

SK®6T40-G2

Fits: Gen 2 6T30, 6T40, 6T45 & 6T50

Corrects/Prevents/Reduces

Ratio or Solenoid Performance Codes, Erratic TCC or TCC Hunting, Includes NEW drop in Pressure Regulator Valve that reaches beyond the worn area in the bore. Includes oversize Actuator Feed Limit valve (See note.)

Note: This product requires

TransGo® # **AFL-G2-TK** Tool kit to repair the Actuator Feed Limit system.



2621 Merced Ave. El Monte CA 91733
Product Support (626) 443-7451

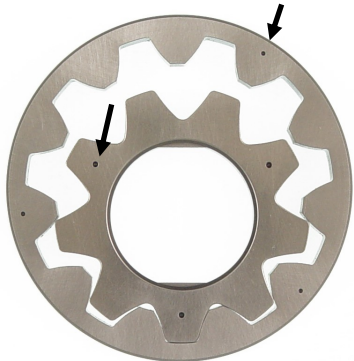
Does Not Fit Gen 1 (Has Pressure Switches)
Does Not Fit Gen 3 (Has Chain Driven Pump)

Warning: A Gen 2 PR Valve mistakenly installed into Gen 1 Pump—*Can Cause Severe Damage!*

The transition from Gen 1 to Gen 2 units occurred from 2012-2014, be careful! Use the TEHCM to ID the system (See page 4). Gen 1's have pressure switches, Gen 2's do not. All 6T30's, 40's, 45's & 50's: The TEHCM type and the Transmission version are matched for Vehicle, Generation & Programming. Do not cross-mix them.

Pump Gear Info

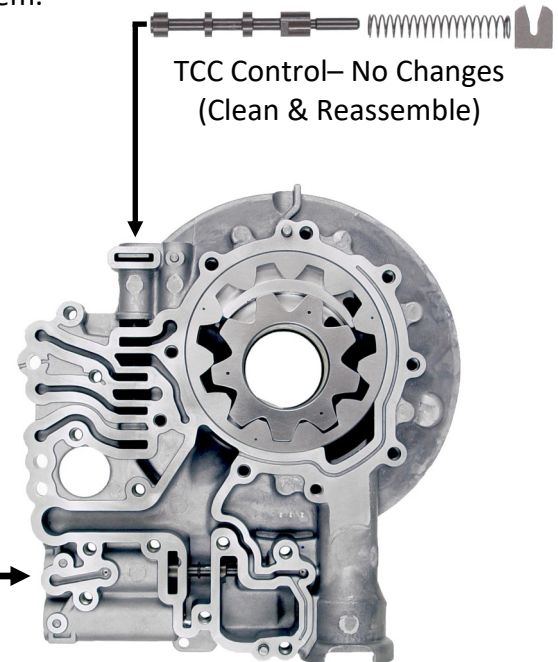
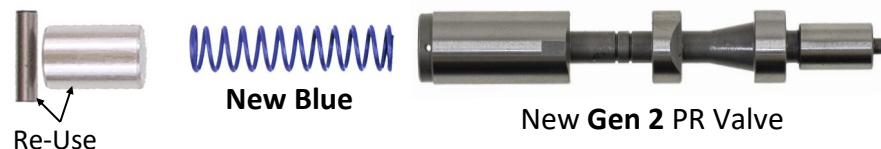
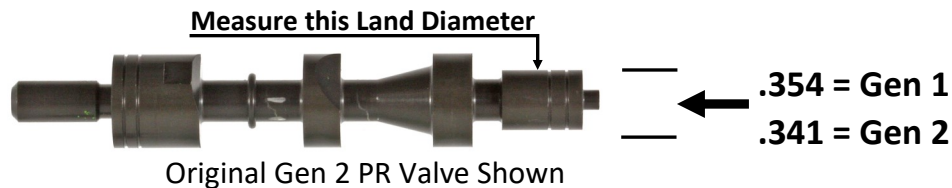
Dots on both gears face up at you when installed correctly!



Step 1 ID the PR valve to use the correct Product.

Gen 1's inner land on **original** PR valve measures .354" Use: SK 6T40-A

Gen 2's inner land on **original** PR valve measures .341" Use: SK 6T40-G2



Step 2 If original inner PR land measured .341" discard original Pressure Regulator valve & spring. Install **New Pressure Regulator Valve**, New **Blue** Spring, Reuse end plug & pin.

Main Body Repairs

To repair the AFL bore requires the TransGo # **AFL-G2-TK** Tool kit.

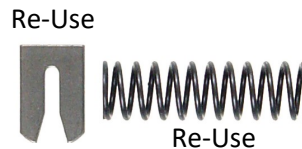


Tool Kit fits 3 **different** transmissions, just use the correct reamer guide.
Fits All **Gen 2 Vb's** 6F35's, 6T40's & 6T70's.

Tip: *Have an old parts washer?*

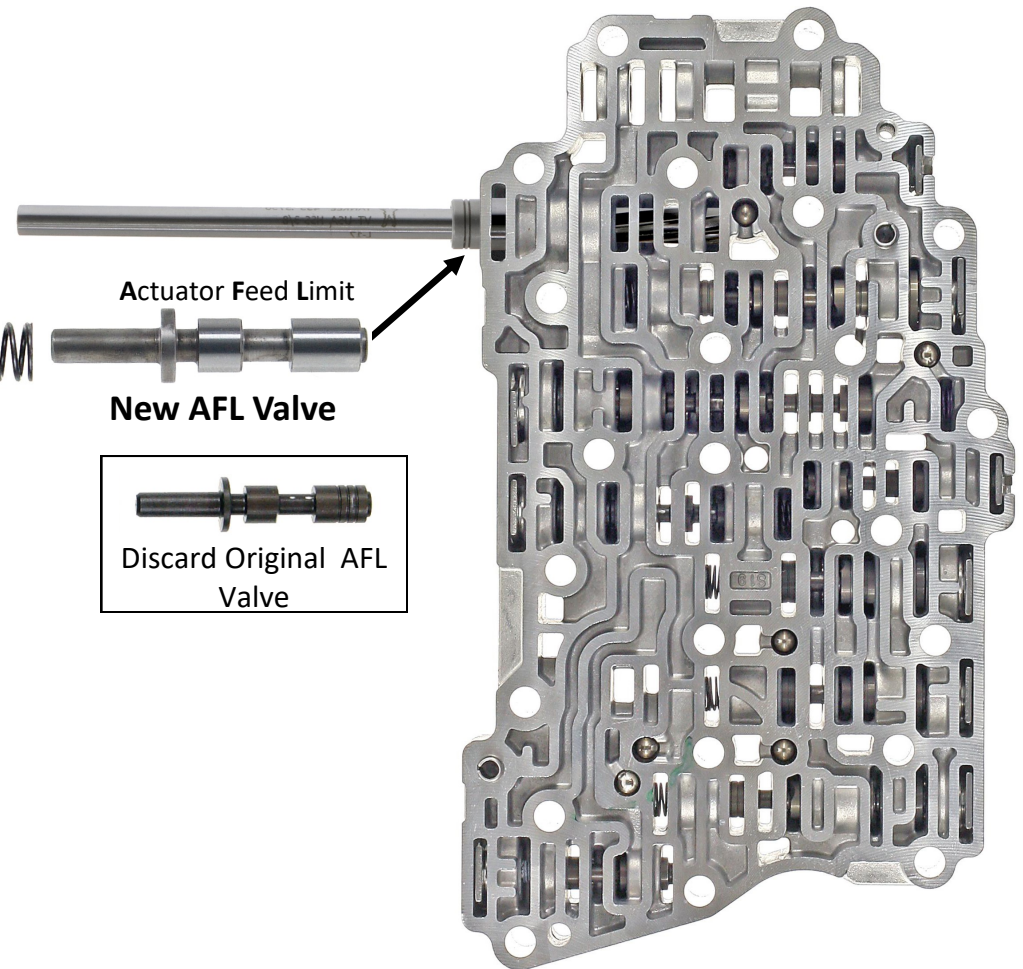
Get 5 gals of WD-40 (approx \$100 bucks) and you'll have the perfect wet tank to keep the VB bore and reamer cool while you ream aluminum valve bodies. Flushes chips out as you go.

Step 1. Disassemble AFL Valve lineup
Save the Retainer & Spring.



Step 2. The **6T40 Gen 2** uses the "**2 Groove**" reamer guide. Place the 2 groove guide into the bore till it stops, with the stepped end out as shown. Use lots of WD-40 and **low speed** on your favorite portable drill, let the reamer do the cutting until it bottoms in the bore. Don't force the reamer, bore finish & Reamer life require a **slow inward movement** and lots of WD 40.

Step 3. After reaming, clean the bore and the new AFL Valve furnished in this kit. Make sure the valve is free in the bore. Install the **New AFL Valve** and reuse original spring and retainer.



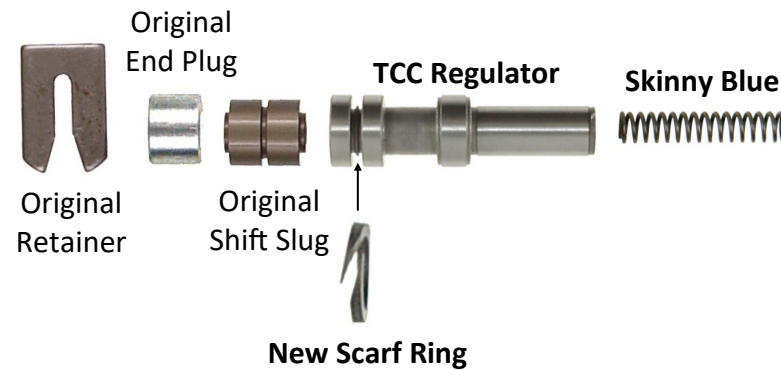
Main Body Repairs

Check Ball Locations:

Ⓒ = (6) .250 Check Balls

Step 1

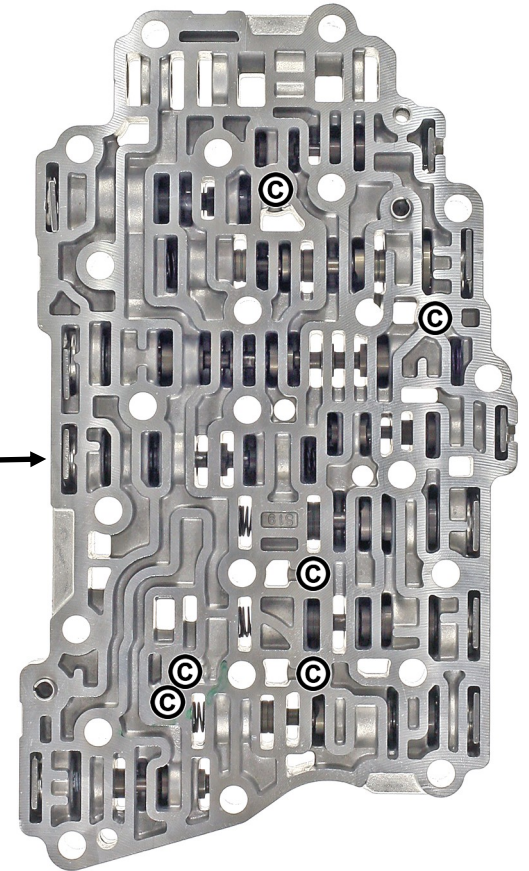
Discard original TCC Regulator Valve and spring. Clean the **New TCC Regulator Valve** provided and test fit it into the clean VB bore. If it moves freely, remove it and put a small dab of assembly gel into the groove of the new valve followed by the **NEW Scarf Cut Ring**. Now roll the small **o-ring** provided on top of the scarf cut ring and place it in the freezer for 15 minutes. This will “size” the ring into the groove. **Note:** The o-ring is only used as a sizing tool.



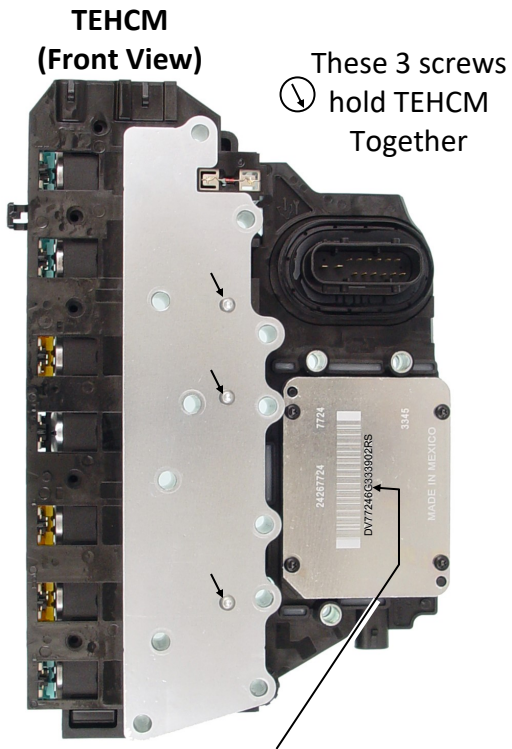
Step 2

To install, roll the o-ring **off** the valve and set it aside. Insert the **NEW Skinny Blue Spring** into the hollow end of the new valve and insert new valve and spring into the bore while it's still cold, followed by the original Shift Slug, End Plug & Retainer. It will go right in if the outer diameter of the ring is flush with the new valve. Never force the valve in.

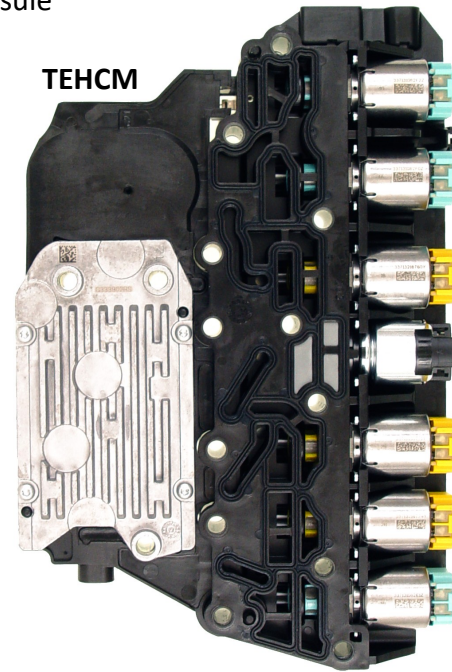
Once you install the valve and ring– **DO NOT REMOVE IT!**



Additional Data



Quick VB ID
Check ball capsule
Gen 2 Only.



Gen 2 solenoids
3 green 3 yellow 1 black

- PCS3- L/R456
- PCS5- 1234
- TCC- Control
- On/Off- CS/TCC
- PCS2- 35R
- PCS4- 26
- LINE- EPC



Solenoid Screen

IF 8th Digit of TEHCM ID is a:
Number (1,2,3) it's a 1st Gen.
Letter (A,B,C) it's a 2nd Gen.

PCS-4,2 & TCC Normally-Low (output)
PCS-3,5 & EPC Normally-High (output)

All Solenoids = 4.0-5.0 Ohms
Except On/Off = 16-20 Ohms

Component Apply Chart

Gear	1234	Low/ Rev	Low One-way	35R	456	26
P/N		on				
R		on		on		
D1	on	on*	hold			
D2	on					on
D3	on			on		
D4	on				on	
D5				on	on	
D6					on	on

* On at a stop, turns off during initial acceleration.



Mr. Shift

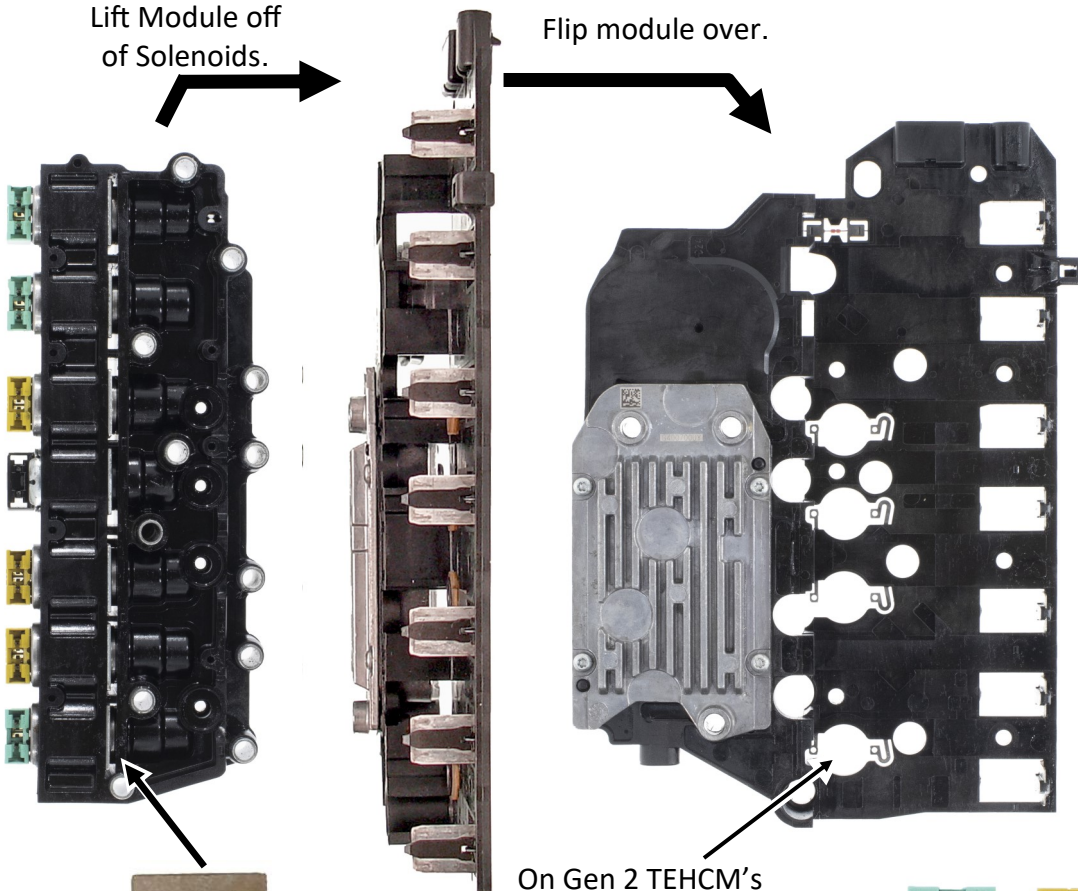
No Forward is Often a Bad PCS5
No Reverse is Often a Bad PCS2
Neutral on the 3-4 is Often a Bad PCS3

Let us hear from you!

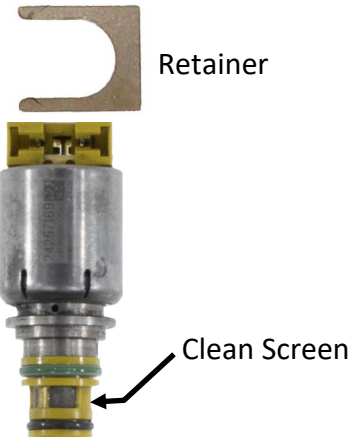
Solenoid Cleaning

Lift Module off of Solenoids.

Flip module over.

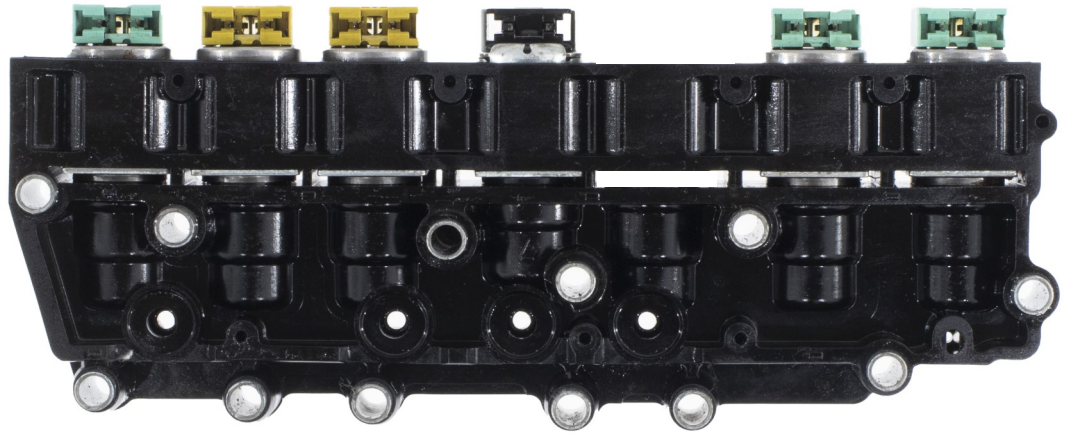


Remove 1 solenoid at a time, clean the solenoid, lube seals & re-assemble with original retainer.
Solenoids are different! Use care!



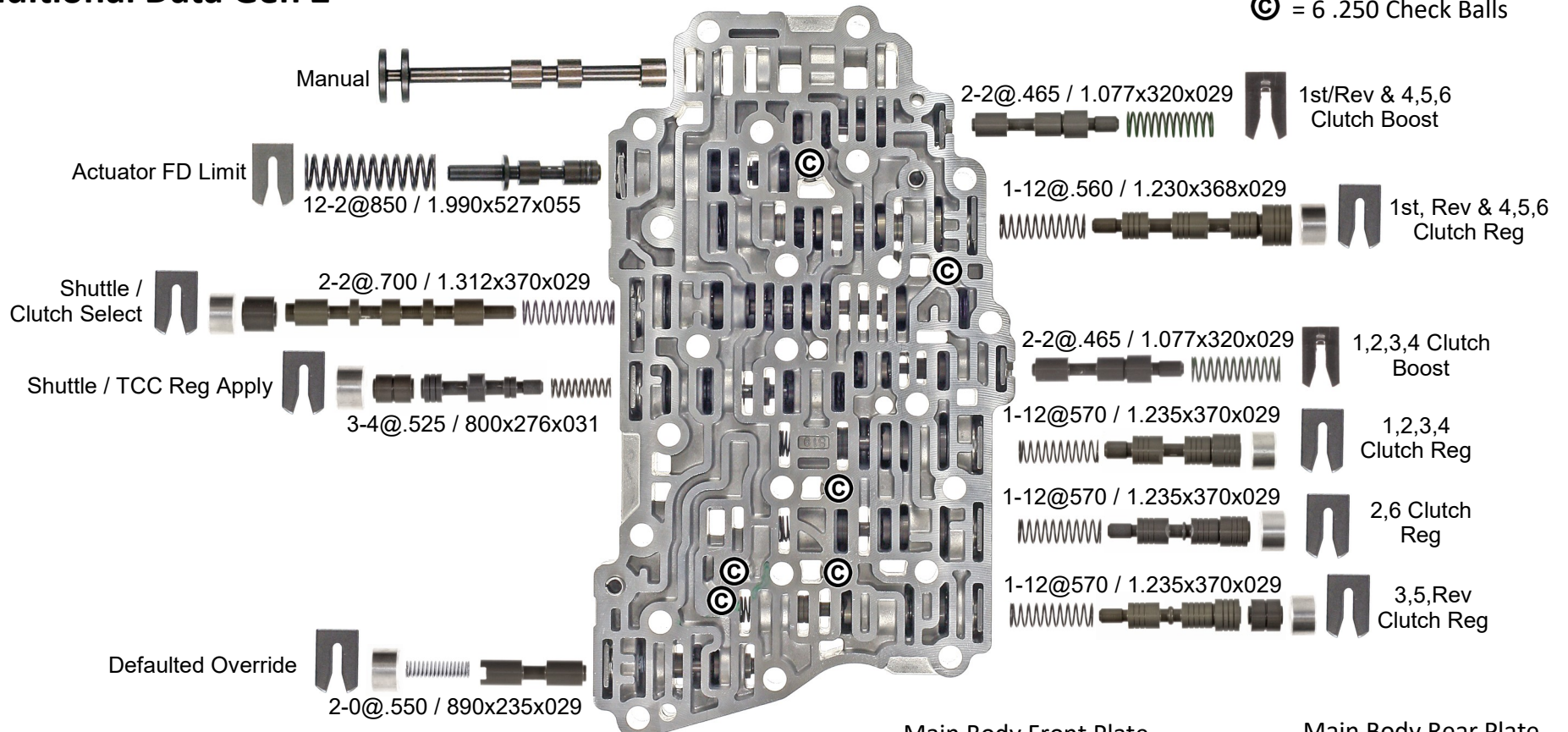
On Gen 2 TEHCM's the pressure switches were deleted.

Solenoid Retainers are usually loose in the body.



Additional Data Gen 2

© = 6 .250 Check Balls



5 Pulse Dampeners



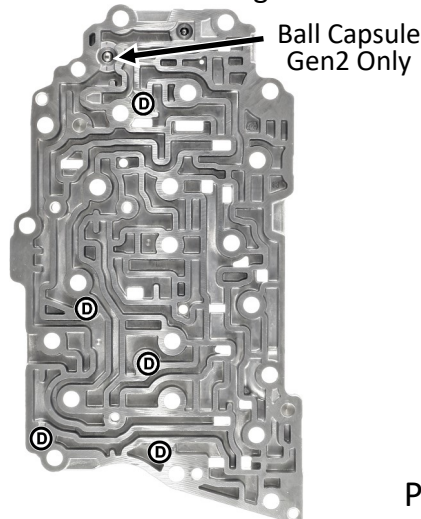
Spring into casting 1st, Cup side of Damper towards spring.

We have seen a couple of these castings worn in the damper holes. Always look carefully.

6T-PDP-TK

Repairs Worn Damper bores 6T40 & 6T70

Channel Casting



Main Body Front Plate



Main Body Rear Plate





NEW PRODUCT!

Announcement Number: S07162001

ALL GM 6-SPEED FWD VALVE BODIES

6T30/40/45/50 GEN2 and GEN3, 6T70/75/80 GEN1 and GEN2

Only ONE tool kit required for all GM FWD 6-SPD valve bodies to repair worn pulse dampener (accumulator) bores.

The function of a solenoid pulse dampener (accumulator) is to dampen pressure irregularities within a hydraulic circuit. Pulse dampener usage will vary between models and generations. In GEN2 and GEN3 6T30/40/45/50 and GEN1 and GEN2 6T70/75/80 FWD 6-speeds, pulse dampeners can be found in the following solenoid circuits: actuator feed limit, clutch control, line pressure, as well as the TCC. Over time, as a result of constant oscillation, the dampener bores will wear, creating circuit leaks manifesting as driveability complaints such as harsh, flared and erratic shifts. TransGo developed one universal toolkit that will work with all GM 6-SPD FWD series and generations.



QUICK, EASY, COST-EFFECTIVE UNIVERSAL SOLUTION



Universal Pulse Dampener Tool Kit
(with carbide reamer)
PART# **6T-PDP-TKC**
UNIVERSAL FIT 6T30/40/45/50/70/75/80

Eliminates the need to purchase a new valve body casting

Includes:

- Guide plate, (4) washers, (2) bolts with butterfly nuts, pulse dampener pocket guide pin and USA made carbide reamer



Pulse Dampeners (Accumulators)
PART# **6T40-PDP-OS**
Fits 6T30/40/45/50 GEN2 and GEN3 12-on

Corrects/Prevents/Reduces:

- Harsh, flared and erratic shifts
- Solenoid codes
- Friction burnup
- Reduced relearn time

Includes:

- (5) heat treated steel pulse dampener pistons (accumulators) and new springs calibrated to retain OE function

Requires: # 6T-PDP-TKC



Pulse Dampeners (Accumulators)
PART# **6T70-PDP-OS**
Fits 6T70/75/80 GEN1 AND GEN2 07-on

Corrects/Prevents/Reduces:

- Harsh, flared and erratic shifts
- Solenoid codes
- Friction burnup
- Reduced relearn time

Includes:

- (6) heat treated steel large pulse dampener pistons (accumulators) and new springs calibrated to retain OE function

Requires: # 6T-PDP-TKC

HERE'S HOW IT WORKS:

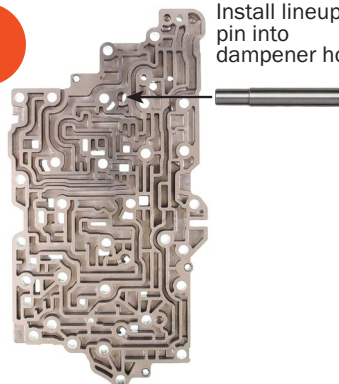
1

Install threaded bushing into tool



2

Install lineup pin into dampener hole



3

Place tool over lineup pin and tighten. Remove lineup pin and you're ready to ream!



ENGINEERED FOR PERFORMANCE. DESIGNED FOR DURABILITY.

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