

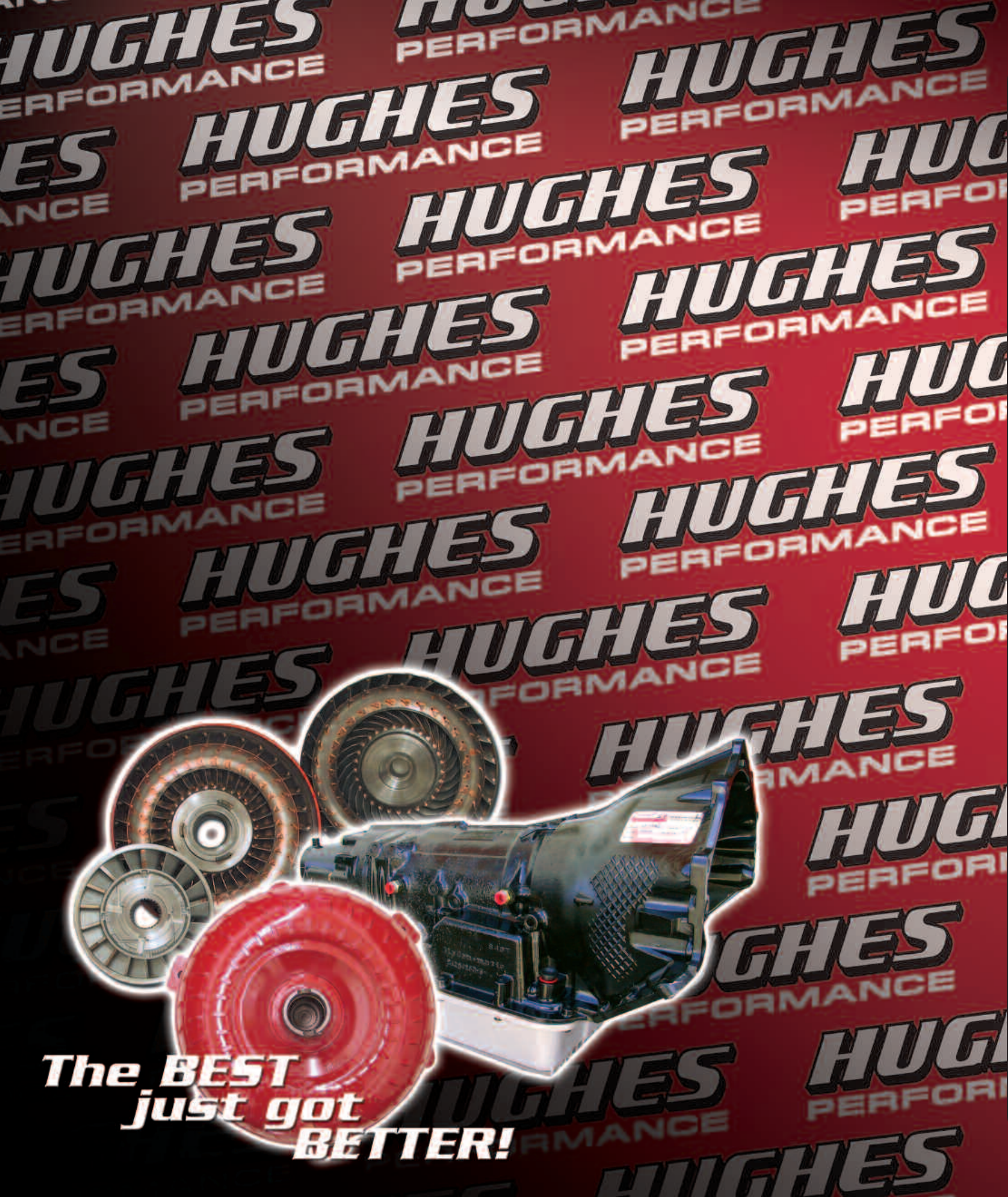
# **HUGHES**

## **PERFORMANCE**

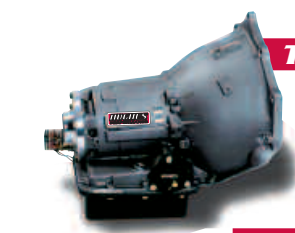
CONVERTERS • TRANSMISSIONS • COMPONENTS







The BEST  
just got  
BETTER!



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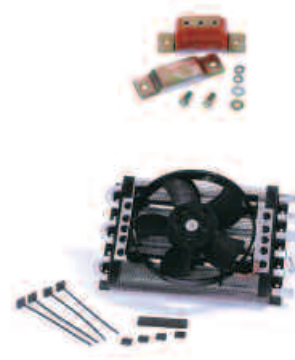
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# HUGHES

## PERFORMANCE

**F**or over 35 years, Hughes Performance has earned a distinguished reputation in the industry, as an industry leader devoted to customer service. It is with great pride that we offer this latest catalog to you. As always, the Hughes Motorsports race team has tested all of the products and can attest to their quality and durability. The industry's latest technology is offered in the following pages.

Our research and development rely upon the race team for continual feedback and suggestions. The race team covers everything from super street to top sportsman. The information they give us is a critical part of the product development process and results in superior new products with no equal.

You want to win; we can help you make that happen. Hughes Performance offers the latest innovations, superior quality, and tried and tested products.

Hughes Performance is a family company. Customer service is the cornerstone upon which we build each and every product. We pride ourselves in treating you the way we want to be treated.

Racing is a team sport. Our company team — from research to shipping — has one goal: Complete Customer Satisfaction. Experience the Hughes Performance advantage for yourself and discover why so many racers across the globe have come to depend on us.

Thank you,  
*The Hughes Family*





## Transmissions

**The transmissions that Hughes Performance produce are recommended for RV, towing, or other applications where severe duty applies.**

Hughes transmissions feature specially designed components that eliminate the weaknesses found in stock transmissions, such as slipping or damaging overlap.

Our heavy duty towing transmission packages remain industry leaders. Our build-ups are regularly evaluated and improved to include the latest modifications and advances in technology. These units are stronger than ever and their service life is unbeatable. Every package starts with our best tow converter that multiplies more torque to pull easier than ever before!

For that diesel enthusiast who is serious about performance and has modified his engine output, we have designed a torque converter that will endure all the punishment that these motors can dish out. We start by manufacturing a steel billet clutch cover that will not distort behind 600 to 1200 pound feet of engine torque output.



The original lockup disc is replaced by our triple-disc setup that will also withstand all the increases of horsepower and torque and allow you trouble free driving, even under loaded conditions.

We use only the best internal components, including high performance friction components - the very same found in all full race applications. We admit that the components are high-end, but our primary goal is to build the best transmissions and components - not the least expensive. To finish off each transmission, we add a deep aluminum pan for more fluid capacity and an external oil cooler. Don't leave home without this amazing tow package!



### TRANSMISSION HD TOW PACKAGES

TRANSMISSION APPLICATIONS		PART #
General Motors		
TH350	1969-79 2WD Chevrolet Truck. Package consists of #35-1 Transmission, GM11XTM HD Towing Converter, HP3280 deep oil pan (installed on trans) and HP8235 HD transmission oil cooler w/#6 fittings.	K35-10X
TH400	1965-90 2WD Chevrolet Truck. Package consists of #34-1 Transmission, GM5XTM-1 HD Towing Converter, HP2280 deep oil pan (installed on trans) and HP8235 HD transmission oil cooler w/#6 fittings.	K34-10X
TH700R4	1982-92 2WD Chevrolet Truck. Package consists of #74-1 Transmission, (also referred to as 4L60), GM22LXTM HD Towing Converter, HP3780 deep oilpan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K74-10X
TH700R4	1982-92 2WD DIESEL Chevrolet Truck. Package consists of #74-1 Trans mission, GM22LXFM HD Towing Converter, HP3780 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings	K74-10XD
4L60E	1993-95 2WD Chevrolet Truck with electronically controlled transmission. Package consists of #74-1E Transmission (all non-PWM controlled), GM22LXTM HD Towing Converter, HP3780E deep oil pan (installed on trans) and HP8235 HD transmission oil cooler w/#6 fittings.	K74E-10X
4L60E	1995-96 2WD Chevrolet Truck with PWM electronically controlled trans mission. Package consists of #74-1E2 Transmission, GM22LXTM HD Towing Converter, HP3780E deep oil pan (installed on trans) and HP8235 HD trans-	K74P2-10X
4L60E	1997-98 2WD Chevrolet Truck with PWM electronically controlled trans mission. Package consists of #74-1E3 Transmission, (310mm) GM22ELXTM Towing Converter, HP3780E deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K74P3-10X
4L60E	1999-on 2WD Chevrolet Truck with PWM electronically controlled trans mission. Package consists of #74-1E4 Transmission, GM57LXTM HD Towing Converter, HP3780E deep oil pan (installed on trans) and HP8235 HD trans mission cooler w/#6 fittings.	K74P4-10X
4L60	1982-92 2WD Chevrolet Truck. Package consists of #74-1HD Transmission, GM22LXTM HD Towing Converter, HP3780 deep oil pan along with numerous heavy-duty upgrades to transmission, and HP8235 HD transmission cooler.	K74-10XHD
4L80E	1991-95 2WD Chevrolet Truck (3/4 & 1 ton) with HD 4 Speed OD. Package consists of #25-1 Transmission, 25LXTM HD Towing Converter, HP2580 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K25-10X
4L80E	2000-Up 2WD Chevrolet Truck (DIESEL) with HD 4 Speed OD. Package consists of #25-1a Transmission, 25ALXFM HD Towing Converter, HP2580 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K25-10XC
4L80E	1996-99 2WD Chevrolet Truck with HD 4 Speed OD. Package consists of #25-1A Transmission, 25LXTM HD Towing Converter, HP2580 deep oil pan (in-stalled on trans) and HP8235 HD transmission cooler w /#6 fittings.	K25-10XA
4L80E	2000-Up 2WD Chevrolet Truck with 4 Speed OD. Package consists of #25-1A Transmission, 25ALXTM HD Towing Converter, HP2580 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K25-10XDA
4L80E	2000-on 2WD Chevrolet Truck with HD 4 Speed OD. Package consists of #25-1A Transmission, 25ALXTM HD Towing Converter, HP2580 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K25-10XB
4L80E	2000-on 2WD Chevrolet Truck (DIESEL) with 4 Speed OD. Package consists of # 25-1A Transmission, 25LXFM HD Towing Converter, HP2580 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K25-10XD
Ford		
C6	1967-96 Ford Truck with gasoline engines. Package consists of #36-1 Transmission, F43XTM HD Towing Converter, HP4280 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K36-10X
C6	1982-96 Ford Truck with DIESEL engines. Package consists of #36-1 Trans mission, F43XFM HD Towing Converter, HP4280 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K36-10XD
E4OD	1989-97 Ford Superduty Truck 2WD 5.4L V8 w/HD 4 Speed OD. Package consists of #46-1 Transmission, 46LXTM HD Towing Converter, HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K46-10X
E4OD	1989-97 Ford Superduty Truck 2WD 7.3L V8 DIESEL and 4 Speed OD. Package consists of #46-1B Transmission, 46LXFM HD Towing Converter, HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler w/#6 fittings.	K46-10XD
E4OD	1989-97 Ford Superduty Truck 2WD 7.5L GAS engine and 4 Speed OD. Package consists of #46-1A Transmission, 46LXTM HD Towing Converter, HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler	K46-10XA
4R100	1998-2002 Ford Superduty Truck 2WD 5.4L V8 w/HD 4 Speed OD. Package consists of #46-1G Transmission, 46ALXTM HD Towing Converter ( 6 STUD), HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler	K46A-10X
4R100	1998-2002 Ford Superduty Truck 2WD 7.3L DIESEL and 4 Speed OD. Package consists of 46-1J Transmission, 46ALXFM HD Towing Converter HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler	K46A-10XD
4R100	1998-2002 Ford Superduty Truck 2WD 7.5L GAS engine and 4 Speed OD. Package consists of #46-1H Transmission, 46ALXTM HD Towing Converter. HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler	K46A-10XA
E4OD	1989-97 Ford Superduty Truck 2WD 7.3L V8 DIESEL and 4 Speed OD. Package consists of #46-1B Transmission, 46BLXFM HD Triple-Disc Towing Converter with Billet Cover. HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler.	K46-10XDHD
4R100	1998-2002 Ford Superduty Truck 2WD 7.3L or 6.0L DIESEL and 4 Sp. OD. Package consists of #46-1J Transmission, 46BLXFM HD Triple-Disc Towing Converter with Billet Cover. HP4680 deep oil pan (installed on trans) and HP8235 HD transmission cooler.	K46A-10XDHD

All units listed are for 2WD. Must specify 4WD applications. Use make, model and year to insure proper case configuration for your specific application.





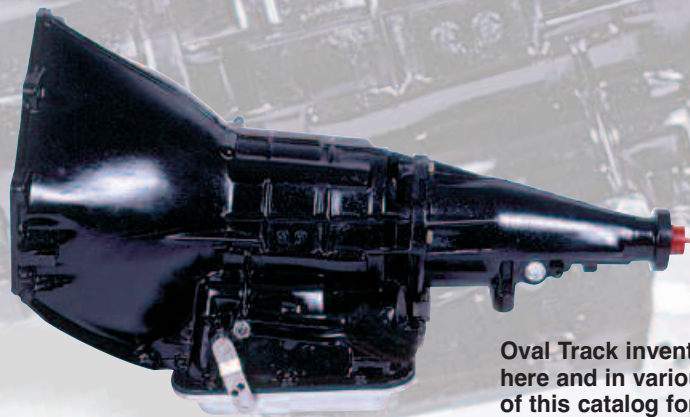
Transmissions

TRANSMISSION HD TOW PACKAGES		
TRANSMISSION APPLICATIONS		PART #
<b>Chrysler</b>		
TF8 GAS	1962-01 Dodge Truck w/Gasoline engines (specify engine size), 2WD. Package consists of #22-1E Transmission, 24XTM HD Towing Converter, Towing Converter (must specify engine size), HP1580 deep oil pan and HP8235 HD transmissioncooler w/#6 fittings.	K22-10X
TF8 Diesel	1989-01 Dodge Truck w/DIESEL engine, 2WD. Package consists of part #22-1E Transmission, 24XFM HD Towing Converter, HP1580 deep oil pan and HP8235 HD transmission cooler w/#6 fittings.	K22-10XD
A518 or	1989-ON Dodge Truck 2WD V8 ( must specify engine ). Package consists of #15-1 Transmission, 15LXTM HD Towing Converter, HP1580 deep oil pan and HP8235 HD transmission cooler w/#6 fittings.	K15-10X
A518 or 46RE	1993-ON Dodge Truck 2WD V10 and 4 Speed OD Transmission. Package consists of #15-1A Transmission, 15ALXTM HD Towing Converter, HP1580 deep oil pan (installed) and HP8235 HD transmission cooler w/#6 fittings.	K15A-10X
A618 or 47RE	1993-ON Dodge Truck 2WD with Cummins Diesel and 4 Speed OD. Package consists of #15-1B Transmission, 15LXFM HD Towing Converter, HP1580 deep oil pan and HP8235 HD transmission cooler w/#6 fittings.	K15-10XD
A618 or 47RE	1993-ON Dodge Truck 2WD with Cummins Diesel and 4 Speed OD.Package consists of #15-1B Transmission, 15BLXFM Super HD Towing Converter with billet front cover and triple-disc lock-up clutch, HP1580 deep oil pan (installed), and HP8235 HD transmission cooler w/#6 fittings.	K15-10XDHD
47RE	1993-2002 Dodge Truck 2WD with modified Cummins Diesel. Our most extreme duty buildup with many 48RE and custom drivetrain upgrades. Only available with our 15BLXFM Triple-Disc Converter, larger HP8238 HD Transmission Cooler and our deep aluminum oil pan, adding 4 extra quarts of transmission fluid. For extreme-duty applications only.	K15-10XDHD-1

All units listed are for 2WD. Must specify 4WD applications.  
Use make, model and year to insure proper case configuration for your specific application.

A serious competition transmission  
designed for the oval track.

This unit is based on the very same components that made Hughes famous at the drag strip and is a must for the serious oval track racer. It can be locked in low or high gear (Circlematic) and features full bearing design, Kevlar lined low band, our red race plates and many other state of the art components. We also offer the Circlemaster transmission for the most discerning racer. Circlemaster units are locked into high gear to alleviate the need for many "weight costing" components. Anyone who has been around the track a few times can testify that all powerglides are not created equal. Call the experts at Hughes today to find out more.



Oval Track inventory is listed here and in various sections of this catalog for transmissions, converters and components.

TRANSMISSION	Part #
P/G Circlematic w/1.76 Low	28-6-76
P/G Circlematic w/1.82 Low	28-6-82
P/G Circlemaster (Lightened)	28-9-82

Highly recommended for drag racing, oval track, truck and tractor pulls, or other forms of off-road competition. The Hughes Competition Transmission delivers unsurpassed strength and reliability under the most severe conditions.

Only the finest, state of the art performance parts are used in our competition units. All internal and external components are inspected and then assembled to exact tolerances, thus insuring top quality and performance. Our competition transmissions are equipped with reverse pattern or in some cases forward pattern valve bodies for sure, solid, quick shifts. Competition transmissions are also equipped with the Hughes "Pro III" trans-brake valve bodies.

The Hughes Performance "Pro-Glide" Powerglide has made a name for itself on drag strips across the country. As we all know the Powerglide transmission is the most commonly used transmission on the track. Because it is so popular the Hughes team of expert builders spend countless hours in research and development to provide our customers with the most efficient unit money can buy. Your special order "Pro-Glide" built the way you want it, will send you down the track time after time. . . without missing a beat! The Pro-Glide III Series Superglide was designed as the ultimate race transmission available. This unit has the capacity, (when ordered with our optional steel input shaft, E9310 gears with billet output shaft and Superglide case) to withstand 1500+ horsepower, pass after pass.

It incorporates our full bearing design which lessens drag and produces higher mile per hour. It comes with a fluid release trans- brake, and our famous red race plates, and at your option, with Kolene steel plates, as well. Our race team has proven this unit can take all the horsepower required to be competitive in today's drag racing world. Try our best today.



The Superglide Case

This is the state-of-the-art transmission assembly. Forged from aluminum this much improved case assembly is far superior to the original equipment casting and is pre-SFI approved eliminating the need for any external shields. The case assembly is also available with bolt-on bell housings which allows us to adapt this unit to Ford and Chrysler products as well as GM. The Superglide is equipped with a band adjustment nut for quick low band changes at the racetrack, quick disconnect cooler lines, and an inner case liner for extra strength and durability. The Superglide case should be used on any Powerglide transmission where the engine is exceeding 750HP. The case assemblies can be ordered for any car regardless of manufacture and will greatly enhance the lifetime of your racecar's transmission.

TRANSMISSION	
PART #	Description
PG1000	Enhanced P/G case assembly, one piece GM application with Chevrolet bell housing configuration.
PG1100	Enhanced P/G case assembly, with bolt-on bell housing for GM applications with Chevrolet bolt pattern.
PG1100C	Enhanced P/G case assembly, with bolt-on bell housing for big block Mopar applications and Chrysler bolt pattern.
PG1100CS	Enhanced P/G case assembly, with bolt-on bell housing for small block Mopar applications and Chrysler bolt pattern.
PG1100F	Enhanced P/G case assembly, with bolt-on bell housing for big block Ford applications and Ford bolt pattern.
PG1100FS	Enhanced P/G case assembly, with bolt-on bell housing for small block Ford applications and Ford bolt pattern.

Transmission	Transbrake Long	Medium	Short
1.69 Billet output shaft, E9310 spur gears, one pc Superglide	28-3-69B2D	28-4L-69B2D	28-4-69B2D
1.69 Billet output shaft, E9310 spur gears, Superglide case with bolt-on bell housing.GM Chevrolet engines	28-3-69B2A	28-4L-69B2A	28-4-69B2A
1.69 Billet output shaft, E9310 spur gears, Superglide case vasco input, Pro-Mod component	28-3X-69B2A or D	28-4LX-69B2A or D	28-4X-69B2A or D
1.76 Billet output shaft, E9310 helical gears, one pc Superglide	28-3-76B2D	28-4L-76B2D	28-4-76B2D
1.76 Billet output shaft, E9310 helical gears, Superglide case with bolt-on bell housing.	28-3-76B2A	28-4L-76B2A	28-4-76B2A
1.76 Billet output shaft, E9310 helical gears, Superglide case vasco input, Pro-Mod component	28-3X-76B2A or D	28-4LX-76B2A or D	28-4X-76B2A or D
1.80 Billet output shaft, E9310 spur gears, one pc Superglide	28-3-80B2D	28-4L-80B2D	28-4-80B2D
1.80 Billet output shaft, E9310 spur gears, Superglide case with bolt-on bell housing	28-3-80B2A	28-4L-80B2A	28-4-80B2A
1.80 Billet output shaft, E9310 spur gears, Superglide case vasco input, Pro-Mod component	28-3X-80B2A or D	28-4LX-80B2A or D B2A or D	28-4X-80B2A or D

Most transmissions available without Superglide case by ordering the listed part number without the "A" or "D" suffix.

SFI Approved and Heavy Duty Flexplates  
SFI Approved and Heavy Duty Flexplates  
SFI Approved and Heavy Duty Flexplates





## Transmissions

***This transmission has been designed for street performance and other applications where tire spinning shifts are desired.***

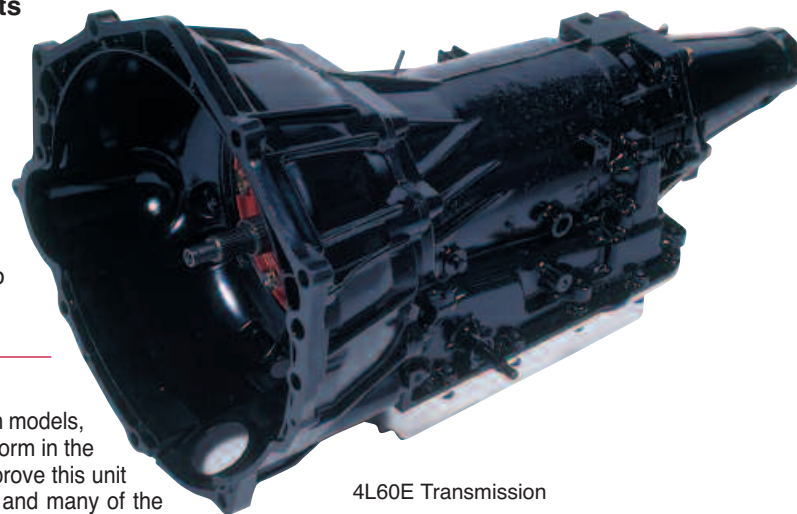
The street/strip transmission contains racing components which increase strength, reliability, and torque capacity. All street/strip transmissions also feature our manual/automatic valve body which allows you to select precise manual shifting or full automatic.

Installation — All linkage, vacuum lines and kickdown mechanisms must be connected and properly adjusted for any automatic transmission to operate correctly. We recommend the use of a Hughes Performance trans. cooler and deep aluminum oil pan, which has 2 to 4 quarts of extra fluid capacity, with any severe-duty, street/strip transmission. We also recommend the use of a cooler with the use of any high-stall torque converter application.

### GM 4L60E Rear Wheel Drive O.D. Transmission

This particular transmission fits many GM rear wheel drive O.D. transmission models, including the popular C/K Pick-ups. It was originally used in non-electronic form in the early 1980's by General Motors. Hughes Performance has continued to improve this unit both in durability and technology. All internal parts are carefully inspected and many of the original equipment pieces are replaced with Hughes High Performance components. We replace OEM clutch plates with our special high-coefficient one-sided frictions\* for longer life and greater reliability. Kevlar bands have been installed in our transmissions for over 15 years in shifting applications. We co-developed with Borg Warner our "High-Static Hold" material for increased holding power, especially in racing applications, for all lubrication and valve body circuits are carefully inspected and modified for cooler and quicker operation. We have manufactured countless numbers of these transmissions for a wide variance of vehicles and have earned an enviable reputation from racing to towing and all types of street performance, hot rods, and custom applications. Call today for details regarding your specific application.

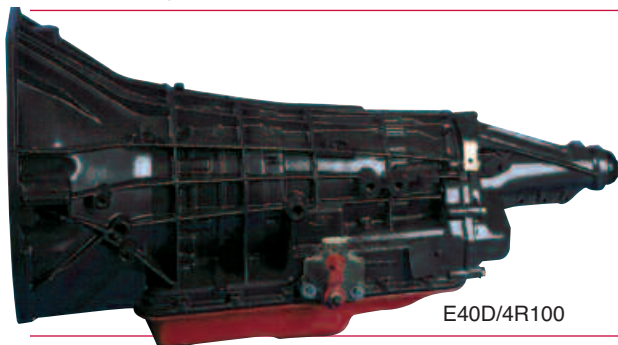
\*E models only.



4L60E Transmission

### Ford Truck 4 Speed Electronic Overdrive Transmission

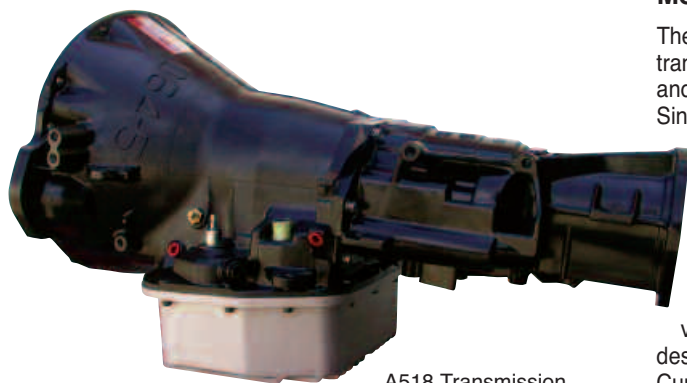
The E40D/4R100, an electronically controlled transmission using the latest technology, is used in all 1989-on Super Duty Ford trucks. Hughes Performance has extensively modified the lubrication circuits, valve body programming, and friction materials resulting in a superior unit. In addition to electronic updates, we use special custom hardened core clutch plates in the forward clutch to prevent failure. To prevent premature failure with the torque converter clutch, we utilize a new heavy duty lockup piston. The Hughes remanufactured assembly for this application is simply the very best available in the market. Call our experts today.



E40D/4R100

### Mopar Transmissions

The A727 Torqueflite: the respected workhorse of Chrysler automatic transmissions. Once Chrysler engineers added an overdrive assembly and updated the unit, it became a 4 speed overdrive known as the A518. Since its introduction in 1990, it has undergone multiple updates. Our in-house modifications, along with the popularity of the fresh design of the new Dodge pickup, make this unit a must-have. Before beginning the rebuild, each unit is closely inspected for abnormal wear. Many components are automatically replaced, even if normally passed over by other manufacturers; all friction material is upgraded, lube circuits are modified, and the valve body is re-worked to achieve more positive shifts and better durability. This is the most outstanding version of the A518 available today. Additionally, Hughes has a newly designed triple-disc H.D. Billet cover tow converter for the enhanced Cummins Diesel applications – please call today for more information. See page 11.



A518 Transmission

Transmission	Street/Strip Automatic	Street/Strip Full Manual	Competition Transbrake	Application Notes
<b>General Motors</b>				
TH350 1969-79 Chev	35-1	35-2	35-3	Available w/2.75 low 6" Ext Hsg
TH350 1969-79 BOP	35-1B	35-2B	35-3B	Available w/2.75 low 6" Ext Hsg
TH350 69-79 4X4	35-1C	35-2C	35-3C	2C/3C available with reverse pat.
TH400 1967-90 Chev	34-1	34-2	34-3	Available w/2.75 low 4" Ext Hsg
TH400 1967-90 BOP	34-1B	34-2B	34-3B	Available w/2.75 low 4" Ext Hsg
TH400 1967-90 Chev	34-1X	34-2X	34-3X	HD version for nitrous/blown appl.
TH400 1967-90 Truck	34-1T	34-2T	34-3T	Bolt-on yoke application
TH400 1967-90 4X4	34-1C	34-2C	34-3C	All 4WD applications
4L60 1982-92 2WD	74-1	74-2	--	30 spline input and converter
4L60 1982-92 4WD	74-1C	74-2C	--	1982-86 S10 4X4 also avail as SO
4L60 1982-92 Vette	74-1V	74-2V	--	Available with or without lockup
4L60E 1993-95 2WD	74-1E	74-2E	--	Electronically Controlled 4 SP
4L60E 1993-95 4WD	74-1CE	74-2CE	--	Electronically Controlled 4 SP
4L60E 1993-95 Vette	74-1VE	74-2VE	--	Corvette applications
4L60E 1996-97 2WD	74-1E2	74-2E2	--	PWM cast on front pump
4L60E 1996-97 4WD	74-1CE2	74-2CE2	--	PWM cast on front pump
4L60E 1996 Corvette	74-1VE2	74-2VE2	--	PWM cast on pump 96 C4 only
4L60E 1997 Corvette	74-1VE3	74-2VE3	--	1997-on REAR MOUNT C5 only
4L60E 1998 2WD	74-1E3	74-2E3	--	Use with 298mm Converter
4L60E 1998 4WD	74-1CE3	74-2CE3	--	Use with 298mm Converter
4L60E 1999-on 2WD	74-1E4	74-2E4	--	3 pc Case 310mm Converter
4L60E 1999-on 4WD	74-1CE4	74-2CE4	--	3 pc Case 310mm Converter
4L60E 2001-on AWD	74-1CE5	74-2CE5	--	GMC Denali, Cadillac Escalade
4L60 1982-92 HD	74-1HD	--	--	HD version, kolene, 5 pinions etc.
4L60E 1993-on HD	74-1EHD	--	--	Need case configuration and year
4L80E 1991-95 2WD	25-1	25-2	--	HD Electronically controlled 4 SP
4L80E 1991-95 4WD	25-1C	25-2C	--	HD Electronically controlled 4 SP
4L80E 1996-03 2WD	25-1A	25-2A	--	Extended manual shaft
4L80E 1996-03 4WD	25-1CA	25-2CA	--	Extended manual shaft
4L80E 2004-on 2WD	25-1B	25-2B	--	Extended manual shaft
4L80E 2004-on 4WD	25-1CB	25-2CB	--	Extended manual shaft
<b>Ford</b>				
C4 1964-69 24 spline	26-1A	26-2A	--	Shipped without Bell Hsg & Linkage
C4 1970-80 26 spline	26-1	26-2	26-3	26-2 available in reverse pattern
C4 1970-80 4WD	26-1C	26-2C	26-3C	Four wheel drive application
C6 1967-91 2WD	36-1	36-2	36-3	Specify engine & bell hsg. Size
C6 1967-91 4WD	36-1C	36-2C	36-3C	36-2 or 2C available in rev. pattern
AOD 1980-91 2WD	56-1	56-2R	56-3	Manual unit only available rev pat.
AOD 1980-91 4WD	56-1C	--	56-3C	--
AODE 1992-93 2WD	56-1E	--	--	Electronically controlled
4R70W 1994-on 2WD	53-1	--	--	Electronically controlled 4 sp. OD
4R70W 1994-on 4WD	53-1C	--	--	F150 only
E4OD 1989-97 5.4L or V10	46-1	46-2	--	HD Electronically controlled
E4OD 1989-97 7.5L	46-1A	46-2A	--	HD Electronically controlled
E4OD 89-97 Dsl	46-1B	--	--	Unit fits Powerstroke diesel
E4OD 1989-97 4WD	46-1C	46-2C	--	5.4L Case configuration D 5.4L or V10
E4OD 1989-97 4WD	46-1D	46-2D	--	7.5L Gas Case Configuration
E4OD 1989-97 4WD	46-1F	--	--	Unit fits Powerstroke diesel
4R100 1998-02 2WD	46-1G	46-2G	--	5.4L Case configuration
4R100 1998-02 2WD	46-1H	46-2H	--	7.5L Gas Case Configuration
4R100 1998-02 2WD	46-1J	--	--	Unit fits Powerstroke diesel
4R100 1998-02 4WD	46-1K	46-2K	--	5.4L Case configuration
4R100 1998-02 4WD	46-1M	46-2M	--	7.5L Gas Case Configuration
4R100 1998-02 4WD	46-1P	--	--	Unit fits Powerstroke diesel
5R110 2003-on 2WD	47-1	--	--	5 Speed HD OD fits 5.4L V8 or V10
5R110 2003-on 2WD	47-1A	--	--	5 Speed HDOD fits Powerstroke Diesel
5R110 2003-on 4WD	47-1C	--	--	5 Speed HD OD fits 5.4L V8 or V10
5R110 2003-on 4WD	47-1D	--	--	5 Speed HD OD fits Powerstroke Dsl.
<b>Chrysler</b>				
TF6 (A904) 1968-on	12-1	12-2	12-3	All 6 Cylinder and 273/318 V8
TF8 (A727) Small Blk. 1967-2001	22-1F	22-2F	22-3F	
TF8 (A727) Big Block 1967-2001	22-1E	22-2E	22-3E	
46RE (A518) 2WD 1990-2003	15-1	15-2	---	4 SP OD Specify if electronic controlled
46RE (A518) 2WD 1990-2003	15-1A	15-2A	---	4 SP OD for all V10 applications
47RE (A618) 2WD 1994-2003	15-1B	---	---	4 SP OD for all Cummins Diesel 2WD
46RE (A518) 4WD 1990-2003	15-1C	---	---	4 SP OD for all V8 applications 4WD
46RE (A518) 4WD 1990-2003	15-1D	15-2D	---	4 SP OD for all V10 applications & 4WD
47RE (A618) 4WD 1994-2003	15-1E	---	---	4 SP OD for all Cummins Diesel 4WD
40/42RH (A500) 2WD 1988-1996	16-1	16-2	---	4 SP OD for all NON-electronic 2WD
40/42RH (A500) 4WD 1988-1996	16-1C	16-2C	---	4 SP OD for all NON-electronic 4WD
40/42RE (A500) 2WD 1993-2004	16-1E	---	---	4 SP OD for all electronic controlled 2WD
40/42RE (A500) 4WD 1993-2004	16-1CE	---	---	4 SP OD for all electronic controlled 4WD
45RFE 5 SP. 2WD 1999-Up	17-1	---	---	5 SP OD for all HEMI applications 2WD
45RFE 5 SP. 4WD 1999-Up	17-1C	---	---	5 SP OD for all HEMI applications 4WD

Some late model units require Core Exchange, or a Core Charge.  
Please See Page 30 for details





## Transmissions Torque Converters

**4L80E - The complete Automatic Overdrive with no-sweat installation that can be used for all makes & models, with adapter.**

Automatic overdrive transmissions have become "the" setup for Today's Build ups. This technology allows the use of steep rear gears for performance while not interfering with highway cruising and fuel mileage, thanks to the big rpm reduction that their overdrive provides.

Does your engine produce high horsepower and torque numbers due to nitrous or a supercharger, and it's exceeding the capabilities of the 200-4R or the 700-R4? Maybe it's time to consider the GM 4L80E electronically controlled four-speed transmission.

In street applications, the fuel savings alone are probably worth the price of an overdrive, especially if you're running a big-block. And the wear and tear on your engine is reduced, since the overdrive will have you cruising at about 1,000 rpm less on the highway.

The 4L80E transmission is original equipment for all heavy-duty GM truck applications. It's GM's latest offspring of the TH400 trans, and we all know how tough that piece is. With GM's latest refinements and electronic controls, the 4L80E is stronger, even with its 4th gear overdrive, and much smarter than its predecessor, the TH400. When modified for all-out performance, the way the Hughes Performance Street/Strip 4L80E is, the 4L80E stands alone as the ultimate setup for extreme-performance.

And because we can program this electronically controlled transmission to suit your specific needs, you can have hard-hitting drag-race-type shifting at full throttle but also reliable part-throttle street manners that is designed into the unit. Now, more than ever before, is the era you can build your hot rod, custom car or truck, or maybe that street machine you've always wanted, and have a state-of-the-art transmission assembly. Our continuing research and development allows you to have the best, most reliable and longest lasting transmission and converter kit with the latest technology available on the market today! Call our experts today and understand why Hughes should be your only source for automatic transmissions, torque converters and related components. We really do care!

The thought of installing an electronically controlled transmission might be intimidating for some. But wait a minute. Installing one of the transmissions with the electronic hardware really is simple. We furnish a foolproof stand-alone computer, wiring harness, tail shaft housing, and all the necessary hardware to make this installation a snap. You can even utilize the OE column shifter, or, for floor-mounted applications, Performance Shifter can be installed. We now ship a programmer with the control unit to facilitate program changes quickly.



### Typical 4L80E Transmission & Converter Packages

#### Towing GM Application

K25-10X<sup>+</sup> Includes #25-1 Transmission, #25LXTM HD Lock-Up Tow Converter, #HP2580 Deep Aluminum Pan, installed on transmission for more oil capacity & #HP8235 20K GVW Transmission Oil Cooler.

#### Performance GM Application

K25-10G Includes #25-1 Transmission, #25-30L High Performance Lock-Up 10" 3000 Stall Billet Cover Torque Converter, #HP2580 Deep Aluminum Pan, installed on 25-1 for more oil capacity & HP8235-20K GVW Transmission Oil Cooler.

#### Performance Ford Application

K25-10F Includes #25-1 Transmission, #53-30L Custom Built 3000 Stall Lock-Up Converter w/Billet Cover. Also includes Adapter Plate Kit for Ford motor, Deep Aluminum Pan, & 20K GVW Transmission Oil Cooler.

<sup>+</sup> Other tow packages available, see page 2 for listings.

## The oval track racers spoke and Hughes Performance listened!

After the racers told us what they wanted, we brought to the market the ultimate oval track competition converter.

### I.M.C.A. Converter

This unit is available in 10" models and is designed with oval track racing in mind. We gave it a full bearing design for durability and less drag. We make this unit as "tight" (low stall) as possible for maximum torque multiplication and top end efficiency, as well as allowing quicker exits while cornering. For ultimate strength and durability we silicon spot braze all turbine and pump vanes. Deal with a company that listens.

**Don't Settle For Second Best . . . Use Hughes!**



### Transmission Direct Drive Assembly

Commonly referred to as a torque converter eliminator, this assembly replaces the converter for those type applications where a direct drive is required. This unit retains the strength of a triangular bolt pattern and eliminates the added weight of a torque converter. As with all competition units, please make note of motor plate thickness so the custom unit Hughes builds for your race car fits properly.



Transmission	10" IMCA Series	Direct Drive Series	Pro Direct Series
<b>General Motors</b>			
Aluminum Powerglide 1962-On	10" PG IMCA	PGDD	PG PRO DD
TH350 1969-79 Non Lockup	10" GM IMCA	GMDD	GM PRO DD
TH400 1965-On (3 Pad)	10" PG IMCA	GMDD	GM PRO DD
<b>Ford</b>			
C4 1964-69 24 Spline 10 1/2" Bolt Pattern	10" F30 IMCA	30DD	N/A
C4 1964-69 24 Spline 11 1/2" Bolt Pattern	10" F23 IMCA	23DD	N/A
C4 1970-81 26 Spline 10 1/2" Bolt Pattern	10" F41 IMCA	41DD	N/A
C4 1970-81 26 Spline 11 1/2" Bolt Pattern	10" F42 IMCA	42DD	N/A
C6 1966-84 360, 390, 428, 429 V8	10" F35 IMCA	35DD	N/A
C6 1966-84 302, 351, 400, 360 V8	10" F43 IMCA	43DD	N/A
AOD 1981-92	N/A	51DD	N/A
AOD 1993-On	N/A	53DD	N/A
E4OD 1985-On	N/A	46DD	N/A
<b>Chrysler</b>			
Torque Flight 903 1968-On 27 Spline	10" 27 IMCA	27DD	N/A
Torque Flight 727 1967-On 24 Spline	10" 24 IMCA	24DD	N/A
Torque Flight A500 Non Lockup	N/A	16DD	N/A
Torque Flight A500 Lockup	N/A	16DD	N/A
Torque Flight A518 Non Lockup	N/A	15DD	N/A
Torque Flight A518 Lockup	N/A	15DD	N/A





### A New Generation of the Torque Converter

Hughes Performance would like to introduce you to the XTM & XFM series, torque converters. Simply put . . . There is **no other** like it!

Let's first understand the main objective of the converter: A fluid coupler designed to allow the engine to idle smoothly while in gear and transfer (convert) the maximum amount of torque (power) from the engine to the drive wheels.

A torque converter designed to operate in a light duty 3/4 ton vehicle **should not** be the same as a converter used in a heavy duty 1 ton dually or even a class "A" motor home. But . . . that is exactly what the industry has dictated to us for years . . . **until now!**

This "New Generation" torque converter is available for General Motors, Ford and Chrysler transmissions.

The "XTM" is slightly higher stall for gas engine application and the "XFM" is a lower stall for diesel engine applications.

#### More Power

The combination of the stator and specific application fin angles applies maximum power to the wheels. This allows you more available engine power.

#### Operates Cooler

You no longer need to be afraid of the "long grade" with the "heavy load". The XTM and XFM series converters run 7 quarts of fluid more per minute than original equipment or stock application.

#### More Efficient

This new generation stator (torque multiplier) transfers power from the engine to the wheels more efficiently.

#### What is Torque Converter Stall?

**Stall speed is the point where a converter has reached it's maximum fluid flow or it has hydraulically locked up because torque multiplication has reached it's highest point.**

All stall speed ratios are approximate and will vary, based on the torque of the engine. Small and Big Block combinations will vary 300 to 500 R.P.M.'s Stall speed is the amount of engine R.P.M. that can be attained at full throttle with the brakes **locked** and the transmission in gear before the drive wheels turn. It is very important to determine that if your vehicle drive wheels turn before the desired stall is reached, you must either "flash" the converter to attain higher stall or install a brake proportioning valve that directs more fluid to the drive wheel brakes to better hold the vehicle. In **either** case, attainable stall ratio will not exceed 3500 R.P.M., due to the vehicle braking system, which is even worse with disc brake equipped cars.

Performance engines are modified to produce more horsepower and torque and it is essential to know what the peak torque or your engine is and to match the stall speed ratio of the torque converter with the engines power curve. This match will give the optimum performance or "launch" of the vehicle. There are no closer-tied components in any vehicle than the engines' camshaft and the torque converter. Attention to this detail is of utmost importance to your vehicle's optimum performance.



#### Full Miser 1000-1200

This is our gas mileage converter. By reducing the amount of slippage in our Fuel Miser converter by 25-30% we can effectively increase gas mileage by 2-4 miles per gallon, with a closer 1 to 1 lock-up.. Your transmission will run cooler with less friction, reducing heat build-up. Actual mileage gains may vary according to your type of driving and installation. Recommended for 400 cubic inch and larger gas engines as well as all diesel applications.

#### Tow Master 1800-2000

Our severe duty performance converter used in many late model trucks, crew cabs, 4x4's and motor homes will increase bottom end pulling power without sacrificing top end efficiency or lock-up. Mileage is increased by as much as 1-2 miles per gallon. Recommended for slightly modified engines.

#### Street Rod 2000-2200

This converter was designed and manufactured for the street rod enthusiast needing that slight edge of the O.E.M stock converter. This unit has silicon brazing for strength, needle bearings for reliability, and stator modifications for more torque multiplication.

#### Street Master 2200-2500

The "Street" converter was design for the driver who is looking for that competitive advantage. By raising the stall RPM you can eliminate that slow, sluggish start. Recommended for stock to slightly modified engines to achieve performance, along with a smooth idle when the car is in gear.

#### XTM/XFM

These units comprise our finest tow convertor technology. All units are designed with Heavy Duty use in mind. From extra brazing to greater fluid capacity, bearing assemblies. special stator configurations and design increase torque multiplication, allowing more towing capacity and in most cases, increased gas mileage.

For the most significant towing by way of diesel engines that have their output increased, Hughes also offers the super-duty XFM series for the Ford Powerstroke, the Dodge Cummins and the GM Duramax. These units are built to take all the punishment these engines can create by using billet steel covers that cannot flex or distort even under the most challenging situations. Instead of trying to "lockup" the converter for increased efficiency and fuel mileage with any type of single disc, we have replaced it with a triple-disc design, which significantly increases the converters ability to endure the increase in torque and horsepower and still deliver top performance for your diesel application.

### Transmission

	Fuel Miser Series	Tow Master Series	H.D.Diesel Series	H.D.Towing Series	2000 Stall Series	2500 Stall Series
<b>General Motors</b>						
Aluminum Powerglide 1962-73	P8FUEL	P8TOW	N/A	N/A	PG20	PG25
TH350 1969-79 Non Lockup#	GM11FUEL	GM11TOW	N/A	GM11XTM	GM20	GM25
TH350 1980-86 Lockup#	GM18FUEL	GM18TOW	N/A	N/A	GM20L	GM25L
TH400 1965-90	GM4Fuel	GM4Tow	---	---	GM20-400bp	GM25-400bp
TH400 1965-90 w/6 Pad	GM5Fuel	GM5Tow	GM5XFM	GM5XTM-1	GM20	GM25
TH2004R & TH700R4 1982-84 4 speed OD 27 spline	GM21LFuel	GM21LTow	GM21LXFM	GM21LXTM	21-20L	21-25L
TH700R4/ 4L60 1985-92 4 speed OD 30 spline	GM22LFuel	GM22LTow	GM22LXFM	GM22LXTM	22-20L	22-25L
4L60E Electronic Control 4 speed OD 1993-98	GM22LFuel	GM22LTow	GM22LXFM	GM22LXTM	22-20L	22-25L
4L60E Electronic Cont. 1999-on All with 4.8L, 5.3L & 6.0L All 1998 F-Body w/ V8	GM22ELFuel	GM22ELTow	GM22ELXFM	GM22ELXTM	22-20EL	22-25EL
4L80E HD 4 SP OD 1991-99	25LFuel	25LTow	25LXFM	25LXTM	25-20L	25-25L
4L80E HD 4 SP OD 2000-on	25ALFuel	25ALTow	25ALXFM	25ALXTM	25A-20L	25A-25L
T1000 Allison 5 spd w/Duramax Diesel	----	----	29LXFM*	----	----	----
<b>Ford</b>						
C4 1964-69 24SPL 10.5" Bolt pat.	F30Fuel	F30Tow	----	----	30-20	30-25
C4 1964-69 24SPL 11.5" Bolt pat.	F23Fuel	F23Tow	----	----	23-20	23-25
C4 1970-81 26SPL 10.5" Bolt pat.	F41Fuel	F41Tow	----	----	41-20	41-25
C4 1970-81 26SPL 11.5" Bolt pat.	F42Fuel	F42Tow	----	----	42-25	42-25
C6 1966-84 w/360, 390, 428 & 429 V8 and 1.848" Conv. Pilot	F35Fuel	F35Tow	F35XFM	F35XTM	35-20	35-25
C6 1966-91 w/302, 351, 400 & 460 V8 and 1.375" Conv. Pilot	F43Fuel	F43Tow	F43XFM	F43XTM	43-20	43-25
AOD 1981-90 4 SP OD F150	F51Fuel	F51Tow	----	F51XTM	51-20L	51-25
AODE/4R70W 4 SP OD Elec- tronically controlled 1992-on 11.5" BC	F53LFuel	F53LTow	----	F53LXTM	53-20L	53-25L
4R70W 4 SP OD Elec. Cont. 10.65" BC	----	----	----	----	53A-20L	53A-25L
E4OD HD 4 SP Electronically Controlled OD 1989-97 4 STUD	46LFuel	46LTow	46LXFM*	46LXTM	46-20L	46-25L
E4OD HD 4 SP Electronically Cont. OD 1992-97 w/Powerstroke Diesel & V8 Gas w/6 STUDS	46ALFuel	46ALTow	46ALXFM*	46ALXTM	46A-20L	46A-25L
4R100 (Late E4OD) 1998-2002 HD 4 SP OD w/V10 or Pwrstroke 6 Studs	46ALFuel	46ALTow	46ALXFM*	46ALXTM	46A-20L	46A-25L
5R110 HD 5 SP OD 2003-on 6 Studs	47LFuel	47LTow	47LXFM*	47LXTM	47-20L	47-25L
<b>Chrysler</b>						
A904 (TF6) 1968-on All 6 cylinder and 273/318 V8 w/27 spline input	27FUEL	27TOW	----	----	27-20	27-25
A727 (TF8) 1967-on All w/24 spline input	24FUEL	24TOW	----	24XTM	24-20	24-25
A500 (40/42RH) 1988-on NON-electronic 4 Speed OD w/27 spline input	16FUEL	16TOW	----	16XTM	16-20	16-25
A500 (40/42RE) 1993-on Electronic 4 Speed OD w/26 spline input LOCKUP	16LFUEL	16LTOW	----	16LXTM	16-20L	16-25L
A518 (46/47RH) 1990-on NON-electronic 4 Speed OD w/24 spline input	15FUEL	15TOW	15XFM	15XTM	15-20	15-25
A518 (46/47RE) 1990-on Electronic 4 Speed OD w/23 spline input LOCKUP	15LFUEL	15LTOW	15LXFM*	15LXTM	15-20L	15-25L
A518 (46/47RE) 1990-on Electronic 4 Speed OD w/23 spline input, V10 Gas Eng LOCKUP	15ALFUEL	15ALTOW	----	15ALXTM	15A-20L	15-25L
45RFE 1999-on 5 SP OD w/HEMI V8	17LFUEL	17LTOW	----	17LXTM	17-20L	17-25L

# Need to specify Chevy or Buick/Pontiac/Oldsobile before ordering.

\*Billet Cover Triple-Disc also Available.

See page 13.



Pro-Street 30 Series

All Pro-Street converters are brazed to increase strength and have full needle bearing design, front and rear to insure reliability. All stall speeds are approximate and will depend upon application. Call for specific recommendations.

Competition Converter 40 Series

The most important factor in performance driving is how your car leaves the starting line. This Hughes Street and Strip converter is exclusively designed for the serious racer. The replacement of the fiber thrust washers with heavy duty needle bearings packages enables this converter to be run on the street, but is recommended for the strip.

Street/Strip 35 Series

Excellent for weekend racing and high performance street use. All converters are brazed and feature a strengthened sprag, special cut stator, and full needle bearings front and rear.

Pro Competition 45 Series

All Pro Competition series converters have full needle bearing replacement of fiber washers. Special silicon spot brazing on top and bottom add to strength and reliability. Hughes performance installs a premium built sprag assembly and a specially machined stator.

Transmission	Pro-Street 3000 Stall Series	Street-Strip 3500 Stall Series	Competition 4000 Stall Series	Pro Competition 4500 Stall Series
General Motors				
Aluminum Powerglide 1962-73	PG30	PG35	PG40	PG45
TH350 1969-79 Non lockup	GM30	GM35	GM40	GM45
TH350 1980-86 Lockup	GM30L	GM35L	-----	-----
TH400 1965-on w/3 Pad Converter	GM30	GM35	GM40	GM45
4L60 1982-84 4 SP OD 27 spline Lockup	21-30L	21-35L	21-40	21-45
4L60 1985-92 4 SP OD 30 spline Lockup	22-30L	22-35L	22-40	22-45
4L60E 1993-on Elec. Control 4 SP OD w/Lockup 30 spline 4.8L, 5.3L & 6.0L	22-30EL	22-35EL	-----	-----
4L60E 1998-2002 Firebird or Camaro with LS1 Engine	22-30EL	22-35EL	-----	-----
4L80E 1991-99 Elec. Control HD 4 SP OD w/Lockup 35 spline	25-30L	25-35L	-----	-----
4L80E 2000-on Elec. Control HD 4 SP OD w/Lockup 35 spline	25A-30L	25A-35L	-----	-----
Ford				
C4 1964-69 w/24 spline 10.5" Bolt Pattern	30-30	30-35	30-40	30-45
C4 1964-69 w/24 spline 11.5" Bolt Pattern	23-30	23-35	23-40	23-45
C4 1970-81 w/26 spline 10.5" Bolt Pattern	41-30	41-35	41-40	41-45
C4 1970-81 w/26 spline 11.5" Bolt Pattern	42-30	42-35	42-40	42-45
C6 1966-84 w/31 spline 1.848" Pilot lot w/360, 390, 428 and 429 V8	35-30	35-35	35-40	35-45
C6 1966-90 w/31 spline 1.375" Pilot, w/302, 351, 400 and 460 V8	43-30	43-35	43-40	43-45
AOD 1981-90 4 SP OD. Lockup Removed	51-30	51-35	51-40	51-45
AODE/4R70W Elec Controlled 4 SP OD	53-30L	53-35L	-----	-----
LIGHTENING Pickup w/HD 4 SP OD	46-30LM	46-35LM	-----	-----
E4OD 1989-97 Elec. Controlled HD 4 SP OD w/4 Stud Converter	46-30L	46-35L	-----	-----
4R100 1998-2002 Elec. Controlled HD 4 SP OD w/6 Stud Converter	46A-30L	46A-35L	-----	-----
5R110 2003-on Elec Controlled HD 5 SP OD	47-30L	47-35L	-----	-----
Chrysler				
TF6 (A904) 1968-on w/27 spline	27-30	27-35	27-40	27-45
TF8 (A727) 1967-01 w/24 spline	24-30	24-35	24-40	24-45
A500 OD NON Lockup w/27 spline 1988- '96	16-30	16-35	16-40	16-45
A500 OD Lockup w/26 spline 1993- '04	16-30L	16-35L	-----	-----
A518 OD NON Lockup w/24 spline 1990- '97	15-30	15-35	15-40	15-45
A518 OD Lockup w/23 spline V8 Gas 1990- '02	15-30L	15-35L	-----	-----
A518 OD Lockup w/23 spline V10 Gas 1994- '04	15A-30L	15A-35L	-----	-----
45RFE 5 SP OD w/HEMI engine 2/4 WD 1999-Up	17-30L	17-35L	-----	-----

Due to computer controlled electronics, Non-Lockup converters are not recommended for these applications. Chrysler products use both steel (Non-Weighted) and cast (Weighted) crankshafts for various engines. Engine size is need to insure the proper replacement torque converter. Drop "L" suffix for Non-Lockup converters, modification to the transmission is necessary. Need to specify Chevy or Buick/Pontiac/Oldsobile before ordering. Units with Blown or Nitrous application require an "Heavy Duty Sprag".

These custom units are the finest available and offer a number of upgrades from our performance converter line. All units feature silicon spot brazed fins. A forged aluminum stator is also used because of its ability to multiply torque better than a steel stator. Other features include a 4130 Chrome-Moly Turbine Hub, a redesigned Internal Sprag, with New Springs and Rollers, Torrington Bearings, a Process-90 Hardened Hub and Dual Anti-Ballooning plates. Each unit is hand crafted from these parts to build a speciality unit for your application only. Using a variety of fin angles and stators, as well as different types of turbine clearances and sprags, Hughes puts together a winning combination for your vehicle every time.

In order for Hughes to build your new converter, many vehicle specs are needed. These include: engine size, carburetor size, vehicle weight, cam specs, rear end ratio. trans. type, motor plate thickness, and in some cases, your desired stall ratio. Please refer to the tech info on Page 29 when ordering a Hughes PRO Series converter.

We at Hughes are so confident that you will be greatly pleased with our converter, that we offer a One Year Warranty on all units. Another added bonus is that after the warranty has expired, Hughes will freshen your converter for a small labor charge plus parts. You can not beat this deal!

By using the finest parts available and a wide variety of combinations, Hughes can build a converter for your special application. These units are tested and proven by our own race team, "Hughes Motorsports".

PRO-III Series

This series is available in 8", 9", and 10" configurations and is among the best known full competition unit. Literally thousands of these units have been produced, and when repeatability is important, this is the converter most people insist on. The prime characteristic of PRO III SERIES torque converters is the hard launch, but soft transition down track, allowing more consistency and ability to repeat. In many cases, variance of 60' times will only be a few thousandths from the first to the last round.

All Pro Series are Special Order units Only. Please refer to the Tech Info on page 29 when ordering a Hughes competition torque converter.

PRO-V Series

This full race converter is available from an entirely new casing and built differently than our other full race torque converters. The trend towards bigger and more powerful engines is what spawned this particular bad boy series of converters. The unit is our most aggressive race converter delivering a hard hit off the line and soft transition down track with no loss in top end efficiency and m.p.h. It runs faster than any other race series we've ever produced, yet gives consistency at 60' you won't believe, and still lets you kill the tree. If more m.p.h. is what you're looking for, order our 95 Series today.

- Hard Hit Soft Transition
- More Aggressive Stator Less Aggressive Fin Angle
- No Loss of Top End Efficiency & MPH

- Great Reaction Time
- 60' More Consistent

Transmission	PRO III - 7"	PRO III - 8"	PRO III - 9"	PRO III - 10"	PRO IV-8"	PRO IV-9"	PRO IV-10"	PRO V-8"	PRO V-9"	PRO VI-9"
General Motors										
Aluminum Powerglide 1962-On	PG73	PG83	PG93	PG103	PG84	PG94	PG104	PG85	PG95	PG96
Turbo 350 and 400 Transmission	GM73	GM83	GM93	GM103	GM84	GM94	GM104	GM85	GM95	GM96
Ford										
C4 1964- On (specify pilot size/bolt pattern)	F73	F83	F93	F103	F84	F94	F104			
C6 1966-84 All Motors (Specify pilot size)	F73	F83	F93	F103	F84	F94	F104			
Chrysler										
TF6 (A904) 1968-On w/27 Spline	C73	C83	C93	C103	C84	C94				
TF8 (A727) 1967-On w/24 Spline	C73	C83	C93	C103	C84	C94				



PRO-V Series 6M 95

PRO-IV Series

PRO IV SERIES are more aggressive by design. The units are normally good for slightly higher m.p.h. Units are designed with more furnace brazing which produces less efficiency loss and less slippage, therefore producing higher miles per hour. This unit will still produce excellent repeatability, a must for bracket-type race situations. Units are available in 8", 9", and 10" configurations.



### The Billet Generation

When the lockup piston applies in high torque applications, an enormous amount of force is applied to the lockup piston and the torque converter cover. This is especially true in modified diesel engines and can cause the cover to flex and simply destroy the lockup lining and piston.

Hughes has done a great deal of research and development on this particular problem and has come up with the solution. We manufacture a new CNC billet steel cover along with a triple disc lockup piston assembly. This eliminates "cover flexing" which also protects the piston. In addition, with three discs doing the job of one, the lockup piston can now handle the increased torque capacity without slipping. The material used for the pistons is also upgraded, this in addition to transmission modifications that are necessary, will allow the 25-30% increase in torque output of today's modified diesel engines.

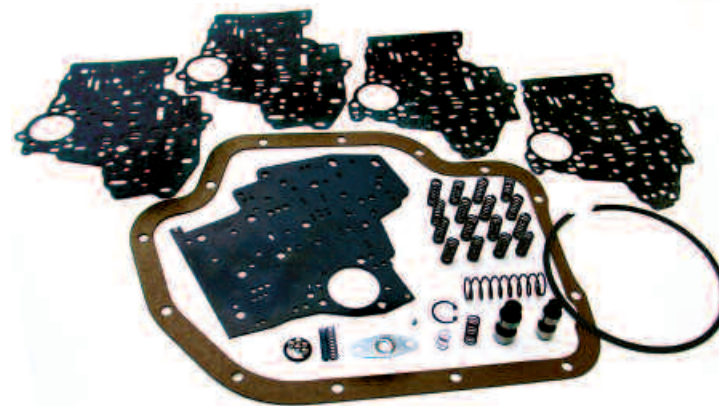


Welcome to the future of Street/Strip converters with a 12" lockup. Yes, you read it right. Hughes now builds a 4000-4500 stall converter while retaining a 12" lockup cover.

This is made possible by using a 12" cover with a 10" top. Not only is a 12" cover used but the piston is modified to incorporate 80% more friction surface! This solves the dilemma of higher torque producing motors exceeding the ability for a 10" converter to retain lock up. The custom built units incorporate all the same features as our Performance 3500 Series. Order one today.

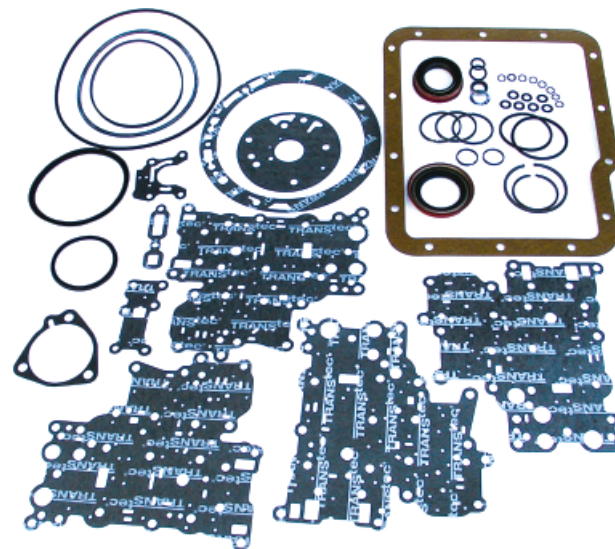
Transmission Type	Part #
4L60 1982-84 27 Spline	21-1012
4L60 1985-92 30 Spline	22-1012
4L60E 1993-98	22-1012
4L60E 1998-ON PWM w/3	
Piece Case Camaro, Firebird w/LS1 Motor	57-1012

BLXFM Converters	Part #
A618 (47RH/RE) All Dodge trucks with Cummins Diesel	15BLXFM
48RE All Dodge Trucks with Cummins Diesel 2003-on	15ABLXFM
E4OD/4R100 HD 4 SP. All Ford trucks with Powerstroke Diesel	46BLXFM
T1000 Allison 5 SP OD. All GMC and Chevy trucks w/Duramax Diesel	29BLXFM
5R110 HD 5spd all Ford Super Duty Trucks w/Powerstroke Diesel	47BLXFM



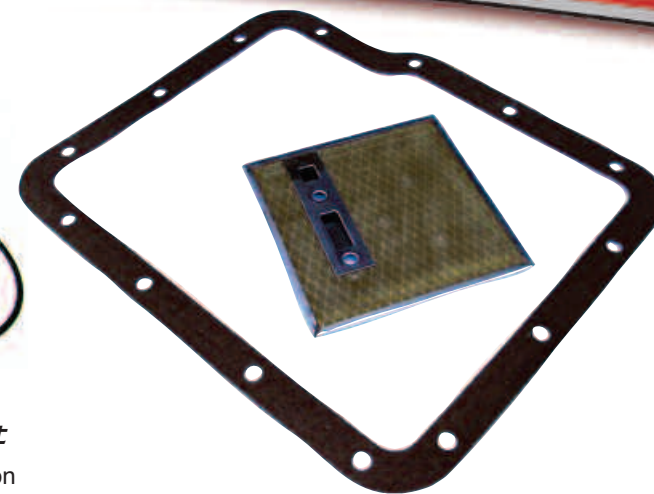
### Valve Body Reprogramming Kit

Hughes Performance recommends this kit for the person who wants a little 'snap' in their street machine. This kit was not designed for full competition, but it will give you a positive competitive feel on the street. Easy to install and comes complete with instructions and all parts and gaskets necessary to get you on the road to your first stage in performance. Works great for street, towing, and off road applications.



### Basic Overhaul Race Kit

When only a basic freshen up is needed, the Hughes Performance Basic Overhaul Race Kit will provide you with all the necessary items. Gaskets, sealing rings, seals, and the confidence of a Hughes backed, overhaul kit. Stay a 'step ahead' with this basic kit, by keeping it in stock.



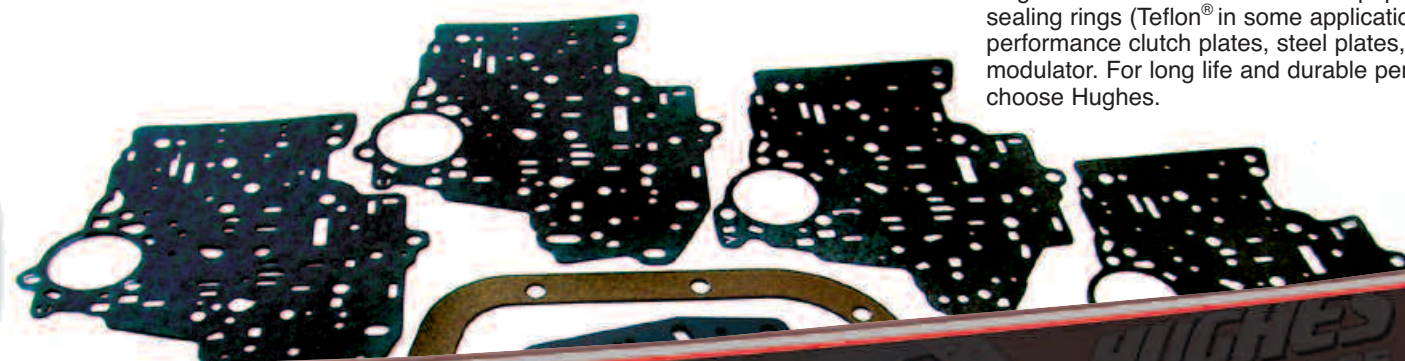
### Service Maintenance Kit

One of the most neglected components in cars today is the transmission. It is very important to service the transmission oil & filter. Just as it is important to the life and performance of your engine, it is equally important to the life and performance of your transmission. Preventative maintenance saves time and money.

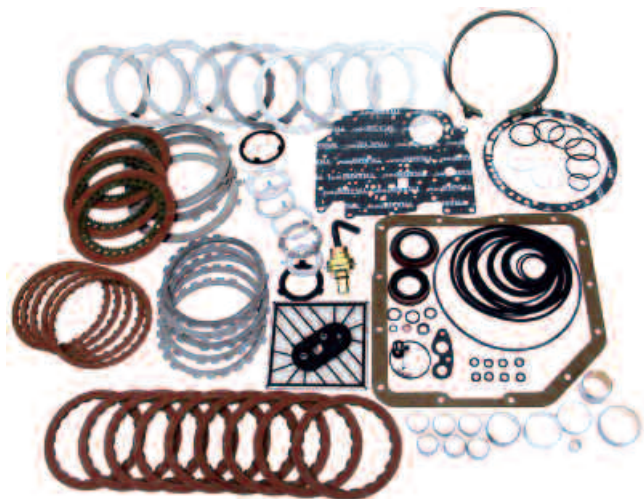


### Master Overhaul Race Box Kit

For the street performer and the off road or towing enthusiast, this kit will provide the master rebuilder, all of the components necessary to complete the job. This Hughes Master Race Kit includes: paper & rubber kit, sealing rings (Teflon® in some applications), seals, high performance clutch plates, steel plates, filter and modulator. For long life and durable performance choose Hughes.







### Premium Overhaul Race Box Kit

The Hughes Performance Premium Race Kit is the best on the market. Great care is taken when these kits are built to insure you the winning edge. Complete kit includes: paper and rubber kit, sealing rings (Teflon® in some applications), seals, high performance "Red Alto®" clutches, Kevlar lined race band, filter, modulator, washers and bushings. For the race track and off track you will find only one kit better . . . and it comes to you from Hughes as well. . .



### Premium Overhaul Race Kit Box with Kolene® Steels

Hughes Performance Race Products has become the leader in many areas . . . Here is just one more to add to the list. This Premium Race Kit features Kolene® steels, 'Red' Alto® race frictions, and a Kevlar lined race band. With these items highlighting this box kit, your performance will never be the same. Moving forward and rising to the top is *our* goal . . . is it yours?

### Chrysler Transmission Kits

Transmission Type	Bushing	Washer	Service	Basic O/H	Reprogramming Kits
TF6(A904) 1972-03	HP1237	-----	HP1284	HP1486	HP1205, HP1206
TF8(A727) 1967-70	HP1228	HP1227	HP1285	HP1286	HP1205, HP1206
TF8(A727) 1971-01	HP1228	HP1227	HP1285	HP1287	HP1205, HP1206
A518(46RE/RH) 1990-03, 3or4 pin. Planet	HP1537	HP1536	HP1585	HP1586	HP1505,06,or 07
A618(47RH/RE) 1994-03, all 5 pin. Planet	HP1537	HP1536A	HP1585	HP1586	HP1505,06,or 07
48RE 2003-on w/ 6 Pinion Planet	HP1537A	HP1536B	HP1585	HP1587	HP1505A
A500(40/42RH) 1988-96 NON-Electronic	HP1637	HP1636	HP1685	HP1686	HP1505,06,or 07
A500(42/44RE) 1993-04 Elec. Controlled	HP1637	HP1636	HP1685	HP1686	HP1505,06,or 07
45RFE 5 SP OD for HEMI-power V8 2WD	HP1737	HP1738*	HP1785	HP1786	HP1705
45RFE 5 SP OD for HEMI-power V8 4WD	HP1737	HP1738*	HP1785F	HP1786	HP1705

\*All bearings in 45RFE

### Chrysler Transmission Box Kits

Transmission Type	MASTER	PREMIUM	PREM w/KOLENE
TF6(A904) 1972-03	HP1489	HP1290	HP1290K
TF8(A727) 1967-70	HP1490	HP1288	HP1288K
TF8(A727) 1971-01	HP1493	HP1289	HP1289K
A518(46RE/RH) 1990-97	HP1590	HP1588	HP1588K
A518(46RE/RH) 1998-03	HP1590A	HP1588A	HP1588AK
A618(47RE/RH) 1994-97	HP1591	HP1589	HP1589K
A618(47RE/RH) 1998-03	HP1591A	HP1589A	HP1589AK
48RE 2003-on w/6 Pinion Planet	HP1592	HP1589B	HP1589BK
A500(40/42RE/RH) 1988-96	HP1690	HP1688	HP1688K
45RFE 5 SP OD 1999-on	HP1790	HP1788	HP1788K

### Ford Transmission Kits

Transmission Type	Bushing	Washer	Service	Basic O/H	Reprogramming Kits
C4 1964-69	HP5135	N/A	HP5284	HP5286	HP5202 or HP5207
C4 1970-81	HP5137	N/A	HP5285	HP5287	HP5206 or HP5208
C6 1967-76	HP4137	HP4136	HP4284	HP4286	HP4205/4206/4207
C6 1977-91	HP4137	HP4136	HP4285	HP4286	HP4205/4206/4207
AOD 1980-91 (Non-electronic)	HP4337	N/A	HP4384/85	HP4386	HP4307
AODE 1992-94 (Electronic)	HP4337E	N/A	HP4385*	HP4387	HP4307E
4R70W 1994-on (Electronic)	HP5337	N/A	HP5385*	HP5386	HP4307E
E4OD HD 4 SP OD 1989-97	HP4637	HP4636	HP4684+	HP4686	HP4605/4606/4607
4R100 HD 4 SP OD 1998-2002	HP4637	HP4636	HP4685+	HP4687	HP4605/4606/4607
5R110 HD 5 SP OD 2003-on	HP4737	HP4736	HP4785	HP4786	HP4705 or HP4706

### Ford Transmission Box Kits

Transmission Type	MASTER	PREMIUM	PREM w/KOLENE
C4 1964-69	HP5290	HP5288	HP5288K
C4 1970-81	HP5295	HP5289	HP5289K
C6 1967-76	HP4290	HP4288	HP4288K
C6 1977-91	HP4291	HP4289	HP4289K
AOD 1980-91 (see footnotes for year usage)	HP4390*	HP4388	HP4388K
AODE 1992-94 (Electronic)	HP4393	HP4389	HP4389K
4R70W 1994-on (Electronic controlled)	HP5390	HP5388	HP5388K
E4OD HD 4 SP OD 1989-97	HP4690*	HP4688*	HP4688K*
4R100 HD 4 SP OD 1998-02	HP4691	HP4689	HP4689K
5R110 HD 5 SP OD 2003-on	HP4790	HP4788	HP4788K

\*HP4390 fits 80-83, HP4391 fits 84-89, HP4392 fits 90-91

\* 2WD 92-95, 1996-on 2WD and 4WD use same kit.

+ For shallow oil pans use HP4684. All deep oil pans use HP4685.

\* Last 3 months of 1997 production had 2 styles of reverse clutches and intermediate clutches

### General Motors Transmission Kits

Transmission Type	Bushing	Washer	Service	Basic O/H	Reprogramming Kits
Aluminum Powerglide	HP6237	N/A	HP6285	HP6288+	PG2S
TH350 1969-79	HP3137	HP3136	HP3285	HP3286	HP3205/3206/3207
TH350C Lockup 1980-86	HP3137	HP3136	HP3285	HP3287	HP3204
TH400 1967-90	HP2237	HP2239	HP2285	HP2286	HP2205/2206/2207
4L60 1982-92 (NON-Electronic)	HP3737	HP3736	HP3785	HP3786	HP3707
4L60E 1993-on	HP3737	HP3736	HP3785E	HP3787	HP3707E
4L60E 1997-on+	HP3737	HP3736	†	HP3787	HP3707E
4L80E 1991-96	HP2537	HP2536	HP2585	HP2586	HP2505/2506/2507
4L80E 1997-03	HP2537	HP2536	HP2585A	HP2587	HP2505/2506/2507

### General Motors Transmission Box Kits

Transmission Type	MASTER	PREMIUM	PREM w/KOLENE
Aluminum Powerglide	HP7490	HP6290	HP6289
TH350 1969-79	HP3290	HP3288	HP3288K
TH350C Lockup 1980-86	HP3291	HP3298	HP3298K
TH400 1967-90	HP2290	HP2288	HP2288K
4L60 1982-93 (NON Electronic)	HP3790*	HP3788	HP3788K
4L60E 1993-on	HP3793	HP3789	HP3789K
4L80E 1991-96	HP2590	HP2588	HP2588K
4L80E 1997-on	HP2591	HP2589	HP2589K

† Order HP3785F -- all shallow pan -- gray filter. HP3785 -- Corvette -- white filter. HP3785H -- all deep pan -- black filter.

### Washer, Bushing, Teflon Ring and Bearing Kits

Hughes offers an incredible range of transmission kits for the racing enthusiast. These kits are vital for the rebuilding of any Hughes Street/Strip or Racing Transmission, and are available for most rear wheel drive applications.



### Bearing Kits

Bearing Kits	Part #
TH350 Bearing Kit 1969-85	HP3238
TH400 Bearing Kit (3) 1964-92	HP2238
4L80E Bearing Kit (4) 1991-on	HP2538
AOD/E Bearing Kit 1980-95	HP4338
4R70W Bearing Kit 1993-03	HP5338
5R110 Bearing Kit 2003-on	HP4738
45RFE Bearing Kit 1999-on	HP1738

### Teflon Ring Kits

Teflon Ring Kits	Part #
P/G 6 Ring custom Teflon Rings	HP6215
TH350 Custom Teflon Ring Kit	HP3212
TH400 4-ring Kit 2-pump, 2-supt	HP2210T
4L60 Teflon Sealing Ring Kit 82-93	HP3712
4L60E Teflon Sealing Ring Kit 94-on	HP3712E





### Get Set Up like the Pro Stockers

Hughes Performance is proud to present its all billet planetary gear set for aluminum Powerglides — with a 1.76:1 gear ratio that's ideal for today's big-cubic-inch motors. This extremely stout gear set features new E9310 gears (eight pieces), a new forged ring gear a new forged planetary housing, 9310 pins, and new washers and needle bearings. The forged billet output shaft offers excellent torsion memory, which means you can twist it, but they virtually can't break it — and it's available in long, medium (4 link dragster ) and "shorty" versions.

Other aftermarket companies only offer planetary sets with steeper gears, but Hughes knows they just don't work as well as 1.76's with the torque output of the big motors today — not to mention the hard-hit/soft transition torque converters and improved tire compounds.

Pro Stock drivers run a setup just like this because they want less rpm drop between gears, and Hughes Performance's new "Bulletproof" 1.76 gear set is being proven right now on the track by the Hughes Motorsports racing team.

We have had so much success with this assembly, we now have an even higher low gear ratio. We have released a 1.69 to 1 low gearset, which will give you an even deeper low gear ratio. this is even more ideal for the higher horsepower and torque outputs of today's motors. In addition, we have manufactured these gears with a spur (straight) cut design with even more strength for absorbing more horsepower and torque than ever before! The design also eliminates most of the end thrust of helical units which allows for higher m.p.h. in most cases.

In addition, we have a 1.80 to 1 low gearset, giving you three selections of gear ratios for most any type drag racing, no matter what weight, horsepower or hot rod you race.

### The Missing "Link"

Once again, the Hughes Motorsports Race Team is solving problems so you — and other racers — don't have to.

#### The problem:

When you release the transbrake during launch in one of the newly designed dragsters with a four-link suspension, the suspension will load and actually pull the coupler in a Powerglide to within a quarter-inch of disengagement.

#### The solution:

Hughes Performance's new "lengthened" shorty for Powerglide assemblies. It's longer output shaft compensates for suspension travel and allows for normal engagement between the transmission output shaft and the coupler.

*Other aftermarket companies only offer planetary sets with steeper gears, but Hughes knows they just don't work as well as 1.76's with the torque output of the big motors today — not to mention the hard-hit/soft transition torque converters and improved tire compounds. We have recently followed this philosophy further and offer our new 1.69 ratio planetary, complete with all the parts associated with our "B2" carrier, with the 9310 gearing manufactured with the spur gear design.*

*This ratio has become very popular among the top sportsman and other heads up racing categories.*

- Long: HP7448
- Medium: HP7449L
- Short: HP7449

*Coupled with our "Big Red" GM104 — this is a winning combination!*

#### Planetary Gear Sets

Aluminum Powerglide	"SHORTY"	"MEDIUM"	"LONG"	Ring Gear	Gearset 8 pc.
1.69 Low Gear ratio Forged output shaft, 9310 gears, new carrier bowl, ring gear, pins, washers and needle bearings.	HP7449	HP7449L	HP7448	HP7447	HP169PGK
1.76 Low Gear ratio, Stock output shaft, factory gears, factory bowl, ring gear, new pins, washers/needle brgs as needed.	HP7463	N/A	HP7474	N/A	N/A
1.76 Low Gear ratio, Forged output shaft, factory gears, factory bowl, ring gear, new pins, washers/needle brgs as needed.	HP7479	HP7479L	HP7478	N/A	N/A
1.76 Low Gear ratio, Forged output shaft, 9310 gears, new forged bowl and ring gear, new pins, washers, & needle bearings.	HP7469	HP7469L	HP7468	HP7472	HP176PGK
1.80 Low Gear ratio, Forged Output shaft, 9310 gears, new forged bowl and ring gear, new pins, washers and needle bearings.	HP7445	HP7445L	HP7444	HP7443	HP180PGK
1.82 Low Gear ratio, Factory Output shaft, factory gears, bowl, and ring gear. Pins, washers and needle bearings as needed.	HP7462	N/A	HP7475	N/A	N/A

#### Planetary Gear Sets

Transmission Type	Description	
GM TH350	Gear set w/2.75 Low Gear	HP3275
GM TH400	Gear set w/2.75 Low Gear	HP2275
GM TH400	Gear set w/2.10 Low Gear SPECIAL ORDER	HP2221
GM 4L60/60E	Heavy Duty Rear Carrier	HP3768
GM 4L60/60E	Heavy Duty 5 Pinion Front Carrier	HP3769
GM 4L60/60E	Heavy Duty 5 Pinion Rear Carrier	HP3770
FORD C6	Gear set w/2.72 Low Gear	HP4275
FORD E4OD	Heavy Duty Forward Carrier	HP4668

Make the  
Right Choice  
**BUY THE  
BEST!**





Transmission	Stock Zinc	Deep Aluminum
<b>General Motors</b>		
Aluminum Powerglide	HP5280	HP5282
TH2004R	N/A	HP3880
TH350	HP3281	HP3280
TH400	HP2281	HP2280
TH700R4 (4L60)	HP3781	HP3780
TH700R4 (4L60) Stock depth	HP3781	HP3782
4L60E (93-on Electronic)	HP3781	HP3780E
4L60E Stock depth 1993-on	HP3781	HP3782E
4L80E (2WD only)	N/A	
T1000 Allison 5 SP	N/A	HP2980+
w/8L Gas or Duramax Diesel		
<b>Ford</b>		
C4 All Transmission case fill	HP5181	HP5180*
C4 All Transmission oil pan fill	N/A	HP5180P*
C6	HP4281	
AOD 1980-91	N/A	HP4380
AODE or 4R70W (Electronic)	N/A	HP5380
E4OD or 4R100 4 SP OD	N/A	HP4680+
5R110 HD 5 SP OD 2003-on	N/A	HP4780+
<b>Chrysler</b>		
TF6 (A904)	N/A	N/A
TF8 (A727) extra 2 Qts.	HP1281	HP1280
A518 (46RE/47RE) extra 4 qts.	N/A	HP1580+
45RFE Electronic 5 Sp. (HEMI)	N/A	HP1780

ALL DEEP ALUMINUM PANS HOLD AN EXTRA 2 QUARTS EXCEPT WHERE NOTED; \* = 1 extra quart.  
+ = extra 4 quarts.

Each oil pump is carefully machined to our exact tolerances and in some cases, incorporates our own pump bearing assembly for less drag and horsepower loss, but still yields more mile per hour than the more commonly used thrust washer types. All units come with gasket, o-ring sealing rings, new Hughes pressure regulator springs, gear set, and some also use a new Torrington Bearing.

Transmission	Oil Pump
<b>General Motors</b>	
Aluminum Powerglide	HP7434
Aluminum Powerglide Oval Track	HP7434C
Aluminum Powerglide New Body and Gears	HP7436
Aluminum Powerglide New Body and Gears	HP7437
Aluminum Powerglide Top Sportsman style Pump	HP7437XK*
TH350 1969-79 Rebuilt Pump Assembly	HP3230
TH400 1965-90 Rebuilt Pump Assembly	HP2230
4L60 (TH700R4) 1985-87 Rebuilt Pump Assembly	HP3733
4L60 (TH700R4) 1988-92 Rebuilt Pump Assembly	HP3734
4L60E (Electronic) 1993-94 Rebuilt Pump Assembly	HP3734E
4L60E (Electronic) 1995-96 (PWM) Rebuilt Pump	HP3734E1
4L60E (Electronic) 1998-on Rebuilt Pump	HP3734E2
4L60E (Electronic) 1998-on w/bolt-on Bell Housing	HP3734E3
4L60E (Electronic) 1999-on with LS1 Engine	HP3734E4
<b>Ford Motors</b>	
C4 1965-69 Rebuilt Front Pump	HP5230
C4 1970-77 Rebuilt Front Pump	HP5231
C4 1978-81 Rebuilt Front Pump	HP5232
C6 1967-90 Rebuilt Front Pump	HP4230
<b>Chrysler Motors</b>	
TF8 (A727) 1967-70 Rebuilt Front Pump	HP1230
TF8 (A727) 1971-77 Rebuilt Front Pump	HP1231
TF8 (A727) 1978-on Rebuilt Front Pump	HP1232

\* Must use with HP7496MX Ringless Input Shaft.  
Kit with pump and input shaft.  
Need to specify year when ordering

Bolt on deep transmission pans are made from cast aluminum and designed with cooling fins to dissipate heat quicker. Cast aluminum pans hold approximately 2 to 4 extra quarts of fluid, thereby reducing operating temperatures and increasing transmission life.

These pans also increase transmission case rigidity, allowing more torsional twist capacity. (A must for 4X4 units.)

- All necessary hardware is included (including filter extensions).
- No modifications are necessary
- Increased fluid capacity by approximately 2-4 quarts depending on application.



### Pump Accessories

General Motors	Part #
Aluminum Powerglide Pump Gear Set	HP6208
Aluminum Powerglide Pump Bearing	HP6210
Aluminum Powerglide Ringless Input Shaft	HP7496MX*
Aluminum Powerglide Custom Teflon Pump Rings	HP6211T
Aluminum Powerglide Pressure Regulator Spring	HP7043
TH350 Oil Pump Sealing Ring Set	HP3211
TH400 Pressure Regulator Spring	HP2243
4L60 1982-92 Boost Valve .500"	HP3725
4L60 1982-92 Boost Valve .570"	HP3726
4L60E 1993-on Boost Valve	HP3727
4L60 10 Vane Oil Pump Slide Kit	HP3730
4L60 Oil Pump Lockup to Non-lockup Conversion Valve	HP3735
<b>Ford Motors</b>	
C4 Front Oil Pump Gear Set	HP5209
C4 Front Oil Pump Teflon Sealing Rings	HP5211T
C6 Front Oil Pump Gear Set	HP4208
<b>Chrysler Motors</b>	
TF8 (A727) 1967-70 Rebuilt Front Pump	HP1230
TF8 (A727) 1971-77 Rebuilt Front Pump	HP1231
TF8 (A727) 1978-on Rebuilt Front Pump	HP1232

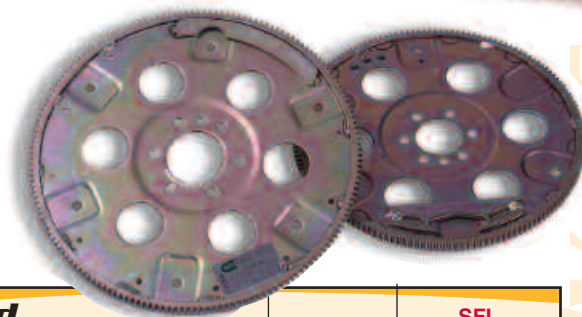
\*Very high HP applications – must be used with HP7437X Oil Pump or included in part # HP7437XK.



Double Welded Hughes flexplates are .035" thicker than OEM and in most applications will withstand the punishment and shock of today's high horse power and high RPM engines. Our race application flexplates will handle all Hughes high stall converters. For street, strip, and off road strength, Hughes Performance meets the needs.

Make the  
Right Choice

**BUY THE  
BEST!**



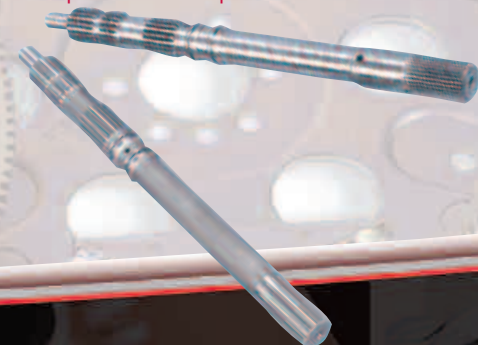
### SFI Approved and Heavy Duty Flexplates

	Part #	SFI Approved
<b>General Motors</b>		
350 C.I. V8 (5.7L) Internal Balance	HP3992	X
400 C.I. V8 (6.5L) External Balance Weight	HP3993	X
454 C.I. V8 (7.4L) External Balance Weight	HP3994	X
12.85" O.D. 153 Tooth Ring Gear Internal Balance	HP3995	X
350 C.I. V8 (5.7L) External Balance Weigh	HP4000	X
305 or 350 C.I. V8 External Balance Weight 153 Tooth Ring Gear, Corvette or IROC Camaro 1986-on	HP4001	X
454HO/502 C.I. V8 Chevrolet w/Cast Crankshaft	HP4002	X
454HO/502 C.I. V8 Chevrolet w/Steel Crankshaft	HP4003	X
HD Flexplate for 4L60E and LS1 Engine 1999-on	HP4004	X
<b>Ford</b>		
289/302/351C-W-M with C4 10.5" Bolt Circle e 157 Tooth	HP5296F	X
460 C.I. V8 Non-weighted with C6 11.5" Bolt Circle	HP5297F	X
289/302/351C-W-M with C6 11.5" Bolt Circle	HP4297F	X
289/302/351C-W-M with C4 11.5" Bolt Circle	HP5299F	X
460 C.I. V8 Weighted-Late Style	HP4298F	X
Small Block V8 with AOD 4 SP 11.5" Bolt Circle 164T	HP4397F	X
CUSTOM 157 Tooth with AOD 4 SP and 50 OZ weight	HP4396	X
<b>Chrysler</b>		
Mopar 6 Hole Design Flywheel	HP1491F	X
Mopar 6 Hole Design Flywheel Flexplate	HP1452	X
Mopar 8 Hole Design Flywheel	HP1491F8	X
Mopar 8 Hole Design Flexplate	HP1453	X
Mopar OEM Flexplate for 11" Converter-Offset spacing	HP1456	
Mopar OEM Flexplate for 11" Converter-Even spacing	HP1456A	
Mopar OEM Flexplate for 12" Converter-Offset spacing	HP1457	
Mopar OEM Flexplate for 12" Converter-Even spacing	HP1457A	

### Hardened Input Shafts

	Part #
<b>General Motors</b>	
Aluminum Powerglide with Turbo Spline, All Ratios	HP7496C
Aluminum Powerglide w/Turbo Spline-High HP appl.	HP7496M
Aluminum Powerglide w/Turbo Spline w/o rings can be used with special top sportsman style oil pump ONLY! Part # for pump and shaft is HP7437XK*	HP7496MX
Aluminum Powerglide w/PG Spline, All Ratios	HP7497C
TH400 Input Drum and Shaft Assembly	HP2236
TH400 Direct Drum with 34 Element Intrm. Sprag	HP2234
<b>Ford</b>	
C4 All with 26 Spline Input	HP5214
C6 All with 31 Spline Input	HP4214
AOD All with Standard Spline	HP4314
AODE and 4R70W Intermediate Shaft	HP5314
<b>Chrysler</b>	
A518/618 (46/47RE/H) Hardened Input/Hub Assm.	HP1534

\*Very high HP applications – must be used with HP7437X Oil Pump or included in part # HP7437XK.



Install a Hughes hardened input shaft in your Powerglide transmission and feel confident you will not have any twisting or breakage. For the high horsepower and transbrake application Hughes hardened input shafts made from 4340 steel billet, will exceed the need! Turbo shafts are also available and manufactured from special forged alloy steel for even higher horsepower applications.



In most cases, the electrical winding is the only part in a solenoid that wears down or goes bad — but, until now, the only choice has been to buy a whole new solenoid.

Now, you can save time and money by replacing the electrical winding yourself. Order the replacement winding (part number HP7499), Unscrew the end cap, install the winding in your old casing, connect the new wiring, and you're done! It's another great innovation from Hughes Performance — the company with parts made by racers, for racers.

\* Also available for bracket cars - Part # HP7482

<b>Replacement Gaskets - Sets of 2 For Trans-Brakes</b>	
TH400	HP2216
Powerglide	HP6283

Hughes Performance has taken liberty to improve on the numerous updates and changes provided by the manufacturer and supply you with the most up to date, state of the art valve bodies on the market today. The consistency and durability you will receive with the Hughes valve body line, is second to none.

Hughes Performance offers 3 different control valve bodies for your specific application. The first version is our automatic/manual valve body, installed on all of our "-1" street/strip transmissions. The second version is a full manual control valve body, used more specifically for all types of racing. The third version available for most racing applications is the fluid release transbrake control valve body. It is designed with drag racing in mind and is not recommended for the street.

When ordering a valve body from Hughes, please be as accurate with your application as possible to insure the best results. For further information, please call our Tech Line for assistance. Order these valve bodies to enhance the operation of your functional transmission.

**Once these are installed on your unit, they cannot be returned just like electrical components. Don't assume installation of one of our valve bodies will or can fix the operation of your transmission if it has a malfunction.**

The Hughes manual/automatic valve body is designed for street/strip operation. It will let you shift manually or put the shifter into drive and the transmission remains full automatic. This valve body is featured in our street/strip transmissions. When shifting manually this valve body will remain in the gear until you select the next gear, and then provide you with a clean, crisp transition as you accelerate.

## Full Manual Valve Body

For competition applications, this valve body is a must. It will provide full manual control over all shifts, and deliver them without delay or time costly overlap. The manual valve body is used when a transbrake is not needed, such as tractor pull, monster truck, and other track applications. Hughes Performance offers both standard shift and reverse pattern manual valve bodies.

## Transbrake Valve Body

The ultimate valve body for competition, will allow you to bring the engine to maximum stall without the slightest creep or wheel movement. The Hughes transbrake valve body kits are complete and ready to install in your competition transmission. All GM units are fluid release models, which allows the fastest release time and are extremely reliable since there is no check-ball to worry about moving to release or set the brake. For the best reaction times switch to a Hughes brake and treat yourself to an experience you won't soon forget.





## Performance Parts

### Heavy Duty Ductile Iron Slip Yokes & Solid U-Joints

Now there is finally an available heavy duty slip yoke without the expense of purchasing a forged unit. Manufactured from ductile iron, these yokes give far greater strength than original equipment units, but are economically priced.

Universal joints are manufactured with a solid cross design for much greater reliability for all heavy duty and race applications. Look to Hughes for all of your drivetrain needs. All the best for less! Call today for more information.

#### U-Joint Dimensions

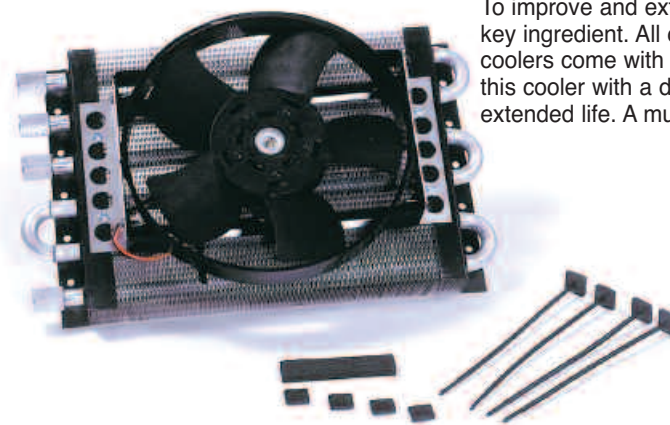
Description	1310	1330	1350
U-Joint "Cross" Length	3-7/32"	3-5/8"	3-5/8"
U-Joint Cap Diameter	1-1/16"	1-1/16"	1-3/16"

#### U-Bolt Kits

HP8970	.....	U-Bolt Kit, 1310 Series, Contains 2 U-Bolts, 4 Nuts & Washers
HP8971	.....	U-Bolt Kit, 1350 Series, Contains 2 U-Bolts, 4 Nuts & Washers
HP8975	.....	TH400 Bolt-On U-Bolt Kit, Contains 2 U-Bolts, 4 Nuts & Washers

#### Transmission Yokes & U-joints

Application	Yoke	U-Joint
<b>General Motors</b>		
TH350 & Powerglide	HP8801	HP8910
W/1310 Series U-Joint		
TH350 & Powerglide	HP8805	HP8950
W/1350 Series U-Joint (H.D.)		
Powerglide w/Superglide Case	HP8805DX	HP8950
Special Machining + Billet Bolt-together		
TH700R4 (4L60) H.D.	HP8805	HP8950
TH400 Slip Yoke	HP8825	HP8950
w/1350 Series U-Joint		
TH400 Bolt On Yoke	HP8826	HP8950
W/1350 Series U-Joint		
TH400 Billet Bolt-together slip yoke w/350 Series U joint	HP8825X	HP8950
<b>Ford</b>		
C4 Trans	HP8840	HP8930
W/1330 Series U-Joint		
C6 Trans	HP8841	HP8930
W/1330 Series U-Joint		
C6 Trans	HP8842	HP8950
W/1350 Series U-Joint		
<b>Mopar</b>		
Mopar A727 (TF8)	HP8835	HP8950
W/1350 Series U-Joint		



### Improve & extend the life of your transmission

To improve and extend the life of your transmission, a transmission oil cooler is a key ingredient. All coolers are equipped with #6 fittings and mounting kit. Upgraded coolers come with a built on fan and a dual cooling system for engine oil. Combine this cooler with a deep aluminum pan and your transmission will enjoy a greatly extended life. A must with any Hughes stall speed converter.

Part No.	Oil Coolers & Fans
HP8235	Transmission Cooler 3/4"x 7.5"x 17" with #6 fittings
HP8238	Transmission Cooler 3/4"x 10"x 17" with #6 fittings
HP8239	Transmission Cooler 30K GVW for Motorhome applications
HP8240	Billet Aluminum Transmission Oil Cooler
HP8255	4 Pass 12" Transmission Cooler and Fan Assembly
HP8258	6 Pass 15" Transmission Cooler and Fan Assembly
HP8265	Transmission Oil Cooler and Fan Assembly
HP8266	Transmission/Engine Oil Cooler and Fan Assembly
HP8269	GM products Cooler Line Kit
HP8270	Ford products Cooler Line Kit
HP8280	Installation Kit with adjustable Thermal Switch



### Sprag and Sprag Assemblies

Hughes offers a wide variety of aftermarket heavy duty sprag and sprag assemblies for the racing enthusiast. These items are essential in higher horse power and transbrake applications. Added elements, forged and heat treated races greatly increase the strength of these assemblies.

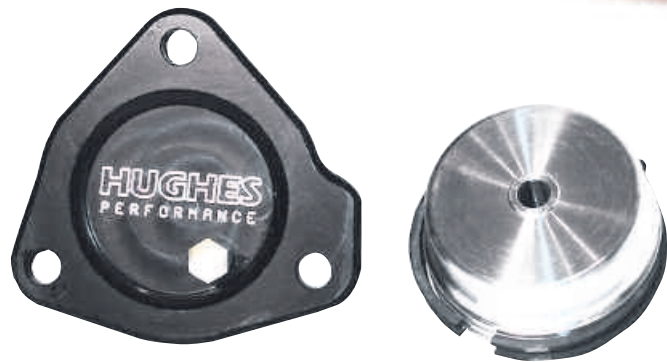
Part #	Sprag and Sprag Assemblies
HP1270HD	TF8 (A727) Bolt-In Overrun Sprag Assembly
HP2234	TH400 Direct Drum with 34 Element Sprag
HP2277	TH400 Forged Outer Race & HeavyDuty Sprag Assembly
HP2279	TH400 Intermediate Heavy Duty Sprag Assembly
HP2579	4L80E Intermediate Heavy Duty Sprag Assembly
HP3279	TH350 Direct Drum with Custom Sprag/Race Assembly
HP3289	TH350 Intermediate Hardened Outer Race
HP3768	4L60/E Heavy Duty 4 Pinion Rear Carrier
HP3769	4L60/E Heavy Duty 5 Pinion Rear Carrier
HP3770	L60/E Heavy Duty 5 Pinion Front Carrier
HP3778	4L60/E Low/Reverse Sprag Assembly 1987-on
HP3779	4L60/E Heavy Duty 29 Element Input Sprag Assembly



### Transmission Mounts

These special polyurethane mounts give remarkable suspension while retaining exceptional firmness. Very long lasting and durable, they will not dry, crack, or break. Fits most GM and Ford transmissions.

Part #	Transmission Mounts
HP8720	GM H.D. Polyurethane Mount
HP8730	Ford H.D. Polyurethane Mount



### Servos, Covers & Assemblies

When using a full race transbrake, exceptional holding power is a must. Our line of Servo Assemblies do just that. Made of billet aluminum and dual o-rings where applicable, Hughes servos are top of the line and should be used in all of your transbrake applications.

Part #	Servos, Cover & Assemblies
HP3728	4L60 Heavy Duty 2-4 Servo Assembly
HP3729	4L60 Heavy Duty Band Servo Kit for Towing
HP4270	C6 Heavy Duty Servo and Billet Cover Assembly
HP5270	C4 Heavy Duty Servo and Billet Cover Assembly
HP7042	Aluminum Powerglide Recalibrated Servo Spring
HP7480B	Aluminum Powerglide Billet Aluminum Servo-Dual Ring
HP7481	Aluminum Powerglide Billet Steel Servo Cover
HP7486	Aluminum Powerglide Billet Servo and Cover Assembly



### Converter Mounting Kits & Shims

All bolts are grade 8 for a stronger more reliable bolt for all stall converters. Each kit is equipped with nylon locking nuts.

Part #	Converter Mount Kits & Shims
HP7455	Grade 8 Kit with (3) 7/16"x20x1" with nuts
HP7455A	Grade 8 Kit with (3) 7/16"x20x1 1/4" with nuts
HP7455B	Grade 8 Kit with (3) 7/16"x20x1 1/2" with nuts
HP7455C	Grade 8 Mounting Kit for Hughes GM104
HP7456	Standard OEM Mounting Kit for GM applications
HP7457	Torque Converter Shim Kit



## Performance Parts

### High performance Kevlar® lined race bands

The Kevlar Lined Race Band is the top of the line when it comes to high performance, street and track application. Nothing on the market today will give you the life and consistency that this Hughes Kevlar band can deliver. If you are serious about racing and performance, you will be serious about the **right** parts for your car or truck.



#### High Static Bands

were designed to withstand high horsepower applications, with better holding power, and they do just that. These bands are available for P/G, TH400 rear and 4L80E applications.

Transmission Type	High Static Bands
Powerglide	HP6255
TH400 Rear	HP2252
4L80E Rear	HP2552

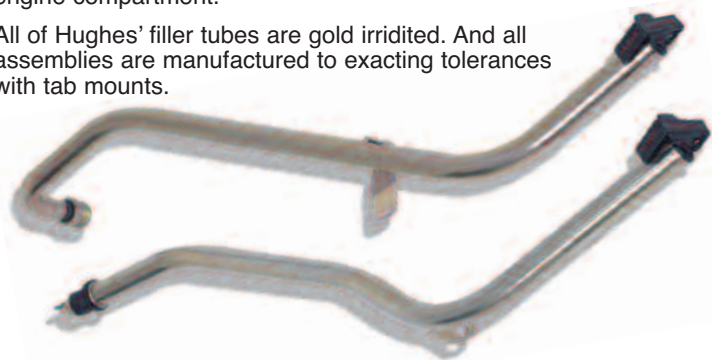
### Locking Trans Fill Tubes

Hughes Performance's unique locking transmission filler tubes for 700R4s and Powerglides were so well-received that the company has expanded the line significantly.

Hughes now offers these dipstick and filler tube assemblies for most popular domestic rear-wheel-drive applications.

Why install a locking dipstick? Many transmissions build up pressure. This pressure can blow out the dipstick, allowing trans fluid to spew everywhere. With Hughes' locking tubes, you keep the fluid in the trans - which means greater reliability and a sanitary engine compartment.

All of Hughes' filler tubes are gold irridited. And all assemblies are manufactured to exacting tolerances with tab mounts.



### Kevlar and High-Static Race Bands

Transmission	Part #
<b>General Motors</b>	
Aluminum P/G	HP6251H
Aluminum P/G High Static Hold	HP6255
Aluminum P/G Pro-Mod Wide Red Lined	HP6256
TH350	HP3251H
TH400 Front	HP2251H
TH400 Rear-Kevlar	HP2252H
TH400 Rear-High Static	HP2252
4L60/E 2nd/4th	HP3751H
4L60/E 2nd/4th HD Wide Band-Red Lined	HP3755
4L80E Front	HP2551H
4L80E Rear-High Static	HP2552
4L80E Rear-Kevlar	HP2552H
<b>Ford</b>	
C4 Intermediate Flex style	HP5255HF
C4 Intermediate Solid style Core Exchange	HP5255H
C4 Reverse Band	HP5256H
C6 Intermediate Flex style	HP4255HF
C6 Intermediate Solid style Core Exchange	HP4255H
AOD O/D Band use with cast drum 80-93	HP4355H
AODE/4R70W O/D Band (steel Drum) 92on	HP4351H
AOD/E Reverse Band	HP4356H
E4OD/4R100 Intermediate Band	HP4655H
<b>Chrysler</b>	
TF6 (A904) Front	HP1256H
TF8 (A727) Front Flex style	HP1255HF
TF8 (A727) Front Solid-Core Exchange	HP1255H
TF8 (A727) Rear	HP1257H
A518 (46/47RE) Front	HP1555HF
A518 (46/47RE) Rear w/6.25" Drum 91-03*	HP1557H
A618 (47RE) Rear 1994-on Double-wrap	HP1558H
A500 (40/42RH) Front	HP1655H
A500 (40/42RH) Rear	HP1656H

\* 1990-early 91 have 6" O.D. reverse drum, which uses band # HP1257H.

### Dipstick & Filler Tubes

Transmission	Part #
<b>General Motors</b>	
Aluminum Powerglide-Short	HP7438LS
Aluminum Powerglide-Long	HP7438L
Aluminum Powerglide-Mid mount	HP7438LM
TH350	HP3235
TH400	HP2235
TH400-Tight fit applications	HP2235A
TH700R4 (4L60) 1982-93	HP3738
4L60E 1993-on	HP3738
4L80E HD 4 SP OD	HP2535
<b>Ford</b>	
C4 with Case Fill	HP5180
C4 with Pan Fill	HP5180P
C6 with Small Block Engines	HP4235
C6 with Big Block Engines	HP4235B
AOD 4 SP OD 1980-91	HP4335
AODE 4 SP OD (Electronic) 1992-94	HP4335
4R70W 4 SP OD with 5.0L only 1994-on	HP5335
<b>Chrysler</b>	
TF6 (A904)	HP1234
TF8 (A727) Small Bloc	HP1235
TF8 (A727) Big Block	HP1235A

### Hughes Aluminum Transmission Shields

This attractive lightweight shield from Hughes offers you the protection in the event of a transmission drum explosion. Made from 6061-T6 aluminum alloy, the Hughes shield offers you dependable strength that is 2nd to none. All shields come complete with mounting hardware for easy installation. SFI Approved.

Hughes Aluminum Transmission Shields		
Transmission Type	SFI Approved	Part #
Aluminum Powerglide	X	HP9700
Aluminum Powerglide-Polished S/O Only	X	HP9700P
Bottom Strap for HP9700	X	HP9715
Mounting Kit for HP9700	X	HP9716
Combination Motor plate / Flexplate Shield for GM applications	X	HP9600
TH350	X	HP9750
TH400	X	HP9800
TH400 - Polished	X	HP9800P
Ford C4	X	HP9740
Ford C6 (Small Bell Housing S/O Only)	X	HP9760
TF6 (A904)	X	HP9150
TF8 (A727)	X	HP9100



### Hughes Aluminum Flexplate Shields

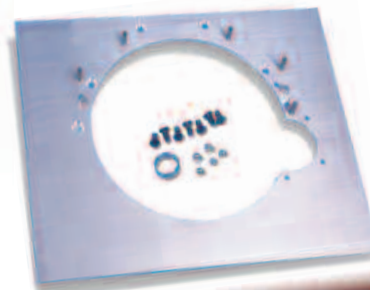
Hughes Performance steps up to the mark when it comes to racer and spectator safety. With the new, smooth design flexplate shields from Hughes, rest assured you meet N.H.R.A. / I.H.R.A. Specs. You and your fans are worry free, and safe. S.F.I. Approved.

Hughes Aluminum Transmission Shields			
Transmission Type	Description	SFI Approved	Part #
Aluminum Powerglide	Chevrolet Bell Housing	X	HP9400
Combination Motor plate/Flexplate Shield	GM bolt Pattern	X	HP9600
TH350	B.O.P. Bell	X	HP9415
TH350 or TH400	Chevy Bell	X	HP9400
TH400	B.O.P. Bell	X	HP9415
Ford C4/C6	Small Bell	X	HP9420
Ford C6	Large Bell	X	HP9425
TF6 (A904)	All	X	HP9430
TF8 (A727)	Small Block	X	HP9430
TF8 (A727)	Big Block	X	HP9435

### Transmission Adapter Plates

Adapter plates allow the Ford and Mopar enthusiasts to hook up to a powerglide or other General Motor transmission while still using their respective power plants. All Adapter plates are precision machined aluminum for minimum weight and perfect fit. Kits come complete with all hardware, ready to install with flexplate.

Transmission Adapter Plates	
Application	Part #
<b>Ford Engine to GM Transmission</b>	
429/460 CID Ford to GM transmissions	HP5292
289/351 CID Ford to GM transmissions Specify flexplate size	HP5291
332/360/390 and 472 CID to GM transmissions S/O Only	HP5294
<b>Chrysler Engine to GM Transmission</b>	
6 Bolt Crank, 318/340 CID Chrysler Engine to GM transmissions	HP1491
8 Bolt Crank, 318/340 CID Chrysler Engine to GM transmissions	HP1491-8
Crank Adapter for 6 hole Chrysler engine crankshaft	HP1491C
Crank Adapter for 8 hole Chrysler engine crankshaft	HP1491C8
6 Bolt Crank, 383/440 CID Chrysler Engine to GM transmissions	HP1492
8 Bolt Crank, 383/440 CID Chrysler Engine to GM transmissions	HP1492-8
392 HEMI Chrysler to GM transmissions S/O Only	HP1494
<b>Miscellaneous</b>	
GM Buick-Olds-Pontiac Engine to Chevrolet Bell Housing Adapter	HP9605
Chevrolet Engine to Buick-Olds-Pontiac Bell Housing Adapter	HP9606



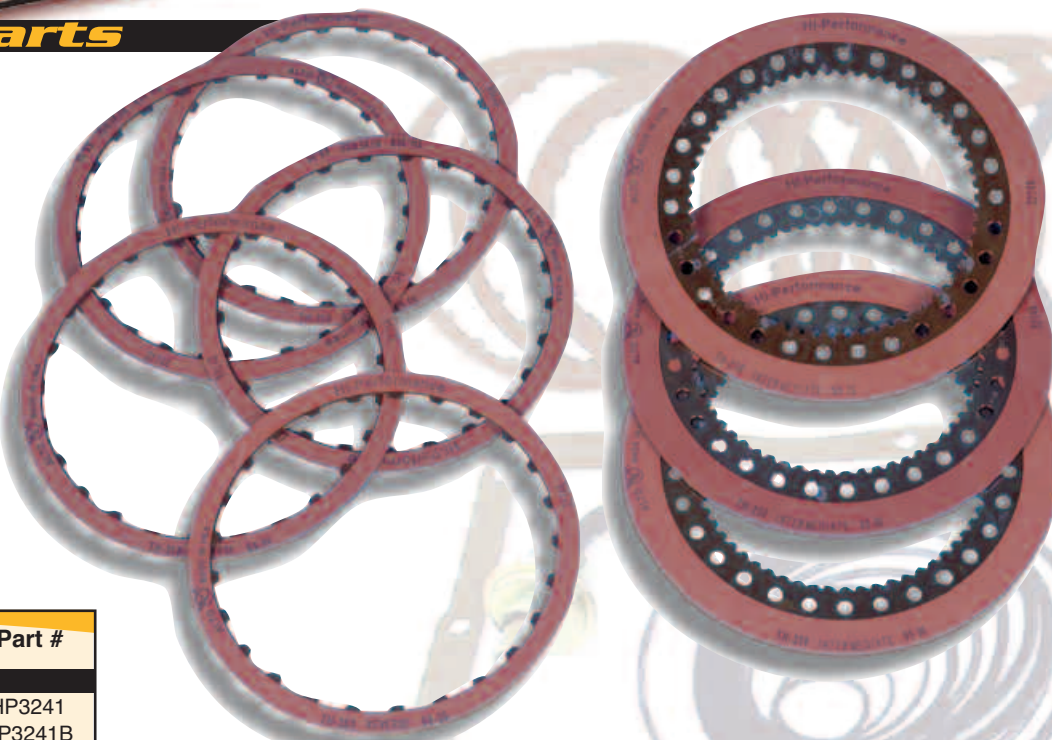




## Performance Parts

### High Performance 'Red' Race Alto® Clutches

Hughes Performance offers you the best when it comes to clutch frictions. Alto® High Performance 'Red' Race Clutches are the only clutch plate for all your needs. The Red Alto® lining has a unique dual saturation which imparts high frictional properties and high heat resistance. Tested against the rest, Alto® Red Race Clutches stand alone at #1, and Hughes Performance stands with Alto® for over 15 years!



Description	Quantity Required	Part #
<b>Aluminum Powerglide</b>		
Reverse Premium Red Race Friction	6	HP3241
Reverse Premium Borg-Warner Race Friction	6	HP3241B
High Gear Friction-OEM Lining	5	HP7240
Reverse Gear Friction-OEM Lining	6	HP7241
High Gear Steel Plate	6	HP7242
High Gear Low Drag Steel Plate	6	HP7242LD
Reverse Gear Steel Plate	6	HP7243
Reverse Gear Low Drag Steel Plate	6	HP7243LD
Premium High Gear Red Race Friction .098"	5	HP7245
Premium High Gear Borg-Warner Friction .098"	5	HP7245B
High Gear Steel Plate .060"	7-10	HP7246
High Gear Kolene Steel w/Turbulator holes .060"	7-10	HP7246TK
Premium High Gear Red Race Friction .061"	7-10	HP7247
High Gear Kolene Steel Plate .070"	6	HP7252K
High Gear Kolene Steel w/Turbulator holes .070"	6	HP7252TK
Reverse Gear Kolene Steel Plate	6	HP7253K
<b>TH350</b>		
Premium Forward/Direct Red Race Friction	9	HP3240
Premium Reverse Red Race Friction	6	HP3241
Premium Reverse Borg-Warner Race Friction	6	HP3241B
Forward and Direct Kolene Steel Plate	9	HP3242K
Reverse Gear Kolene Steel Plate	5	HP3243K
Intermediate Kolene Steel Plate	3	HP3244K
Premium Intermediate Red Race Friction	3	HP3245
Intermediate Premium Red Racing Friction	3	HP3245
<b>TH400</b>		
Premium Forward/Direct Red Race Friction .080"	10	HP2240
Prem. Forward/Direct Borg-Warner Race Fric. .080"	10	HP2240B
Direct Kolene Steel Plate .092"	5	HP2241K
Prem. Intermediate Red Race Friction .080"	3	HP2242
Prem. IntermediateBorg-Warner Race Fric. .080"	3	HP2242B
Intermediate Kolene Steel Plate .100"	3	HP2245K
Prem. Forward/Direct Red Race Fric. .061"	12	HP2246
Forward Kolene Steel Plate .077"	5	HP2247K
Prem. Intermediate Red Race Friction .061"	4	HP2248
Premium Intermediate Red Race Kit (4&4)	1 Kit	HP2249
Premium Fwd/Direct Red Race Kit (6&6)	1 Kit	HP2250
Intermediate Kolene Steel Plate .076"	4	HP2253K
Forward/Direct Kolene Steel Plate .060"	12	HP2254K

Description	Quantity Required	Part #
<b>4L60/4L60E</b>		
3-4 Prem Red Racing Friction .080"	6	HP3740
3-4 Prem Red Racing Friction .062"	8	HP3740A
3-4 Prem B/W High-Energy Friction .062"	8	HP3740AE
Prem Forward Red Race Friction 1985-on	5	HP3742
Prem Low/Reverse Red Race Friction	5	HP3743
Premium Reverse-Input Red Race Friction 1982-87	4	HP3744
Prem Reverse-Input Red Race Friction 1987-on	4	HP3744A
Prem 3-4 Kit, 8&8 .062"/.060" Fric/Steel	1 Kit	HP3745
Prem 3-4 Kit, 8&8 .062"/.060" Fric/Steel (Kolene)	1 Kit	HP3745K
Prem 3-4 Kit, 15 custom one-sided Frictions	1 Kit	HP3745KZ
3-4 Kolene Steel Plates .080"	6	HP3749K
3-4 Kolene Steel Plates .060"	8	HP3749AK
Prem 3-4 Kit, 6&6 .080"/.080" Fric/Steel	1 Kit	HP3750K
Prem Overrun Red Race Friction	2	HP3752
Forward Kolene Steel Plate	4	HP3753K
Reverse-Input Kolene Steel Plate	3	HP3754K
Overrun Kolene Steel Plate	2	HP3756K
<b>4L80E</b>		
Prem Forward/Direct Red Race Friction .080"	10	HP2540
Direct Kolene Steel Plate .092"	5	HP2541K
Prem Intermediate Red Race Friction	4	HP2542
Intermediate Kolene Steel Plate	4	HP2543K
Prem 4th Clutch Red Race Friction	4	HP2544
4th Clutch Kolene Steel Plate	4	HP2545K
Overrun Clutch Friction Plate	3	HP2546
Forward Kolene Steel Plate	5	HP2547K
Prem Intermediate Red Race Friction .061"	5	HP2548
Overrun Clutch Kolene Steel	3	HP2549K
Prem Forward/Direct Friction/Steel Kit 6&6 F/S	1 Kit	HP2550
Prem Forward/Direct Kolene/Steel Kit 6&6 R/S	1 Kit	HP2550K

Description	Quantity Required	Part #
<b>FORD C4</b>		
Premium Direct Red Race Friction	4	HP5240
Premium Direct Red Race Friction .061"	5	HP5240A
Forward/Direct Kolene Steel Plate	8	HP5242K
Premium Forward Red Race Friction	5	HP5245
Prem. Direct Red Race Kit 5&5 5 Fric/Steel (Kolene)	1 Kit	HP5250K
<b>FORD C6</b>		
Premium Direct Red Race Friction	4	HP4240
Premium Direct Red Race Friction .060"	7	HP4240A
Forward/Direct Steel Plate	8	HP4241
Custom sized Direct Steel Plate .059"	7	HP4241A
Forward/Direct Kolene Steel Plate	8	HP4241K
Custom sized Direct Kolene Steel Plate .059"	7	HP4241AK
Reverse Kolene Steel Plate	6	HP4243K
Premium Forward Red Race Friction 1967-76	5	HP4245
Premium Reverse Red Race Friction	6	HP4247
Premium Forward Red Race Friction with Hardened Splines 1977-90	5	HP4249
Premium Direct Friction/Steel Kit 7&7	1 Kit	HP4250
Premium Direct Friction/Steel Kit 7&7 w/Kolene Steels	1 Kit	HP4250K
<b>FORD AOD/AODE/4R70W</b>		
Premium Direct Red Race Friction .071"	6	HP4340
Premium Direct Red Race Friction .059"	8	HP4340A
Direct Steel Plate .070"	4-6	HP4341
Direct Kolene Steel Plate .070"	4-6	HP4341K
Direct Steel Plate .060"	8	HP4341A
Direct Kolene Steel Plate .060"	8	HP4341AK
Premium Intermediate Red Race Friction	4	HP4342
Intermediate Steel Plate	3	HP4343
Intermediate Kolene Steel Plate .069"	3	HP4343K
Intermediate Steel Plate .079"	4	HP4343A
Premium Forward/Reverse Red Race Friction	9	HP4344
Forward/Reverse Steel Plate .068"	8	HP4345
Forward/Reverse Kolene Steel Plate .068"	8	HP4345K
Premium Forward Red Race Friction 1990-on	5	HP4346
Reverse Kolene Steel Plate 1990-on	4	HP4347K
Premium Intermediate Red Race Friction 1992-on	4	HP4348
Forward Kolene Steel Plate 1990-on	5	HP4349K
Premium Direct Kit w/Kolene Steels	1 Kit	HP4350K
Direct Kolene Steel Plate 1990-on (Steel Drum)	6	HP4353K
Direct Kolene Steel Plate 1990-on .059"	8	HP4353AK
Premium Direct Kit w/Kolene Steels 1992-on	1 Kit	HP5350K
<b>E4OD/4R100</b>		
Premium Direct Red Race Friction .077"	5	HP4640
Premium Direct Red Race Friction .059"	8	HP4640A
Forward/Direct Steel Plate	9	HP4641
Forward/Direct Kolene Steel Plate	9	HP4641K
Custom sized Direct Steel Plate .060"	8	HP4641A
Custom sized Direct Kolene Steel Plate .060"	8	HP4641AK
Premium Forward Red Race Friction w/hardened spline	4	HP4642
Reverse Kolene Steel Plate	6	HP4643K
Premium Reverse Red Race Friction	6	HP4644
Premium Overdrive Friction	3	HP4646
Premium Overdrive Red Race Friction 1998-on	3	HP4646A
Premium Intermediate Friction	3-4	HP4648
Premium Intermediate Red Race Friction 1998-on	3-4	HP4648A
Intermediate Steel Plate 2001-on	2	HP4649
Premium Coast Friction	3	HP4650
Premium Intermediate Kit w/custom one-sided frictions	1 Kit	HP4651KZ
Prem Overdrive clutch kit 4+4 w/pressure plate & Kolene 1989-98	1 Kit	HP4652K
Prem Overdrive clutch kit 4+4 w/pressure plate & Kolene 1999-on	1 Kit	HP4652AK

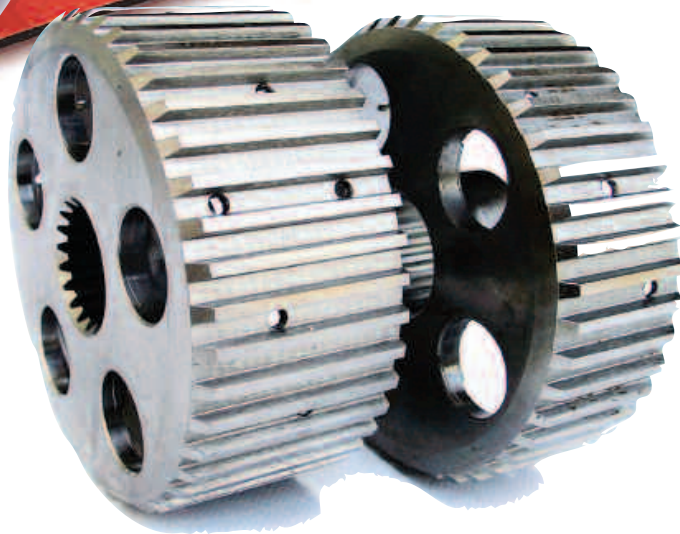
Description	Quantity Required	Part #
<b>FORD 5R110 5 SP. OD</b>		
Premium Direct Red Race Friction	4	HP4740
Direct Kolene Steel Plate	4	HP4741K
Premium Forward Red Race Friction 2003-04	4	HP4742
Premium Forward Red Race Friction 2005-on	4	HP4742A
Forward Kolene Steel Plate	4	HP4741K
Prem. Intermediate Red Race Friction 2003-04	3	HP4744
Prem. Intermediate Red Race Friction 2005-on	3	HP4744A
Intermediate Kolene Steel Plate .127" 2003-04	3	HP4745K
Intermediate Kolene Steel Plate .116" 2005-on	3	HP4745AK
Premium Low/Reverse Red Race Friction	6	HP4746
Low/Reverse Kolene Steel Plate	6	HP4747K
Premium Overdrive Red Race Friction	3	HP4748
Overdrive Kolene Steel Plate	3	HP4749K
Premium Coast Red Race Friction	3	HP4750
Coast Kolene Steel Plate	3	HP4751K
Prem.Direct Kit w/Cust 1side Reds & Kolenes 2003- on	1 Kit	HP4750KZ
Prem.forward Kit w/Cust 1side Reds & Kolenes 2003- on	1 Kit	HP4752KZ
<b>CHRYSLER TF6</b>		
Front/Rear Kolene Steel Plate	7	HP1241K
Premium Direct Red Race Friction	4	HP1245
Premium Forward Red Race Friction	4	HP1247
<b>CHRYSLER TF8</b>		
Premium Direct Kit (6+6) Reds & Kolenes	1 Kit	HP1250K
Premium Direct Red Race Friction	4	HP1240
Forward/Direct Kolene Steel Plate	7	HP1242K
Premium Forward Red Race Friction	4	HP1244
<b>CHRYSLER A500</b>		
Forward/Direct Kolene Steel Plate	8	HP1241K
Premium Direct Red Race Friction	5	HP1245
Premium Forward Red Race Friction	4	HP1247
Overdrive Direct Kolene Steel Plate .068"	7	HP1543K
Overdrive Direct Kolene Steel Plate .049"	8	HP1543AK
Premium O/D Direct Red Race Friction	8	HP1544
Overdrive Kolene Steel Plate	3	HP1545K
Premium Overdrive Red Race Friction	4	HP1546
<b>CHRYSLER A518/A618 (46RE/47RE)</b>		
Premium Direct Red Race Friction	5	HP1540
Forward/Direct Kolene Steel Plate	8	HP1541K
Premium Forward Red Race Friction	4	HP1542
Overdrive Direct Kolene Steel Plate .068"	8	HP1543K
Overdrive Direct Kolene Steel Plate .049"	9	HP1543AK
Premium O/D Direct Red Race Friction	10	HP1544
Overdrive Kolene Steel Plate	5	HP1545K
Premium Overdrive Red Race Friction	5	HP1546
Premium Direct Kit (6+6, Reds & Kolenes)	1 Kit	HP1550K
<b>CHRYSLER 45RFE 5 SP. OD</b>		
Premium Underdrive Red Race Friction	4	HP1740
Underdrive Kolene Steel Plate	4	HP1741K
Premium O/D & 3rd Red Race Friction	4	HP1742
O/D & 3rd Kolene Steel Plate	3-4	HP1743K
Premium Reverse Red Race Friction	2	HP1744
Reverse Clutch Kolene Steel Plate	1-2	HP1741K
Premium 4th Clutch Red Race Friction	3	HP1746
4th Clutch Kolene Steel Plate	3	HP1747K
Premium 2nd Clutch Red Race Friction	2	HP1748
2nd Clutch Kolene Steel Plate	2	HP1749K
Premium Low/Reverse Red Race Friction	6	HP1750
Low/Reverse Kolene Steel Plate	6	HP1751K

\*Turbulator holes are the latest technology adapted from OEM applications used to "wipe" oil from friction plates for a more positive shift.





## Performance Parts



### Heavy Duty Clutch Hubs

The Hughes Heavy Duty hubs are recommended for all Powerglides and TH400s and will increase the strength and reliability of your transmission

Part #	Description
HP7473	Aluminum Powerglide-Aluminum Clutch Hub
HP7483	Aluminum Powerglide-Steel Clutch Hub for 5&6 clutch count
HP7483P	Aluminum Powerglide-Custom sized Hub for 10&10 clutch count with .061" frictions and .060" steels.
HP2226	TH400 HD Forward clutch hub.

### Specialty Items

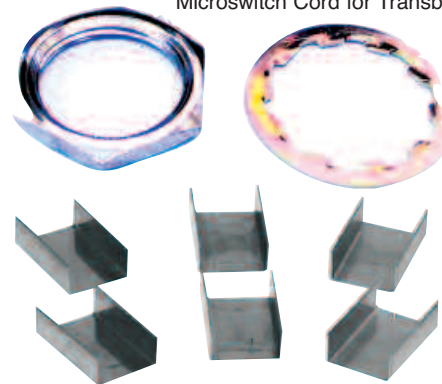
Description	Part #
TF8 Intermediate Band Lever 4:2 ratio	HP1469
TH400 Transmission Detent Solenoid	HP2295
TH400 Transmission Bearing Kits (3)	HP2296
TH350 Transmission Steel Case Positioner-prevents rear sprag spinout	HP3255
TH350 Transmission Steel Case Positioner-prevents rear sprag spinout without support assembly	HP3255X
GM 4L60 Transmission Steel Case Positioner	HP3757
GM 4L60E Crankshaft Adapter for LS1 Motor	HP3795
Microswitch and Cord for Transbrake with 18 gauge wire	HP3884
C6 Transmission "F" Band Lever	HP4269
Aluminum Powerglide Filter Extension	HP6225
TH350 Filter Extension	HP3225
Mopar 46/47 RE Filter Extension	HP1525
Aluminum Powerglide Billet Plug for modulator threaded hole (for full manual)	P7442-10
Aluminum Powerglide planetary Lube Bushing	HP7477
Aluminum Powerglide Case Saver Kit	HP7487
Transmission Drain Plug Kit for oil pan	HP8058
Line-lock Solenoid Assembly for brake system	HP8611
Chromed Dustcover for Aluminum Powerglide	HP9710
Steel Dustcover for TH350 or TH400	HP9711

### Competition Powerglide Shift Levers

Part #	Description
HP7484C	Universal
HP7484R	Powerglide Universal Rear Exit



Microswitch Cord for Transbrake w/18 Gauge Wire



Powerglide Case Saver Kit  
HP7487

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BEST!**

## Warranty Information

### Hughes Limited Warranty

All Hughes Performance converters are warranted for one (1) year from date of purchase against defective parts and workmanship. All returns must be accompanied by a copy of the invoice. All Hughes Street/Strip Transmissions are warranted unconditionally for 90 days against defective parts or workmanship. Race Transmissions are warranted for 30 days. During the warranty period, Hughes will repair or replace any parts determined to be defective due to workmanship or material. Shipping charges for the return of any defective parts must be prepaid by the purchaser. Warranty of transmissions is limited to replacement of all friction materials, seals and gaskets. Additional charges will be made for damaged parts due to improper installation, misuse or abuse, improper cooling or low fluid level. This Hughes warranty is limited to the value of the part/s covered by this warranty and is in lieu of all other warranties expressed or implied, including the warranty of merchantability and fitness of the product for any purpose. No other consequential damages or other charges, implied or expressed are allowed.

### Not Covered

1. Failure of a Hughes product due to improper installation or maintenance; failure to provide adequate cooling or maintain proper fluid level; misuse; abuse; unauthorized repairs.
2. Removal or replacement costs, transmission oil or shipping costs.
3. Damage to related components.
4. Cost incurred due to downtime of vehicle.
5. Normal wear and tear.

UNDER NO CIRCUMSTANCES WILL HUGHES PERFORMANCE RACE PRODUCTS BE HELD RESPONSIBLE FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE INSTALLATION OR USE OF ANY HUGHES PERFORMANCE PRODUCT. The installation of any Hughes products in a competition or off-road vehicle (or any street driven vehicle operated in an illegal manner) shall indicate an awareness on the part of the customer that he/she is modifying said vehicle to compete with and operate it in a potentially hazardous environment, and accepts full responsibility for consequential damages and liabilities, indemnifying Hughes Performance Race Products.

