	4.73"
3.63"	8"	11.38"	9.20"	7.77"	5.51"	5.13"	4.89"

**STRANGE ALTERED ULTRA STRUT:** Compact strut specifically designed for altered and dragster applications. The Altered Ultra is ideal for assisting weight transfer and adapting to less than perfect track conditions. Brake tabs are installed to accept Strange Lightweight spindle mount brake kits. Brake kits are available separately.



**STRANGE SINGLE ADJUSTABLE ALTERED ULTRA STRUT PACKAGE** PSS280

Includes single adjustable stud mount Altered Ultra struts, lower control arm kit, springs and spring seat bearing kit

**REPLACEMENT SPRINGS**

SP50130 for Dragster 130 lbs

SP50170 for Dragster 170 lbs

**STRANGE SINGLE ADJUSTABLE ULTRA STRUT PACKAGE WITH STEEL BRAKES** PSS200

Includes single adjustable stud mount Ultra struts, lower control arm kit, L/W steel spindle mount brake kit, Hyperco springs and spring seat bearing kit

**STRANGE DOUBLE ADJUSTABLE ULTRA STRUT PACKAGE WITH STEEL BRAKES** PSS205

Includes double adjustable stud mount Ultra struts, lower control arm kit, L/W steel spindle mount brake kit, Hyperco springs, and spring seat bearing kit

**STRANGE SINGLE ADJUSTABLE ULTRA STRUT PACKAGE WITH CARBON BRAKES** PSS210

Includes single adjustable stud mount Ultra struts, lower control arm kit, Carbon spindle mount brake kit, Hyperco springs and spring seat bearing kit

**STRANGE DOUBLE ADJUSTABLE ULTRA STRUT PACKAGE WITH CARBON BRAKES** PSS215

Includes double adjustable stud mount Ultra struts, lower control arm kit, Carbon spindle mount brake kit, Hyperco springs and spring seat bearing kit

Single adjustable struts control extension forces only / Double adjustable have individual adjusters to alter extension and compression

All struts listed above fit spindle mount wheels designed specifically for Anglia spindle dimensions

# SPRINGS

## HYPERCOIL & KNIGHT SPRINGS

**HYPERCO SPRINGS:** Cold wound from preheat treated SAE 9254 chrome silicon wire. Optimum wire diameter is selected for the individual design without compromise. After coiling, the closed ends are ground, and the spring is thermally stress relieved, preset and shot-peened. Completed springs are magnafluxed, inspected, deep blue epoxy powder coated and checked for dimensions, trueness and rate. Hyperco then tests each coil for actual rate and etches the rate permanently into the spring. Hyperco strict manufacturing tolerances assure the racer of springs within a tolerance range of +/- 2%- most being within 1%!

Part Number	Spring Rate	Length	Length At Coil Bind	Deflection	Weight Per Spring	Part Number	Spring Rate	Length	Length At Coil Bind	Deflection	Weight Per Spring
SP70175	175	7"	1.803"	5.197"	1.25 lbs	SP12162	162	12"	3.494"	8.506"	2.95 lbs
SP70200	200	7"	1.938"	5.062"	1.45 lbs	SP12175	175	12"	3.523"	8.477"	3.00 lbs
SP70250	250	7"	2.166"	4.834"	1.55 lbs	SP12185	185	12"	3.597"	8.403"	3.10 lbs
SP70300	300	7"	2.405"	4.595"	1.80 lbs	SP12200	200	12"	3.687"	8.313"	3.80 lbs
SP70500	500	7"	2.765"	4.235"	2.35 lbs	SP12225	225	12"	3.867"	8.133"	3.60 lbs
SP80200	200	8"	2.269"	5.731"	1.70 lbs	SP12375	375	12"	4.634"	7.366"	5.05 lbs
SP80225	225	8"	2.353"	5.647"	1.85 lbs	SP12400	400	12"	4.670"	7.330"	5.10 lbs
SP80250	250	8"	2.452"	5.548"	2.10 lbs	SP12425	425	12"	4.956"	7.044"	5.85 lbs
SP80275	275	8"	2.622"	5.378"	2.30 lbs	SP12450	450	12"	4.857"	7.143"	5.85 lbs
SP80300	300	8"	2.563"	5.437"	2.35 lbs	SP12550	550	12"	5.026"	6.974"	6.60 lbs
SP80325	325	8"	2.652"	5.348"	2.40 lbs	SP12600	600	12"	5.376"	6.624"	6.70 lbs
SP80350	350	8"	2.733"	5.267"	2.55 lbs	SP12650	650	12"	5.710"	6.290"	6.80 lbs
SP80375	375	8"	2.853"	5.147"	2.60 lbs	SP14085	85	14"	3.718"	10.282"	2.65 lbs
SP80400	400	8"	2.910"	5.090"	2.80 lbs	SP14100	100	14"	3.457"	10.543"	2.60 lbs
SP80550	550	8"	3.364"	4.636"	3.10 lbs	SP14110	110	14"	3.705"	10.295"	2.70 lbs
SP10125	125	10"	2.498"	7.502"	1.75 lbs	SP14125	125	14"	3.736"	10.264"	3.10 lbs
SP10225	225	10"	3.125"	6.875"	2.65 lbs	SP14138	138	14"	4.012"	9.988"	3.25 lbs
SP10250	250	10"	3.214"	6.786"	3.00 lbs	SP14150	150	14"	4.230"	9.770"	3.55 lbs
SP10300	300	10"	3.409"	6.591"	3.35 lbs	SP14160	160	14"	4.053"	9.947"	3.90 lbs
SP10325	325	10"	3.496"	6.504"	3.45 lbs	SP14175	175	14"	4.324"	9.676"	3.80 lbs
SP10350	350	10"	3.603"	6.397"	3.45 lbs	SP14185	185	14"	4.484"	9.516"	4.20 lbs
SP10375	375	10"	3.731"	6.269"	3.90 lbs	SP14200	200	14"	4.607"	9.393"	4.35 lbs
SP10400	400	10"	3.709"	6.291"	3.75 lbs	SP14225	225	14"	4.777"	9.223"	4.90 lbs
SP10425	425	10"	3.781"	6.219"	3.90 lbs	SP14250	250	14"	4.857"	9.143"	4.95 lbs
SP10550	550	10"	4.131"	5.869"	4.95 lbs	SP14275	275	14"	5.049"	8.951"	5.30 lbs
SP12085	85	12"	2.764"	9.236"	1.95 lbs	SP14300	300	14"	5.243"	8.757"	5.80 lbs
SP12095	95	12"	2.803"	9.197"	2.00 lbs	SP14325	325	14"	5.372"	8.628"	5.95 lbs
SP12110	110	12"	2.954"	9.046"	2.25 lbs	SP14350	350	14"	5.205"	8.795"	7.00 lbs
SP12125	125	12"	3.160"	8.840"	2.35 lbs	SP16125	125	16"	3.819"	12.181"	4.80 lbs
SP12150	150	12"	3.392"	8.608"	2.80 lbs						

Part numbers shown above are for pair of Hyperco springs



## HYPERCO SPRINGS



7" & 8" Hyperco Springs



12" & 14" Hyperco Springs



16" Hyperco Springs

**KNIGHT SPRINGS:** An exceptional value. Most manufacturers offer comparable type springs as their finest quality springs on the market. Knight springs are black epoxy powder coated and are cold wound to within 5% of the advertised rate

Part Number	Spring Rate	Length
SPK1295	95	12"
SPK12110	110	12"
SPK12130	130	12"
SPK12150	150	12"
SPK12170	170	12"
SPK12200	200	12"
SPK1495	95	14"
SPK14110	110	14"
SPK14130	130	14"

Part numbers shown above are for pair of Knight springs



# 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.

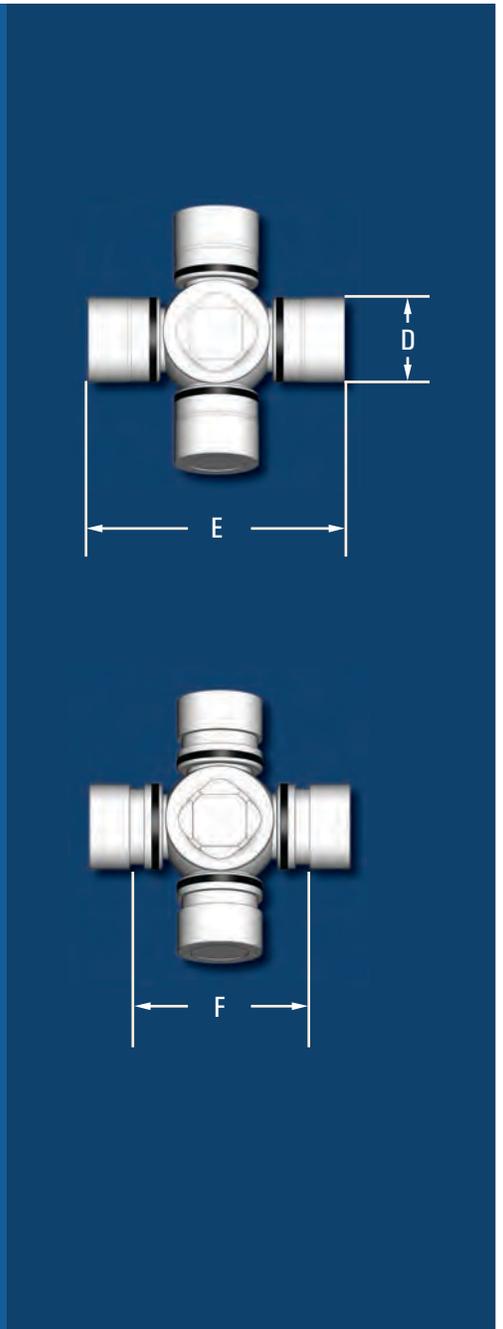
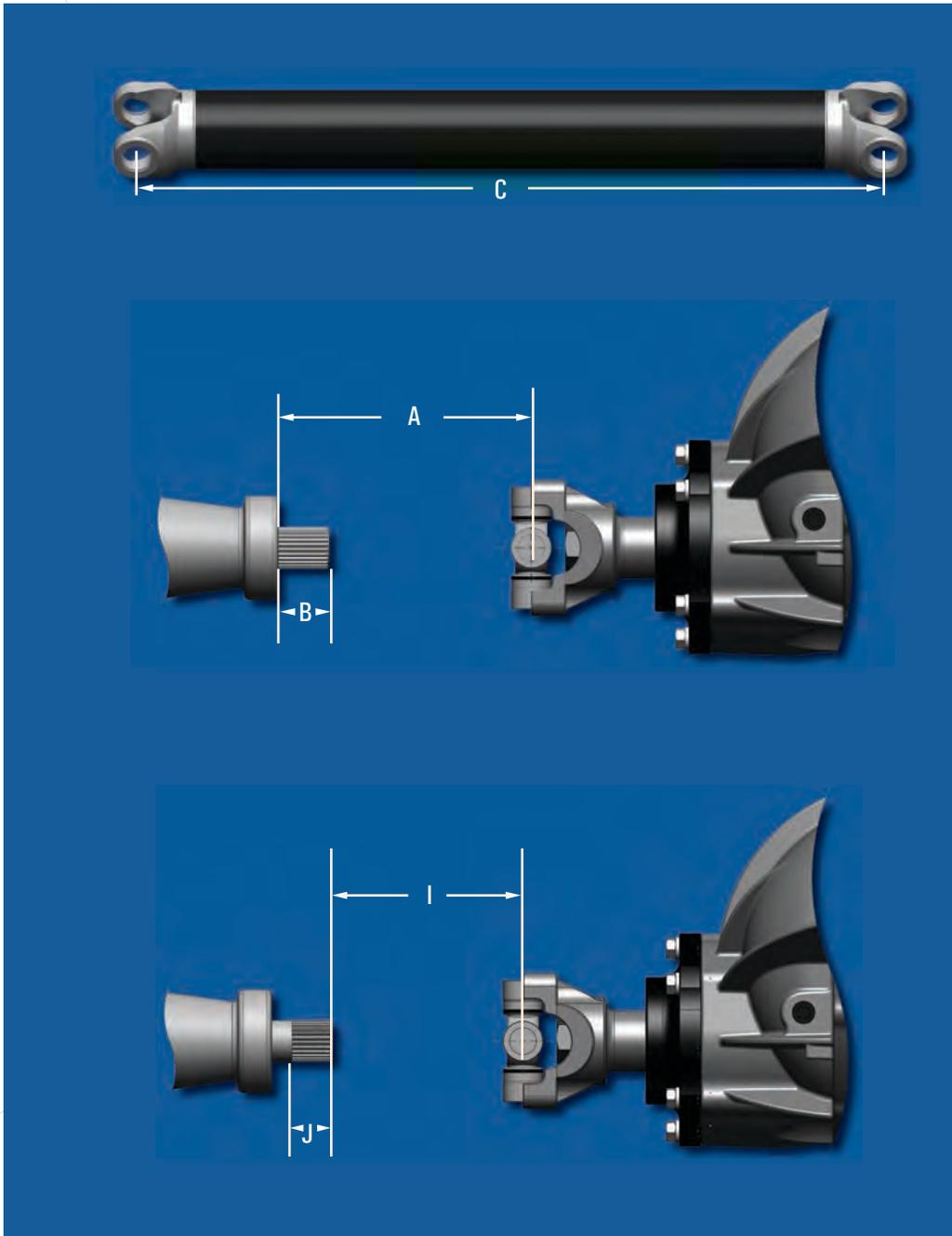
**MEASUREMENTS:** Should be taken on level ground, full weight on all four tires, vehicle at ride height, and pinion angle set. If the rear yoke is smaller than a 1350 series, it may be the time to replace it before proceeding. The driveline is only as strong as the weakest link and a new yoke will change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





# DRIVELINE

## DRIVESHAFTS & YOKES

### DRIVESHAFTS

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

\* Available with SFI certification sticker for an additional

### DRIVESHAFT COMPONENTS

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



U1670



U1673

### TRANSMISSION YOKES

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



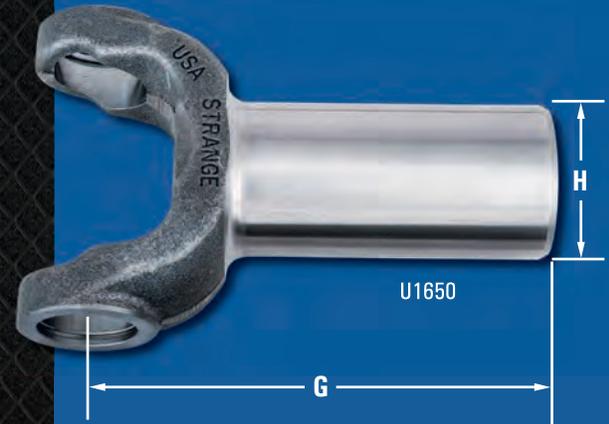
U1658



U1668

## TRANSMISSION YOKES

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



# DRIVELINE

## REAR END YOKES

### DANA 60 / MOPAR 8 3/4"

- U1598** Dana 60 / 29 spline / 1350 series  
Strange chrome-moly / G=3.500" / H=1.875"
- U1600** Dana 60 / 29 spline / 1350 series  
Strange HD / G=3.00" / H=1.875"
- U1607** Mopar 8 3/4" / 742 case / 10 spline / 1350 series  
Strange HD / G=3.375" / H=1.875"
- U1608** Mopar 8 3/4" / 489 case / 29 spline / 1350 series  
Strange HD / G=3.375" / H=1.875"

### FORD 9" / FORD 8.8"

- U1603** Ford 9" / 28 spline / 1350 series  
Strange chrome-moly / 2.80 lbs / G=4.063" / H=1.812"
- U1603P** U1603 polished and chrome plated
- U1603B** Ford 9" / 28 spline / 1350 series  
Strange billet chrome-moly / 2.50 lbs / G=4.063" / H=1.812"
- U1604** Ford 9" / 35 spline / 1350 series  
Strange chrome-moly / 2.86 lbs / G=4.063" / H=2.125"
- U1604P** U1604 polished and chrome plated
- U1604B** Ford 9" / 35 spline / 1350 series  
Strange billet chrome-moly / 2.60 lbs / G=4.063" / H=2.125"
- U1633** Ford 9" / 28 spline / 1350 series  
Strange aluminum / 1.00 lbs / G=3.875" / H=1.804"
- U1634** Ford 9" / 35 spline / 1350 series  
Strange aluminum / 1.00 lbs / G=3.875" / H=2.113"
- U2203** Ford 9" / 28 spline / 1350 series / with dust shield  
Strange HD / G=4.060" / H=1.812"
- U2203HDA** Ford 9" / 28 spline / 1350 series / with dust shield / for HD Pro support  
Strange HD / G=4.060" / H=1.812"
- U2304** Ford 9" / 35 spline / 1480 series  
Strange billet / 2.86 lbs / G=4.062" / H=2.125"
- U1596** Ford 8.8" / 30 spline / 1350 series  
Strange chrome-moly / G=3.150" / H=1.812"
- U1630** Ford 8.8" / 30 spline / 1350 series  
Strange HD / G=3.150" / H=1.812"



U1598



U1607



U1603



U1603B



U1603P



U2203



U1630

## GM 12 BOLT / 10 BOLT / OLDS

- U1601** Chevy 12 bolt / 30 spline / 1350 series  
Strange chrome-moly / G=3.150" / H=1.750"
- U1602** Chevy 12 bolt / 30 spline / 1350 series  
Strange HD / G=2.688" / H=1.750"
- U1594** Chevy 8.5 10 bolt / 30 spline / 1350 series  
Strange chrome-moly / G=3.375" / H=1.940"
- U1605** Chevy 8.5 10 bolt / 30 spline / 1350 series  
Strange HD / G=3.375" / H=1.940"
- U1606** 57-64 Oldsmobile / 13 spline / 1350 series  
Strange chrome-moly / G=3.156" / H=1.937"



U1601



U1602



U1594



U1605



U1613-2



U1610



U1610HD

## SENSOR COLLARS / U-BOLTS / CAP KITS

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

\* Applications shown are for yokes produced after 1/1/15

# LIVE AXLES

## 9" / 9 1/2" DROP-OUT LIVE AXLE

- Ultra Case Accepts Typical 9" & 9 1/2" Gear Sets
- 11" Carbon or Steel Brakes
- 32 1/2" Wheel to Wheel Width
- One Piece Housing Eliminates Bolt-on End Bells
- 2" OD One Piece Axle Utilized to Stiffen Assembly
- Choice of Mounting Plates
- Distance Between Plates Available From 14 3/8" to 17"
- Lightweight - Complete Assemblies Begin @ 145 lbs
- Oil capacity: Approximately 3 quarts

The 9" / 9 1/2" Drop-Out Live Axle is designed for certified chassis 6.00 seconds (1/4 mile) and slower. The drop-out live axle is an extremely lightweight and rigid rear end. The rear end features our one piece aluminum housing, Ultra Center Section, thru-hardened live axle, and 11" carbon or steel brakes. The one piece axle is used to assist in reducing rear end distortion and aid in eliminating ring gear deflection. In addition, the live axle provides the safety of a floater rear end at less weight. The assembly includes a 9" pro gear set, with an option to upgrade to a 9 1/2".



**L6000:** Strange Drop-out Live Axle assembly with 11" carbon brake kit  
Includes PRF230 Ultra Center Section with 9" pro gear & choice of mounts

OPRF23	Upgrade to 9 1/2" gear set
OPRF31	Pinion support with built-in coupler cover
OPRF50	Discount to equip with steel brakes
L6020	Tool kit to service Drop-out Live Axle

Additional options available for PRF230 - See 9" Ultra Center Section page

## 9" / 9 1/2" TOP LOAD LIVE AXLE

- Accepts Typical 9" & 9 1/2" Gear Sets
- 11 1/2" Carbon or Steel Brakes
- 32 1/2" Wheel to Wheel Width
- Eliminates Front or Rear Access Opening that Allows Deflection
- 2" OD One Piece Axle Utilized to Stiffen Assembly
- Top Cover for Easy Access & Inspection
- Distance Between Mounting Plates 14 3/8"
- Lightweight - Complete Assemblies Begin @ 145 lbs
- Oil capacity: Approximately 4 quarts

The 9" / 9 1/2" Top Load Live Axle was originally created over three decades ago for the demands of Top Fuel and Funny Cars. Today's unit has been refined for alcohol racers demanding the least amount of rear end maintenance. This model features a newly designed heavy duty aluminum center piece, accepts 9" or 9 1/2" gear sets, a redesigned aluminum spool, and supplied with 11 1/2" carbon or steel brakes. Aluminum semi finished mounting plates are available at an additional cost.



**L4101:** Strange 9" / 9 1/2" Top Load Live Axle assembly with 11.5" carbon brake kit  
Includes 9" pro gear - Mounting plates are not included

OPRF23	Upgrade to 9 1/2" gear set
OPRF31	Pinion support with built-in coupler cover
OPRF51	Discount to equip with steel brakes
E1500M	Semi finished mounting plate- each
L4020	Tool kit to service 9" / 9 1/2" Top Load Live Axle



## 10 1/2" LIVE AXLE

- 10 1/2" Ring Gear Available in 2.91 & 4.11 Ratios
- 11 1/2" Carbon or Steel Brakes
- 32 1/2" Wheel to Wheel Width
- Eliminates Front or Rear Access Opening that Allows Deflection
- 2 3/4" OD One Piece Axle Utilized to Stiffen Assembly
- Top Cover for Easy Access & Inspection
- L7000 - 200 lbs without oil L7002 - 214 lbs without oil
- Oil capacity: 6-7 quarts

The 10 1/2" Live Axle rear end is designed to withstand loads that can destroy many drag racing rear ends. The Strange Live axle provides superior resistance to bending loads in comparison to full floater axle assemblies. Axles in a floater assembly do not contribute to the rigidity of the rear end and place the entire load on the housing. The massive 2 3/4" OD axle shaft offers additional support against bending loads imposed on the housing. The top loading design eliminates a front or rear access opening that can allow deflection and reduced gear life. It also provides convenient complete inspection of the internal components.



**L7000:** Strange 10 1/2" Top Load Live Axle assembly with 11.5" carbon brake kit  
Includes choice of 10 1/2" pro gear- Mounting plates are not included

**L7002:** Strange 10 1/2" Top Load Live Axle assembly with 11.5" steel brake kit  
Includes choice of 10 1/2" pro gear- Mounting plates are not included

L7000MP Semi finished mounting plate for 10 1/2" or 12 1/4" Live Axle- each  
L7020 Tool kit to service 10 1/2" Live axle

## 12 1/4" LIVE AXLE

- 12 1/4" Ring Gear - 3.20 Ratio
- 11 1/2" Carbon Brakes
- 32 1/2" Wheel to Wheel Width
- Eliminates Front or Rear Access Opening that Allows Deflection
- 2 3/4" OD One Piece Titanium Axle Utilized to Stiffen Assembly
- Top Cover for Easy Access & Inspection
- 198 lbs with oil
- Oil capacity 5 quarts

The 12 1/4" Live Axle rear end is the finest rear end available for Top Fuel and Funny Car. The main housing is unique in both design and material. The top load design coupled with a one piece axle, provides an excellent structural base that maximizes gear life and significantly reduces rear end distortion. The unit features magnesium tubes, magnesium cover, titanium axle, steel spool, 11 1/2" carbon brake kit and internal oil pump.



**L7400:** Strange 12 1/4" Top Load Live Axle assembly with 11.5" carbon brake kit  
Includes 3.20 pro gear - Mounting plates are not included

L7000MP Semi finished mounting plate for 10 1/2" or 12 1/4" Live Axle- each  
L7420 Tool kit to service 12 1/4" Live axle

# LABOR

## AXLES

- A1007\*\*\* Remove axle bearings- pair
- A1008\* Install axle bearings- pair
- A1008C\* Install clip eliminator kit- pair
- A1008SC\* Install studs and c-clip eliminator kit- pair
- A1008R\* Install retainer plates and axle bearings- pair
- A1008SRC\* Install studs, reluctor rings, and c-clip eliminator kit- pair
- A1009A\*\* Turn down brake register ("A") on customer's axle- pair
- A1009B\*\* Move back bearing shoulder ("B") on customer's axle- pair
- A1009F\*\* Turn down axle flange OD ("D") on customer's axle- pair
- A10090\*\* Bore access hole in flange on customer's axle- pair
- A1065\*\* Drill and tap customer's Strange axles- pair  
One bolt pattern - Tapped 1/2x20 or 5/8x18

\* 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
- R5292 Set-up new gear set in new Chevy 12 bolt or Dana 60
- D3592 Gear change in Ford 9"- Labor only- Parts extra
- D3594\* Gear change in Dana 60, Ford 8.8, Chevy 10 & 12 bolt
- L7092\* Gear change in Strange Top-loader 9", 9.5", 10.50", & 12"
- D3596 Lighten new ring gear at time of purchase
- D3597 Lighten customer's ring gear
- D3598G MicroBlue ring and pinion set

\* Labor only - Parts extra

## BRAKES

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

## HOUSING

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

\* Labor only - Parts extra



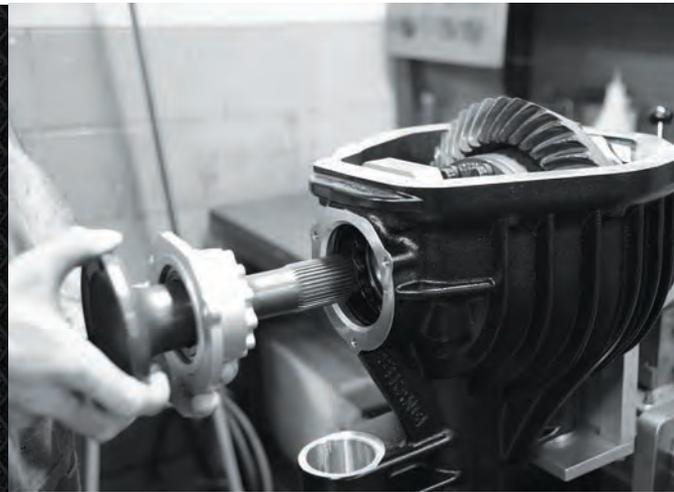


## SHOCKS

- S5200NV\* Alter extension valving on New Strange single adjustable shocks- pair
- S5000NV\* Alter one adjustment on New Strange double adjustable shocks- pair  
For both adjustments on New double adjustable shocks- pair
- S5200UV\*\* Alter extension valving on Used Strange single adjustable shocks- pair
- S5000UV\*\* Alter one adjustment for Used Strange double adjustable shocks- pair  
For both adjustments on Used Strange double adjustable shocks- pair
- S5200UR\*\* Rebuild Strange single adjustable shocks- pair
- S5000UR\*\* Rebuild Strange double adjustable shocks- pair

\* At time of purchase

\*\* Labor only- Parts extra- Send shocks in without springs



## STRUTS

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

\* At time of purchase

\*\* Labor only- Parts extra- Send struts in without springs

## SUSPENSION

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

\* Labor only - Parts extra



# Strange



**MADE IN  
THE USA**

Find out more about performance brakes, pads, rotors we have.