

# **45RFE-HD2**

## ***Reprogramming Kit***<sup>TM</sup>

**Fits: 45RFE - 545RFE & 68RFE  
1999-11 Dodge-Jeep Gas & Diesel.**

**Prevents-Corrects-Reduces  
Rough Lockup, Converter drain back.  
Allows use of Pump Cover with worn TC limit  
bore. HD Accumulator Cover Plate Replacement  
Springs for Pump.**



**Quick clean shifts that  
you will Just love!**

# If Trans is in vehicle, Skip pages 2 & 3 or 2 & 4.

**Hello Mechanic:** Remove transducer **before** cleaning or washing the trans. It's a good idea to replace this sensor on every overhaul.



## Step 1

Install **slotted Retainer** & three **PLAIN** Springs into open end of accum Piston. No need to disassemble inner retainer or inner valve assy.

New V-Notch Retainer



Discard Original TC Limit & Spring  
Type 1



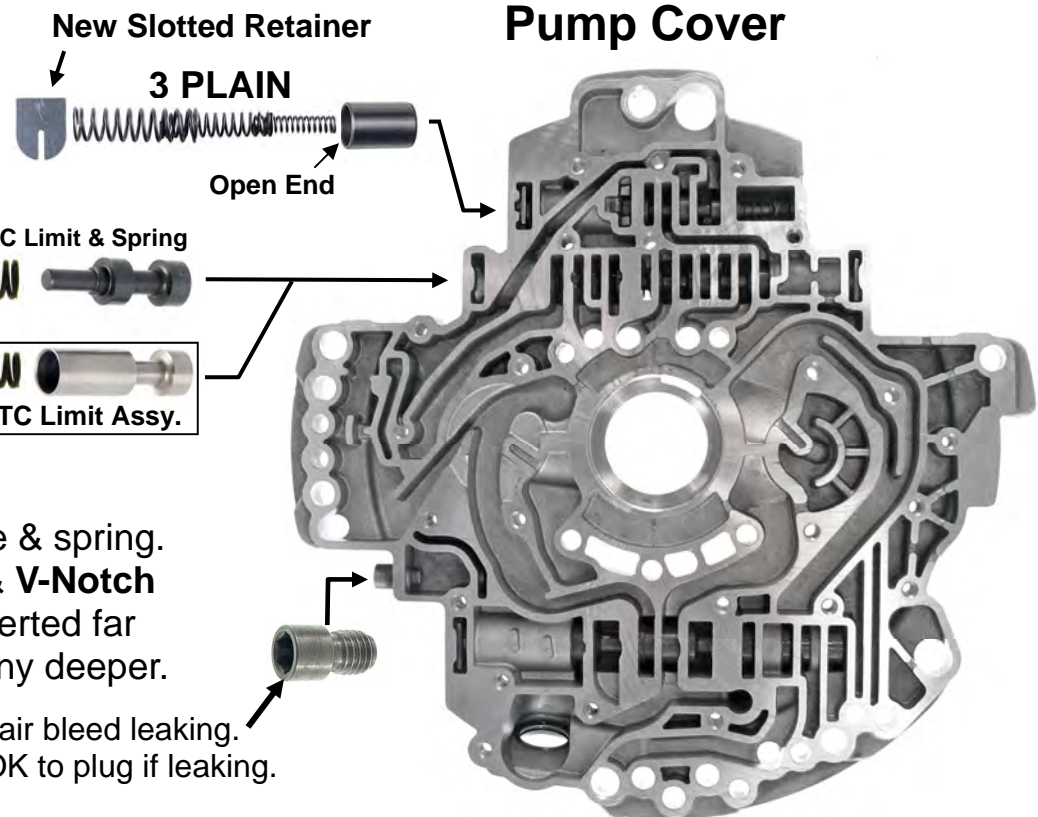
## Step 2

Remove TC Limit and **ID** which Type valve you have.

**IF** you have a **TYPE 2** Valve, **SKIP** this step!

**IF** you have a **TYPE 1**, discard original TC limit Valve & spring. Install new **Bushing**, **GOLD** ball, **ORANGE** Spring & **V-Notch** Retainer. It is correctly installed when bushing is inserted far enough to install the retainer. Bushing does not go any deeper.

Type 2\*  
\*Re-Use Type 2 TC Limit Assy.

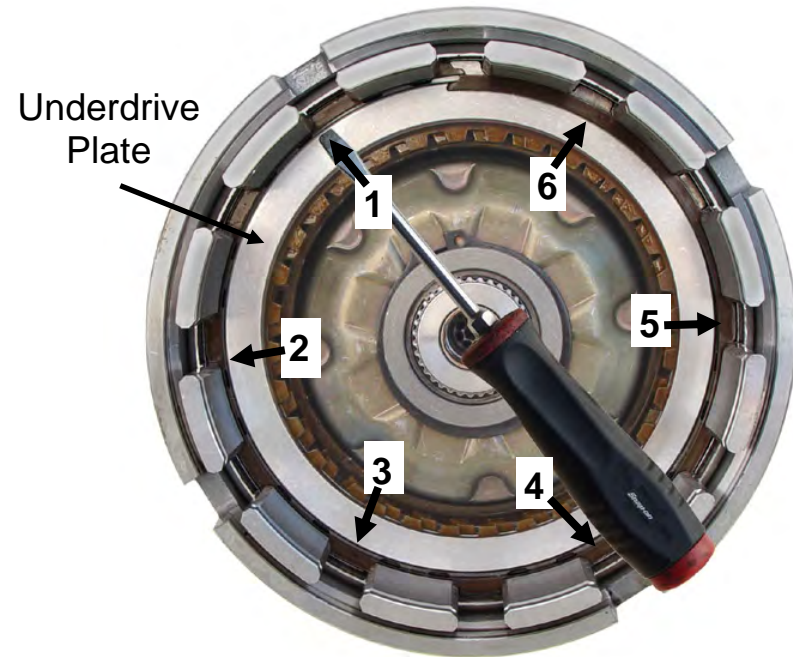


Over-night drainback can be caused by this ball-check air bleed leaking. (Visible with pan removed - Not found on all pumps.) OK to plug if leaking.

## Heavy Duty Underdrive Snap Ring

Replaces tapered ring that breaks and pops out.

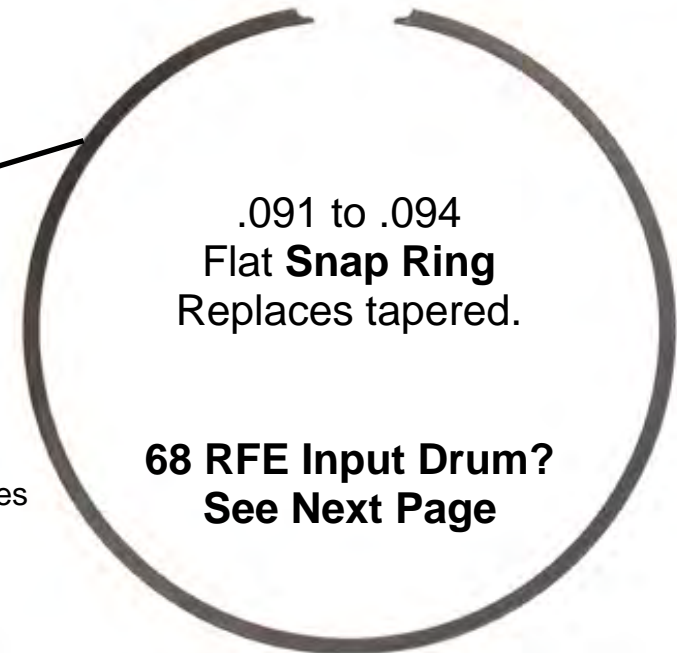
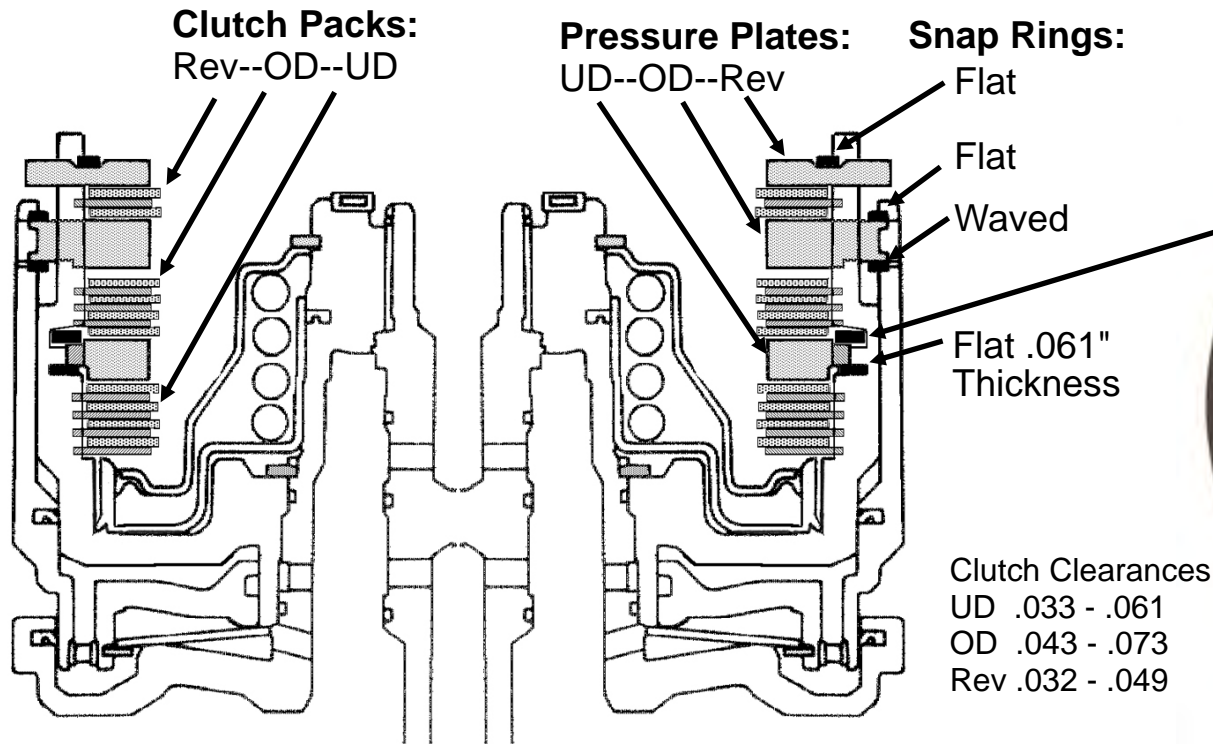
Install the **Snap Ring** on top of underdrive pressure plate. Using screwdriver, *firmly* seat **Snap Ring** into groove in six places. Don't worry, It's supposed to be a **TIGHT** fit.



**Heads Up! 45RFE & 545RFE OD Clutches and Steels are thicker** than UD and Rev. Pay attention!

UD FRICTION .075	OD FRICTION .090	REV FRICTION .075
UD STEEL .068	OD STEEL .087	REV STEEL .068

**45/545 RFE Input Drum--Cutaway Side View**  
**68 RFE Input Drum--See Next Page**



# 68RFE: Input drums use one sided clutches UD & OD

**UD & OD, clutch friction surfaces face UP!**

UD clutch has ten .058 thick frictions.

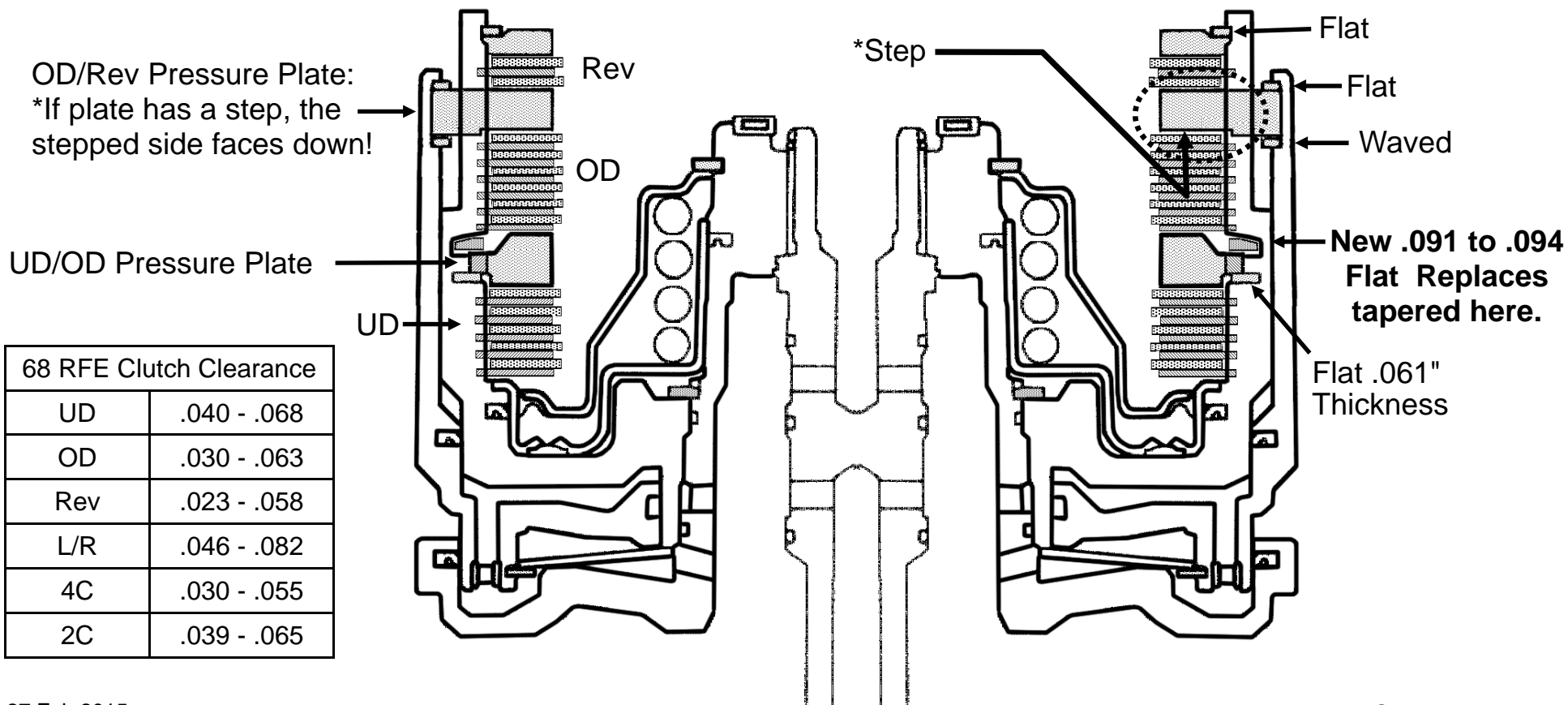
OD clutch has twelve .050 thick frictions.

Reverse clutch has 2 double sided frictions & 1 steel.

**UD stack-** Start with .058 friction plate with external lugs, alternate with internal lug plates. The stack will end with a friction plate with internal lugs. Install thin snap-ring, UD/OD Pressure plate then replace beveled snap-ring with new .091 to .094 flat snap-ring.

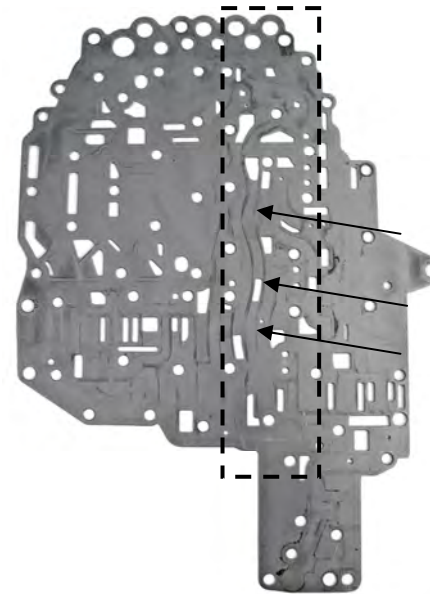
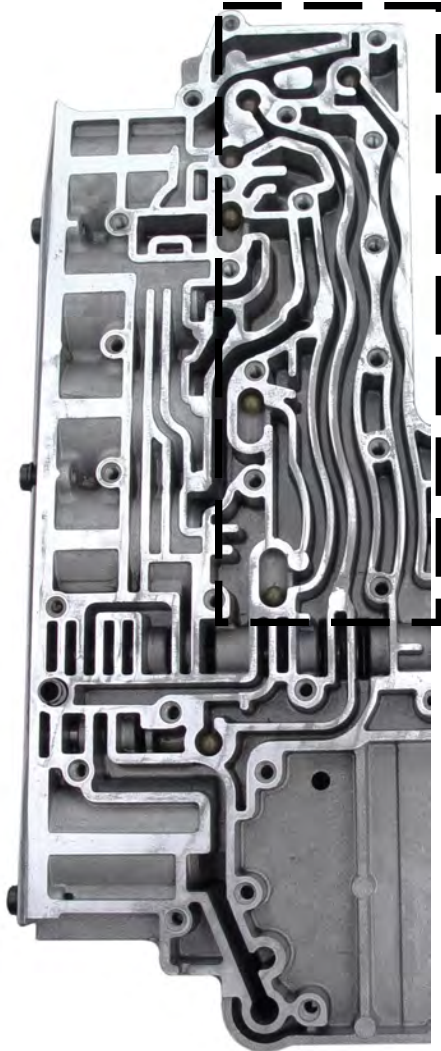
**OD stack-** Start with .050 friction plate with external lugs, alternate with internal lug plates. The stack will end with a friction plate with internal lugs. Install waved snap-ring, OD/Rev Pressure plate, **\*If plate has a step, the stepped side faces down**, then install flat snap-ring.

**Rev stack-** Start with double sided friction, steel, double sided friction, Pressure plate and flat snap-ring.



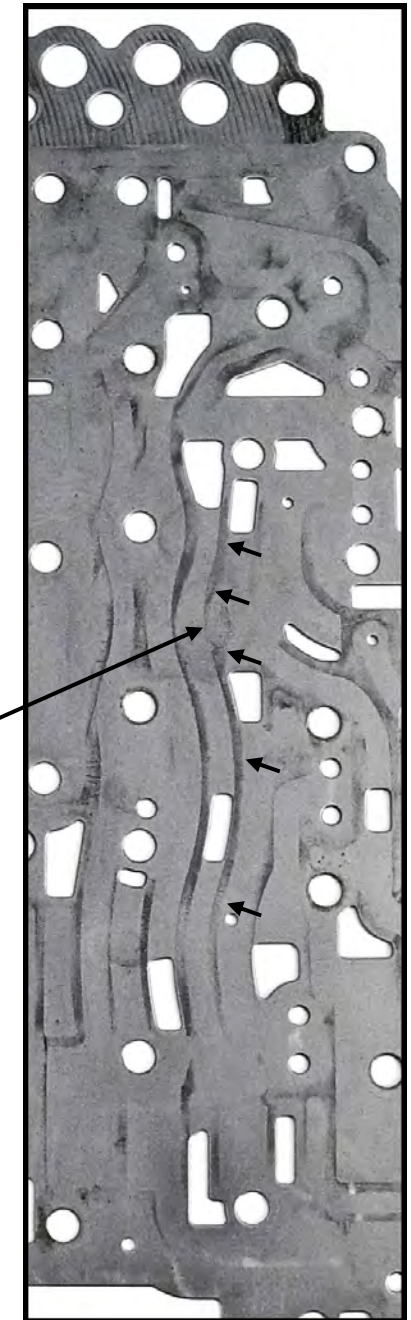
# 68RFE Repeated OD Clutch Failure due to Valvebody Erosion Crossleaks!

**WATCH OUT FOR THIS**  
on **HARD** working or  
**HIGH** mileage 7 Ball  
**68RFE Valve Bodies!**



Pressure, time & heat induce flexing of the channel walls. This movement scrubs the separator plate (leaving a mark) and erodes the aluminum casting causing cross leaks. Usually seen in high mileage 68RFE Diesels due to higher pressure and heat. Repeated OD Clutch Failure is common.

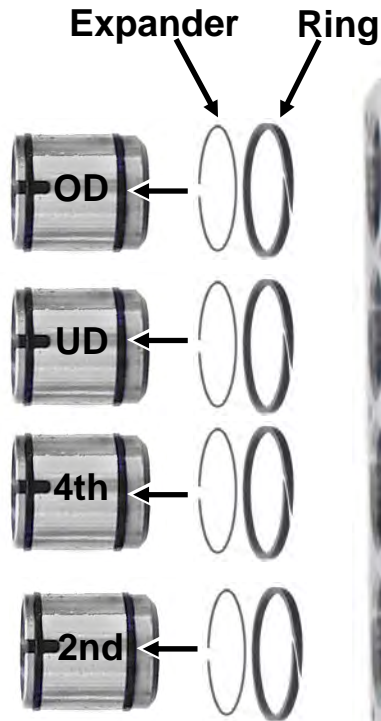
This condition is not easily solved by surfacing the VB. It is recommended for long term durability to **replace the VB**. 45/5-45RFE VB's have been used to replace 68RFE VB's as long as you swap over the accumulator springs, the TRS plate & Solenoid Pack. 5 & 7 Ball VB's **Do Not** Interchange!



# 45/545RFE Valve Body

68 RFE VB  
See Next Page.

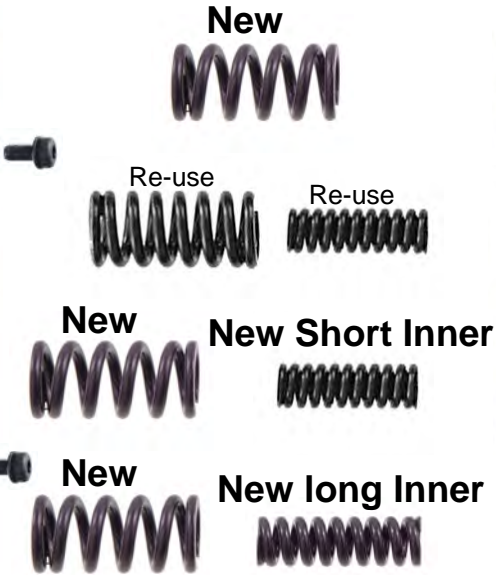
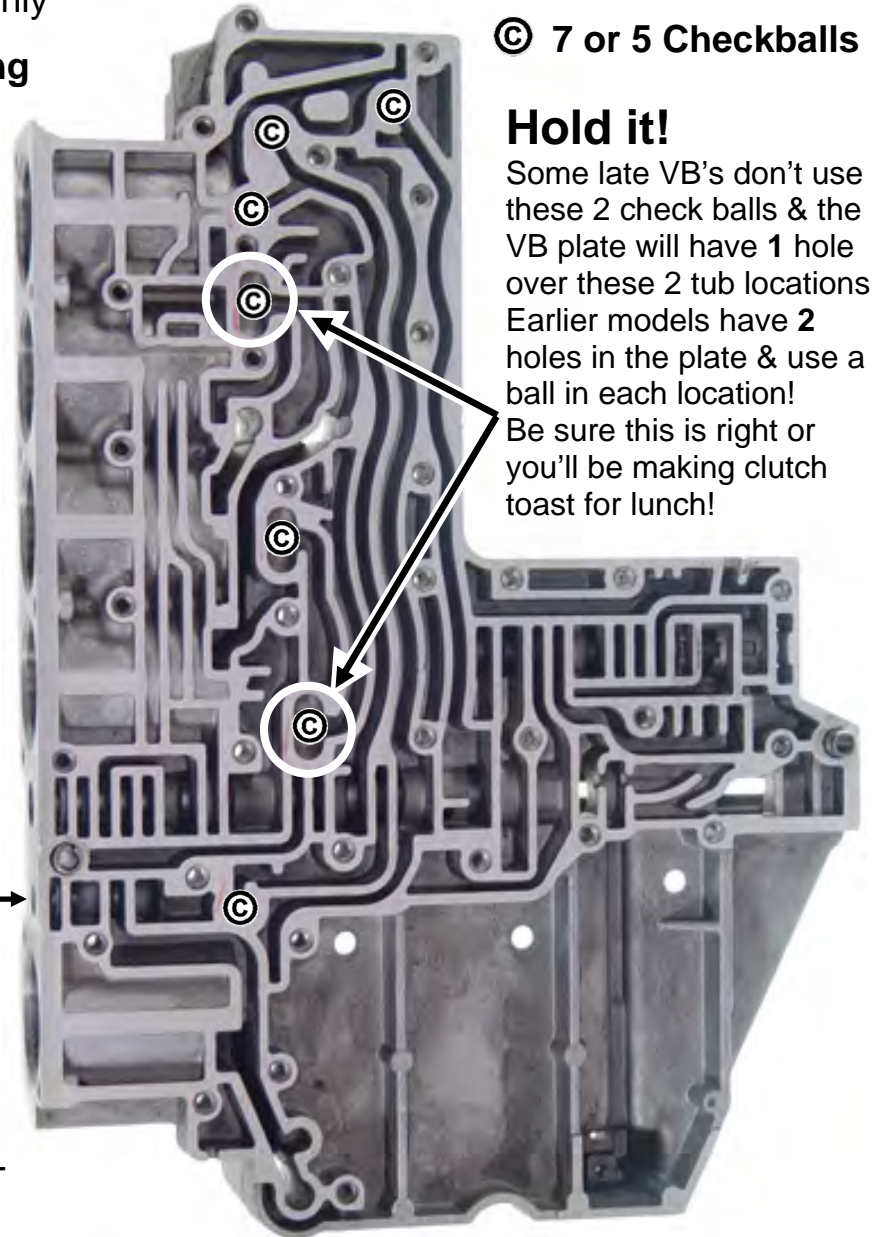
1. Install wire expander and new ring on inner seals only



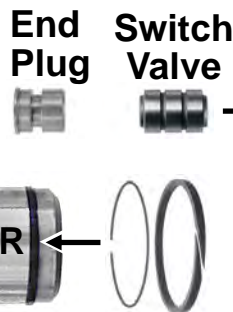
© 7 or 5 Checkballs

## Hold it!

Some late VB's don't use these 2 check balls & the VB plate will have 1 hole over these 2 tub locations. Earlier models have 2 holes in the plate & use a ball in each location! Be sure this is right or you'll be making clutch toast for lunch!



2. Discard original valve and plug. Install new self cleaning **Switch Valve** and new **End Plug** furnished.



3. Install **NEW HD Cover.**

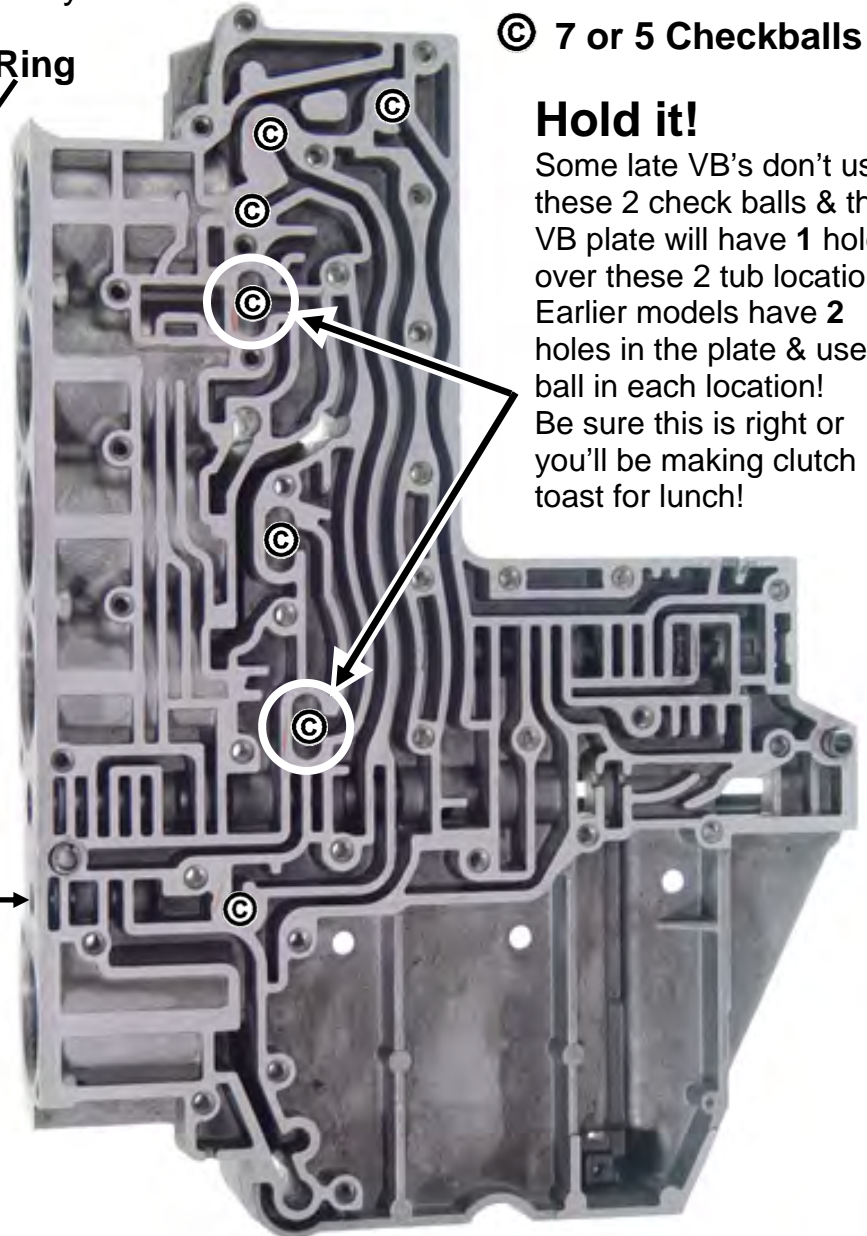
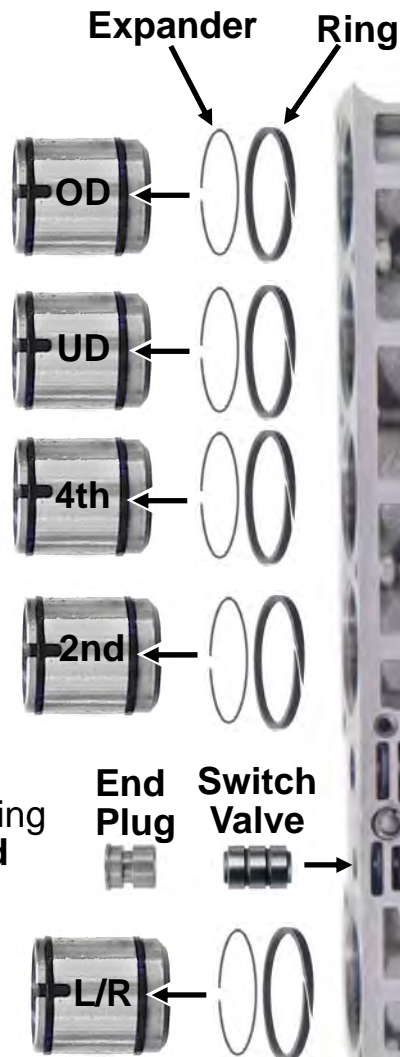
End plate screws from 470-670-604-42LE are same size. Stripped threads? Tap 1/4-20 Use 1/4-20 x 1/2 bolt w/washer.

# 68RFE Valve Body

# 68RFE Valve Body's

© 7 or 5 Checkballs

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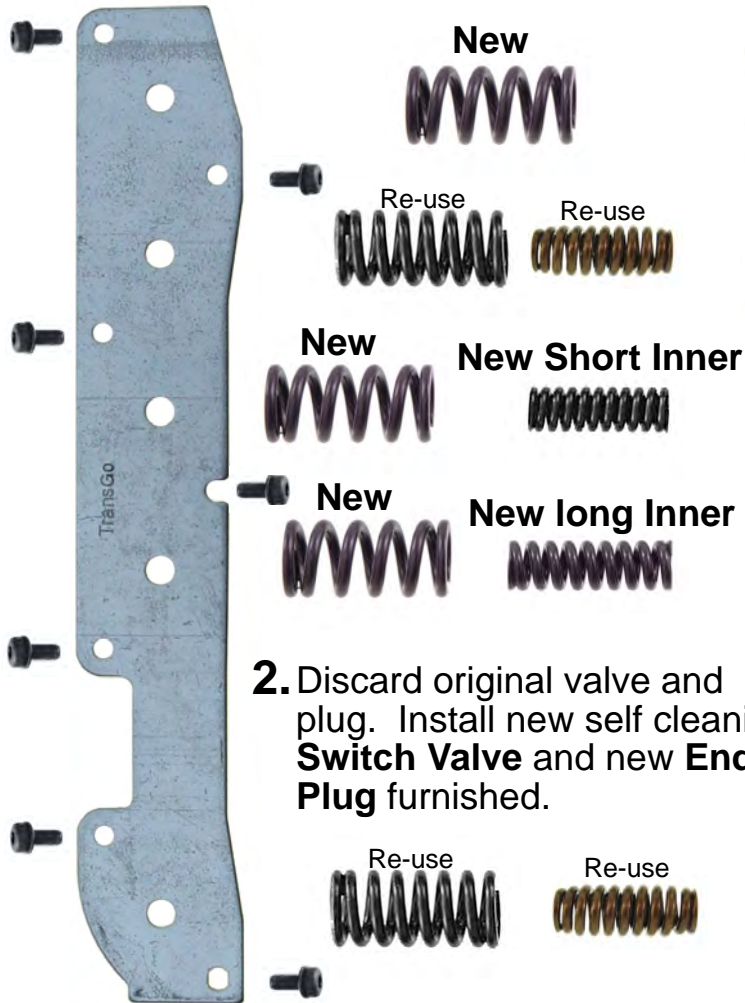


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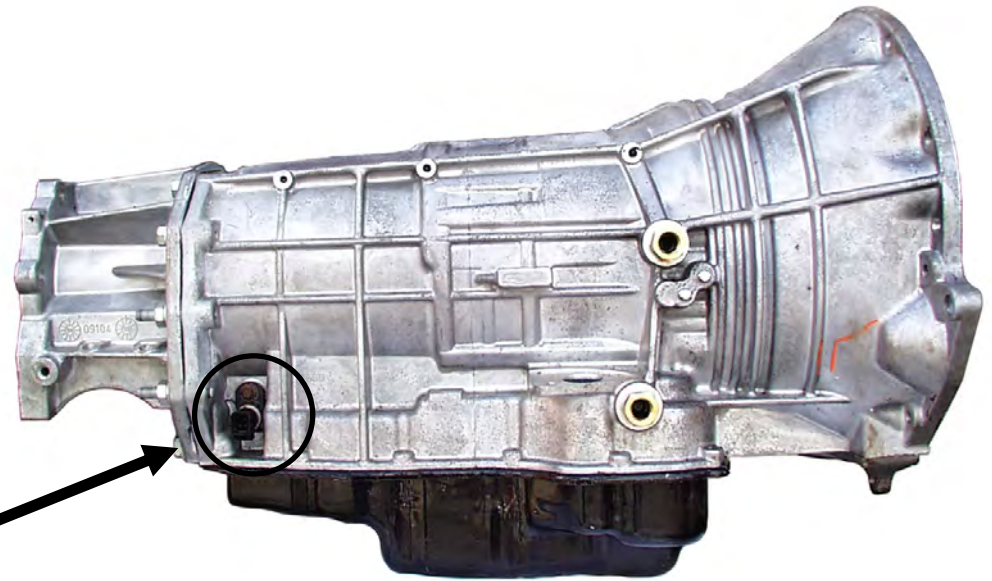
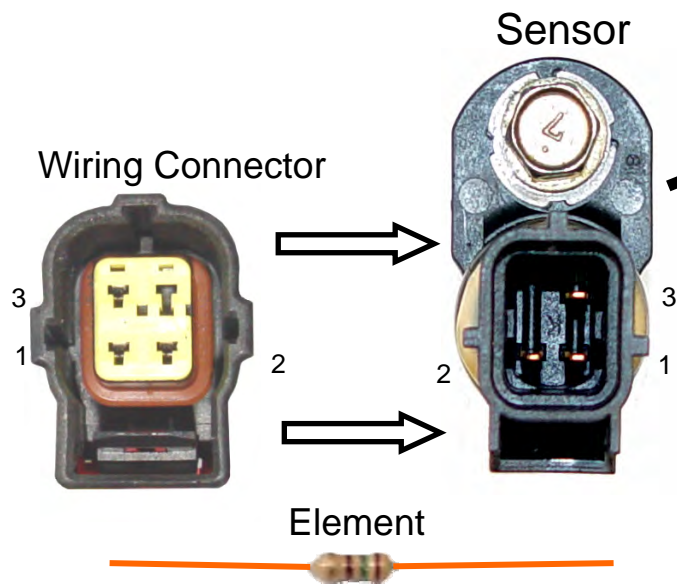
3. Install **NEW HD Cover.**



# 05 Up Skip this page !!

If using after market power programmer with transmission modifications, *All years.*

# Skip this page !!



1. Slide insulation away from connector about 1-1/2".
2. Strip the insulation for about 1/4" on wire 1 and 3.
3. Solder one end of element to wire 1 and the other end to 3. Slide up the insulation and tape it shut.

Thanks for Listening, The Tech Team

