4L80E-HD2-D

Reprogramming Kit™

HD Trucks and RV's

Choose the firmness you want: From Comfortable to Crisp, you decide.

Installs with trans in vehicle or on the bench.

This is an HD and Hi-Perf product for professional installation. It is not a "do-it-yourself" product. Its for the experienced, **full time**, professional transmission mechanic who is already familiar with 4L80E transmission.
New boost valve & relief valve: Prevents high pressure parts breakage.
New Separator Plate Provided: Easier, Faster install!
Dual feed direct clutch: Triples 3rd gear holding power.

"This is the trans that heavy duty trucks, RV's and high horsepower streeters have been wishing for. Something you can beat the snot out of without giving it or you a runny nose.
It will soon be the trans of choice for vehicles that have weight and horsepower.
It just gets comfortable at about 900 HP and will handle a lot more with just a few special parts. Hang onto your hat."

"We have a Stick Shift version too!"

Burnouts:

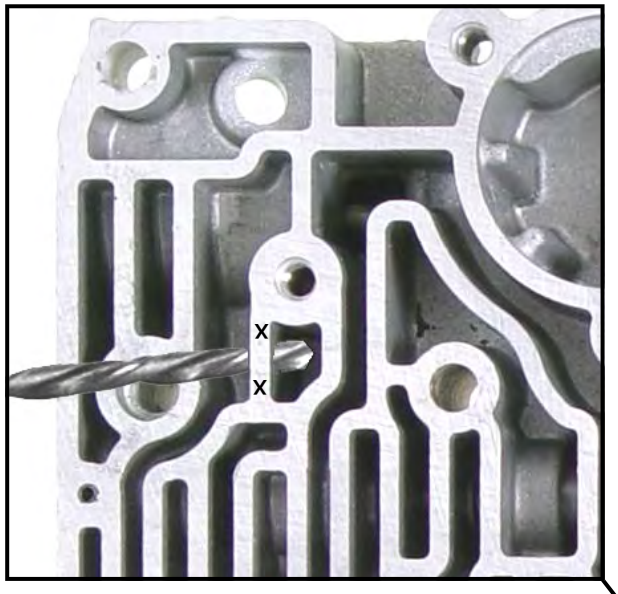
In water or bleach box: Break it loose in 1st/2nd, then up-shift to 3rd.

THESE ARE THE TRANSMISSION RATIOS:
 "1st" 2.48 "2nd" 1.48 "3rd" 1.00 "4th" .75
To find top gear ratio, multiply the axle ratio x .75 [Example 3.73 x .75 = 2.79]
Other ratios: Multiply axle ratio x trans ratio. [Example 3.73 x 2.48 = 9.25]

Mr. Shift
"Thanks for Listening"

TransGo® 2621 Merced Ave, El Monte, CA 91733-1997

27 Dec 2021

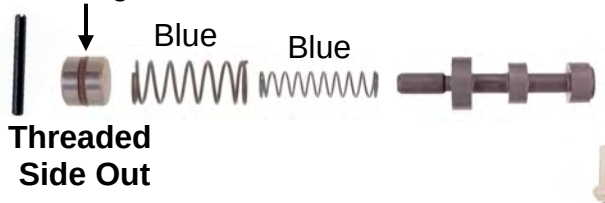


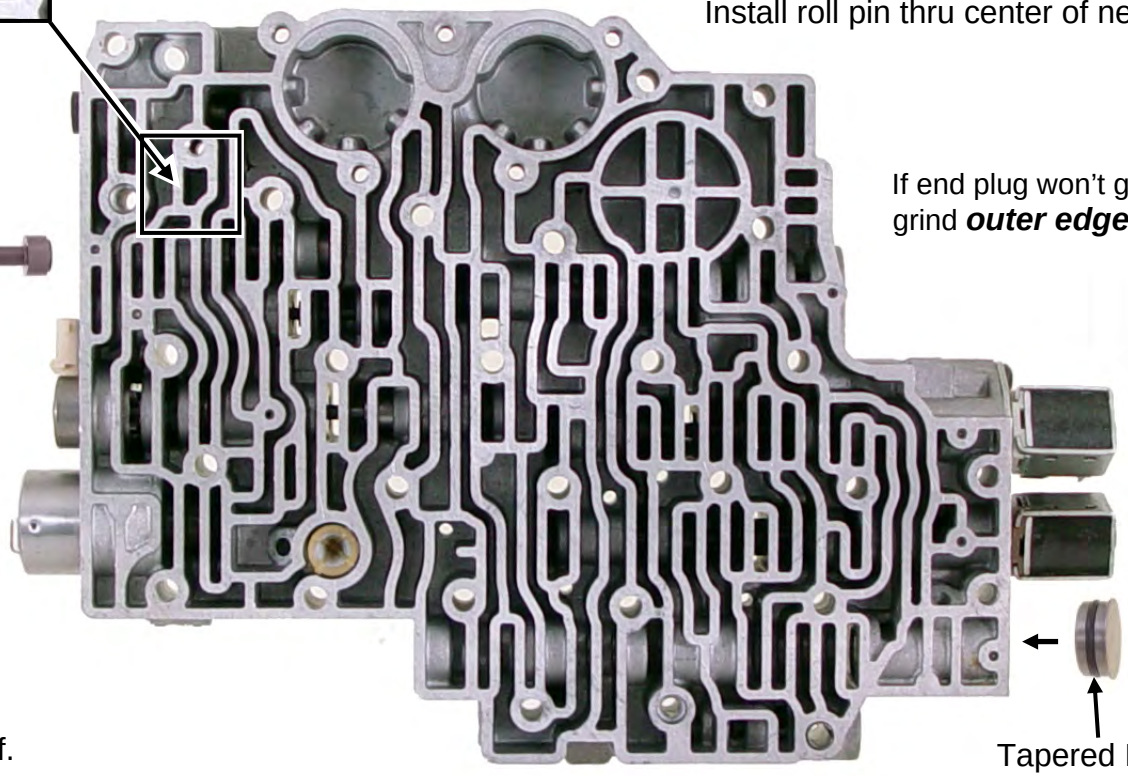
Step 1

Between the “X’s” on **angle shown**, drill thru the partition right to left with .125 drill, (1/8”). Center punch location first, (keeps drill from walking), **then enlarge with 3/16" drill.** Make sure drill angle is high enough so the side of drill does not nibble other partitions.

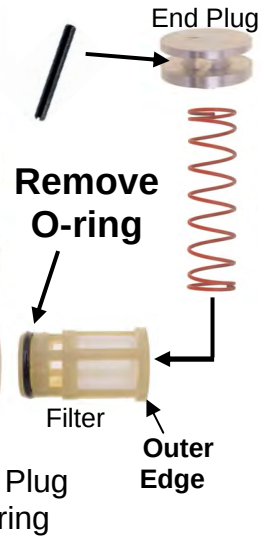
Step 3

Remove Actuator Filter Parts. Discard o-ring on the filter and the original end plug. Install NEW tapered plug with o-ring. Install filter, NEW ORANGE spring and NEW end plug. Install roll pin thru center of new plug.





If end plug won’t go in far enough, grind ***outer edge*** of filter slightly**.**

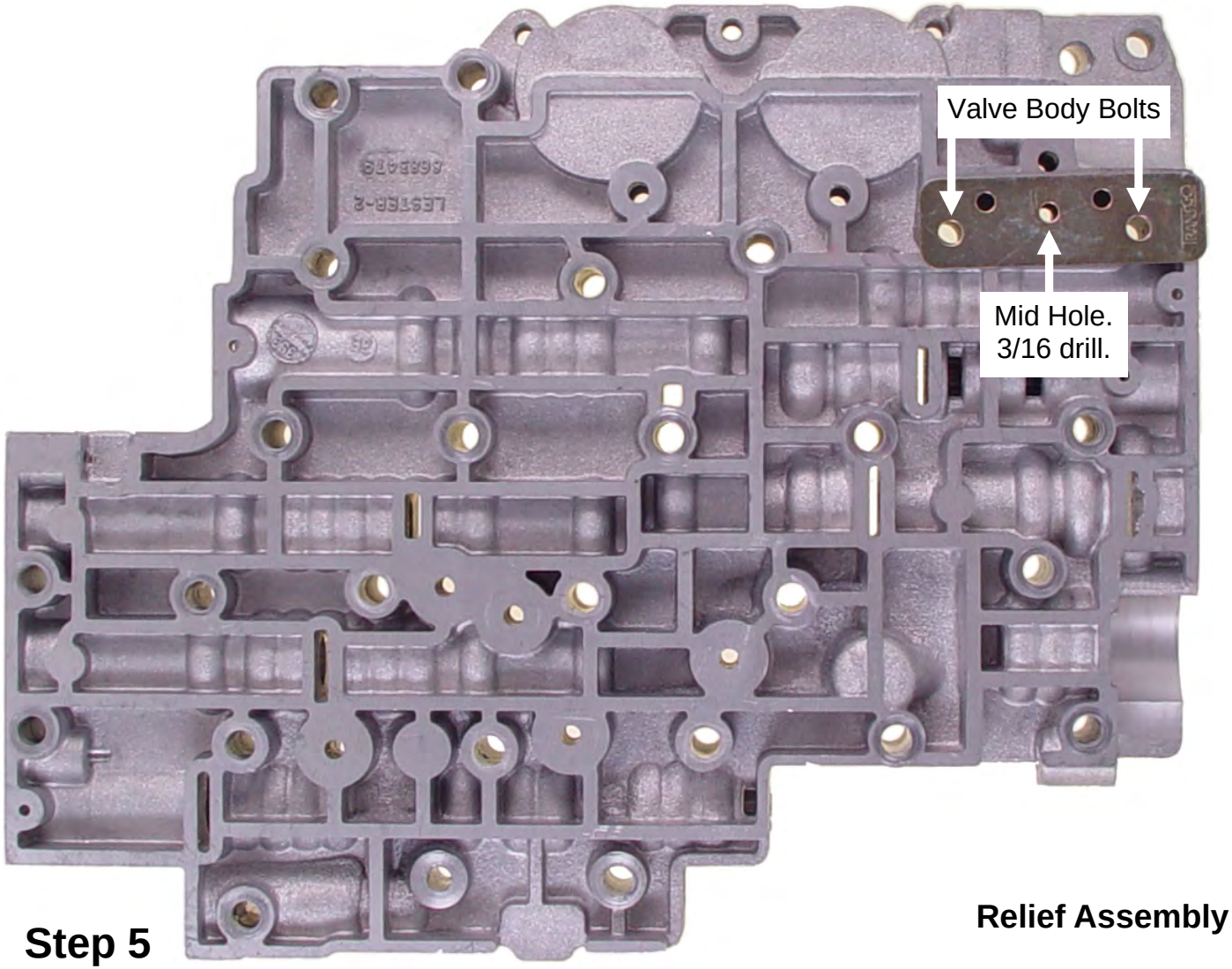


Step 2

Discard original springs and plug. Install new TransGo BLUE outer and BLUE inner springs then new TransGo plug with O-ring.

Adjusting shift “firmness”

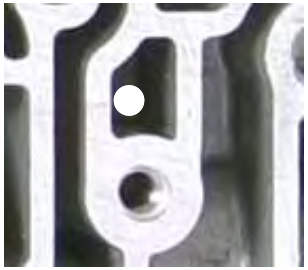
For slightly firmer shifts:
Use outer BLUE Accum spring by itself.
For even firmer shifts:
Use inner BLUE Accum spring by itself.



Step 4

Install relief assembly cover with two valve body bolts and the nuts furnished—finger tight. Down thru the Mid hole, drill thru the valve body with 3/16" drill.

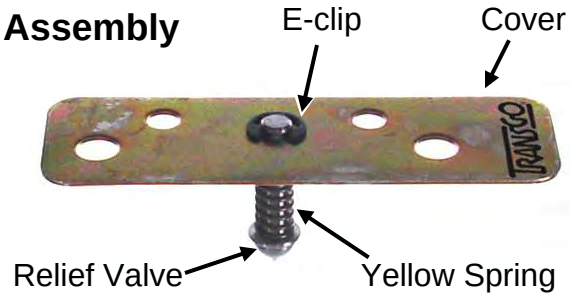
View from Other side when finished.



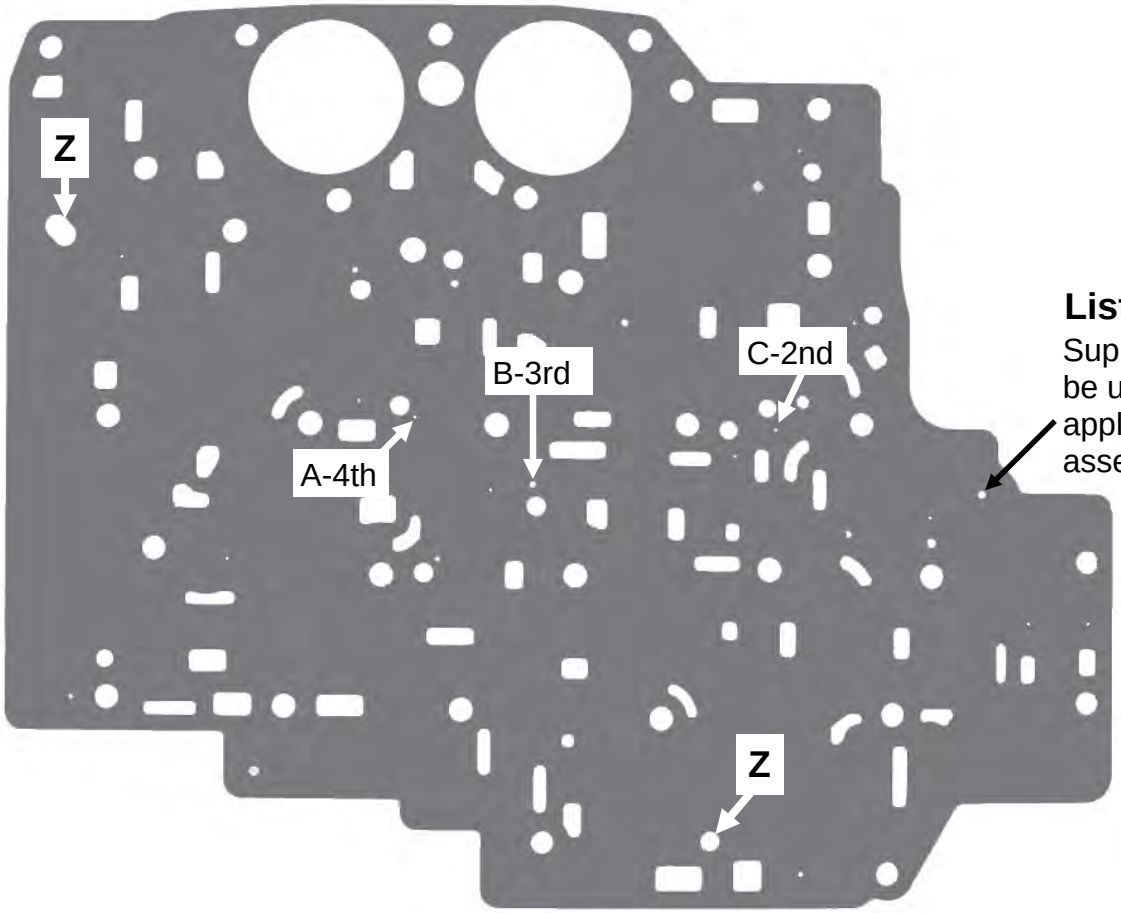
Step 5

Install spring on long stem end of valve. Push stem end of valve up thru cover while a buddy installs “E” clip. Install the assembly temporarily with two bolts and tap the E-clip end **lightly** with a light hammer to seat the valve on the drilled hole. Install relief assembly last when everything else is done and you are installing the valve body.

Relief Assembly



“Z” Holes are your friends.
Center gaskets on plate and insert valve body bolts thru “Z” holes first to keep gaskets and plate from twisting.



Step 6

Discard original plate. Use chart below and **drill** holes A, B and C on **New TransGo® Plate**. Align gaskets while assembling **New** plate to valve body.

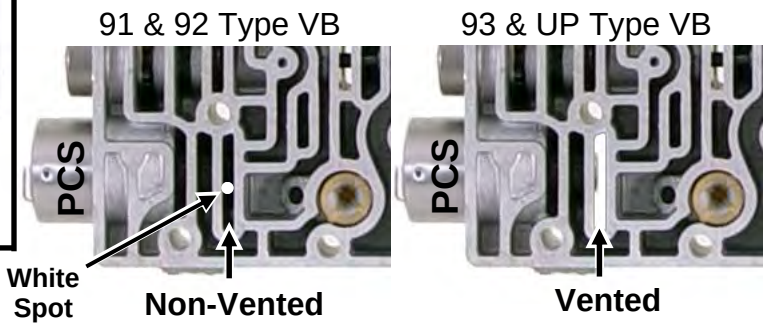
Selecting Shift Firmness

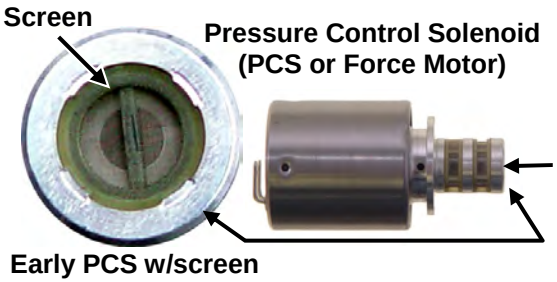
Holes ABC are for shift feel selection:
Average = .086 Softer = .076 Firm = .096
For off-road use with small diameter high stall converter make holes ABC .125 (1/8”)
Average works great for HD trucks!

Listen Up!

Supplied case gasket has enlarged hole here. It **must** be used with **new** plate. A little ATF or assembly gel applied to plate first will keep gaskets from shifting while assembling. (It’s the SMALLEST of the 2 big Gaskets.)

HOLD IT! This is Important:



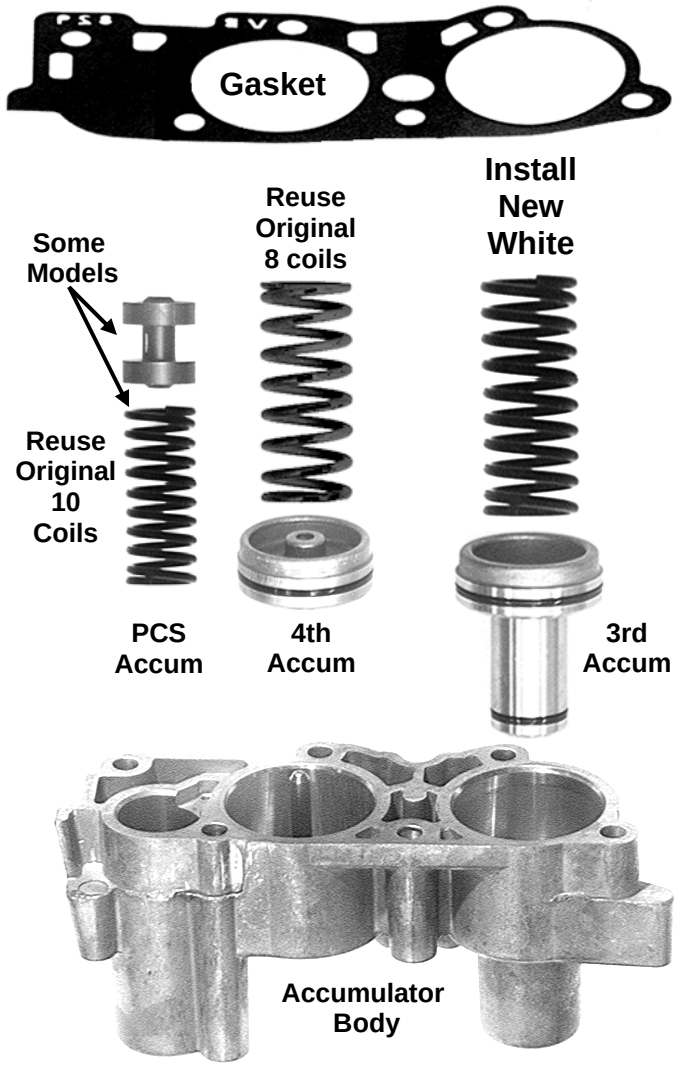


Do NOT use a PCS Solenoid that has a screen on this end. (Used in 91-92 VB’s) Replace it with a 93 to 2003 Solenoid. Uses same connector and it works fine.

If your VB is the Non-Vented Type, use a PCS solenoid that has **NO** Screen on the end and drill a .093 to .130 hole down thru the bottom floor in the passage at the white spot shown above to create a vent in the floor.

Sub Assembly: Steps A-F

Note: The only changes you are making on this page are replacing the 3rd Accum spring and installing the New Transgo plate. The rest of the steps are for re-assembly purposes.



A. Discard Original 3rd Accum spring. Install **NEW WHITE** spring.

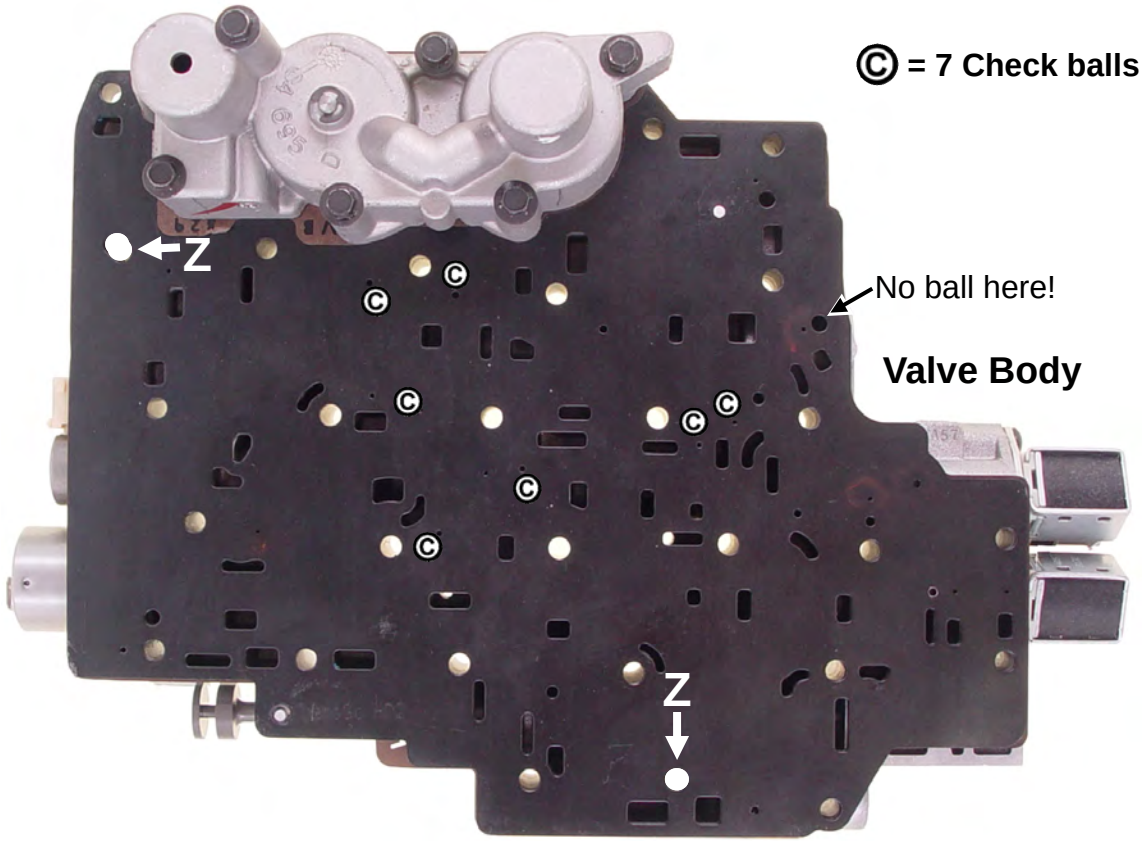
B. Install gasket onto accumulator housing.

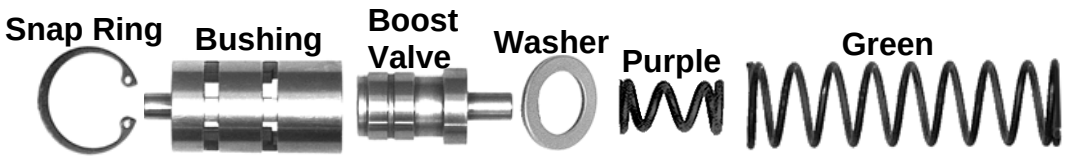
C. Install the full size gasket and the **NEW TransGo®** plate onto the valve body. Align the plate and gasket by inserting bolts in holes “Z”.

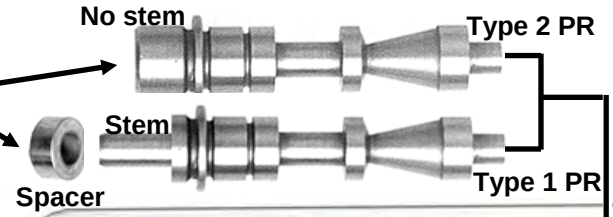
D. Install the accumulator housing and tighten the bolts.

E. Pull out the “Z” bolts. Put a small amount of oil on the plate and place the gasket marked T C on the plate and align it carefully at the “Z” holes.

F. Smear a small amount of Vaseline on the holes for the check balls and place seven 1/4" balls on the holes.







Step 7

Install New PR springs, washer, boost valve and bushing.

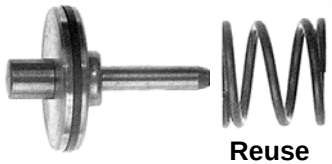
No stem Type 2 PR valve: Do **not** install spacer.

Stem Type 1 PR valve: Install spacer on PR valve stem.

Step 8

Install New Stronger 4th bolt & washer.

New 4th Bolt & Washer



1-2 Servo Assembly Reuse

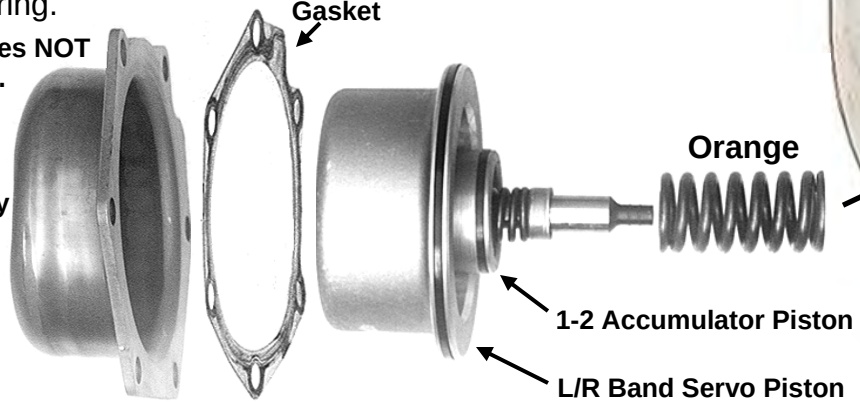
Reuse

Step 9

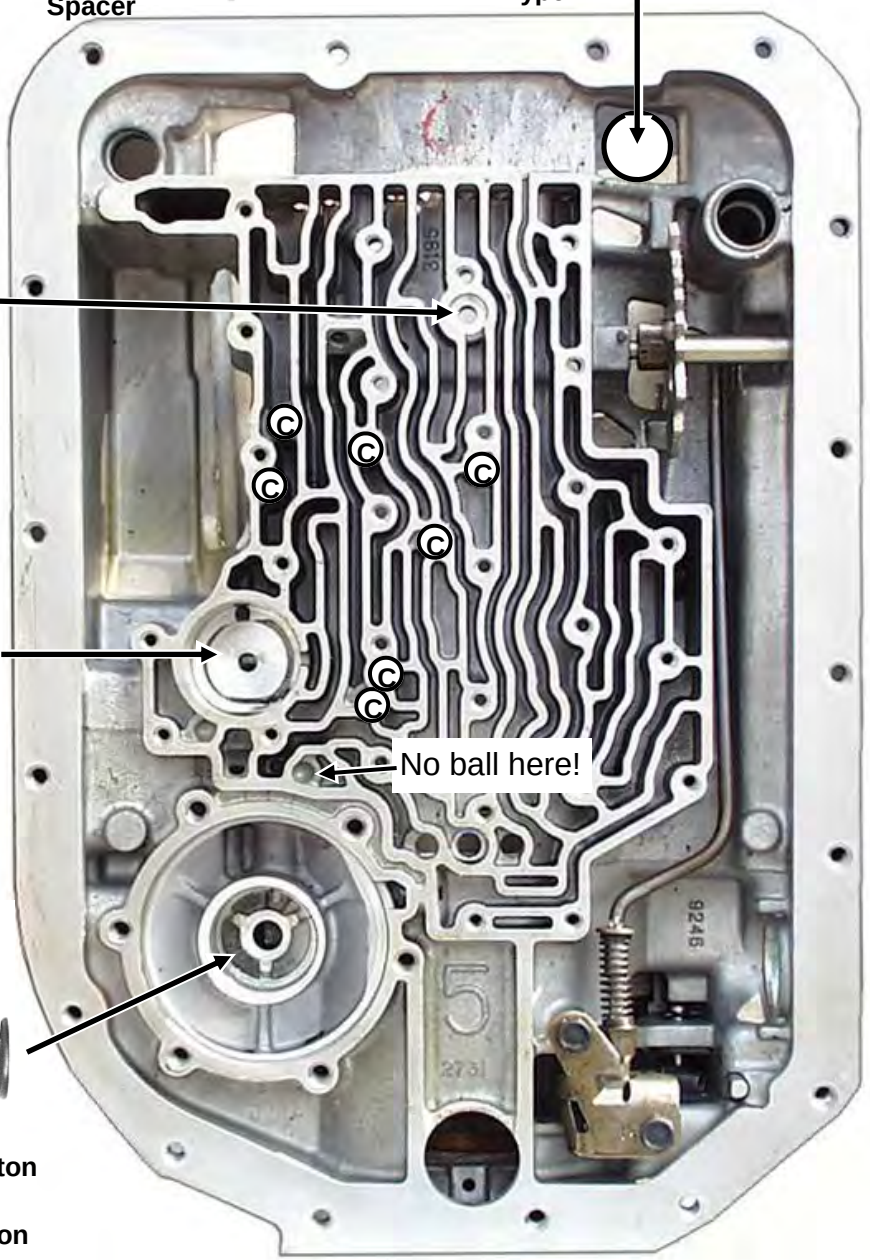
Remove accumulator cover, gasket and piston.

Install **New ORANGE** 1-2 accumulator spring.

If NEW spring does NOT fit re-use original.



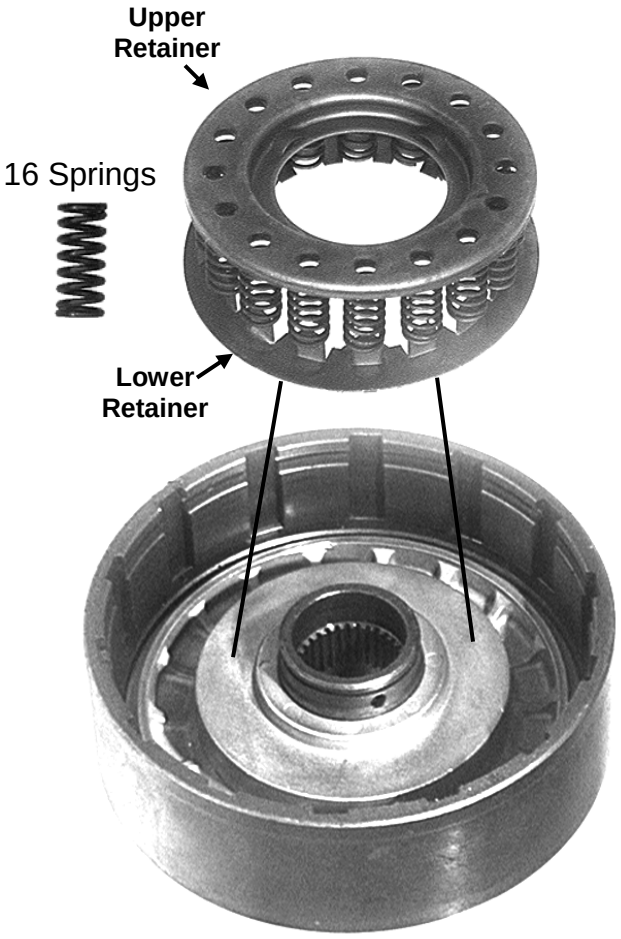
Low/Rev band apply & 1-2 accumulator cover.



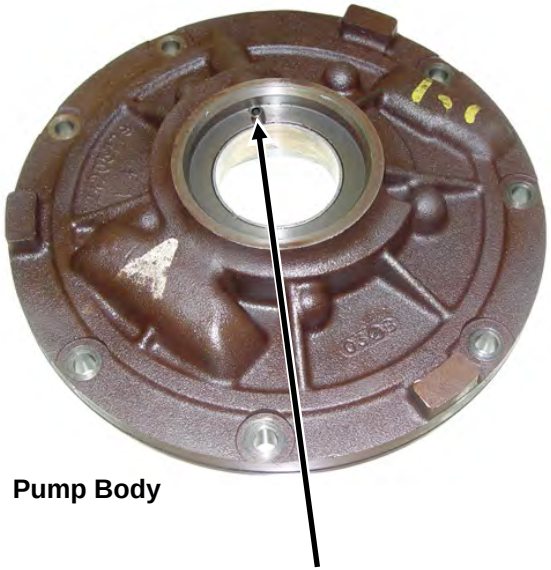
© = 7 Checkballs

Internal Upgrades—If Trans is Apart.

Step 1 Carefully pry the lower retainer out of the springs. Then with side cutters grab each spring up close to upper retainer and twist and pull at the same time to remove the springs. Install the springs furnished into the old retainers.



Direct Clutch Drum

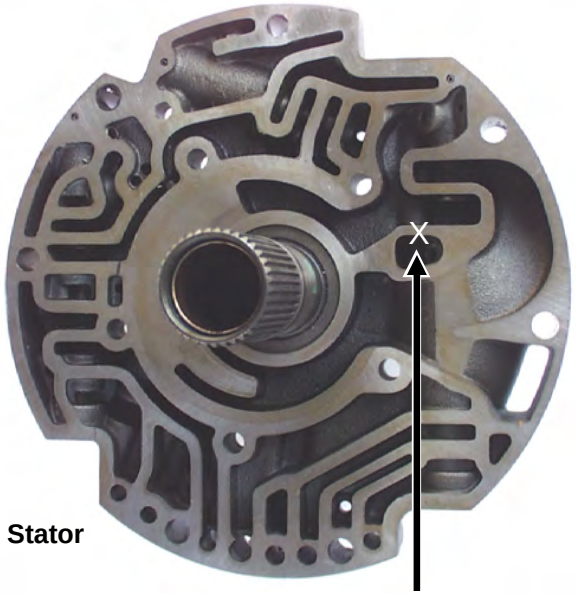


Pump Body

Step 3 To prevent front seal blowout, Enlarge this hole 1/4” to 9/32”.

Intermediate Snap Ring

Step 2 Install new thicker snap ring.
This is the last snap ring that goes in case.
Stops wear on the lugs which reduces lug blowout.



Pump Stator

Step 4 Under “X” drill a 3/64 (.042-.055) hole thru side of wall in direction of arrow.

48-ACT-TL **Actuator Limit Valve Repair Kit:** Saves worn 4L80E Valve Bodies

At 100,000 miles the actuator bore will be worn. YOU can check it, but the best answer is just FIX it. Worn bore causes **low pressure HOT**. Clutch, band and converter slippage, wrong gear starts, **neutrals** on highway, mysterious burn ups and Codes 39, 85, and 68. Boring guide and cutter makes the **FIX** an **easy** 5 minute job. Save an expensive valve body and avoid the headaches of repeated failures.
Special valves have 50% more linear support, and oscillate less than half as much as the original design. This virtually **stops** the wear and makes the valve body more durable than a new one.

48-ACT-TL: **Actuator Valve Repair Kit**

Kit contains: Boring guide, Boring tool, 6 valves and springs. Repairs 6 valve bodies. Repairs early or late design! Refills available see below.

48-ACT-VL6: **Actuator Valve Refill Kit**

Refill Kit contains: 6 valves and springs for use with tools included in 48-ACT-TL.