

Full Race--Stick Shift: Manual shift only.

4L60E-3

Reprogramming Kit™

Trans will start off in whatever gear shifter is in.
Will shift to any gear, at any speed, by moving lever.

Shift performance is dependant on the 2nd gear Servo and 3-4 clutches. For optimum results 093 or 95-1 Corvette 2nd Servo Piston is required, TransGo #7-2P. Assemble the 3-4 Clutch with 9 **brown paper** friction Plates. Frictions & Steels are available in .060 thickness that will allow additional Steels & Frictions. NOTE: Engine torque, axle ratio & vehicle weight also play a big part in shift performance.



2nd Servo Piston

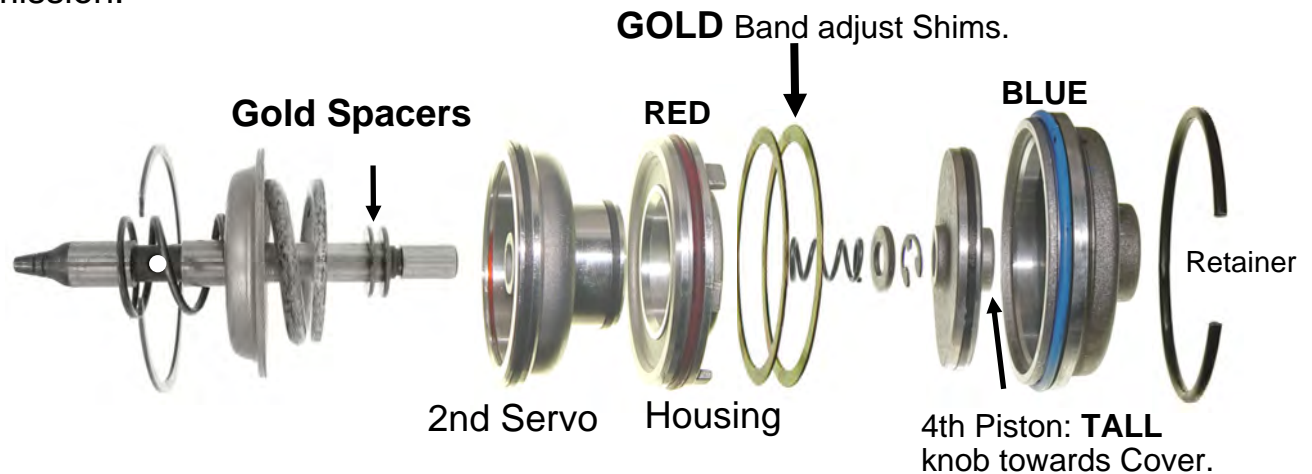
Corvette Servo Piston & Housing required. Servo *not* furnished.
TransGo #7-2P.

Step 1 2nd Servo

Install 2 gold Spacers & reassemble 2nd Servo.
Follow Band adjust instructions before re-installing the Servo into Transmission.



Shaft must turn both ways by hand. One way will turn harder than the other way and that is OK.



2nd Servo Piston

Measure here, 1.800 is required diameter.

Servo Piston may have casting #093 or 95-1



Band adjust: Install 2nd Servo assembly and housing into Trans, Install 2 **GOLD** Band adjusting Shims against Housing. Install 4th Piston and Cover **without the Blue O'ring**, then Retainer. Band must wiggle on Drum front to rear (see page 7) or you must be able to turn the drive Shaft both ways by hand. If too tight remove one Band adjusting Shim, and test again. Retainer groove in Case must be clean before final assembly. **Retainer must be fully seated in groove when installed to avoid Servo blow out & Case damage.**

Step 1 2nd Accumulator

Discard original Springs, Install 3 spacers, Piston & **ORANGE** Spring. Do not Install **GOLD** Spacer on Piston **WITH** 3 legs.

ORANGE



Gold SPACER

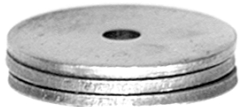


Piston with 3 Legs:
Do not install **GOLD** Spacer.

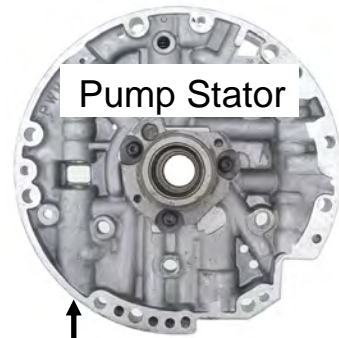
Piston



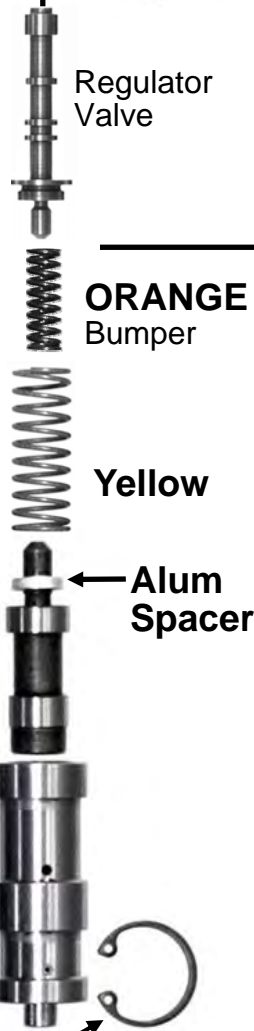
SPACERS



2nd Accumulator



Pump Stator



Regulator Valve

ORANGE
Bumper

Yellow

Alum
Spacer

Boost
Valve

Boost
Bushing

Step 2 Regulator Valve

Remove OE regulator Valve Parts. Install new Parts furnished.

See Page 7 for location & data

Trans on the Bench:

Installing non lock up Converter?
Install **TransGo 4L6-CCV** for correct Converter fill & cooling.

With .093 drill, drill **thru** the existing holes in the Reverse Input Piston. Install **black orifice cup Plugs** furnished into holes.



Reverse Input Piston

Make **SURE** this snap-ring is fully seated in the Groove by pushing up on the Bushing. Low line pressure, slips or no reverse is common if snap-ring blows out.

Do not connect any wires going to the shift Solenoids.

Note: This usually turns the check Engine Light on if the vehicle has a computer.

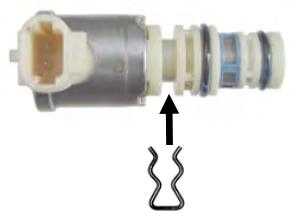
Step 1 Remove & Save original 3-4 Spring. Install New **WHITE** Spring. Install Clip from bottom side of Valve Body.



Step 2 Install new PURPLE 3-2 down shift Spring



3-2 Sol & Valve



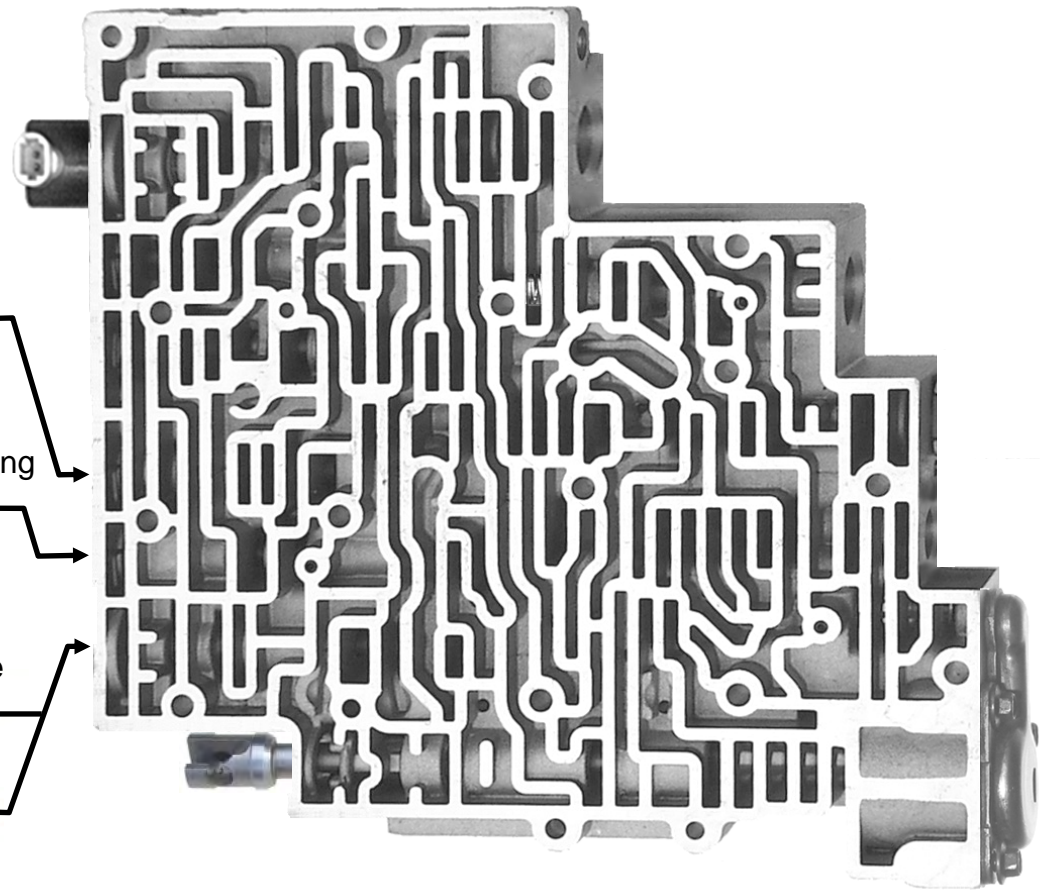
PLAIN 2nd type Valve



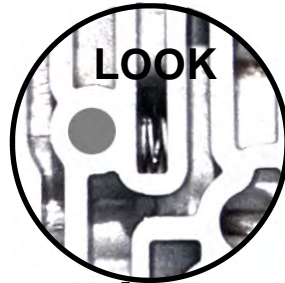
3-2 Control Valve
1st type no change

Step 3 2nd type Valve only!

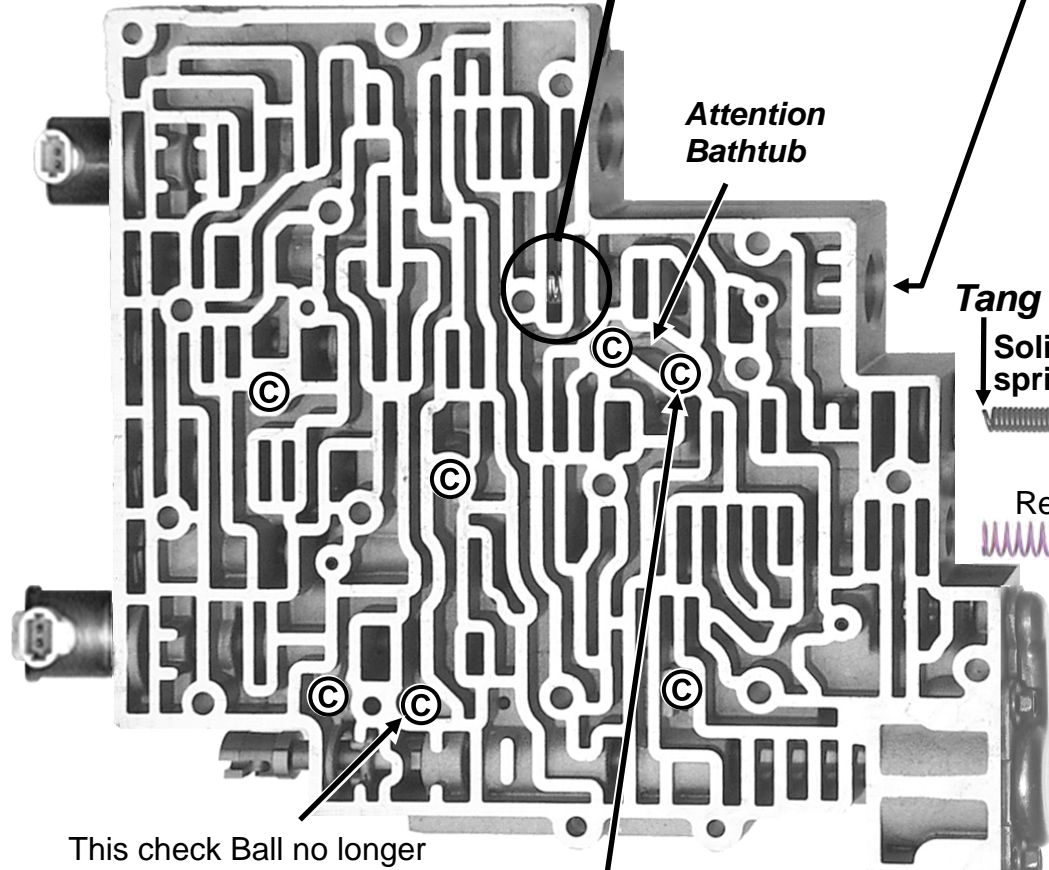
Remove & discard 3-2 control Valve Spring. Install new **PLAIN** Spring **BETWEEN** Solenoid & Valve as shown.



© Check Balls:
7 In Valve Body, 1 in Case.
Some VB's do not have Ball in
Bathtub.



Make sure
Accumulator
spring is not
crooked.



This check Ball no longer
functions. Ball installed or
left out is okay.

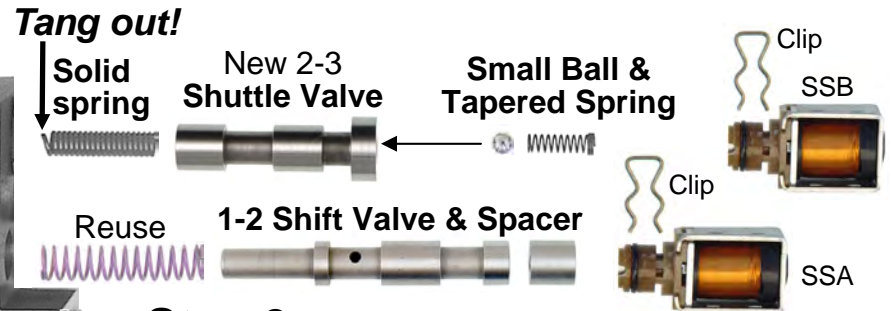
Attention!
Lay Plate over bathtub.
If plate has 2 holes over tub,
Install Ball in Bathtub.
With 1 hole, do not install
Ball in Bathtub. See page 6.

Step 1 Accum Spring



Step 2

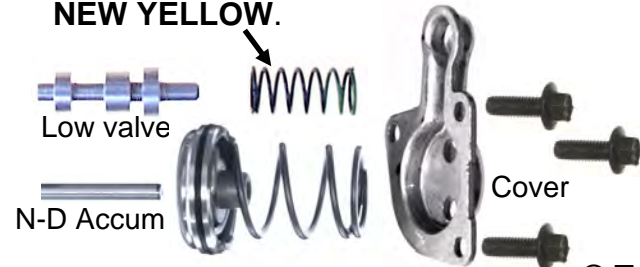
Remove SSB's clip & SSB. Remove ONLY the outer
shuttle valve. Leave the inner valve installed! Install
new solid Spring into new 2-3 Shuttle valve with **TANG
END OUTWARD** and insert new valve with solid spring
into bore. Now insert small Ball & the tapered Spring
into outer end of new 2-3 Shuttle valve. Large end of
spring outward! Re-install SSB & Clip.



Step 3

Remove and save the original 1-2 shift valve.
Re-using original inner spring, insert **NEW 1-2 Shift
Valve**, then **Spacer**, then Solenoid and retainer as
shown. (Retainer clip inserts up from the VB bottom.)

Step 4 Replace original spring with NEW YELLOW.



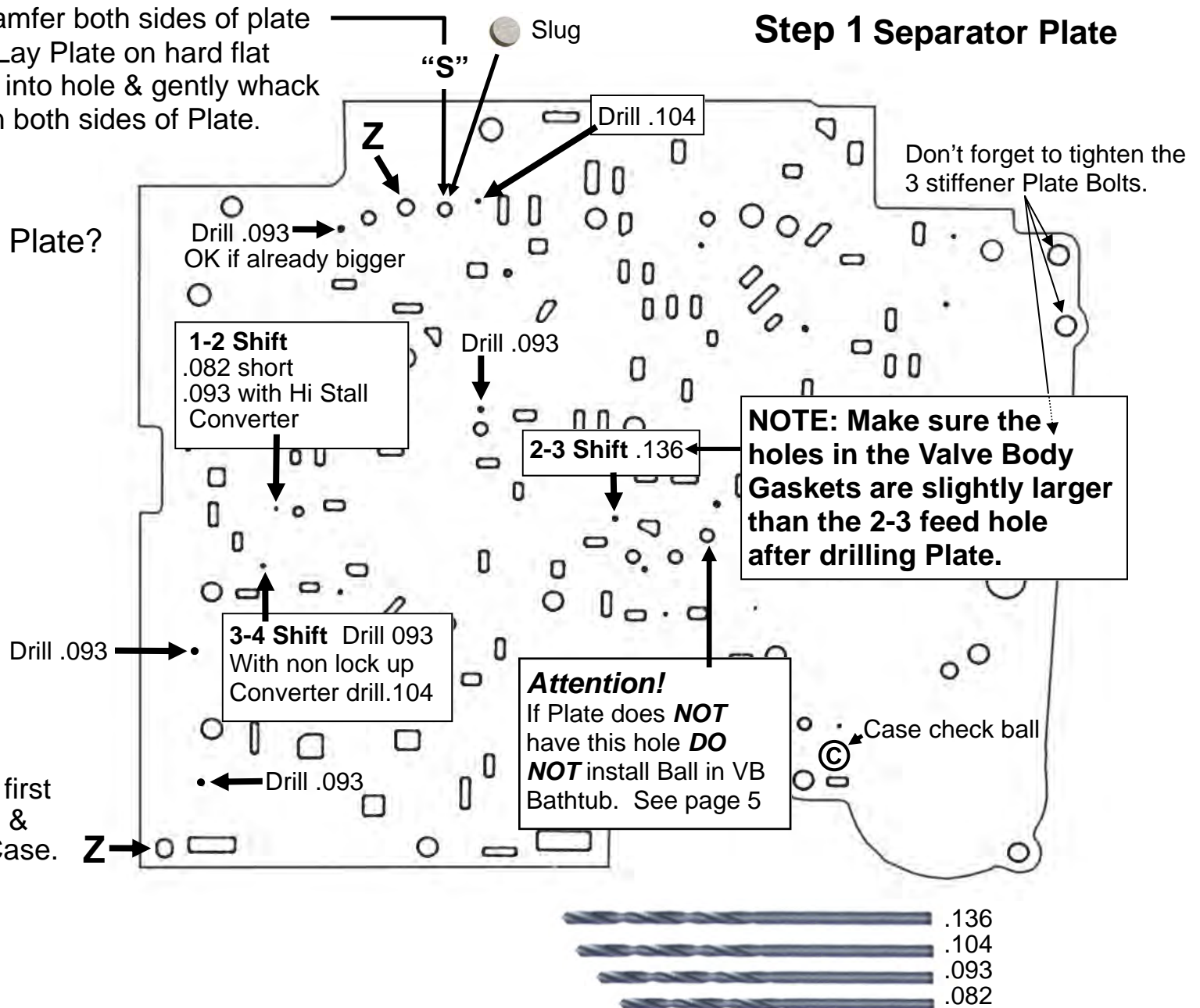
With a 5/16 Drill chamfer both sides of plate hole "S" by hand. Lay Plate on hard flat surface, Insert Slug into hole & gently whack it with a Hammer on both sides of Plate.

Step 1 Separator Plate

Need a new Separator Plate?
TransGo #'s

- 46-PLT-94 fits 93-94
- 46-PLT-95 fits 95
- 46-PLT-96 fits 96-06
- 46-PLT-05V fits 05 Vette
- 46-PLT-07 fits 07-08
- 46-PLT-09 fits 09

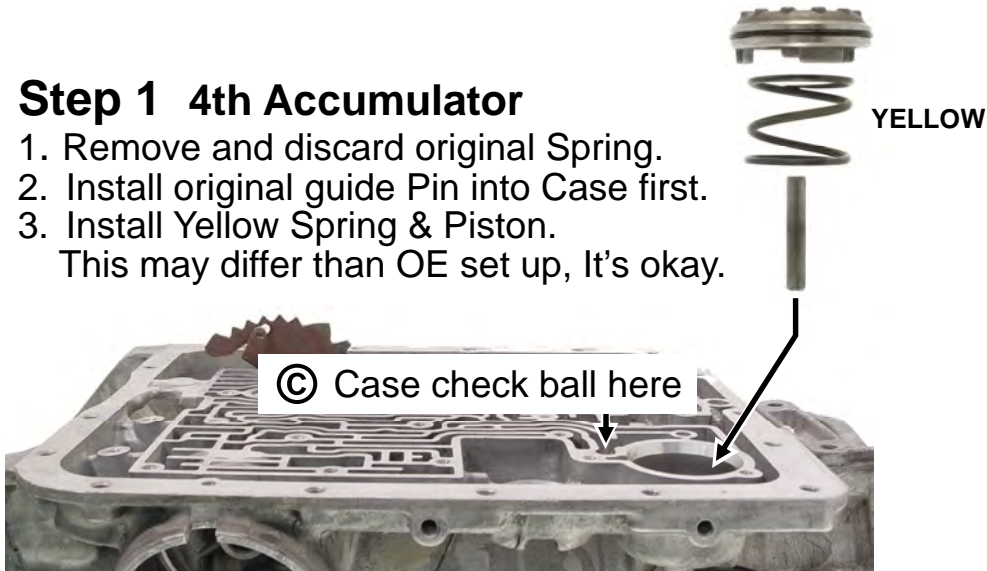
Start Z bolts first to align plate & Gaskets to Case. Z →



Before installing VB follow pages titled 4L60E-3 Vacuum Modulator System Installation.

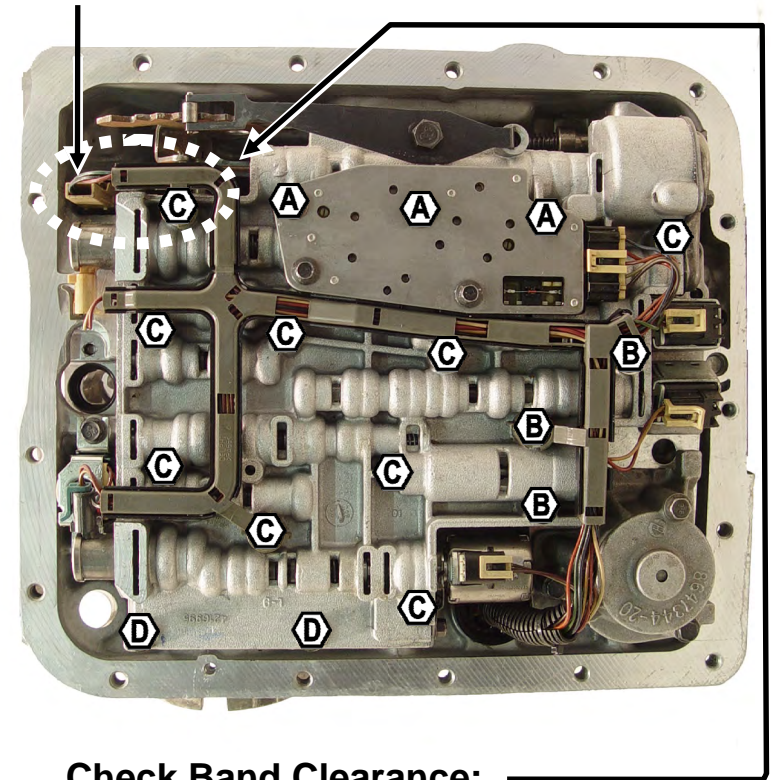
Step 1 4th Accumulator

1. Remove and discard original Spring.
2. Install original guide Pin into Case first.
3. Install Yellow Spring & Piston.
This may differ than OE set up, It's okay.



Regulator Valve Location

Turbine Sensor harness here? Skip step 2 on Page 3. If Trans is on Bench remove Pump and install PR parts on Step 2.







Check Band Clearance: _____
 From page 2,
 Through opening in Case, with a Screwdriver make sure the Band wiggles on drum front to rear. ←→

Final Check: With engine off, wheels off the ground and trans in neutral, driveshaft **MUST** turn in both directions. If it won't, band is too tight or VB bolt(s) in wrong hole location.
 Do not drive until corrected!

WARNING: Wrong Bolts locks Gear Train.

Valve Body Bolt Guide.

- | | | |
|----------------|---|------------------|
| A 10 MM |  | 3 A bolts |
| B 8MM |  | 3 B bolts |
| C 10MM |  | 9 C bolts |
| D 10MM |  | 2 D bolts |

Converting back to automatic shifts

For Computer equipped Vehicles only

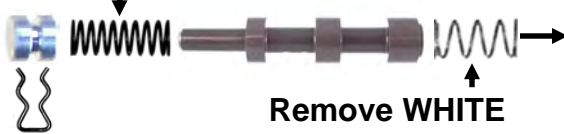
Make changes with Valve Body on Transmission

Remove retaining Clip from bottom.

Step 1

Remove white 3-4 shift Valve Spring. Install saved OE Spring.

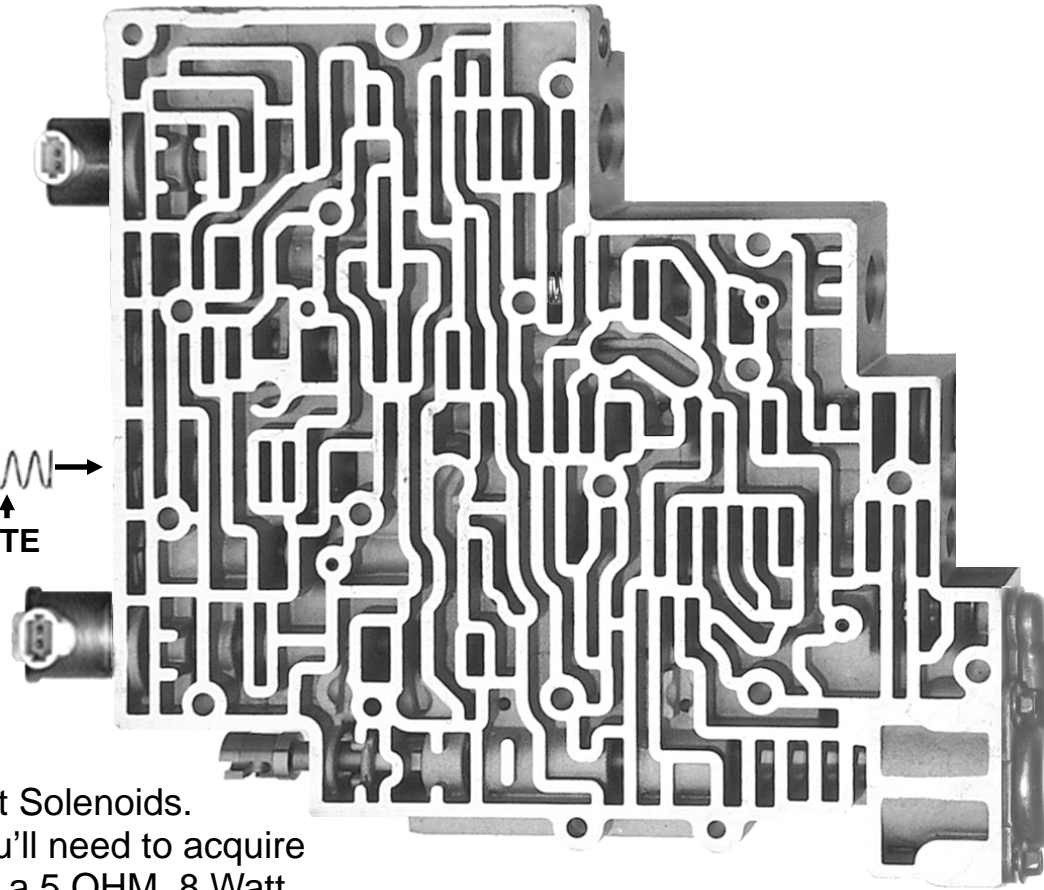
Re-install original Spring



Step 2

Reconnect the Wires to shift Solenoids.

If the Modulator is used: You'll need to acquire from an electronics supplier a 5 OHM, 8 Watt Resistor and install it across the two wires at force motor plug.



Mr Shift

"Thanks for Listening"

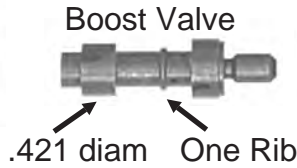


46-MOD 4L60E Vacuum System Installation

Product support: (626) 443-7451

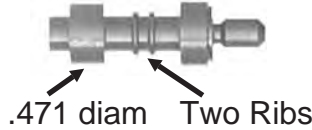


Boost Bushing

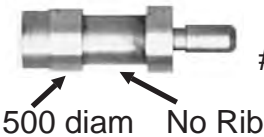


Boost Valve

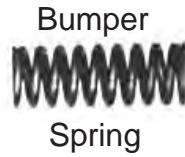
.421 diam One Rib



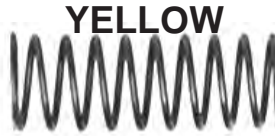
.471 diam Two Ribs



.500 diam No Rib



Bumper Spring



YELLOW

Step 2

Install YELLOW Pressure Regulator Spring



Pressure Regulator Valve

Step 1
Look at boost valve.
Circle boost valve size here:
.421 .471 .500

READ THIS: If you are unable to install the boost bushing parts due to interference with the late model speed sensor harness, use .471 as your boost valve size and skip steps 1 and 2.

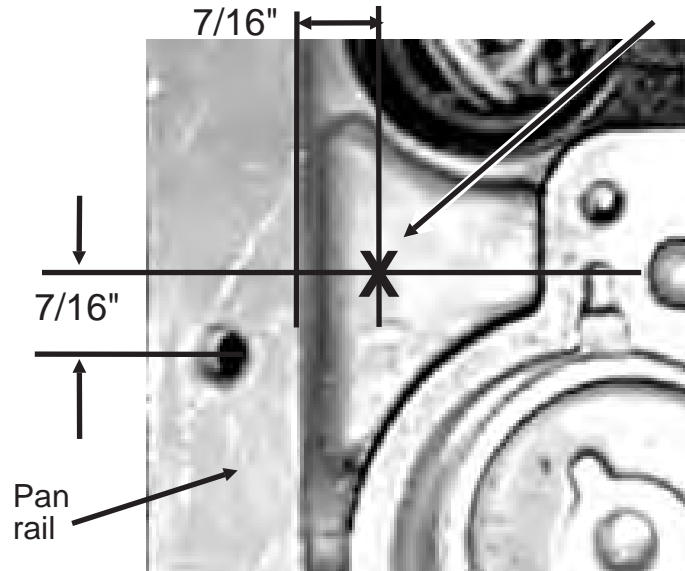
Installing this kit will fix most pressure rise problems.

This kit also increases accumulator pressure which can cause a very firm 1-2 shift.

It also does not solve the cross leaks that can burn out the L/R clutches and 3-4 clutches, nor does it correct excessive 3-2 downshift overlap that wears band and 3-4 clutches.

Installing the SK® 4L60E Shift Kit® reduces these complaints and furnishes calibration parts to adjust the 1-2 shift firmness.

Step 3 Drill 11/32" hole at "X" 7/16" in from pan rail and 7/16" forward of the pan bolt hole. Tap the hole, from this side 1/8" NP.



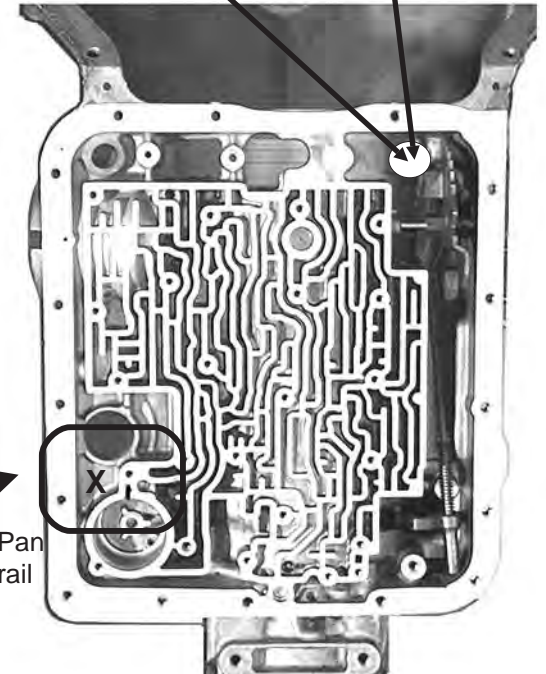
Pan rail



Step 4

Install fitting into the case with some sealer.

If speed sensor harness covers this area, skip steps 1 & 2.



Pan rail

46 MOD Cont'd

Line pressure and accumulator pressure are adjusted by changing the length of the modulator pin. Adjust the pin length to match boost valve diameter and vehicle use.

Step 5 ADJUSTING PIN LENGTH

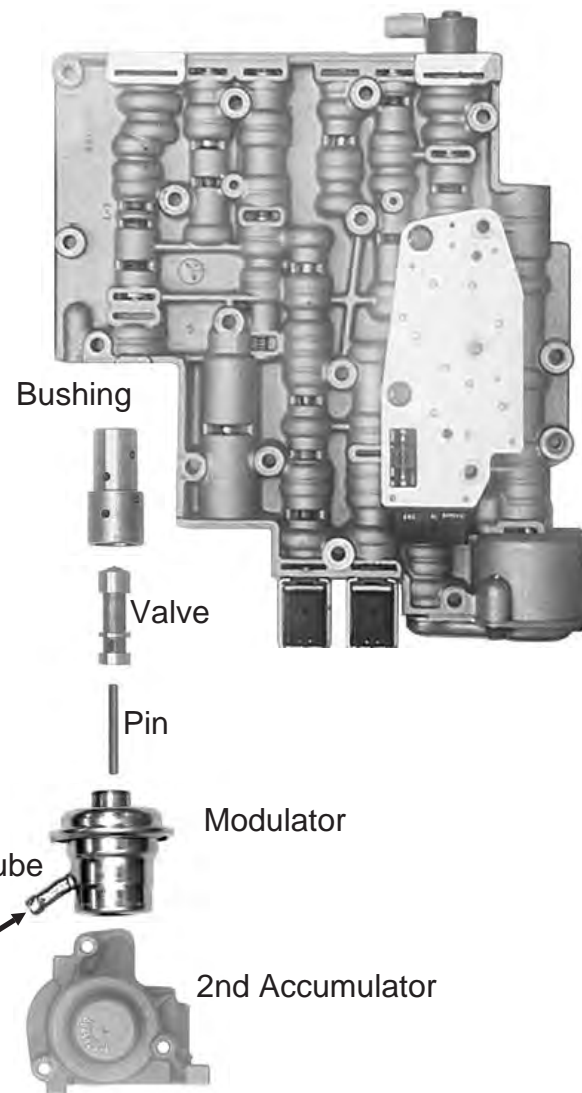
↓ Circle the boost valve diam here.
Grind pin shorter as needed.

Diam	Usage	Pin length
.421	Police & Street Hot Rod	1.365
	All other uses	1.325
.471	Hot rod with small converter	1.365
	Police & Street Hot Rod	1.325
	All other uses	1.300
.500	This boost valve is big improvement for vehicles that use electrical pressure control and for race cars with small high stall converters. For use with vacuum modulator the .471 or .421 boost valve will do the job just fine.	
	Race car with small converter	1.365
	Police & Street Hot Rod	1.300
	All other uses	1.285
Off road and rally:		
.421	Use pin length of 1.325	
.471	Use pin length of 1.300	

Check Pin length

	1.365
	1.325
	1.300
	1.285

Step 6 Install bushing, valve, pin and modulator as shown. Install 2nd accumulator **loosely**. [Sometimes it is necessary to grind the accumulator casting slightly, where it butts the modulator, before installing the bolts.]



Step 7 Place the hose on this picture and cut it to match picture.



Step 8 Install skinny **SILVER** spring into the tube. Install hose over skinny spring & tube. Install Zip tie on both ends of hose and install hose onto the fitting in the case. Tighten Zip-ties.

If engine has supercharger or turbo you will need the TransGo Vac bypass kit in the vacuum line.
Order: VBP-Vac bypass
"We had fun making this setup and we hope you are going to like it."

WARRANTY: Warranty is limited to the replacement of defective parts only and does not include inconvenience or ancillary dysfunctions real or projected.

Installing Vacuum Line

Step 1

Using 3/16 Brake line (not provided), route brake line down to modulator case fitting. Use enough line to comfortably reach within 2" of both the vacuum brake booster Tee location (Step 2) and the case vacuum fitting. After determining correct length that will allow you to secure the line and reach both fittings, cut the brake line and swedge both ends to prevent vacuum hoses from slipping off. Secure lines and hoses with Zip-ties.

"If the engine has supercharger or turbo you will need a pressure bypass valve in the vacuum tube to prevent high pressure trans damage."

Order: TransGo® P/N VBP-Vac

Step 2

Cut power brake hose and insert tee into hose. Install clamps [not furnished] or zip-ties on brake hose.

Step 3

Install a short piece of Vacuum hose between case fitting and brake line. Make sure rubber vacuum line is as straight as possible to prevent it from becoming kinked. Zip-tie hose to line and fitting as shown.



Mr Shift®

"Thanks for listening!"

Page3

Supercharged & Turbo'd engines require bypass here.

