

SK® 44-55E Shift Kit®

Reduces/Corrects/Prevents

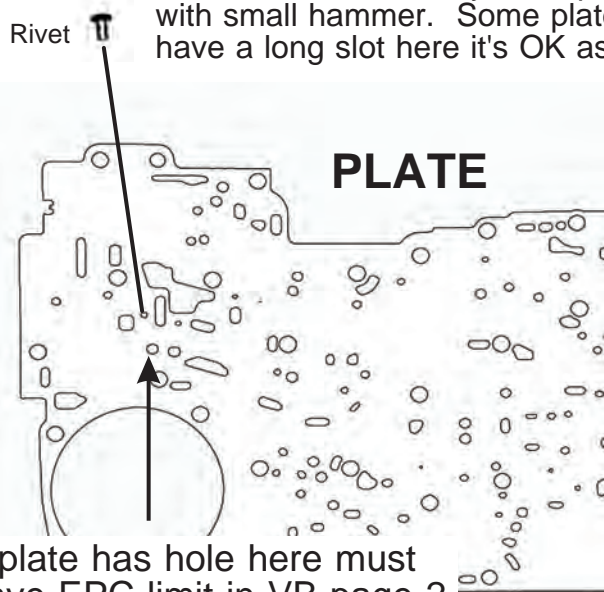
Forward Clutch Failure—2/3 Cutloose
Hard Throttle 2/3 Slip—4th and 2nd Band Failure
Coast 3/2 Clunk—Won't Move
Slipping Codes: 733—734—647—648



Fits: 1995-2010 4R44E, 4R55E, 5R55E

2.3—3.0 and 4.0 V6
Aerostar-Explorer-Bronco-Ranger
Mazda B2300—B3000—B4000

A. Insert small rivet furnished up thru this hole. Hit it smartly a couple times with small hammer. Some plates will have a long slot here it's OK as is.



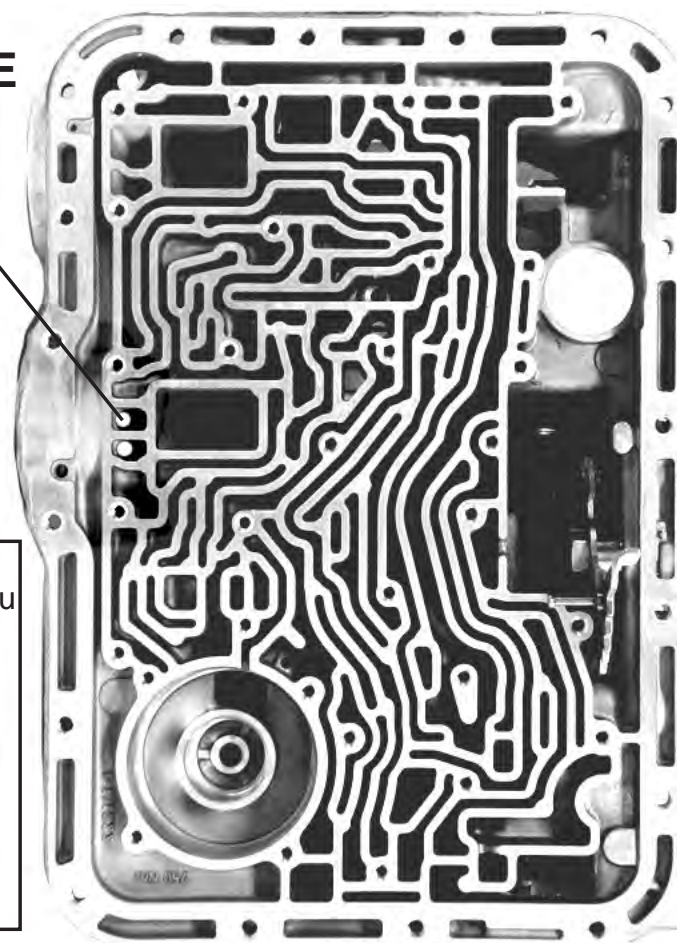
It plate has hole here must have EPC limit in VB page 2

Cooler Flow: This trans has temperature controlled cooler flow. It won't have cooler flow until warmed up. To check cooler flow drive vehicle until it is warm, then check flow.

CASE

Tapered Orifice

B. Install the tapered orifice into 2nd band feed hole with valve body bolt or punch.



2nd band: Tighten band snugly. Then loosen until you can just turn the output shaft in both directions, by hand, then tighten lock nut.

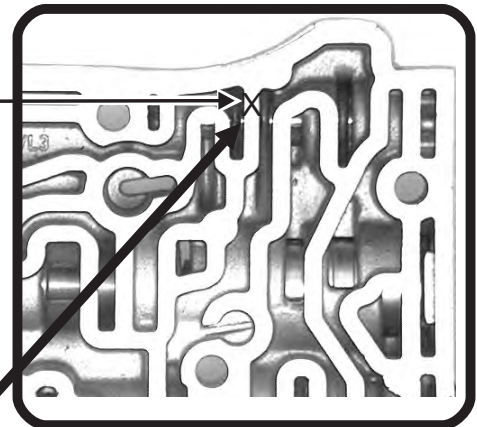
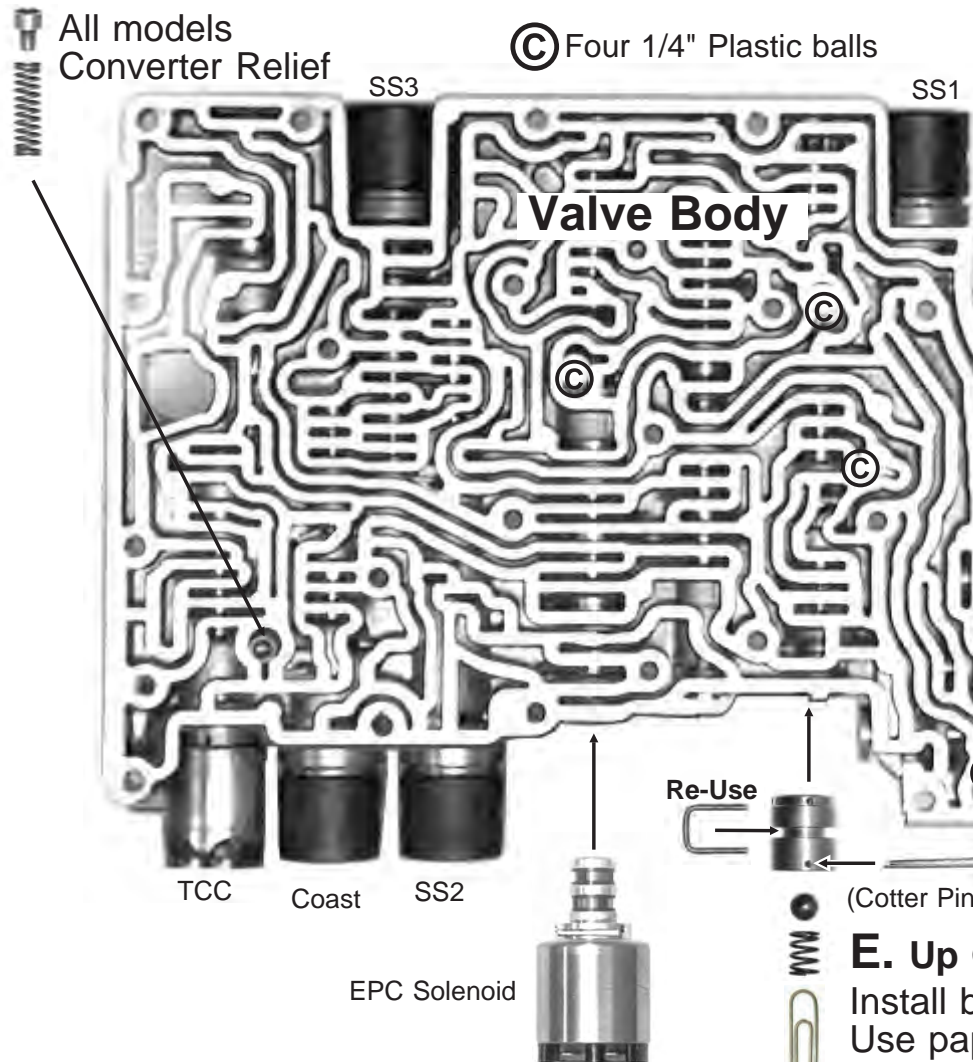
Overdrive band

Single wrap band:
Just snug and off 2 turns.

Double wrap band:
Just snug and off 3 turns.

Original calibration: 1. Clutch and band shift pressure is regulated as low as 40 psi even when line pressure is much higher.
 2. This often causes burned forward clutch and bands.
 3. If EPC solenoid sticks vehicle will not drive forward or reverse.
 This kit changes forward circuit so that vehicle can at least be driven somewhere for service. SHIFT FIRMNESS is upgraded to avoid soft shifts and band failure. Also lockup is slightly firmer.

A. YOU MUST cross drill thru partition, under the X, with the .063 (1/16") drill furnished.

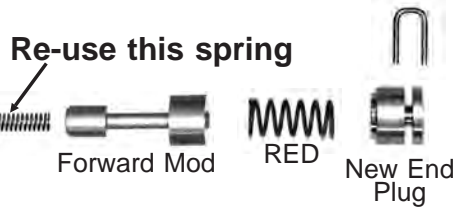


This EPC limit valve & spring was removed in later VB's. If plate has hole over this location EPC limit valve and spring must be installed.



B. WHITE

C. Install new puck.



D. All Models: Install RED spring and the New Alum End Plug.

For firmer shifts: Use ORANGE spring instead of Red. The 3-2 coast downshift will be firmer.

For even firmer shifts: Orange Outer & Yellow inner are used together. Coast downshift will get even firmer.

(Cotter Pin will be outside of VB when done.)

E. Up Grade: New EPC limit
 Install ball & spring into bushing. Use paper clip to push spring in while installing cotter pin. Spread pin legs. Discard paper clip. Limit assy replaces original end plug.

Listen up: EPC solenoids wear out. A new one is recommended. Got a 2-3 Flair? SS2 can cause it!

"Thanks for listening. Let us hear from you."

Additional Fixes:

No Reverse or Delay Bang Reverse Correction.

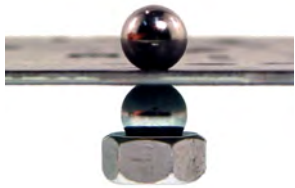
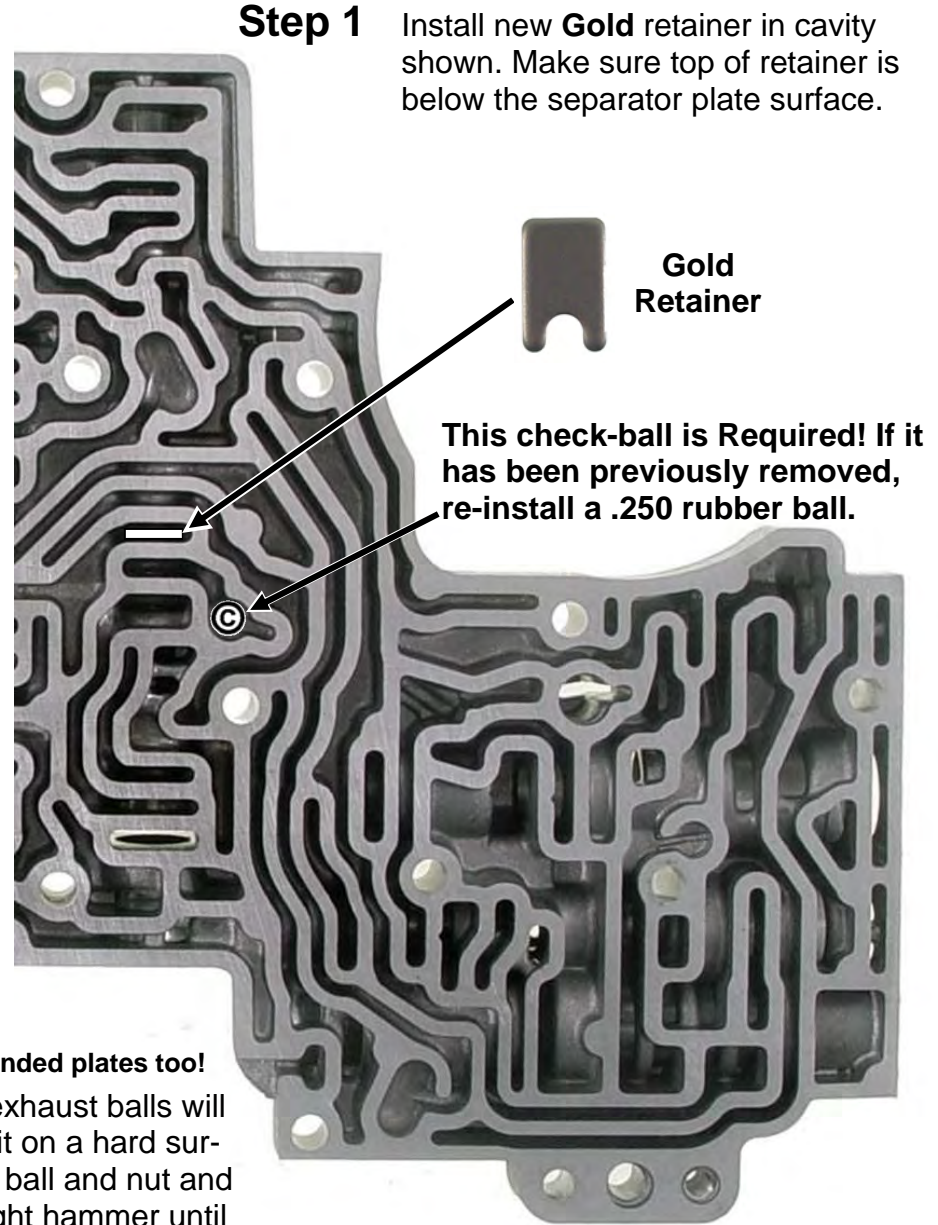
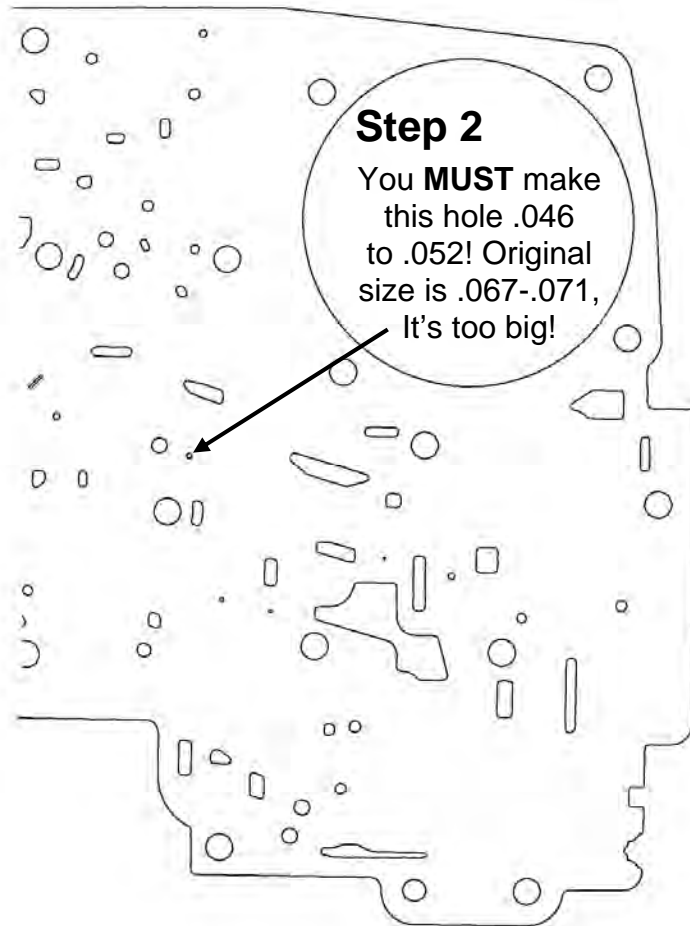


Plate hole size reduction. Works on bonded plates too!

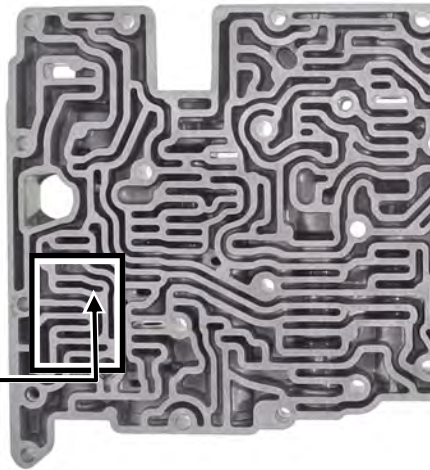
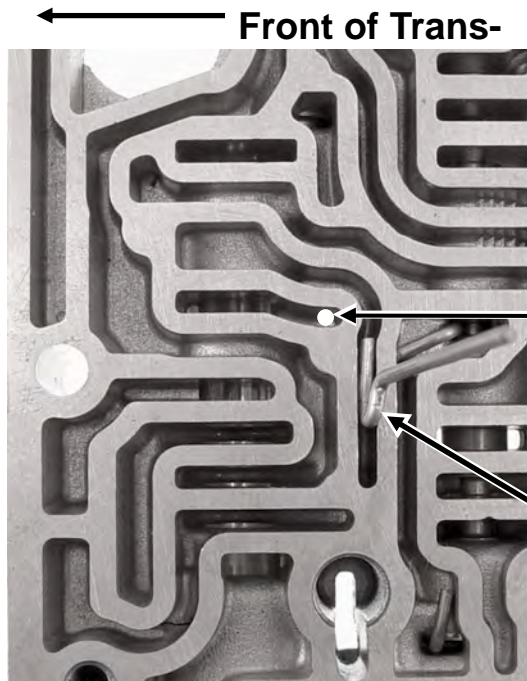
Use (2) approx .314 steel balls (700R4 TV exhaust balls will work) to downsize plates. Take 1/4" nut set it on a hard surface and set (1) .314 Ball on it. Lay plate on ball and nut and set other .314 ball on top. Hit top ball with light hammer until hole is .052 but no less than .046. Engagement into reverse will feel firm like A4LD. Smaller hole = less firm.

Additional Fixes: TCC Exhaust Correction

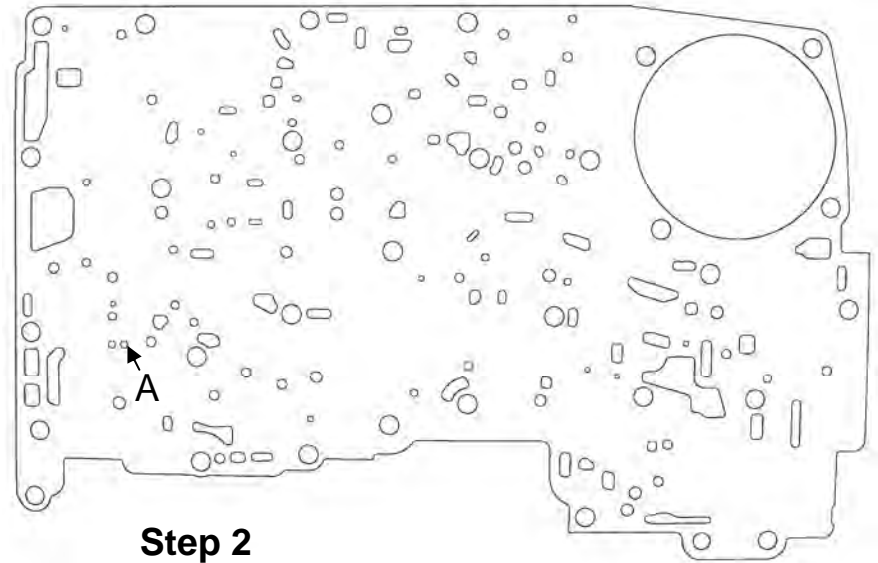
After overhaul with a new converter some vehicles will still set TCC Slip or Stuck Off Codes when there is nothing wrong with solenoids, pump or converter. This Correction will usually take care of the problem **provided** there really is nothing wrong with the above items.

Step 1

Remove TCC Solenoid, shift valve and spring. At the white dot shown below, drill a 1/16" exhaust hole down thru the floor and out the bottom of the VB. Clean drill chips and reassemble TCC Spring, shift valve and Solenoid. Hollow end of valve gets the spring, spring enters VB first!!

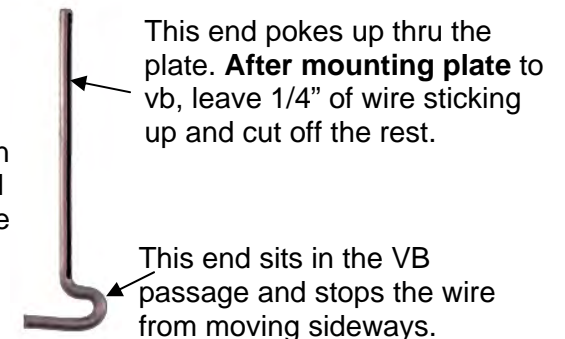


New bent wire is installed up thru the hole marked "A" in the plate. As you set plate down on VB, line up bent end of wire until it slips into the VB cavity shown here. Rotate it either way to fit it comfortably in the VB. After tightening plate bolts, leave 1/4" of the wire sticking up thru the plate & cut off excess. Use care installing VB to case. Wire must poke into case cavity for VB to sit flat.



Step 2

If plate **does not** have bonded gaskets, use some assembly gel to stick both VB gaskets onto separator plate first. Now plug Hole "A" with bent wire provided, by inserting straight end of wire into hole "A" from the vb side of the plate. It should fit snugly into the hole. Plugging the hole doesn't have to be 100% perfect 95% is just fine. (A slight wiggle is ok) Guide bent end of wire into vb passage shown at left while setting plate down on vb. Re-install plate bolts. Trim wire so only 1/4" is left poking up thru the plate.



Electrical Information

4 Speed Solenoid Apply Sequence. All normally open.

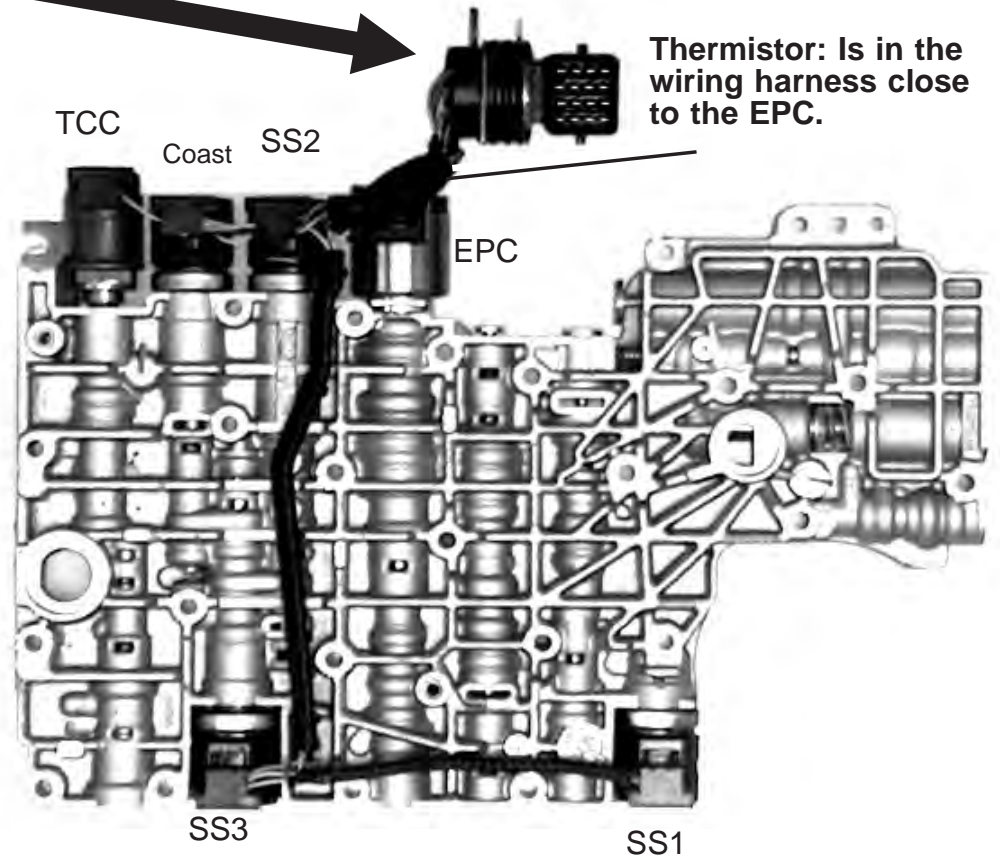
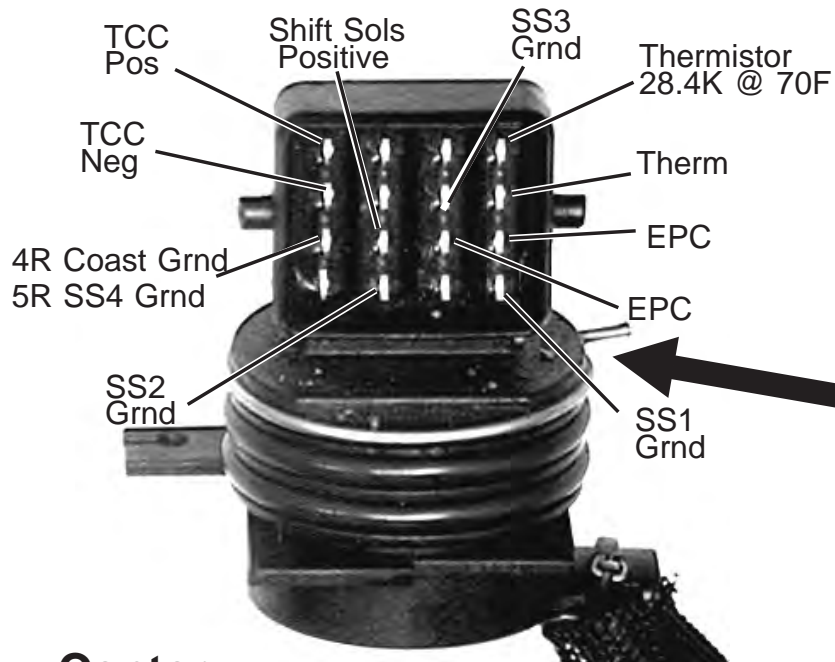
1st = SS1 2nd = SS1&SS2 3rd = None

4th = SS3 Rev = SS1 Lockup = TCC grd

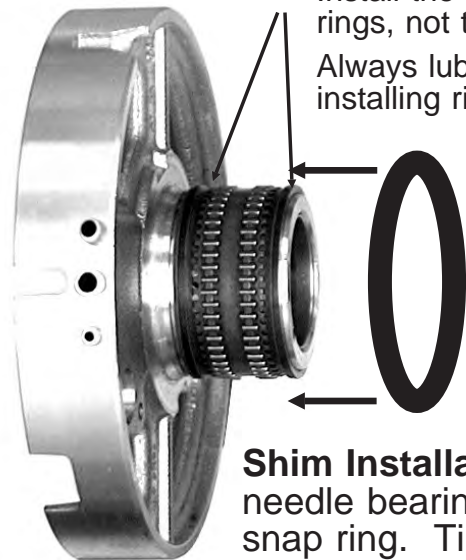
Coast ON in manual 1,2,3 and Rev

Coast, SS1,2 & 3 = 22 to 48 Ω TCC = 9 to 16 Ω EPC = 3.1 to 5.7 Ω

Limp = Starts in 3rd



Center Support



With needle bearing type:
 Install the SCARF CUT hard plastic rings, not the full circle rubber rings.
 Always lube rings & support before installing rings in groove.

End play is critical to prevent dumping at lube dam.

New thicker needle bearing is \$25.

This shim will fix it.

Shim Installation: Install shim then needle bearing. Install support and snap ring. Tip the trans up so the gear train weight pushes the support against the snap ring. Insert fingers thru the support and push on drum. If it moves a little it's OK. If its tight remove shim.

Warning: Tighten this valve body gently 72-92 inch lbs. Over tightening causes wrong gear start after reverse. Torque bolts starting from the center and work outward.

Typical VB Layout for Reference Only!

Technical information like this is available by subscription on-line at www.transgo.org
 All product information is available without subscription at www.transgo.com

