

# SK® AW55-50

## Reduces/Corrects/Prevents

Delay/Bang drive engagement, 4-3 and 3-2 coast clunk, 2-3 and 3-4 cut-loose, kick-down run-aways, TCC Slip, Coast 3-2 part throttle bang, double-bump 3-4 and 2nd Sprag failure.

For Professional Use Only!

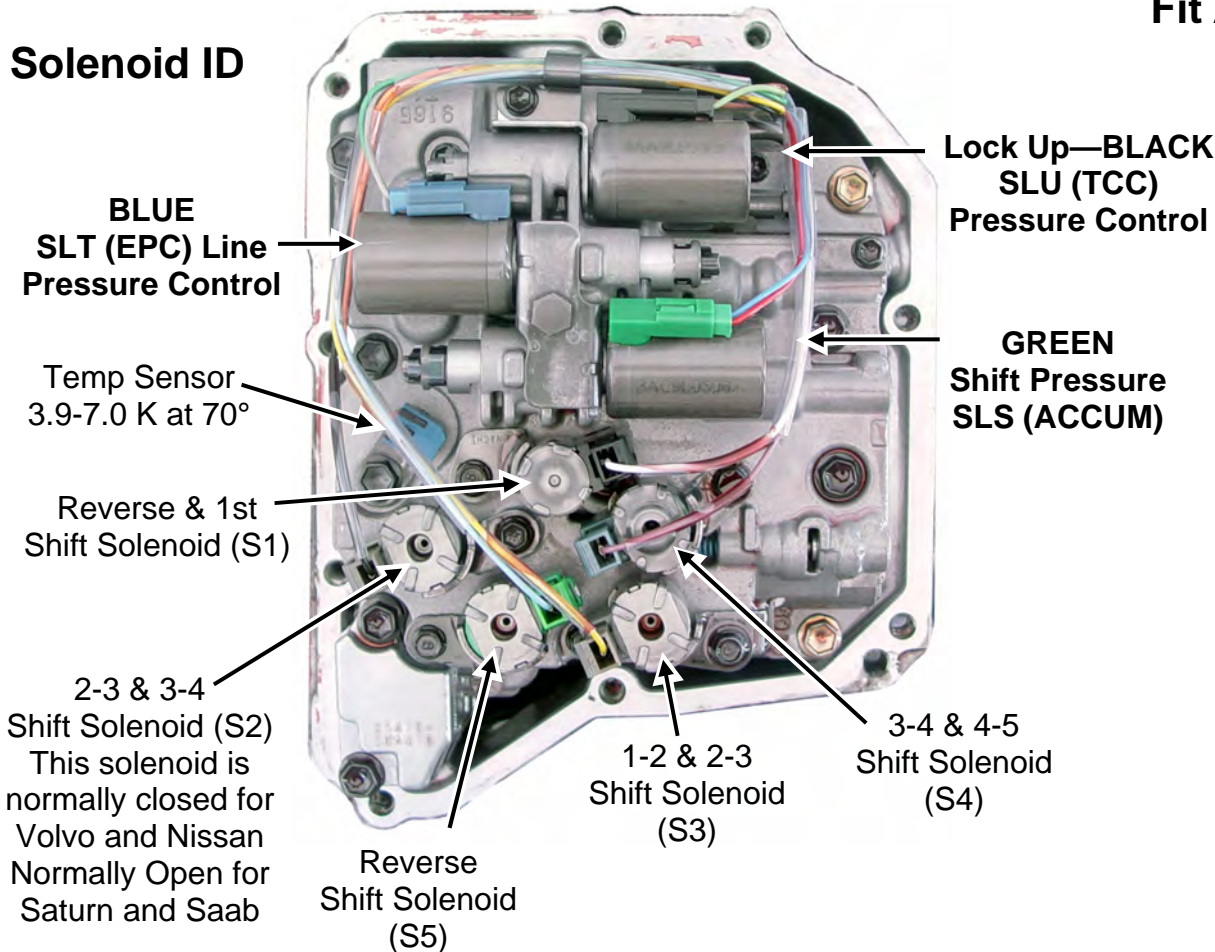
### Fits:

01-07 Volvo,  
04-07 Nissan RE5F22A  
02-07 Saab & AF33-5  
03-04 Saturn  
05-06 Chevrolet Equinox  
06-08 Pontiac Torrent



**This Kit Does NOT  
Fit AW50-42LE!**

### Solenoid ID

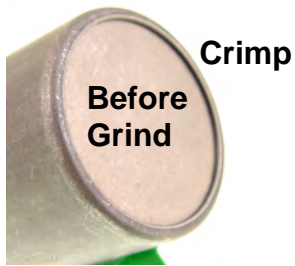


**First Thing Check Resistance!**  
SLU,SLS and SLT 5-7 Ohms @ 70°F  
SS1 through SS5 11-16 Ohms @ 70°F

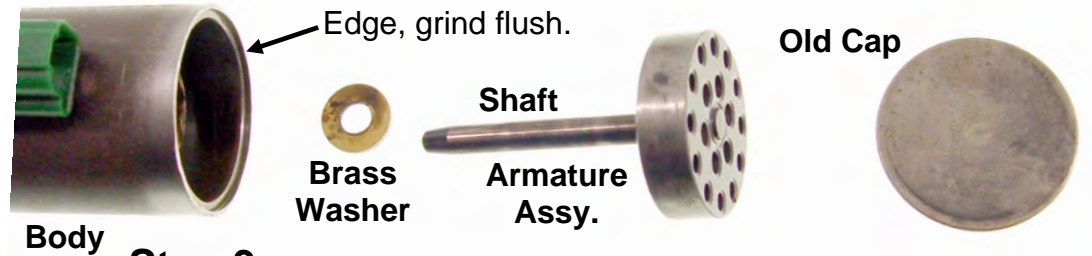
### Step 1

Locate the EPC, TCC and Accum Solenoids. Before repairing them, perform Ohm check by probing the connectors. They must be 5-7 Ohms between the pins. From either pin to solenoid body must be open. Don't repair solenoids until you know electrically they are OK. **Any solenoid out of range must be replaced.**

# Solenoid Disassembly and Rebuilding—Black, Blue and Green



**Step 2** On the angle shown, using the **SIDE** of the grinding wheel, grind off the crimped end.



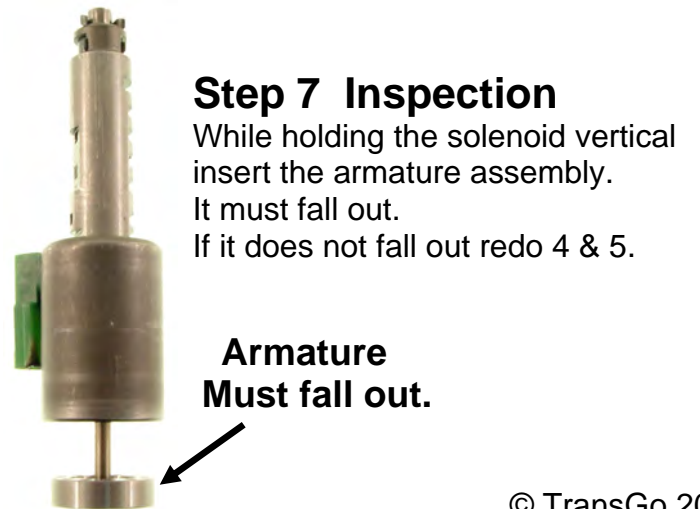
**Step 3** Disassemble. Grind edge flush. Deburr outside of Sol can.



**Step 4** Mic the shaft. With .156 to .157 shaft use long drill to resize bushings. With .154 to .155 shaft use short drill to resize bushings.

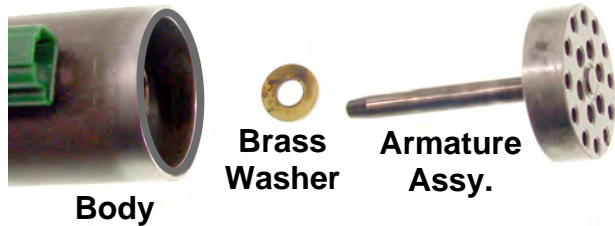


**Step 6** Clean valve and passages using brake clean and air while pushing the armature in and out 10-20 times.

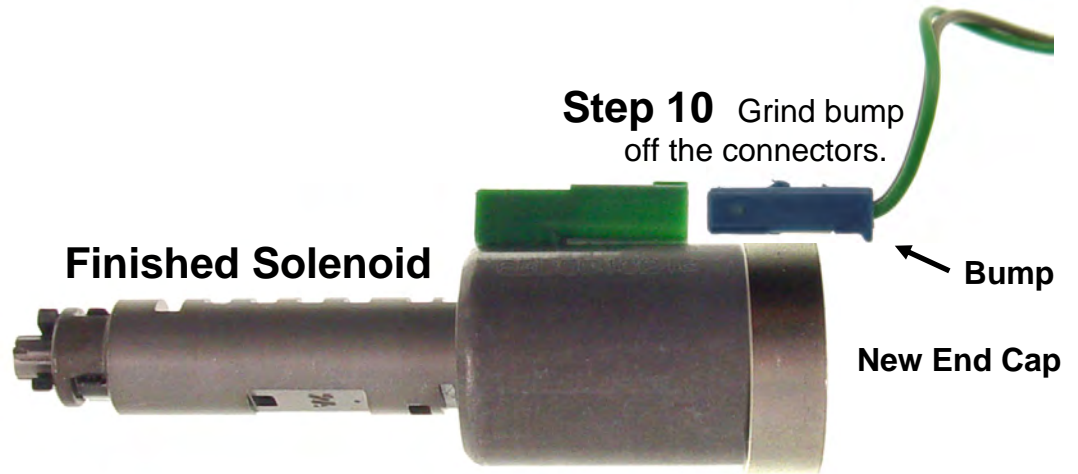
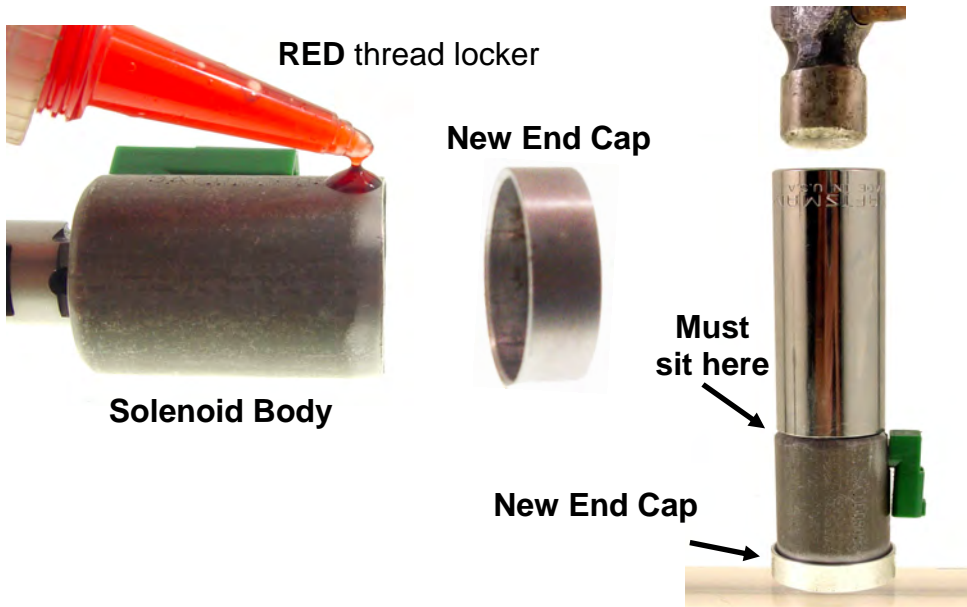


# Solenoid Re-Assembly

**Step 8** Install brass washer onto pin and insert armature assy. into solenoid.



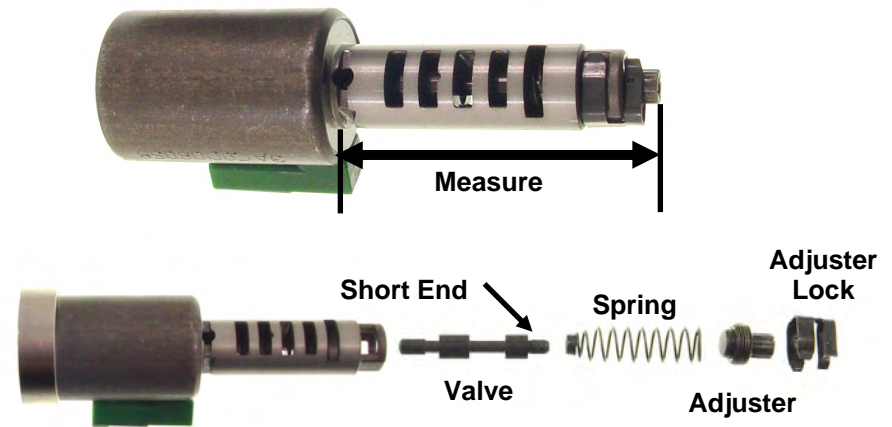
**Step 9** Use brake clean to clean the end of the solenoid. Place very small amount of RED thread locker on the outside. Stay a little away from the end. Be careful—Do not get any into solenoid or in the new end cap. Start end cap onto solenoid. Place the whole assembly, cap down, onto a hard flat surface. Place 1/2" drive 3/4" deep socket over solenoid snout insuring that the socket is sitting on the snout end of the solenoid body as shown. Lightly tap the socket with a light hammer until the solenoid is seated into the cap.



Thanks for listening. Now: continue onto next page to FIX the valve body.

## Stuck Valve Correction

If a solenoid valve is sticking it may be necessary to disassemble and clean it. To maintain the adjustment, measure the distance from the body to the end of the adjustment screw, and put it back the same.



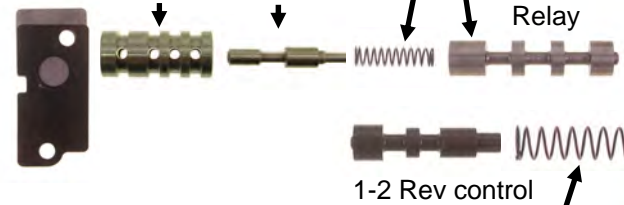
# Install New Valve Body Parts

All the Valve Body parts and repairs are shown on this page. For assembly details see exploded views of valve body pages 5 & 6.

**Bench Data:** Complaint: 2-3 Cut-loose after rebuild. Quality: Reverse engagement OK, and 3-4 shift is OK. Some shops say: **Reusing the 3<sup>rd</sup> band or installing a new OE band will usually avoid this 2-3 Shift complaint.**

## Step 3

Install NEW LRC Sleeve & Valve



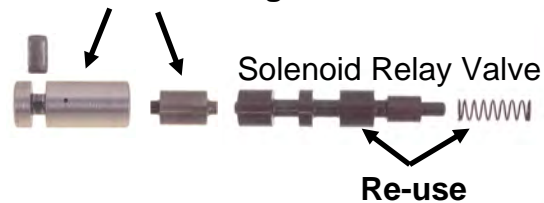
Some models have this spring that matches the car's computer program. If swapping VB's, add or remove this spring to match your original VB!

## Rear Body Front



## Step 1

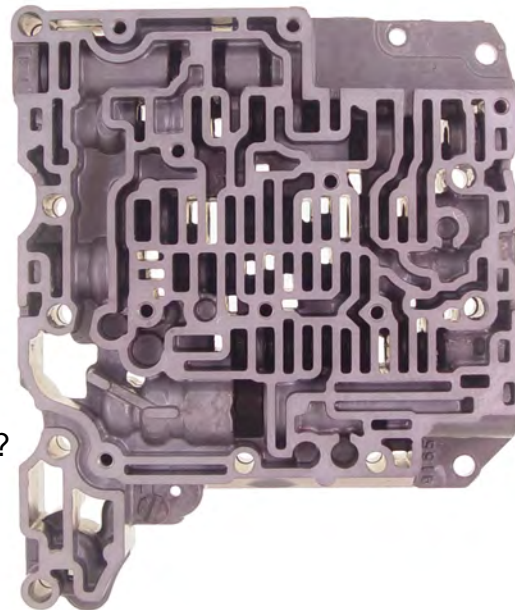
Install NEW Solenoid Relay Sleeve & Plunger Valve



3-2 Part-Throttle Bang?  
2nd Sprag failure?  
Fixed!

## Middle Body Front

See Page 5 for detailed assembly view.



## Step 2

Install NEW 3rd Band Release Valve and Orange Spring.

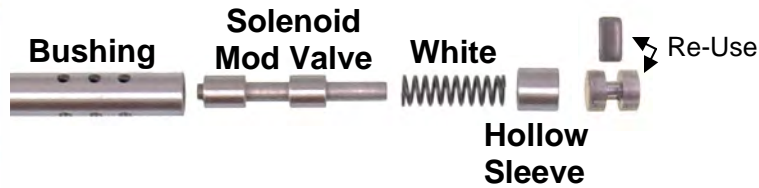
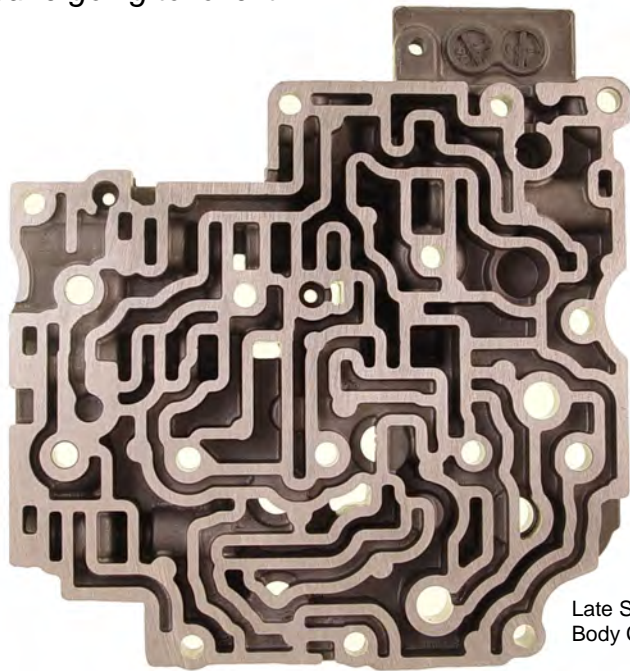


# Front Body-Rear

**Good News!** Installing the NEW Solenoid Modulator Valve system eliminates the need for expensive reaming/boring tool purchases on this valvebody!  
The “**drop-in fix**” for the worn Sol Mod bore!  
You’re going to love it!

## Step 1

Install **NEW Solenoid Mod Bushing, Valve, White Spring & Sleeve.**  
Re-use end plug and retainer.

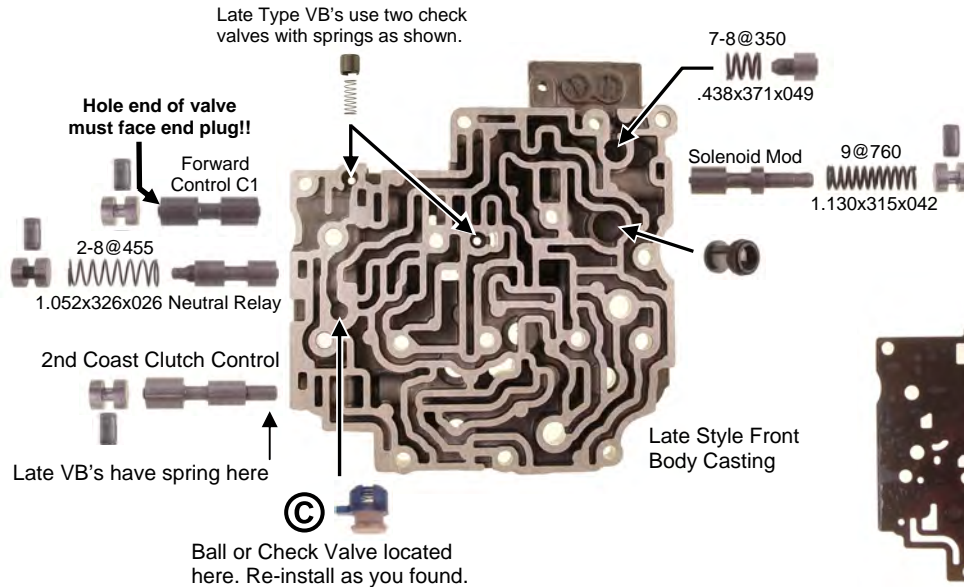


## Step 2

Enlarge “X” hole with .055 drill provided. OK if already larger.

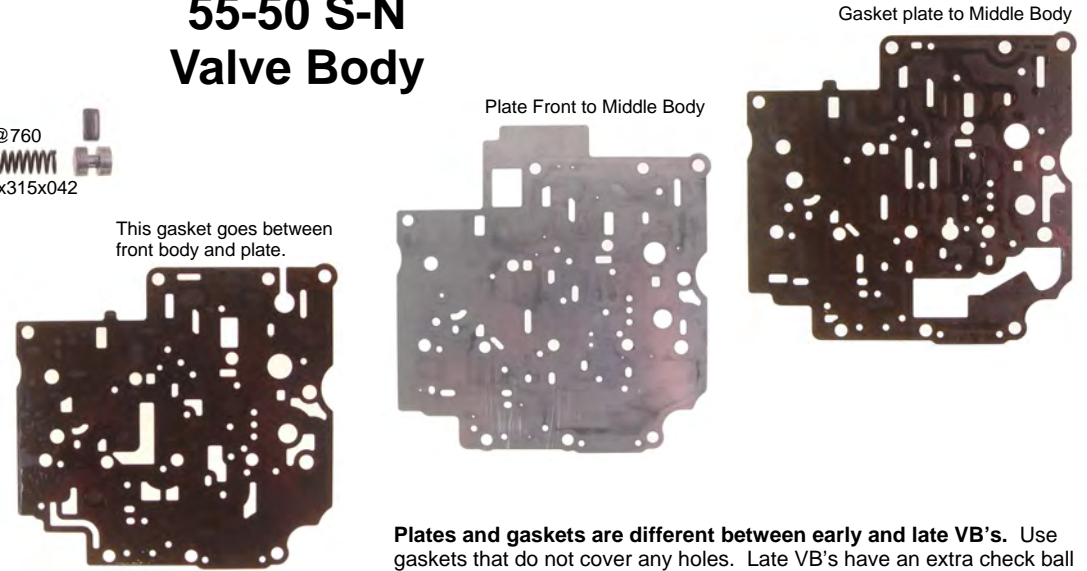


# Reference: Exploded view of valve body

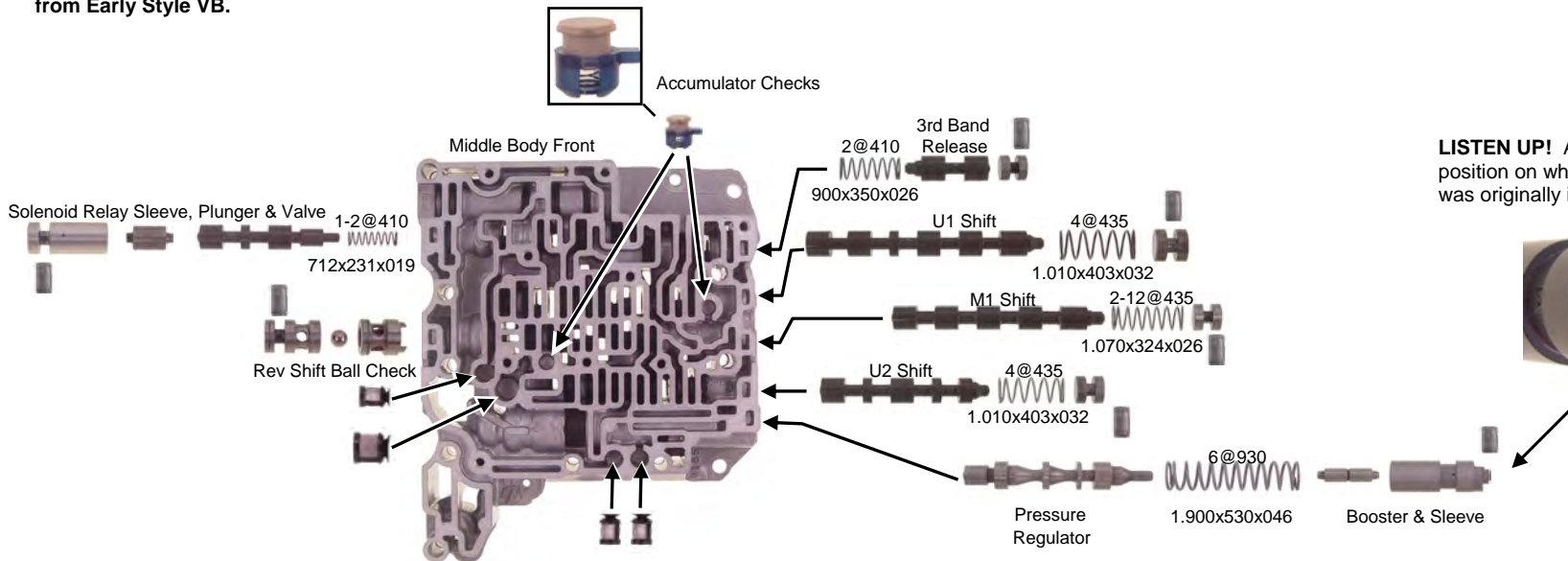


Late Style Front Body Casting shown for Reference only! All other parts shown are from Early Style VB.

## 55-50 S-N Valve Body

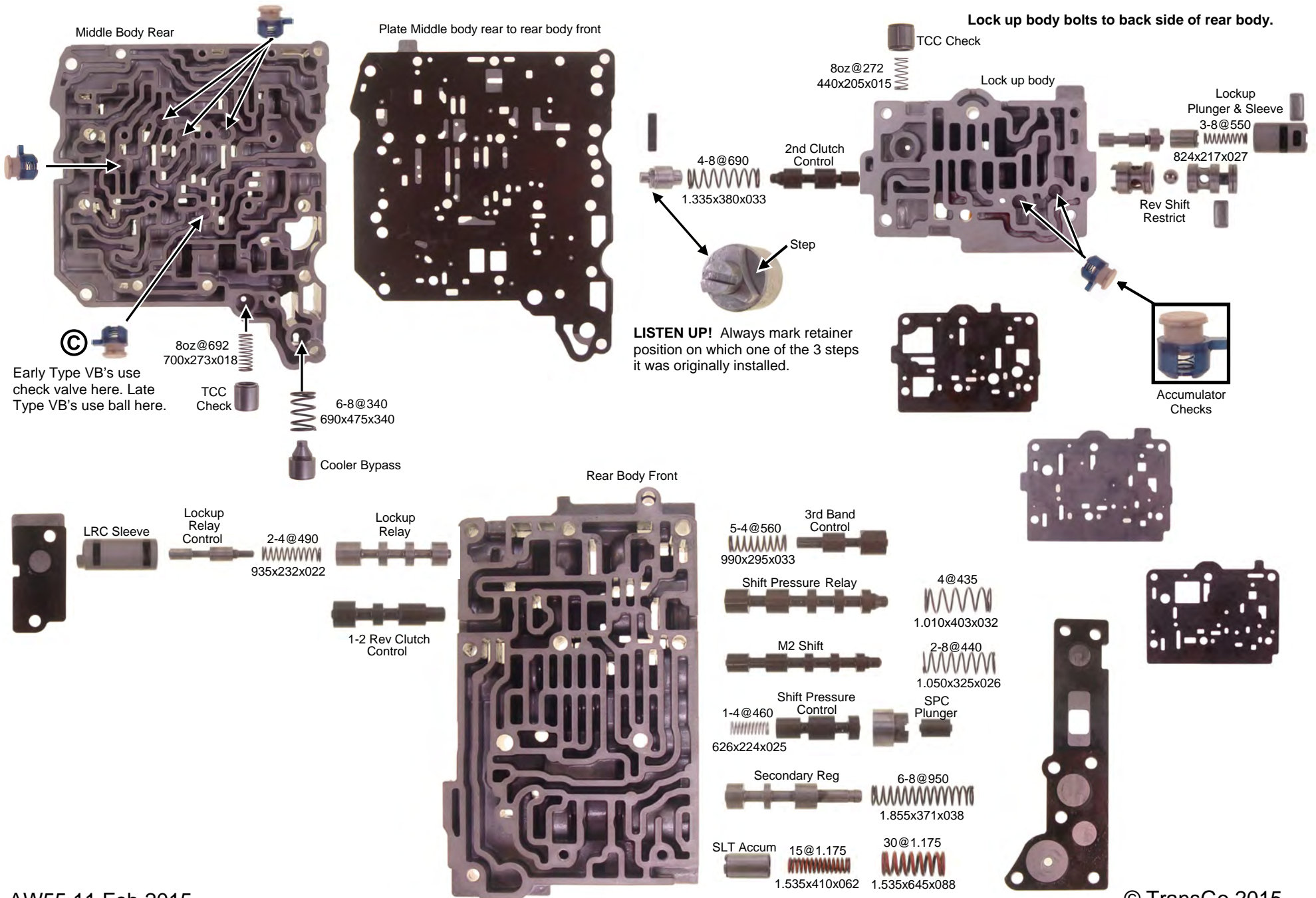


Plates and gaskets are different between early and late VB's. Use gaskets that do not cover any holes. Late VB's have an extra check ball in the Front body that does not exist on early VB's. See Left for Front Body Check ball locations. **DO NOT MIX** late and early VB parts!

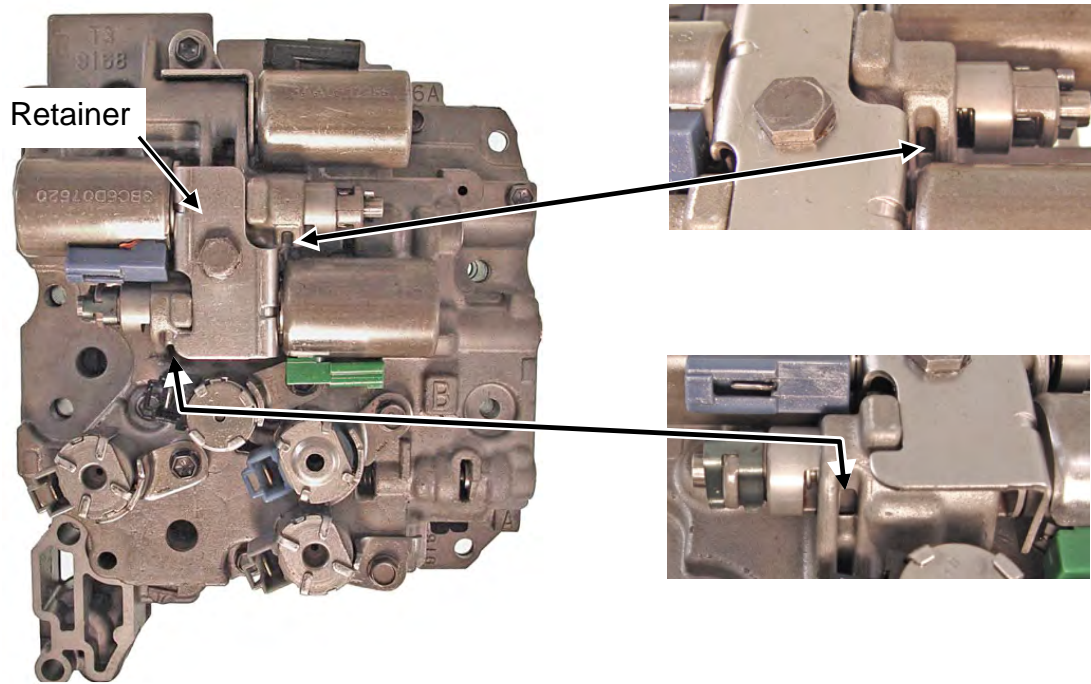


**LISTEN UP!** Always mark retainer position on which one of the 3 steps it was originally installed.

# Reference: Exploded view of valve body



# ATTENTION!! VB & Solenoid exhaust Ports must line up!



**ATTN: Make sure Solenoid & Harness connectors are clean. Harness Connector must snap in. We have experienced lots of complaints from a bad connection. Check them twice!**

## Taking a Better Road...

We know how hard it is to deal with complaints AFTER the trans is already back in the car. This is a fine trans with a good lifespan. Normal wear in control parts causes most malfunctions.

**UNLESS** you FIX this wear, while you have the car, you risk a comeback or a no-ship.

Replacement Shift Solenoids are available. OE Replacement Control Solenoids are NOT available separately. So you need to chose to fix them or pay \$800 to \$900 for a complete valve body from the dealer. Ouch!

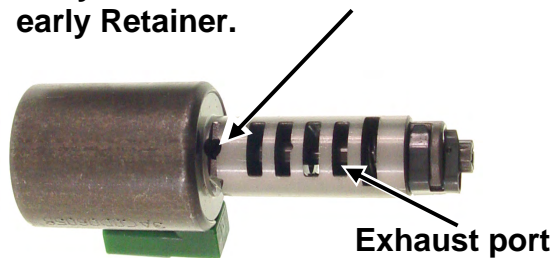
Now the good news: Included in this kit, is parts and tech to FIX the control solenoids. We also furnished parts for the usual wear items in the Valve Body. Your care and patience installing this product will make this trans a real winner! Go for it!

The Tech Team

**VB exhaust Port MUST line up with the Solenoid exhaust Port . Then install the Solenoid Retainer.**

**Incorrect Retainer, Solenoids or mis-positioned Retainer will block exhaust Ports and cause rough shifts, high line & Sol codes.**

**Early Solenoids have round hole here and use early Retainer.**



**Mr. Shift®**  
**Have a nice Day!**