



5R55S/W HD2 Reprogramming Kit[®]

Fits: 5R55S/W 2002-10 Does NOT fit 5R55N

**This kit is about: Upgraded Performance,
Reduces/Prevents: Won't Move - Pump Noise,
No Lockup Hot, Lockup Slip/Shudder**

Prevents Band failure common after adding Horsepower.

Trouble Codes: P1740, PO732, 733, 735

This is not a "do it yourself" kit.
It's for experienced, professional
Transmission mechanics only.

If Trans is in Vehicle Skip Pages 1 & 2.

"Hello Shop: You are going to love the added performance
to this trans. Efficient shifts with class!" Gil

1. Flow Control Assembly

Install **solid** end of piston into bushing.
Insert **YELLOW** spring into **hollow** end
of the **Piston**.

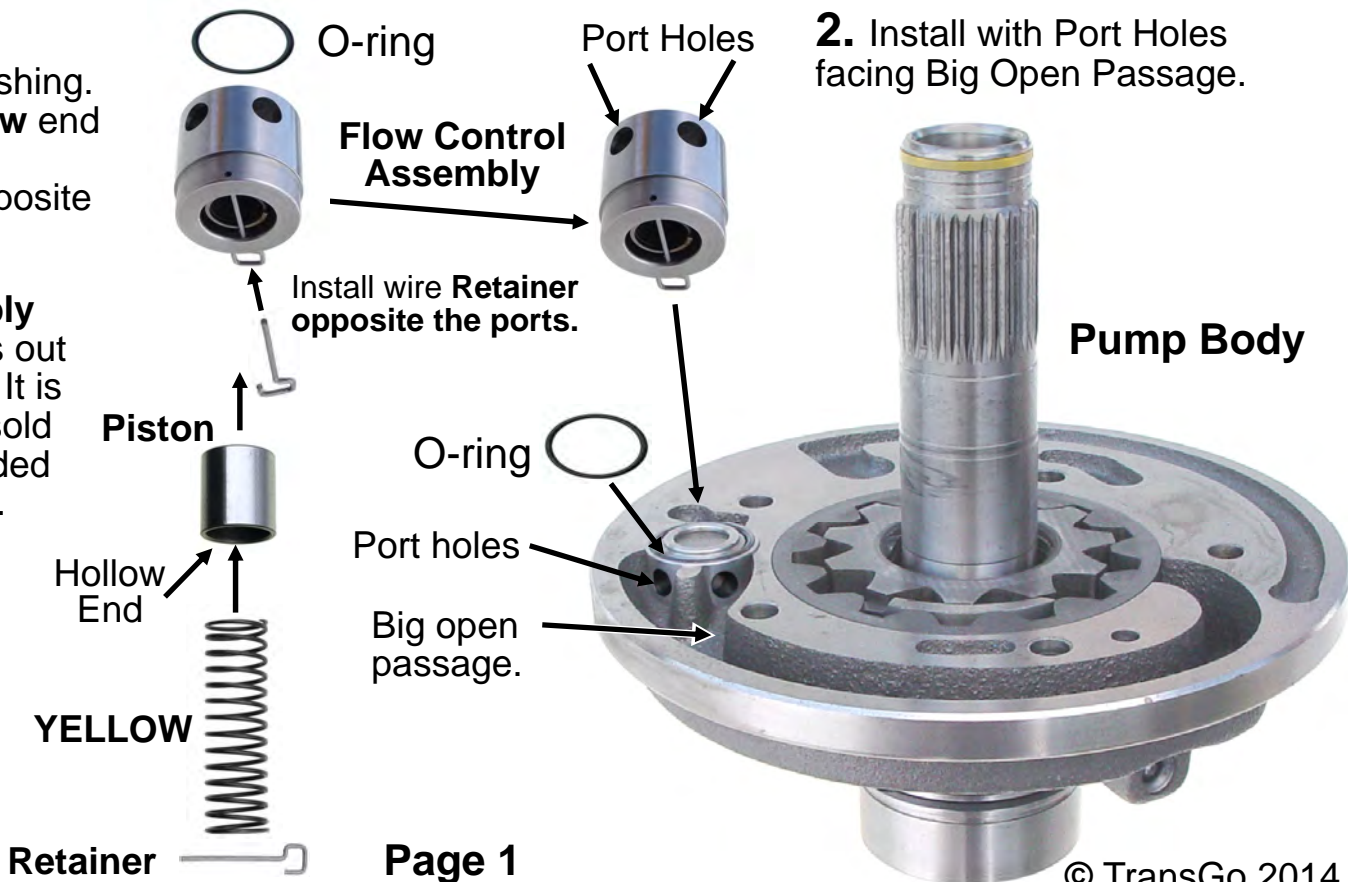
Install **Retainer** into **Bushing** opposite
port holes and under the spring.

Original Flow Control Assembly

Sticks, causing won't move, wears out
causing burned friction and noise. It is
included in a new pump, and not sold
separately. We believe the upgraded
design will outlast the original part.



5R55W/S HD2 28 Oct 2014



1. Assemble & Align Pump

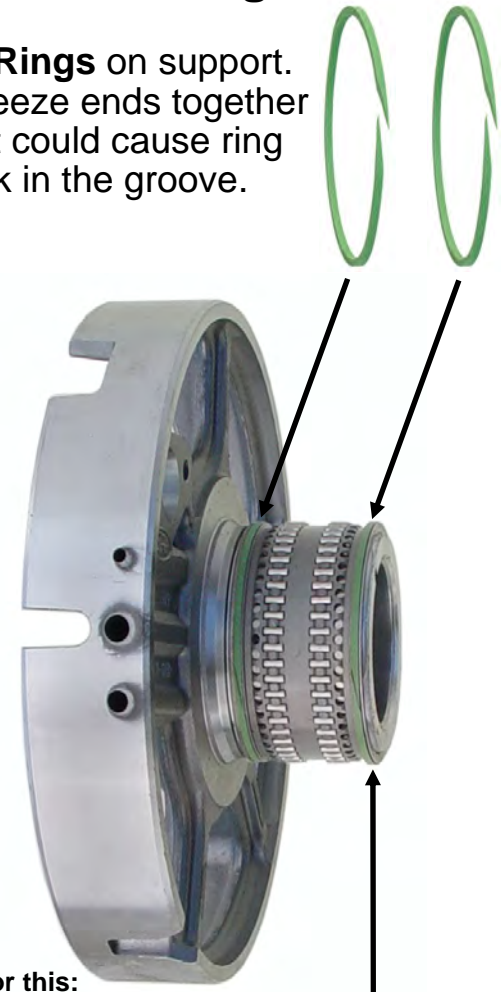
Align pump **BEFORE** installing front seal.
Start bolts, leave pump halves loose. Slide **Pump Tool** over stator spline. Push tool, while wiggling pump body making sure tool enters and snugs into the pump bushing.
Tighten the pump bolts to 18 ft lbs.



If Trans is in Vehicle Skip this page.

High Temp Low Shrink Direct Clutch Rings

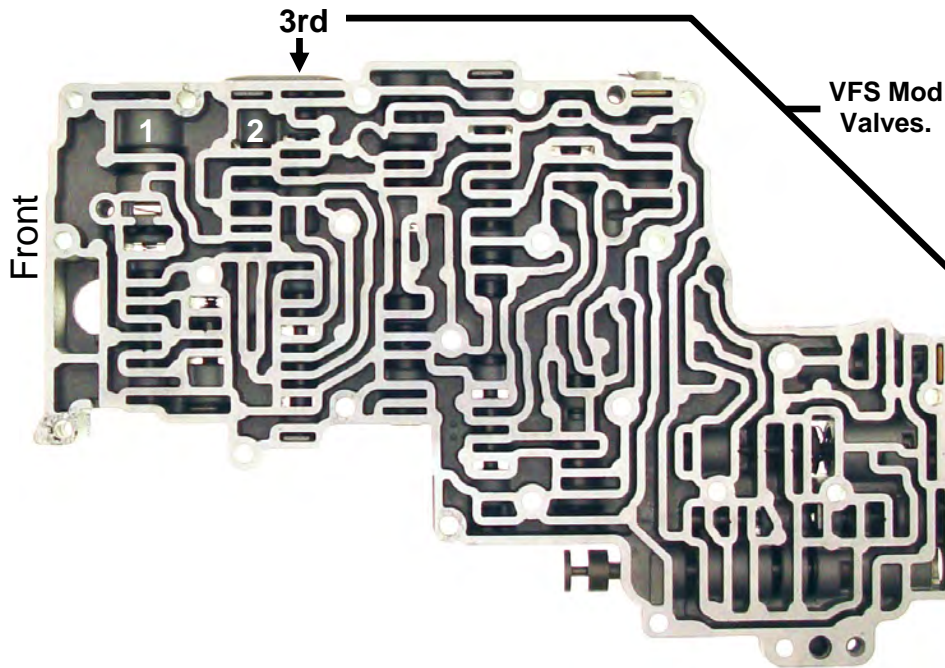
2. Install Rings on support. Don't squeeze ends together firmly, that could cause ring to be stuck in the groove.



Delay forward or burned direct clutches? Check for this:

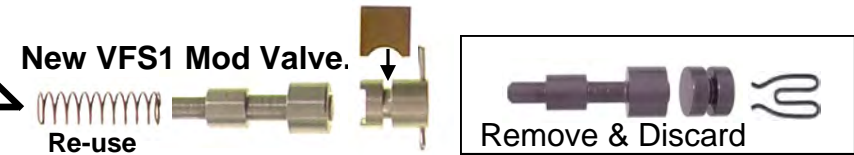
With sealing rings removed look for cracks on the edge of the metal sleeve that continues under the bearing. Replace support if found. Over-heating of the trans increases this possibility.

VFS2 Mod Valve is 3rd valve bore from front.



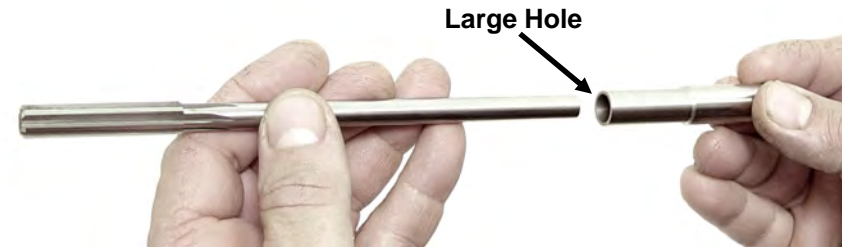
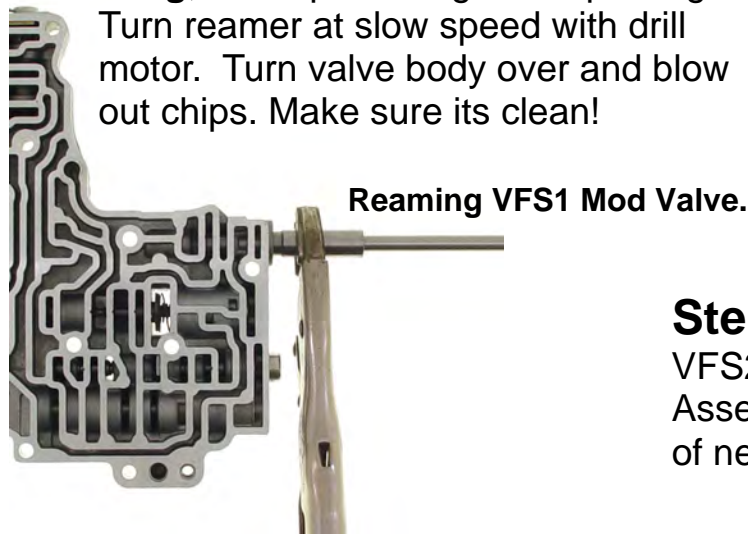
If Trans is still in vehicle, start here.

Step 1. Remove and discard the old VFS1 Mod valve, retainer and end plug.



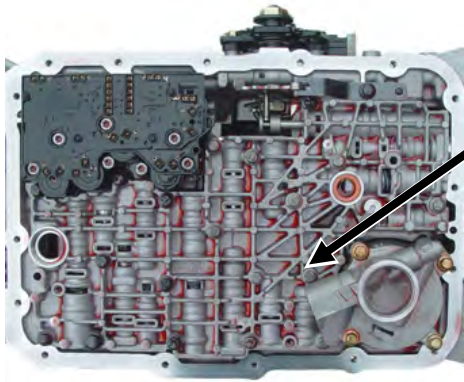
Step 4. Install Original Spring, New Oversize VFS Valve, assembled New Relief Bushing and New Retainer.
(See next page for relief valve assembly procedure.)

Step 3. Insert guide bushing and reamer into bore until bushing bottoms out. Install vise grip as shown, **just snug**, to keep bushing from spinning. Turn reamer at slow speed with drill motor. Turn valve body over and blow out chips. Make sure its clean!

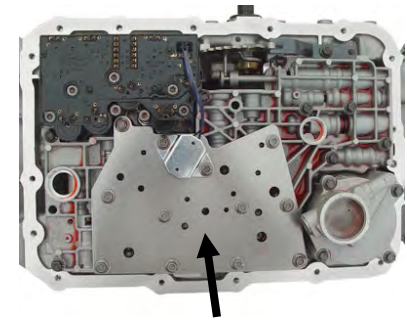


Step 2. Coat cutting end of reamer with a light oil or ATF. Slide shank end through large hole of guide bushing.

Step 5. Repeat the boring procedure (Steps 2 and 3) for the VFS2 Mod Valve and **reuse the original spring, end plug and clip.** Assembly is same as factory: Original spring into VB first, stem end of new valve into spring then original end plug and clip.



5R55-S/W Valve Body
Has NO Bottom Plate

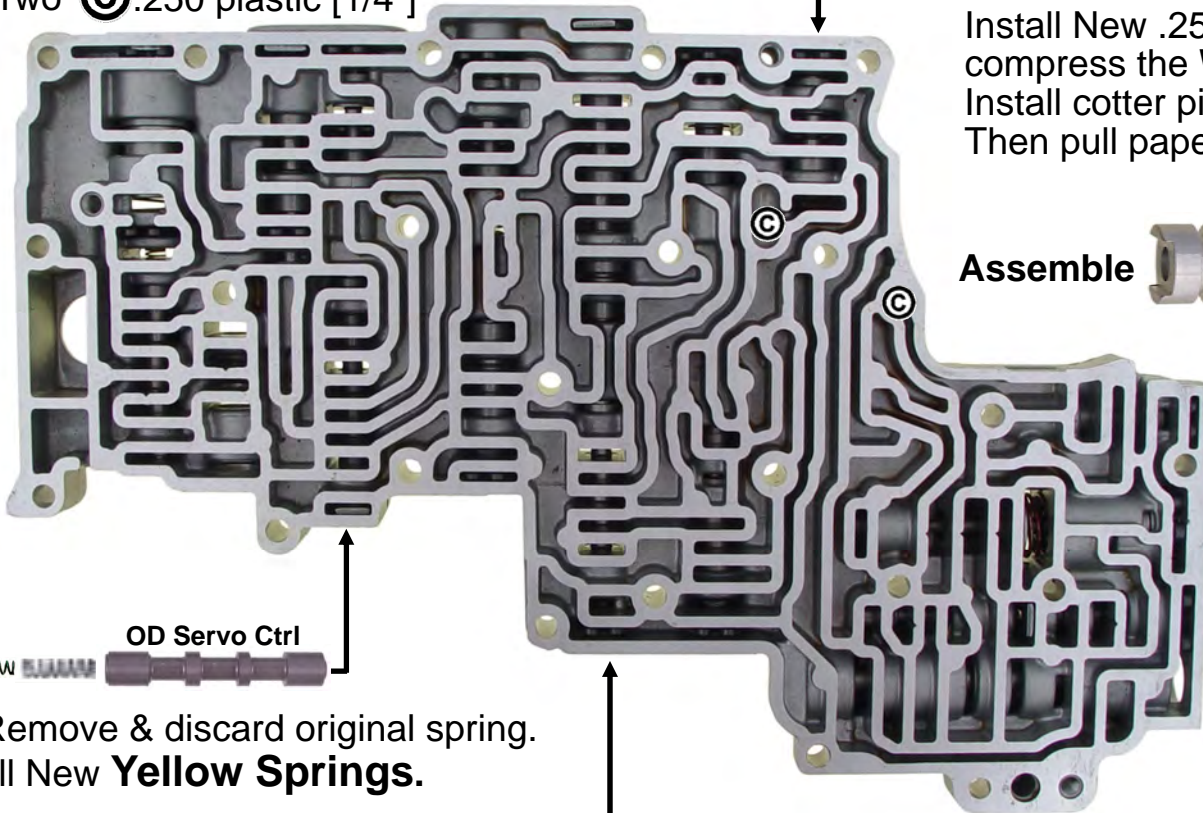


5R55-N Valve Body
This kit does not fit this trans!



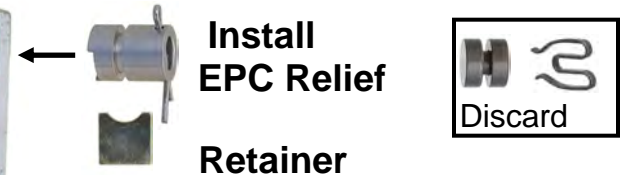
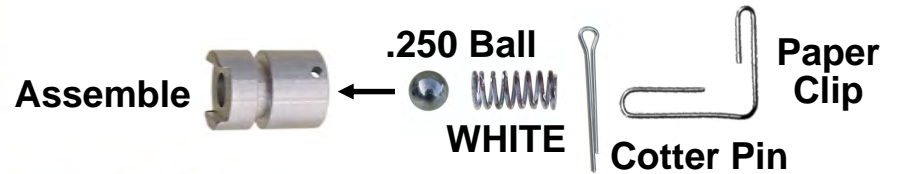
Install EPC Relief Retainer

Two ©.250 plastic [1/4"]



1. Assemble EPC Reliefs

Install New .250 ball, then **White** spring into bushing, compress the **White** spring with big end of paper clip. Install cotter pin and spread legs of cotter pin slightly. Then pull paper clip out with pliers.



2. Remove & discard original end plugs and retainers. Install EPC Reliefs and Retainers in the two locations as shown.



3. Remove & discard original spring. Install New Yellow Springs.

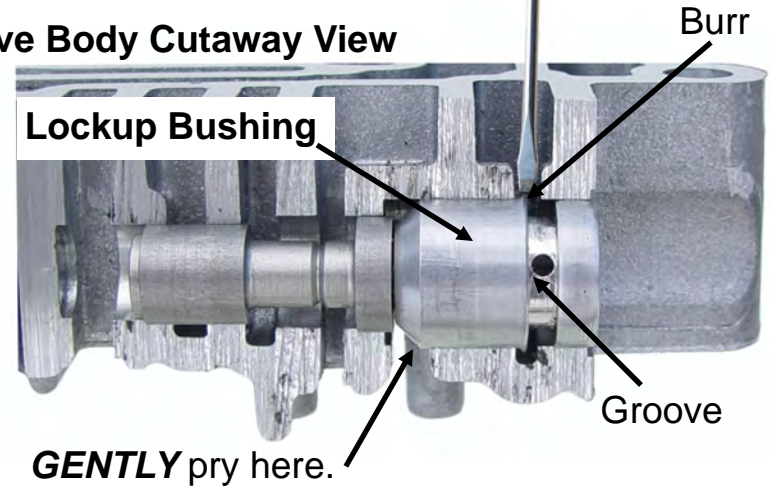


4. Remove & discard original RS ISA Select spring. Install New Green Spring.

Lockup Valve Upgrade

IMPORTANT: The “W” retainer makes small burr on the inside edge of bushing groove. Using sharp end of a drill bit or sharpened screwdriver, carefully scrape off burr. Then remove bushing by **GENTLY** prying thru opening in bottom of VB.

Valve Body Cutaway View

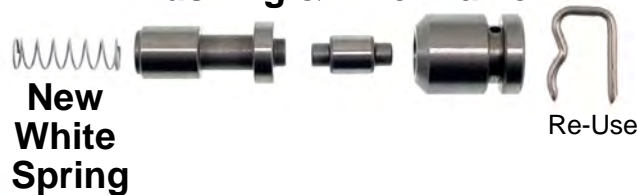


New Lockup Valve
No lockup, Shudder,
Slip, and/or Code 1740.

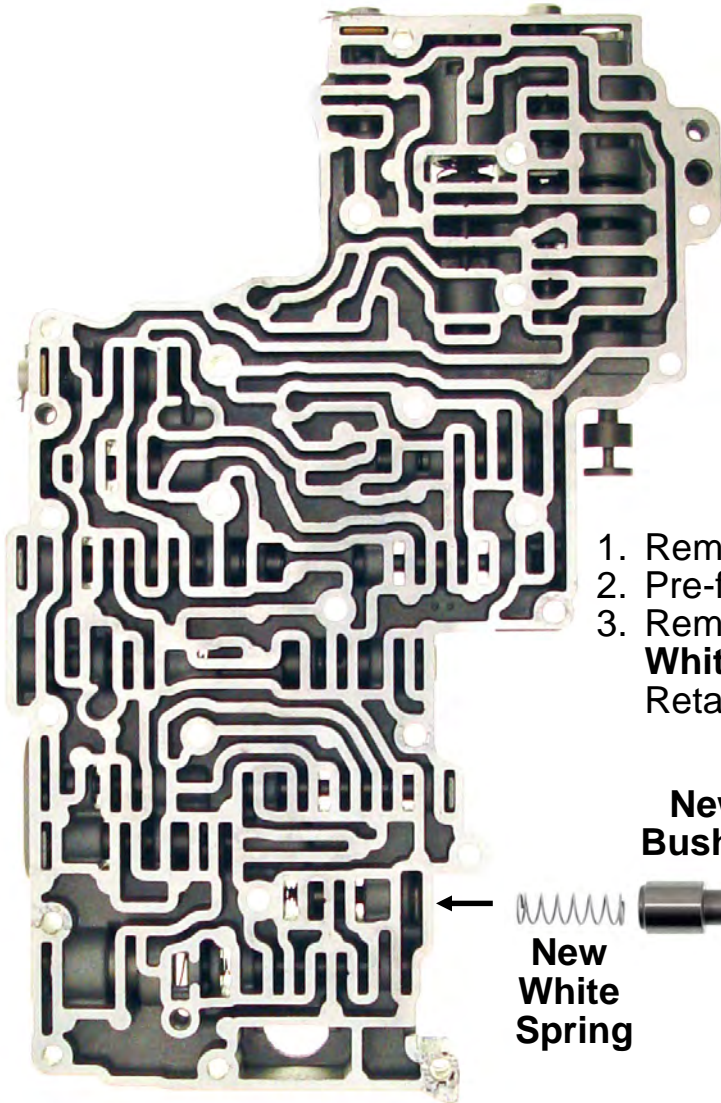
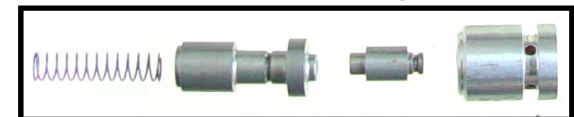
LISTEN UP: If the trans has no lockup when hot, but the fluid and filter look OK: Then this page will fix it from the bottom.
Have Fun, Gil

1. Remove and discard original spring, lockup valve, bushing & inner valve.
2. Pre-fit new Lockup Valve. **Make sure valve freely strokes to bottom of bore.**
3. Remove new Lockup Valve and reassemble in the following order: Install **New White spring** and **Lockup Valve**. Install New Bushing and Inner Valve. Install Retainer. Lock-up will have **smoother engagement & more capacity.**

New Lockup Valve,
Bushing & Inner Valve



Remove & Discard Original Parts



Additional information for reducing comebacks.

Wrong Fluid Level is BIG Problem:

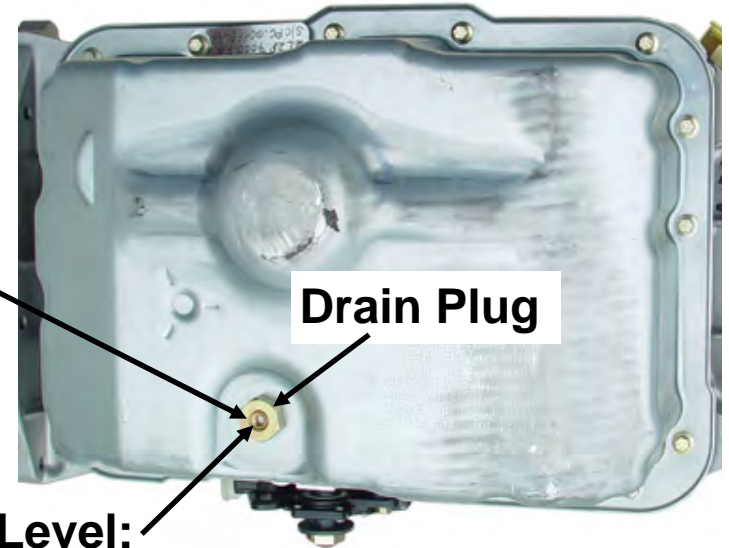
Check/Fill with Vehicle level, Engine running, Selector in Park.
TEMPERATURE: NOT HOT or Cold. Must be 80° to 120°, warm to touch and yet be able to keep your hand on the pan.
Remove *Allen* plug in center of pan drain plug. Install Mercon 5 fluid thru Fill Hole, until fluid flows with **steady stream** out Allen plug hole. Reinstall Allen plug with sealer.

Fill Hole:

5R55W/S fill plug on side of case.



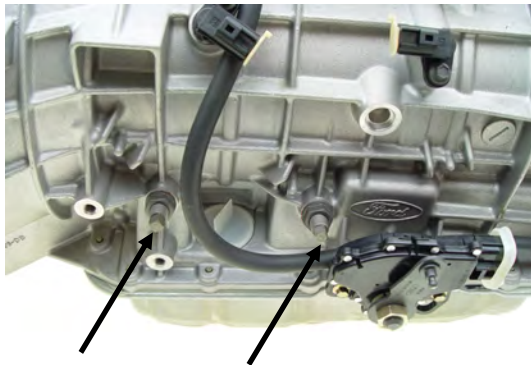
Overfull: Fluid will burp into bell housing. ☹️



Check Level:

Must run full stream out this hole. If just burping out--it is not full.

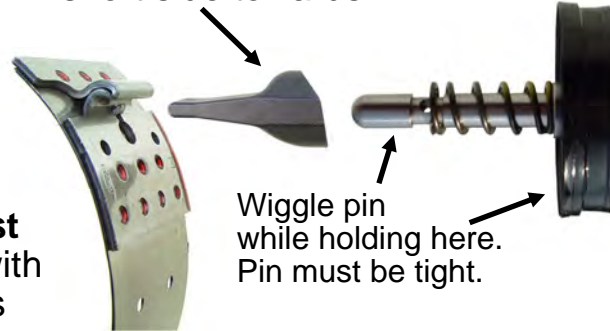
Codes P0732 & P0735, 1-2 Slide Bump, 2-3 Flare, 4-5 Slide Bump or Trans has Burned OD Band.



OD & Intermediate Band Adjust
Tighten adjusting screws snug with short wrench. Back off two turns and tighten the locknuts.

LOOK HERE:

Intermediate and Overdrive band servo struts install with short side towards VB.



Worn OD Band Servo Pin Bore
Inspect bore in case for wear. If pin bore is worn, BIG leak at OD servo.



Repair kit available www.servobore.com
Or call 715-458-2617--