

Especially for YOU: Sonnax Announces Tool Shop, Zip Valves

Sonnax recently unveiled two important initiatives for transmission shops and rebuilders: the Sonnax Tool Shop and Zip Valve™ products.

Sonnax Tool Shop:

The Sonnax Tool Shop delivers better pricing and availability on over 70 popular F-Tool and Vacuum Test products, with the convenience of delivery from your local participating distributor. The goal of this pilot program is simple: help you get the tools you want, when you want them, at a fair price. A complete list of included tools and MSRPs is posted at www.sonnax.com/tool-shop. The MSRP is also listed on all individual part pages so it's easy to see which kits and parts are included.



“Reaming the bore and installing an oversized valve is one option that can help you deliver a quality rebuild for your customer, but tool pricing and availability shouldn't be a barrier or limitation,” says Product Line Manager Maura Stafford. “A key benefit we wanted to deliver to you is this: If a Tool Shop part or kit isn't readily available from your regular local branch, you can call other Sonnax distributors without worrying that you'll have to pay more.”



Sonnax Zip Valves:

Need or prefer a drop-in repair? Sonnax Zip Valves are the answer.



Sonnax Zip Valve™ is a new brand covering the hundreds of drop-in valves and Zip Kits rebuilders have trusted for years to overcome chronic transmission problems. Zip Valves can be found at www.sonnax.com/zip-valve, where more than 350 different products covering 200-plus transmissions are available. From regulating valves, end plugs and accumulator pistons to comprehensive valve body rebuild kits, Zip Valves address the root cause of hydraulic problems, so you can fix — rather than mask — chronic problems.

Continued on page 2...

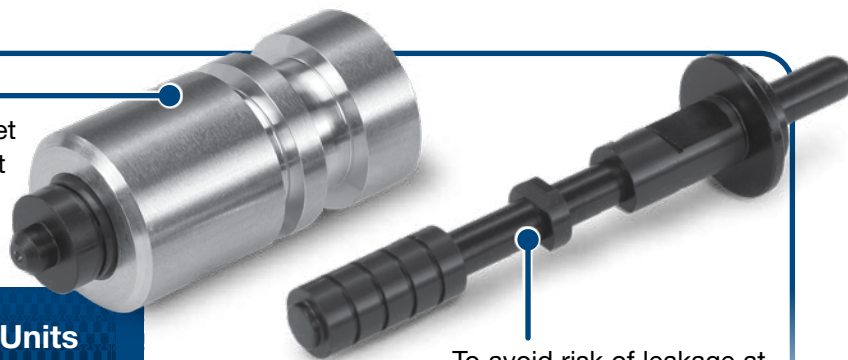
Through customer calls, emails, surveys and conversations at industry events, we heard you loud and clear: some Sonnax tools have been hard to get, and the prices were too high. We brought your concerns to our distributor partners, and worked together to build the Sonnax Tool Shop.

“At the Sonnax Tool Shop, the price you see is the price you pay,” says Vice President of Sales Mark Kaplan. “We're grateful for the support of distributors in offering MSRP-or-better prices and 1–2 day delivery on this selection of tools to all of their customers in the U.S. and Canada.” All distributors are welcome, and chances are, yours is already participating.



...Continued from page 1.

Hardcoat anodized aluminum valves and billet aluminum sleeves protect against future wear.



To avoid risk of leakage at operating temperature, Zip Valves are made of steel ONLY when the OE design calls for it.

Find Over 350 Zip Valves for 200+ Units at www.sonnax.com/zip-valve

It's easy to identify these parts anywhere on the Sonnax website by the new, drop-in "ZIP" logo that accompanies each one. Just like site visitors can narrow down search results by unit or part type, choosing to display only Zip Valves is now another option for quickly finding just the right repair.

"When you've got a build on your bench, it's our job to provide you with a wide range of options you can trust," says Sonnax President Steve Boyer. "Whether it's a drop-in or oversized valve, or a fully remanufactured valve body, we strive to have the best selection of highest-quality solutions available for our customers." ◀

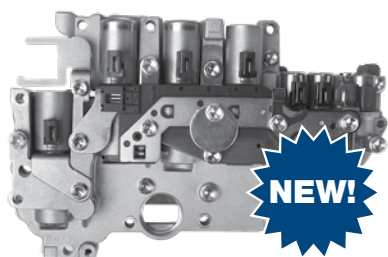
Tell us what you think of the Sonnax Tool Shop and Zip Valves!

- Email us at info@sonnax.com
- Call our Product Support Team at (802) 463-0288
- Socialize with Sonnax: Message us via Facebook or Instagram

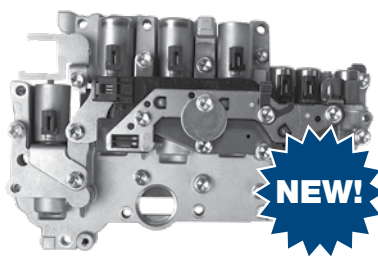
Toyota/Lexus & Ford 6-Speed Remanufactured Valve Bodies

Quality, Performance & Value You Can Trust

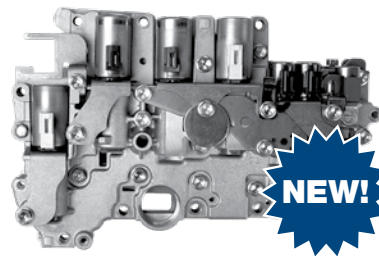
U660E/F '11-Earlier
with 3 Pressure Switches
Part No. TOY183



U660E/F '12-Later
with 1 Pressure Switch
Part No. TOY184



U760E/F
Part No. TOY185



- Remans Feature Genuine Sonnax Parts
- Limited Lifetime Warranty
- Hydraulically & Electronically Tested, Ready to Bolt Up

These premium-quality remanufactured valve bodies allow rebuilders to easily address a variety of common concerns. To guarantee the highest level of operational performance, each valve body is tested on state-of-the-art equipment to verify that pressures match OE specification.

6R140
Part No. F06R140



The Evolution of the 6R80

How to Identify Over a Decade of Different Designs

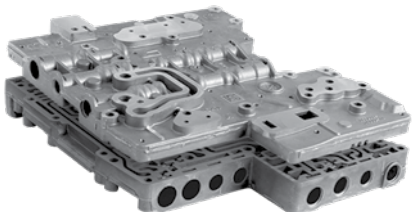
The 6R80 has gone through many different design changes since its inception in 2009. This transmission has many similar parts and components like the 6HP26 family, although it does not go by a Gen. 1 and Gen. 2 designation, so we will refer to them as designs 1 through 4 and list the changes as they came along with the years associated with them.

6R80 1st Design first came out with the same brown and black connector solenoids that were on the 6R60 and 6R75. In '10, the TCM was removed from the molded lead frame and the solenoids were replaced by the banded solenoids with clear connectors that we are used to seeing today (**page 4, Figure 2**).

6R80 2nd Design started on Oct. 3, 2010, which is really '11 production. This design includes '14 models. Many changes were made to this design internal to the transmission, as Ford was working to eliminate a common complaint of a 2-1 downshift clunk that plagued the 1st design 6R80 and even the 6R60, 6R75 applications. Ford redesigned the rear planetary assembly and added a Low diode, which does not require the Low Reverse clutch to come back on when coasting down to 1st Gear. This added Low diode eliminated these complaints. This change made it possible to remove the D2 hydraulic circuit, as this circuit was part of the Low Reverse balance and/or release circuit. So an easy ID is the empty bore in the D regulator bore in the upper valve body (**page 5, Figure 3**).

6R80 3rd Design started in '15 models. This same valve body is used for 6R100 applications. A simple ID for these is the lack of D2 valve in the upper valve body and a hole in the lower valve body to accept a two-inlet sump filter (**page 5, Figure 4**). The 3rd design also had a change to the pressure regulator sleeve and valve (**page 4, Figure 1**). Note: 3rd design does not have stop/start capability, as it does not have the upper valve body that is plumbed for the external pump.

6R80 4th Design also started in '15 models with stop/start technology. It has the same lower valve body as the 3rd design, but the upper valve body has the passages to connect to the external pump for stop/start applications (**page 5, Figure 6**).



See Full ID Guide on Pages 4 & 5 ►



6R80 ('15-Later), 6R100 Zip Kit®

Part No. 6R80L-6R100-ZIP

Sonnax now offers a Zip Kit for the 6R80 ('15-later) and 6R100 transmissions. This kit targets the root cause of multiple shift and engagement issues, pressure losses and part breakages due to excessive line pressure.

- Drop-in Zip Valve™ parts install quickly and easily, no reaming or special tools required
- Uniquely designed parts prevent pressure loss in the main line, solenoid regulator, reverse, clutch control and solenoid apply circuits
- Detailed technical booklet included with in-depth rebuild and inspection tips for comprehensive valve body repair



O-Ringed Internal End Plug Kit (4 End Plugs & 11 O-Rings)



Large Small

O-Ringed End Plug Kit (10 End Plugs & 15 O-Rings)



Pressure Regulator Sleeve



Valve Body Accumulator Piston & Spring Kit (6 of Each)



Clutch A Control Boost Valve & Sleeve Kit



Replacement Solenoid O-Rings (18 Various Pieces, Various Sizes)



Testing Parts



| Design | Years | Application | Lower Valve Body Casting | Upper Valve Body Casting | Other Identifiers |
|------------------------------|----------------|--------------|--------------------------|--------------------------|---|
| 1st Design | 2009–2010 | 6R80 | 9L3P-7A101-BB | 6L2P-7A092-EB | 2009 Brown and black connector solenoids. 2010-Later TCM removed, new solenoids with clear connectors. |
| 2nd Design | 10/3/2010–2014 | 6R80 | 9L3P-7A101-BB | BL3P-7A092-BA | D2 Reg. valve eliminated from upper casting. D2 passage eliminated in upper casting. |
| 3rd Design | 2015-Later | 6R80 & 6R100 | FL3P-7A101-AA | FL3P-7A092-BA | D2 Reg. valve eliminated from upper casting. D2 passage eliminated in upper casting. Lower casting has extra hole to connect to two-pickup filter. |
| 4th Design | 2015-Later | 6R80 | FL3P-7A101-AA | FL3P-7A092-AA | D2 Reg. valve eliminated from upper casting. D2 passage eliminated in upper casting. Lower casting has extra hole to connect to two-pickup filter. Upper casting has case passages to stop/start external pump. |

Figure 1
6R80 Changes in Pressure Regulator & Sleeve Sizes

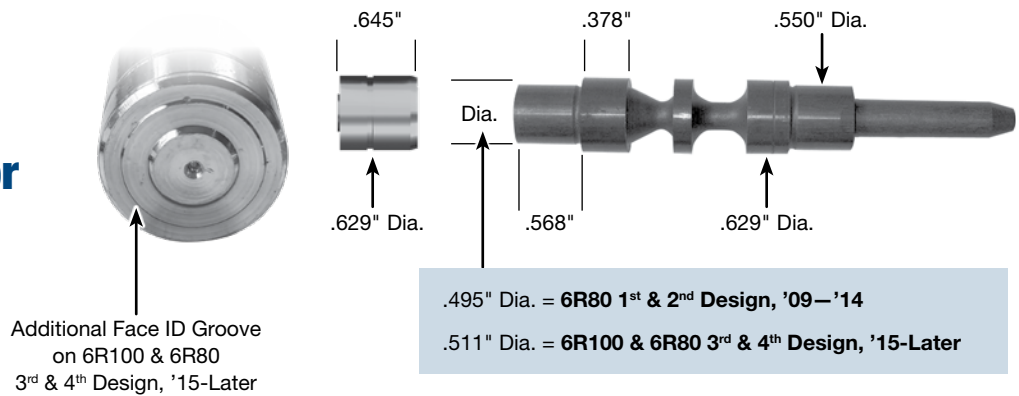
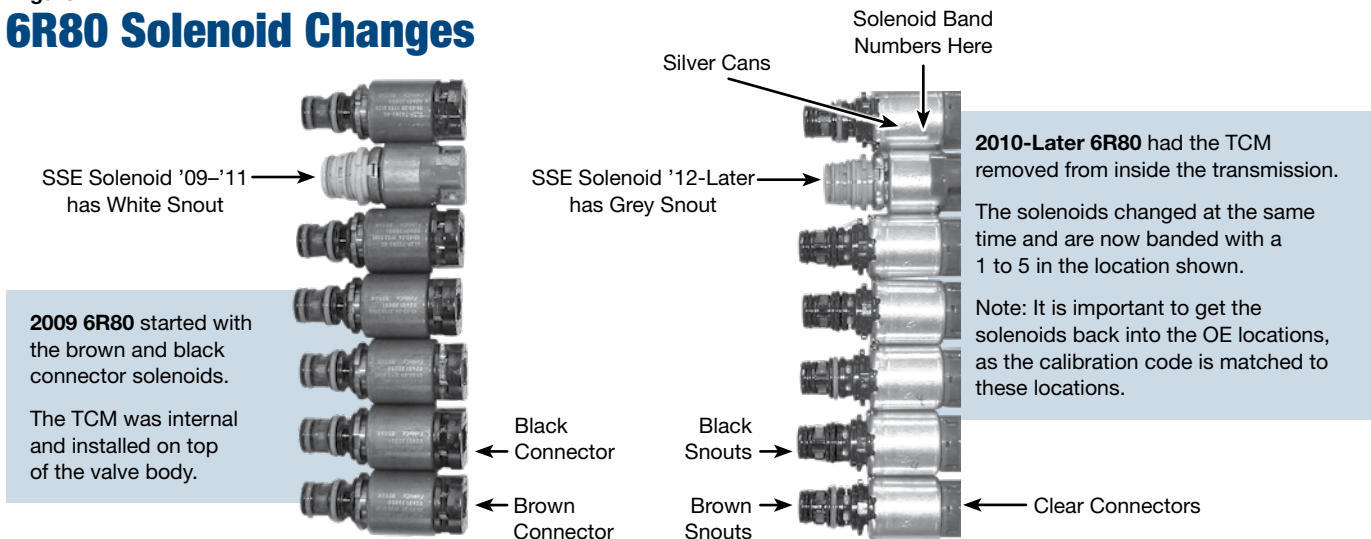


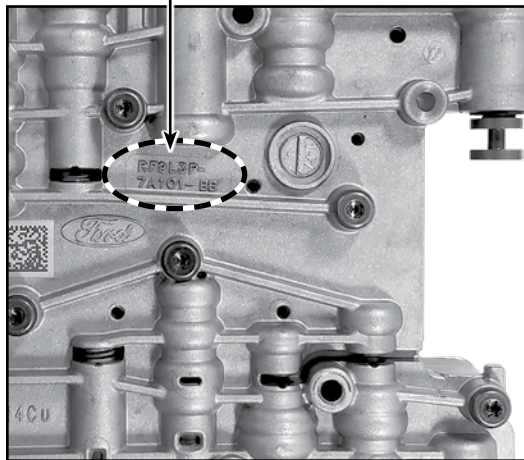
Figure 2
6R80 Solenoid Changes



1st Design has D2 regulator valve,
2nd Design and later have empty bore.

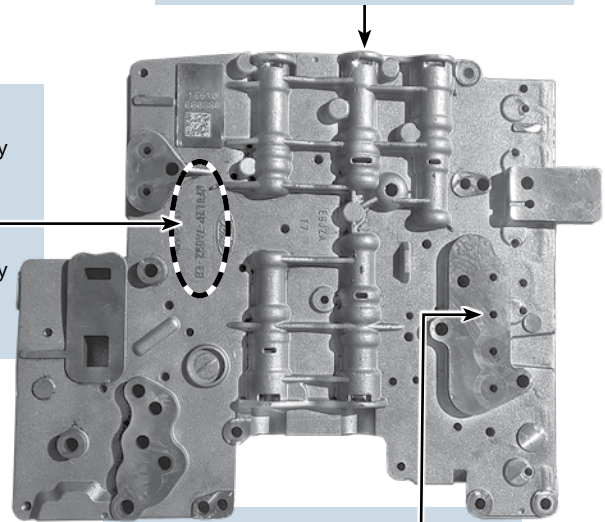
1st & 2nd Design Figure 3

Lower Valve Body Casting Number 9L3P-7A101-BB



1st Design
Upper Valve Body Casting Number 6L2P-7A092-EB

2nd Design
Upper Valve Body Casting Number BL3P-7A092-BA

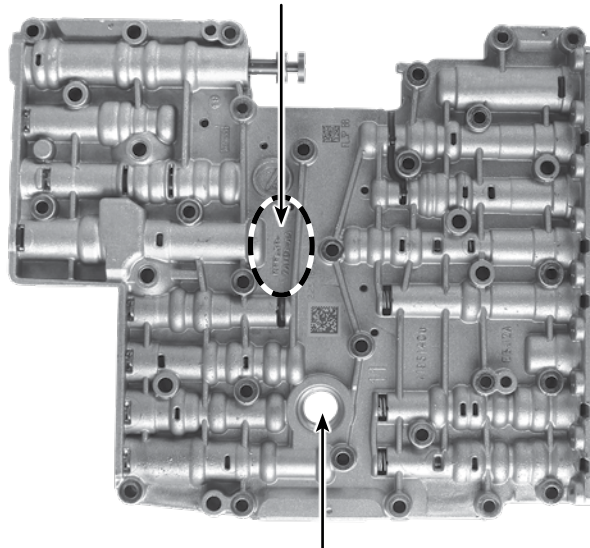


1st Design has a connection hole to D2 circuit. In 2nd design and later, the hole has been eliminated.

3rd & 4th Design Figure 4

6R80 & 6R100 Lower Casting

Lower Valve Body Casting Number FL3P-7A101-AA



Hole here to connect to the two-pickup filter that is used in stop/start applications.

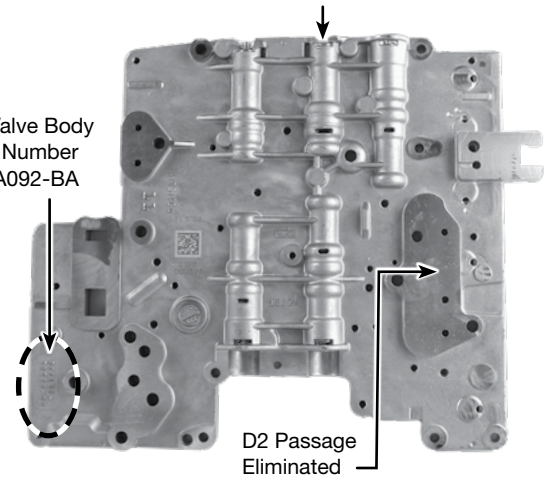
Note: 3rd Design does not use the stop/start feature. There is a rubber seal that inserts here for the two-pickup filter for the stop/start feature on 4th design.

3rd Design 6R80 & 6R100 Upper Casting Figure 5

Upper Casting

D2 Regulator Valve Eliminated (Empty Bore)

Upper Valve Body Casting Number FL3P-7A092-BA



D2 Passage Eliminated

4th Design 6R80 Upper Casting Figure 6

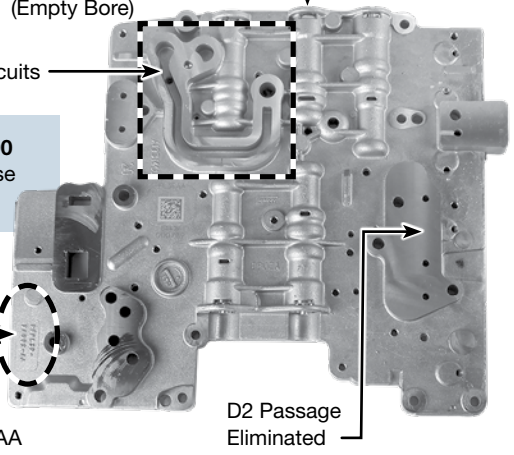
D2 Regulator Valve Eliminated (Empty Bore)

Figure 6

Stop/Start Circuits

Note: 6R100 does not use this design.

Upper Valve Body Casting Number FL3P-7A092-AA



D2 Passage Eliminated

Upgraded Bushings & Bearings for the Most Reliable, Durable Builds

6L50/80/90 Pump Bushing



Part No. 104034A

- Impregnated with highly wear-resistant PTFE — not simply adhesive-coated — for unmatched durability
- Excellent fatigue and seizure resistance
- Precision fit and function assure long bushing life



Sonnax PTFE-impregnated pump bushing **104034A** adds durability to any GM 6L50, 6L80 or 6L90 build. It's a direct replacement, OE-style part ideal for replacing worn components or those damaged from an internal converter failure.

845RFE, ZF8 Bushing Kit



Part No. 35030-01K

- Upgraded material composition outperforms OE bushings
- Superior wear characteristics eliminate premature deterioration
- Bushings also sold separately

OE bushings in Chrysler 845RE and ZF 8-speed units (ZF8HP45, ZF8HP50, ZF8HP55, ZF8HP70, ZF8HP75) have a tendency to wear out prematurely due to sub-optimal material composition. This wear can lead to bushing failure, harsh shifts, burnt clutches and gear ratio or solenoid codes. Sonnax improved bushing kit **35030-01K** restores worry-free operation.



Thrust Bearing Kits **Reduce noise and prevent failure with these high-quality bearings from Sonnax.**

GM Gen. 1 & 2 6T40/45/50

Part No. SBK-G40



- 4-5-6 Clutch Drum/Case
- 4-5-6 Front Hub
- 4-5-6 Rear Hub
- Input Planet/Reaction Planet
- Input Sun
- Output Planet/Input Sun
- Output Planet/Input Planet
- Drive Sprocket/Output Sun
- Stator/Drive Sprocket Hub
- Driven Sprocket/Case



Ford Gen. 1 6F35 Part No. SBK-F35A

Ford Gen. 2 6F35 Part No. SBK-F35B

- 4-5-6 Clutch Drum/Case
- 4-5-6 Front Hub
- 4-5-6 Rear Hub
- Input Planet/Reaction Planet
- Input Sun
- Output Planet/Input Sun
- Output Planet/Input Planet
- Drive Sprocket/Output Sun
- Stator/Drive Sprocket Hub
- Driven Sprocket/Case
- Bell Housing/Diff



Optimize 5R110W Direct Clutch Durability

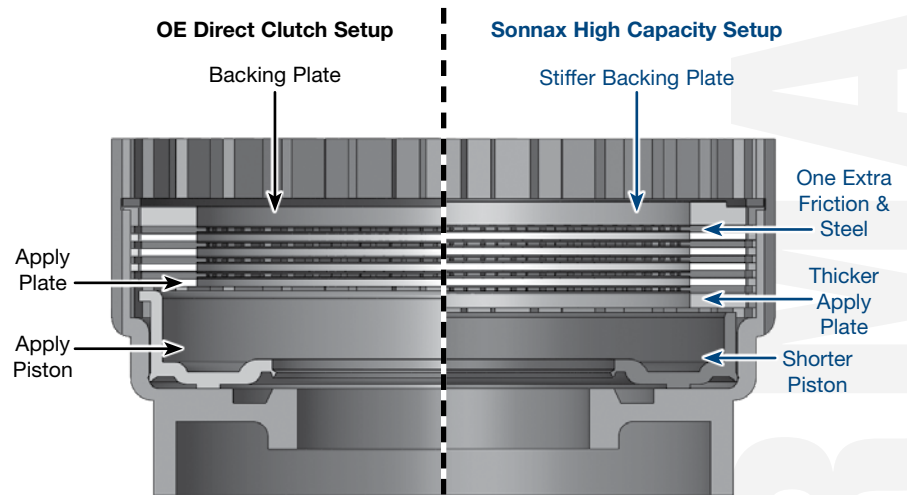


High Capacity Direct Clutch Apply Piston Kit Part No. 36965-01K

- Use with stock thickness clutches and steels plus one additional friction plate
- Thicker apply and backing plates design outperforms OE and thinner aftermarket plates
- Increased heat dissipation improves durability in high-energy shifts

Ford 5R110W transmissions often suffer failure of the direct clutch assembly due to OE design shortcomings: insufficient clutch capacity, poor heat dissipation plus flexing of the apply and backing plates, especially when pressures are increased.

Sonnax high capacity direct clutch apply piston kit **36965-01K** addresses these weak areas with an optimal balance of increased clutch capacity, improved thermal mass and stiffer apply and backing plates.



Performance Adapter Yokes for Mustang Driveshafts

- Precision-machined from 6061-T6 aluminum for excellent fit and balance
- Helps eliminate the troublesome giubo and/or CV joint(s)
- Ideal for chassis swaps

Muscle cars modded with more power are often candidates for an upgraded driveshaft. These Sonnax 6-bolt adapter yokes make it easy to convert a two-piece driveline to a one-piece, U-joint style driveline. Combined with Sonnax tubing and weld yokes, these unique flanges dramatically increase strength and durability while reducing future maintenance costs.

Ask your driveshaft shop to spec out a build with Sonnax aluminum components.



| Mustang Type* | Part No. | Bolt Circle Dia. | Bolt Hole Dia. | Flange O.D. | U-Joint Series |
|---------------------------------------|-------------|------------------|----------------|-------------|----------------|
| Automatic '05-'14 & Manual '05-'19 | T33-ALFY-04 | 95mm | .438" | 4.720" | 1330 |
| | T35-ALFY-09 | 95mm | .438" | 4.720" | 1350 |
| Automatic '15-'19 | T35-ALFY-10 | 93mm | .438" | 4.590" | 1350 |

Listed Flanges Come With Bolts & Washers

*These yokes are custom parts and may fit more models than noted above. Measure flange O.D., output flange bolt hole and bolt circle diameters to determine if a yoke is appropriate for your build.

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Transmission Report

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October 2020

Featured in this Issue

- **Introducing the Sonnax Zip Valve™**
- **Great New Prices on Sonnax Tools**
- **New 6-Speed Remanufactured Valve Bodies**
- **6R80, 6R100 Zip Kit® & Unit ID Guide**
- **New Bushings, Bearings & Performance Parts for Better Builds**

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Sonnax is an industry leader in the cutting edge design, manufacture and distribution of the highest quality products to the automotive aftermarket, commercial vehicle industries, and industrial sectors utilizing drivetrain technology.



Introducing the Sonnax Zip Valve™

Best-in-Class, Drop-In Repairs for Common Shift Problems

- **Quickly address & correct the root cause of common complaints**
- **Easy-to-install components, with quality & performance that can't be beat**
- **Wide range of choices, from single valves to comprehensive Zip Kits**



**Over 350 Zip Valves
Available — Details Inside!**