

SK® 6T40-G3 *Requires (2) Tool Kits (See *Notes 1 & 2)

Fits: Gen3 6T40 Series, 6T31, 6T41/6, 6T51 (Units with Chain Driven Pumps Only)

Does Not Fit: Gen1 (Converter driven pump, Has pressure switches)

Does Not Fit: Gen2 (Converter driven pump, No pressure switches)



Corrects/Prevents/Reduces

Ratio or Solenoid Performance Codes, Erratic TCC or TCC Hunting, Overheating. Includes NEW drop-in Pressure Regulator Valve and Shuttle Valve that reaches beyond the worn area in the bore. Also includes oversized Lube Regulator and Actuator Feed Limit valves (**See Notes 1 & 2 for tooling requirements**)

***Note 1:** This product requires TransGo® # **AFL-G2-TK** Tool kit to repair the Actuator Feed Limit system.

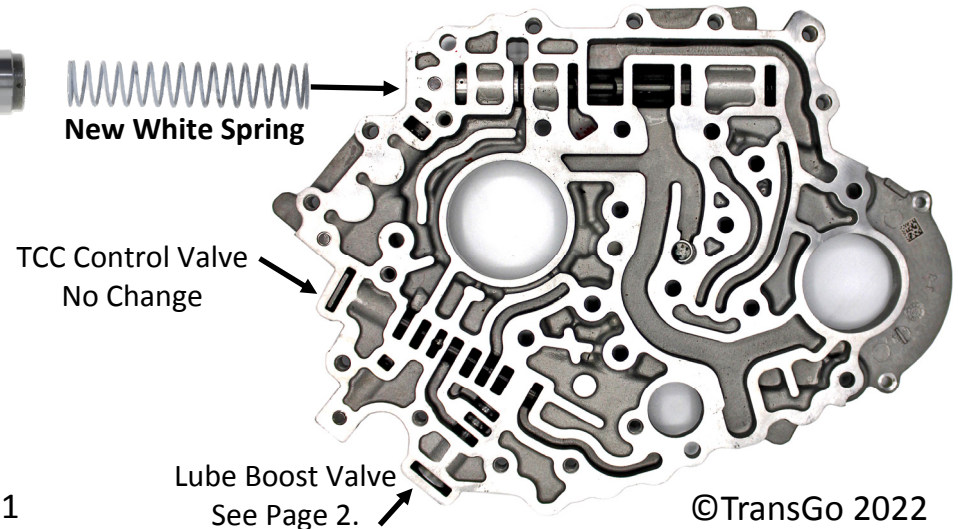
2 Groove	1 Groove	No Groove
6T40 Gen2&3	6F35 Gen2	6T70 Gen2

***Note 2:** This product requires TransGo # **6T40G3-LB-TKC** to repair the Lube Regulator System.

Step 1. Remove and discard OE PR Valve, Spring, Shuttle Valve and Bushing.

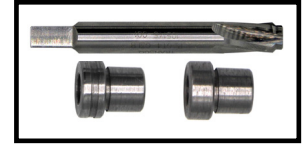


Step 2. Install new Spring & PR Valve, Shuttle Valve and Bushing as shown Reuse retaining pin.



Lube Boost Valve Repair. Excessive Lube Boost Valve Bore wear has been found in virtually every unit with 40K miles and above. A new casting lists for approx. \$450. Save the \$ and put it back in your pocket! This kit and a few minutes of your time will make it like new.

TransGo#
6T40G3-LB-TKC



Save



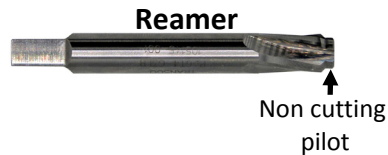
Step 1. Remove & Discard Original lube boost Valve & Spring saving the retainer.



Channel Casting

Step 2. Choosing Guide Bushing.

The small diameter of the 1 groove bushing is slightly larger than the no groove bushing. install the bushing that fits your casting the tightest without forcing it. Until the larger diameter stops against casting.



No Groove guide bushing



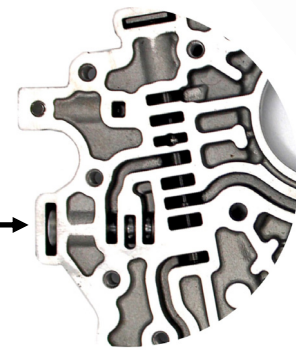
1 Groove guide bushing

Step 3. Slide Reamer thru bushing until then non cutting pilot is started in the casting bore before its spins. Use lots of WD-40 and **low speed** on your favorite portable drill and 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 4. Remove reamer and guide, blow out chips and clean the bore. Test fit the new oversized valve. Check for free movement without binding. If ok, lube new valve with ATF and install it, use new **White** spring and re-use original retainer as shown.

Reuse



Main Body Repairs

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

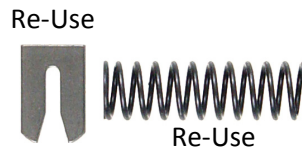


Tool Kit fits 3 **different** transmissions, just use the correct reamer guide.
Fits All **Gen 2 Vb's** 6F35's, 6T40's & 6T70's.

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.

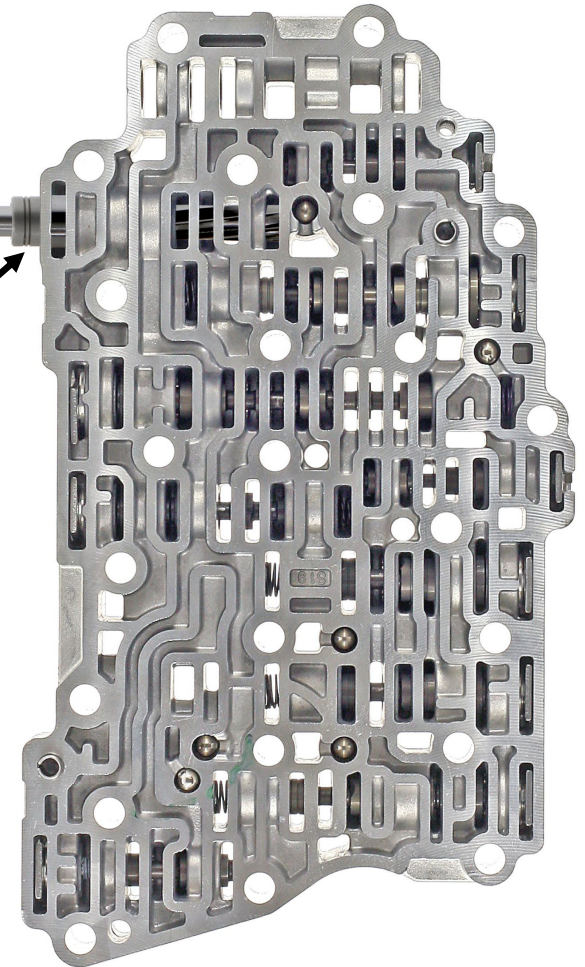
Step 1. Disassemble AFL Valve lineup
Save the Retainer & Spring.



Step 2. The **6T40 Gen 3** uses the "2 Groove" reamer guide.
(Note: Some Gen 3's may require the "1 Groove" guide. It's ok. Just use the one that fits the bore.)
Place the 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.



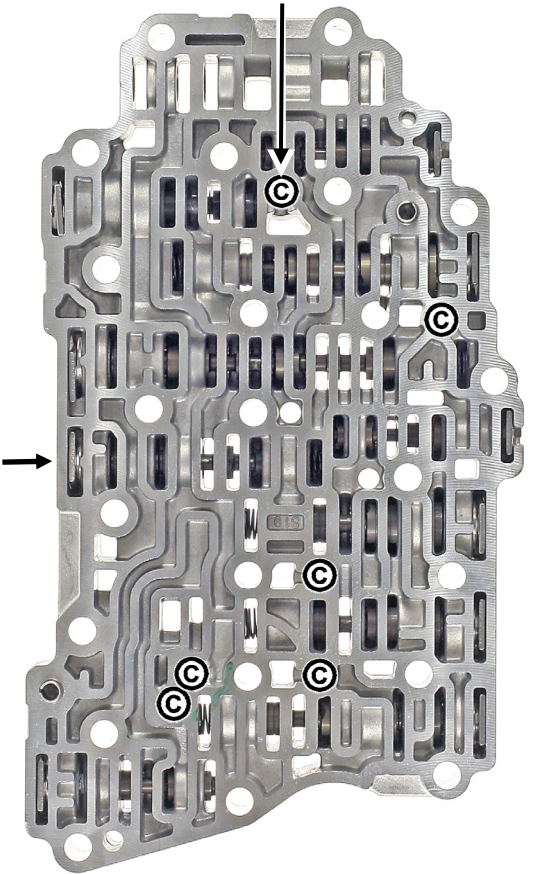
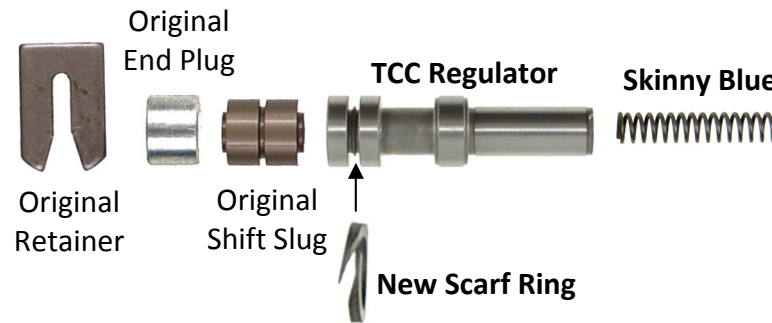
Main Body Repairs

Check Ball Locations: © = (5 or 6) .250 Check Balls

This number 6 ball is model dependent.
See note on bottom of page.

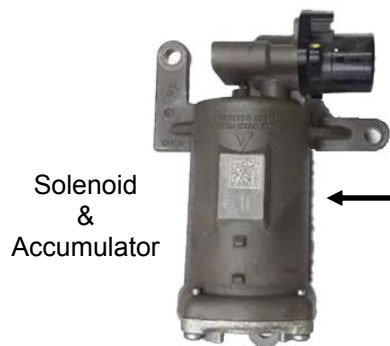
Step 1

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!**

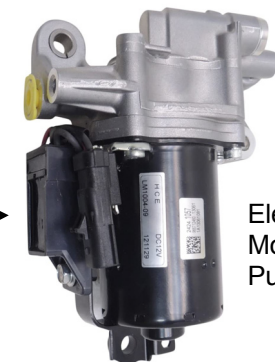


Solenoid & Accumulator

Start/Stop Equipped Models will have **either** an accumulator or an electric pump mounted on top of the trans. Identify your model for #6 ball usage.

Auxiliary **Accumulator** Type
Must NOT HAVE ball #6

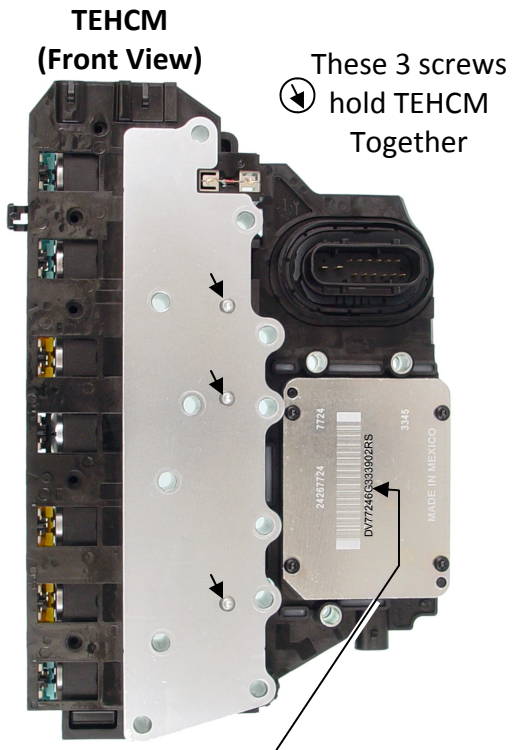
Auxiliary **Pump** Type:
Must HAVE ball #6



Electric Motor & Pump

Models without either type system are usually found with ball #6 but the ball does nothing.

Additional Data

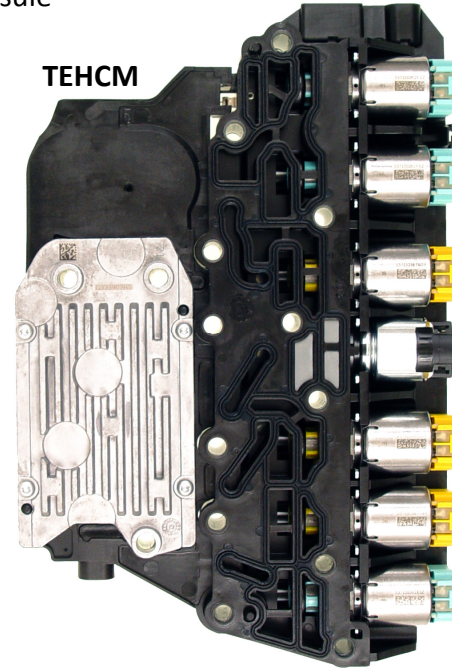


These 3 screws hold TEHCM Together

VB With TEHCM Removed (Front View)



Quick VB ID
Check ball capsule
Gen 2&3.



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

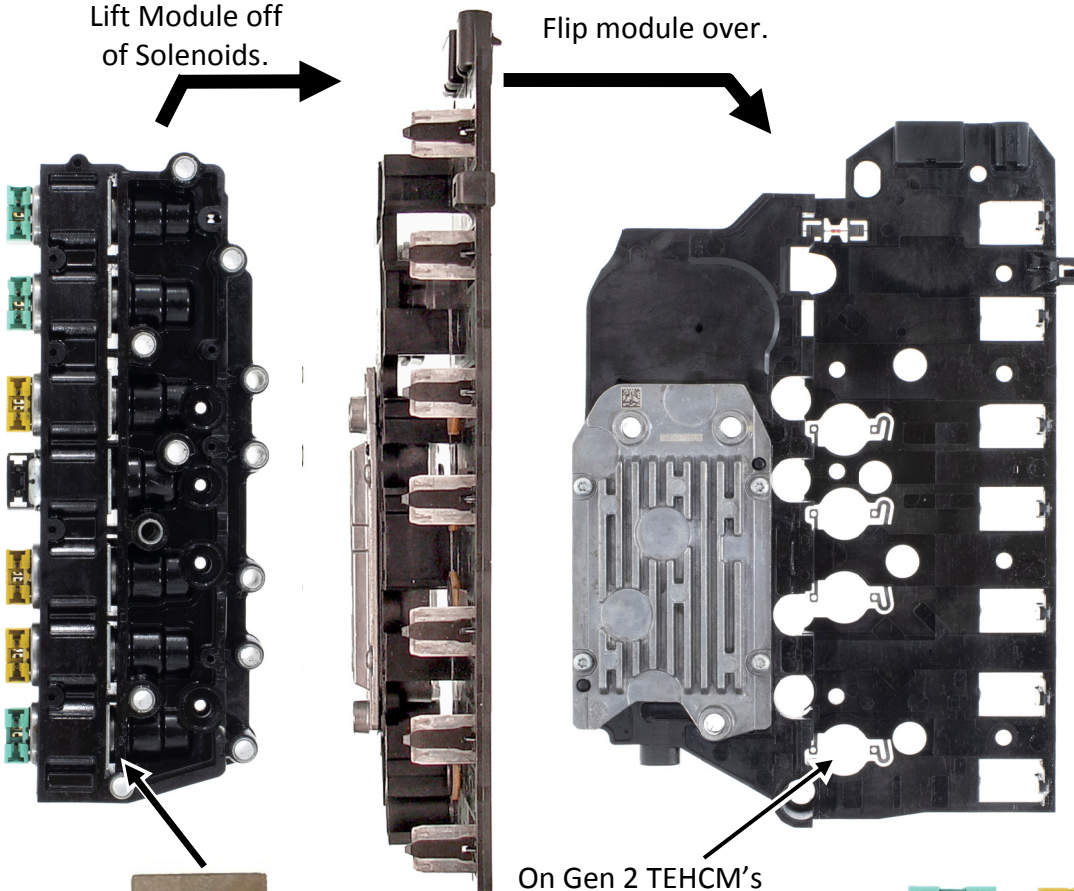
No Forward is Often a Bad PCS5
No Reverse is Often a Bad PCS2
Neutral on the 3-4 is Often a Bad PCS3

Let us hear from you!

Solenoid Cleaning

Lift Module off of Solenoids.

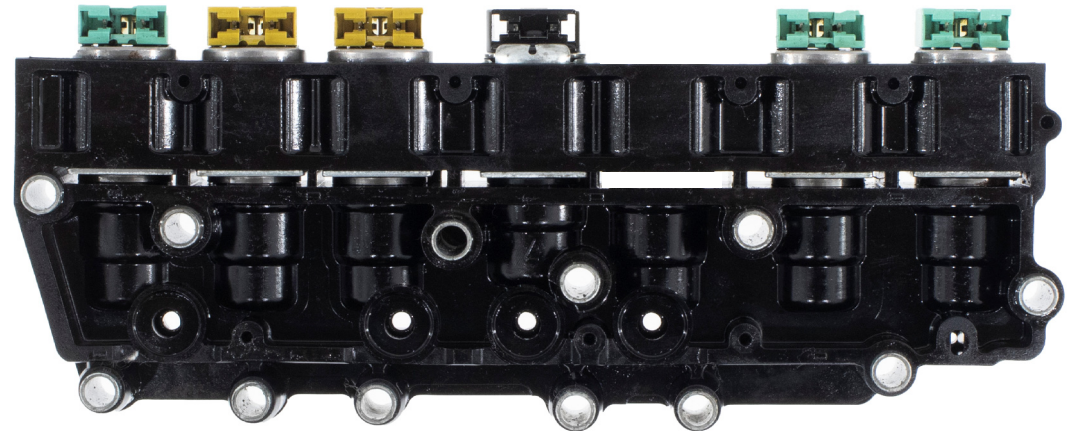
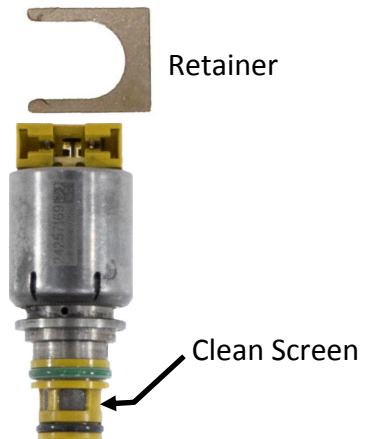
Flip module over.



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

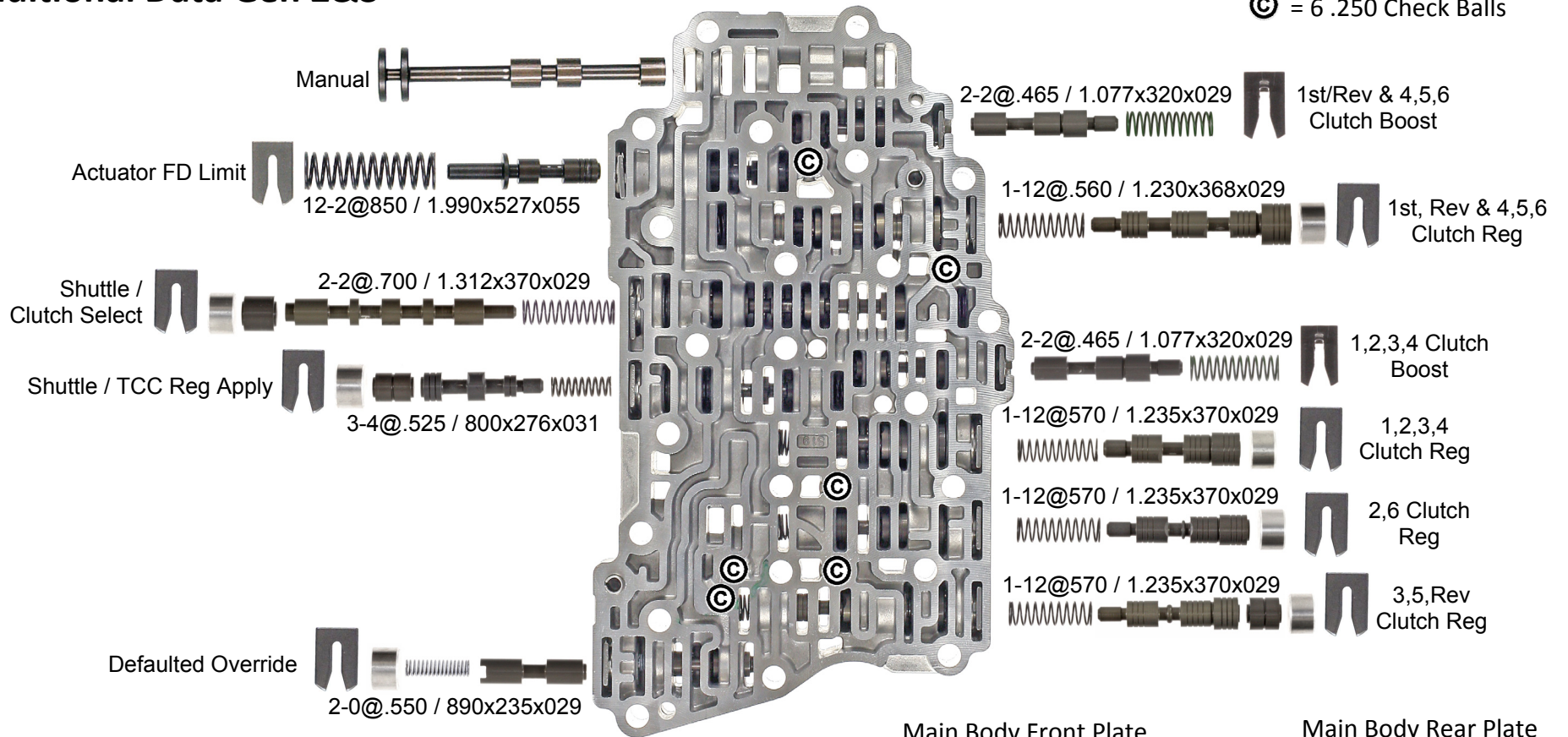
Solenoid Retainers are usually loose in the body.

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



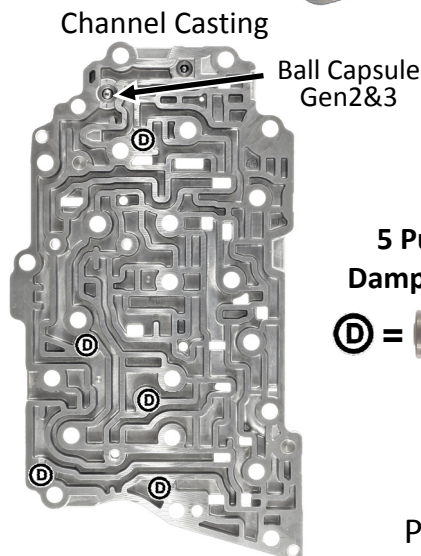
Additional Data Gen 2&3

© = 6 .250 Check Balls

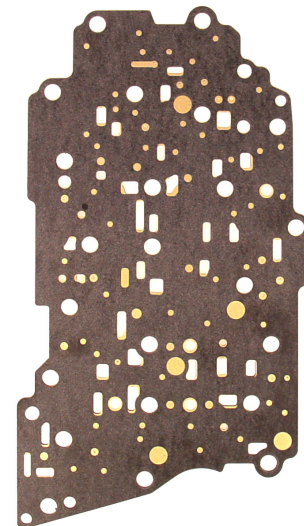


Even a little wiggle has a significant effect on solenoid pressure to the controlling clutch regulator valves. Flair shifts, harsh shifts or erratic shifts are a result of poor clutch control. A worn dampener must be corrected to provide a smooth solenoid signal to the clutch regulator it serves. The smoother the solenoid signal, the more consistent and cleaner the shifts will be.

TransGo Pulse Dampener Repair Kit # 6T-PDP-TK # 6T40-PDP-OS



Main Body Front Plate



Main Body Rear Plate

