

RE4F04A-HD2

Reprogramming Kit™

NISSAN Maxima-Altima 92-99 Quest 92-02
MERCURY Villager 4F2OE 92-02 Infinity i30 95-99

Corrects/Reduces/Prevents

No 3rd after a 3-2 or 4-2 kickdown.

Direct clutch (3rd) inner seal leaks, wears or opens up, etc.

Corrects Soft 1-2. Long 2-3 at heavy throttle. Firmer 4th & Lockup.

Nissan never shifted this good, until now.

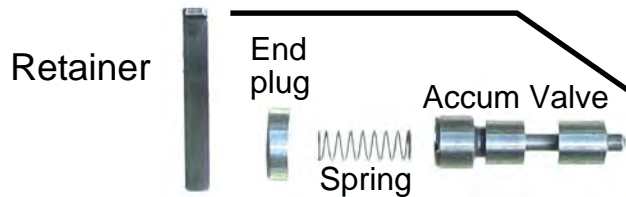


**Nissan never shifted
this good, until now.**

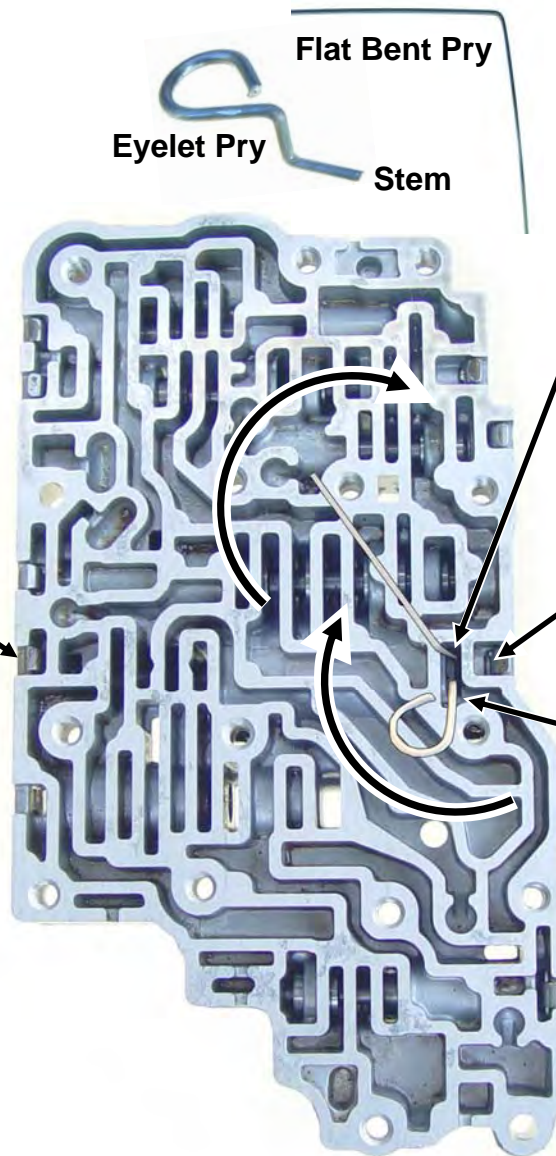
This Kit is about:

Rough 2nd cold. No 3rd after a 3-2 or 4-2 kickdown. Direct clutch (3rd) inner seal **leaks**, wears or opens up, etc. Corrects Hard and Soft 1-2. Long 2-3 heavy throttle. **Firmer 4th and Lockup.**

Use a skinny punch from other side of VB to *push* accum valve out of bore.



Mr. Shift



**LISTEN UP: If trans is out
of vehicle do page 7 first.**

Step 1. Remove Retainers. With sand paper smooth the small burr where the retainer was against bore.

Step 2. Insert **Flat Bent Pry** between the end plug & accum piston. Push piston inward away from the end plug far enough to insert the stem end of eyelet pry.

Step 3. With **Eyelet Pry** *push* the end plug **GENTLY** in various spots to remove it. Then remove 2nd accum piston, spring & washer on **Page 2**. Then *push* accum valve and end plug from this side of VB with a thin punch.

Upper Valve Body

Nissan never shifted this good, until now.

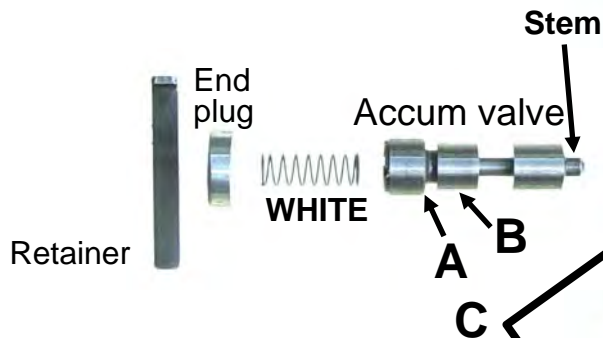
© Checkballs:

Five Steel .214 to .218
Don't use plastic balls.
Use some **Vaseline** to keep the checkballs in place **NOT** grease.

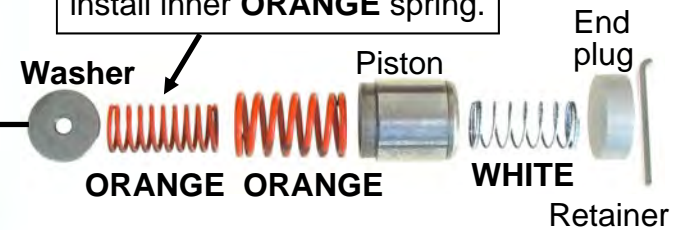
Step 1. Remove the accum valve. Chamfer partition as shown at bottom of page. Clean the bore. Reinstall valve. Install the **WHITE** spring, end plug and retainer.

Step 2. 2nd Accumulator
Install **Three NEW** springs.

Install accum valve first. Then install the flat washer on the **stem** of accum valve, from this side. Then install the remaining parts as shown below.
You're going to love 1-2 shifts.



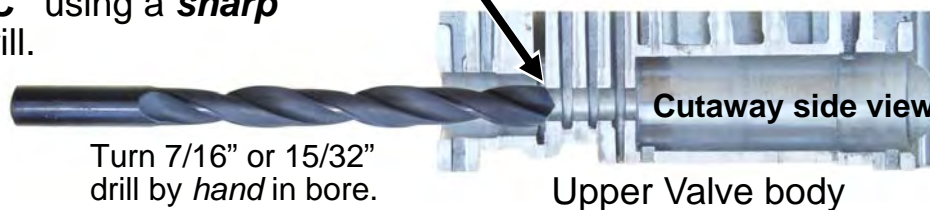
For **extra firm** 1-2 shift do not install inner **ORANGE** spring.



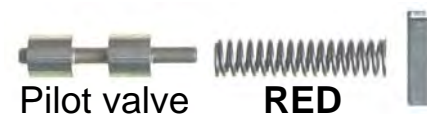
Here's Why: Edge **A** on the valve hits partition at **C**. This deforms the bore which sticks the valve at land **B**.

Here's how to fix it:

By **HAND**, make a slight chamfer in valve bore at "**C**" using a **sharp** 7/16" or 15/32" drill.

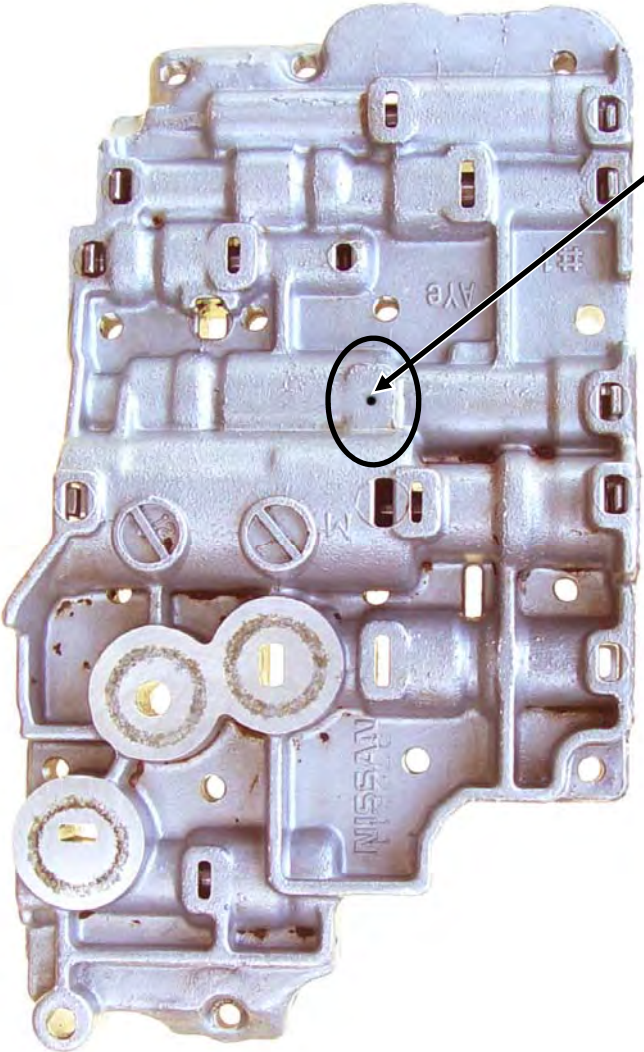


Turn 7/16" or 15/32" drill by **hand** in bore.



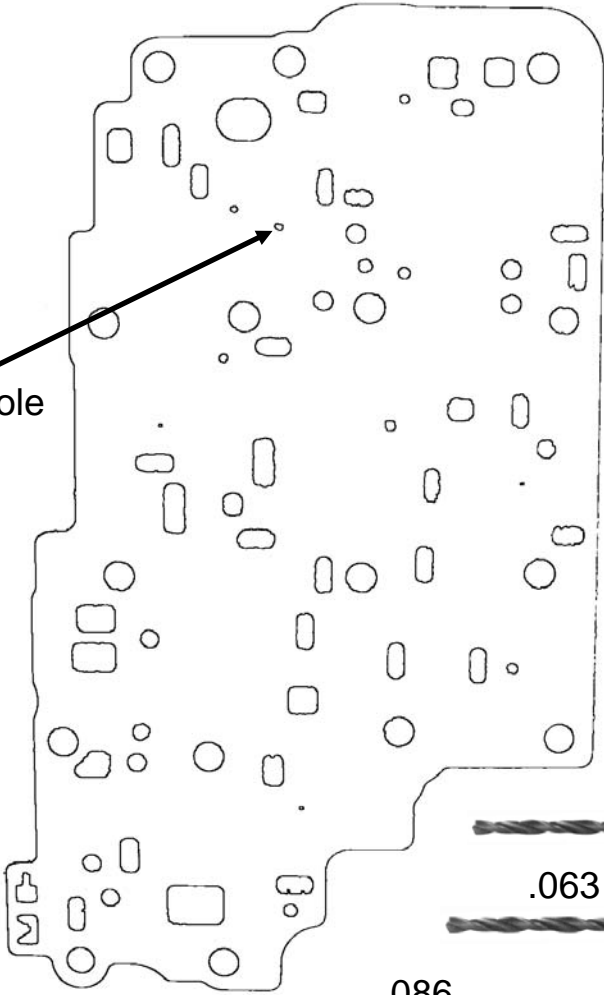
Step 3. Pilot valve.
Install **RED** spring.

Upper Valve Body

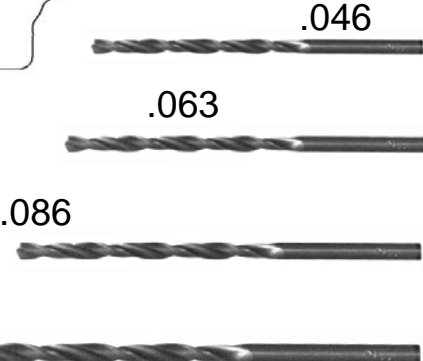


1. Enlarge this hole in VB with .125 drill.

Upper Separator Plate



2. Enlarge this hole with .125 drill.



Checkballs: Steel .214 to .218

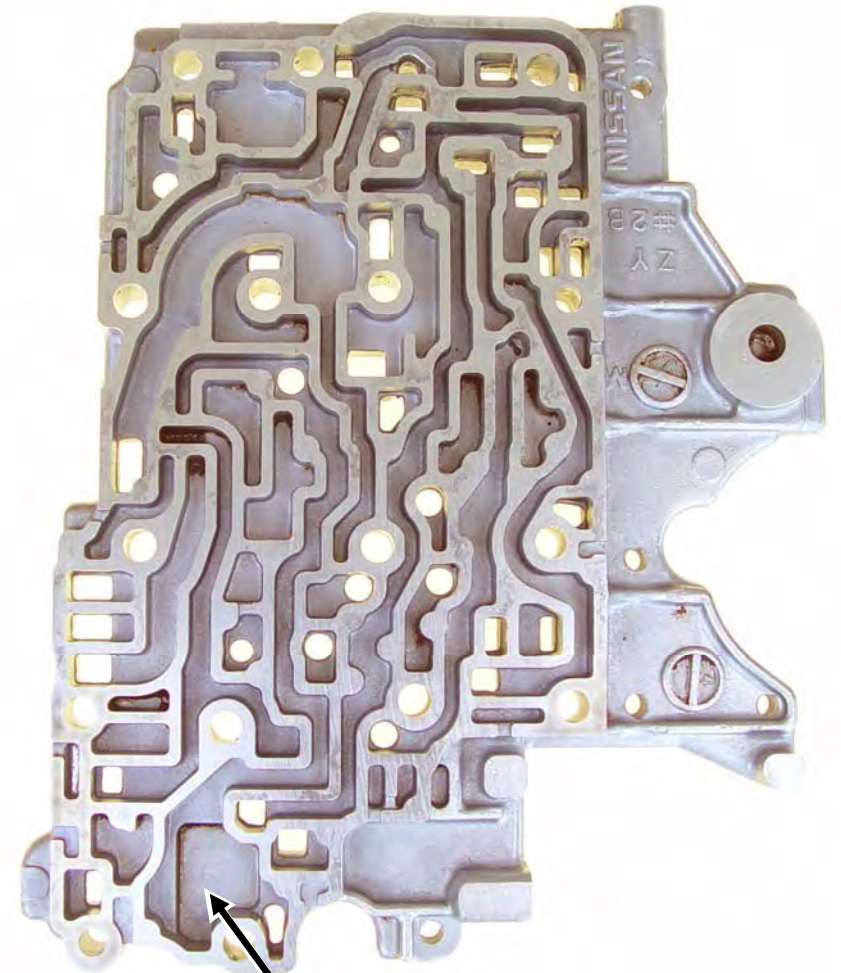
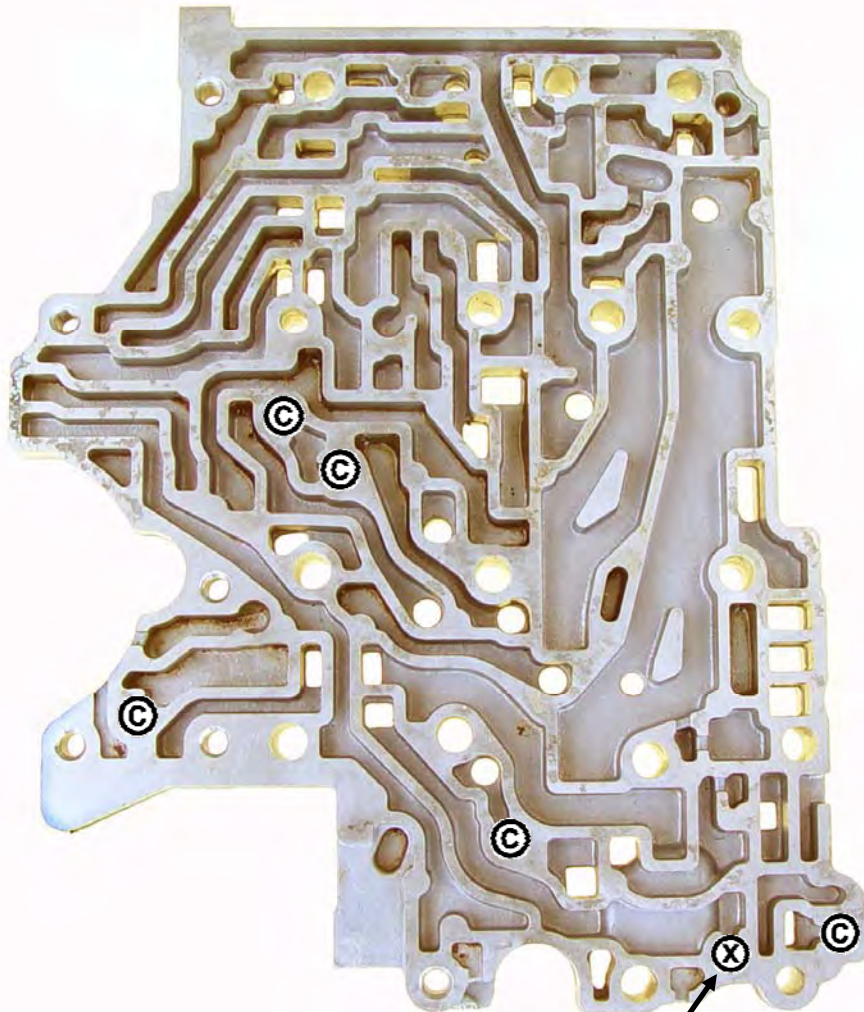
Don't use plastic balls.

© All models

ⓧ Model specific see **Page 7**
for proper usage.

Use some **Vaseline** to keep
checkballs in place not grease.

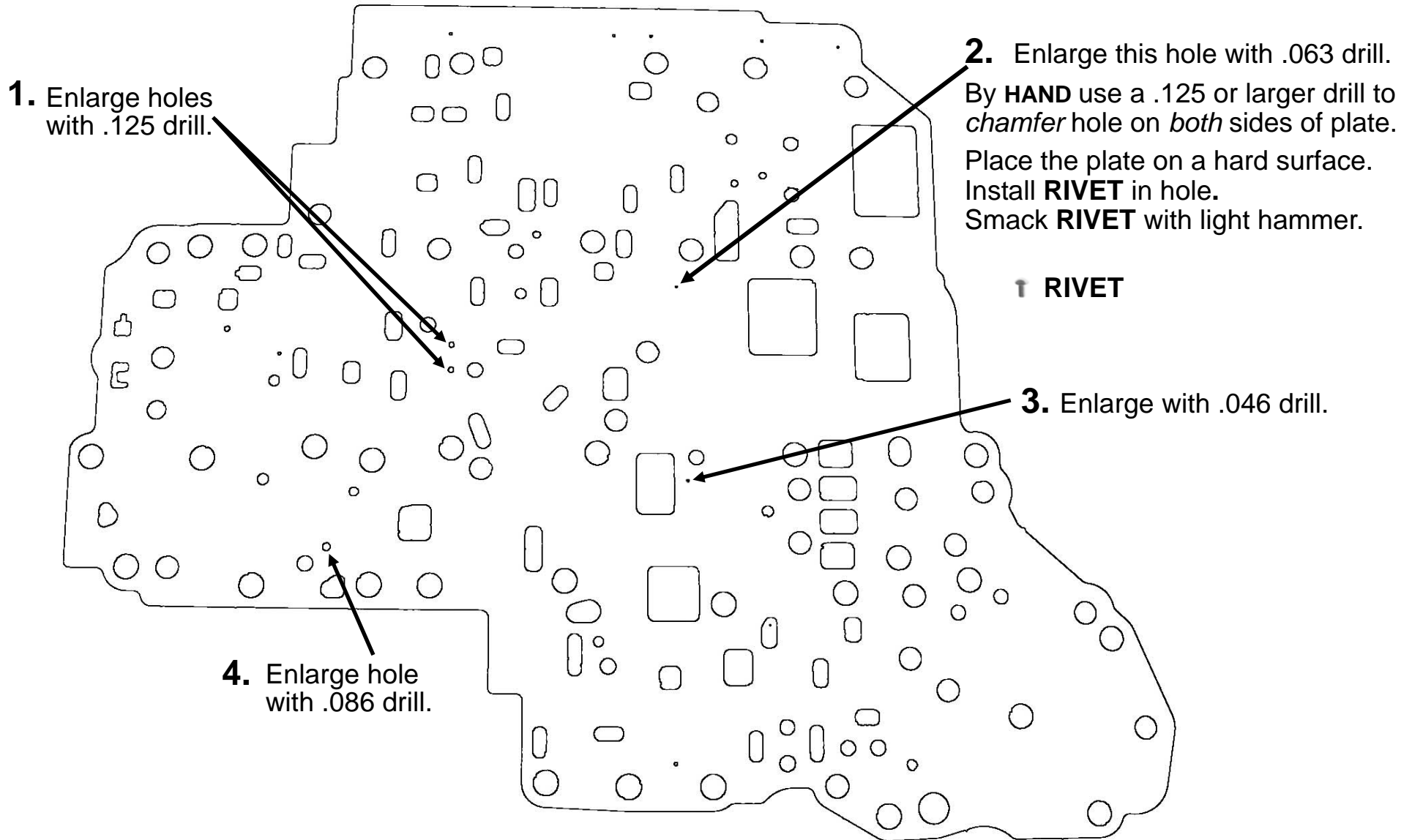
Channel Casting



Filter screen

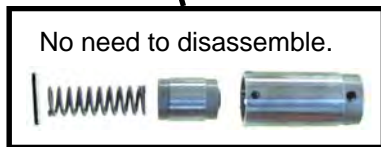
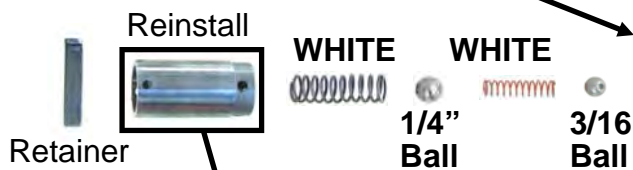
Type 1 Accum shift valve - **Must install** this ball.
Type 2, 3 & 4 Accum shift valve - **Do not use** this ball.
See Page 7 for accum shift valve Identification.

Main Separator Plate



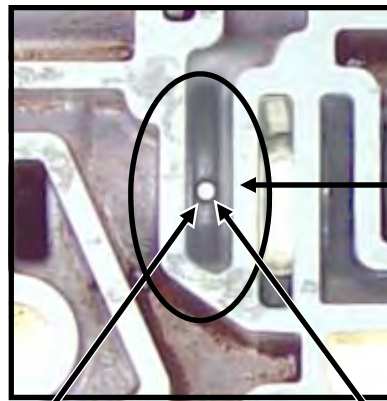
Main Valve Body: Part 1

1. Remove and discard the original modifier valve & spring.

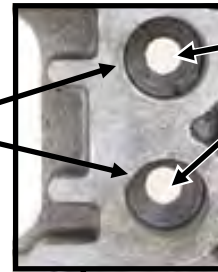


3. Install new **Modifier Valve, Balls and Springs** as shown.

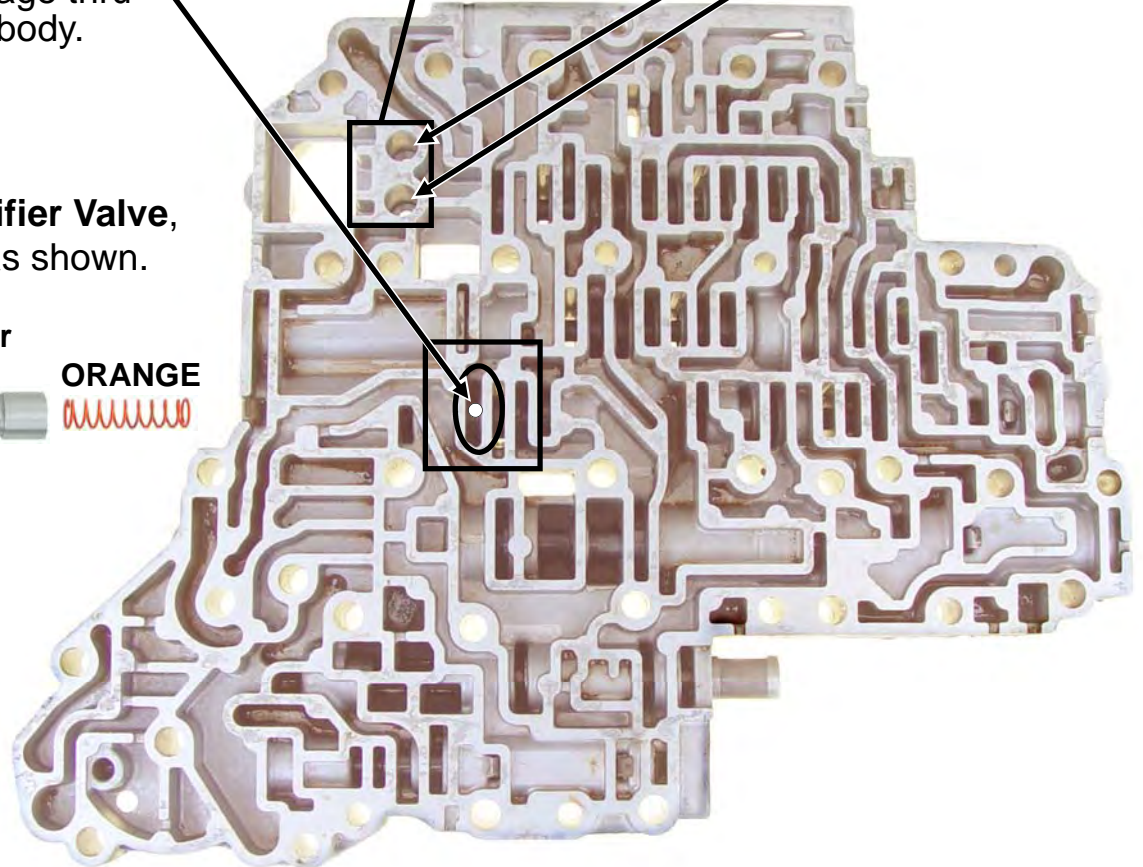
2. Drill .063 hole **straight down** into this passage thru bottom of the valve body.



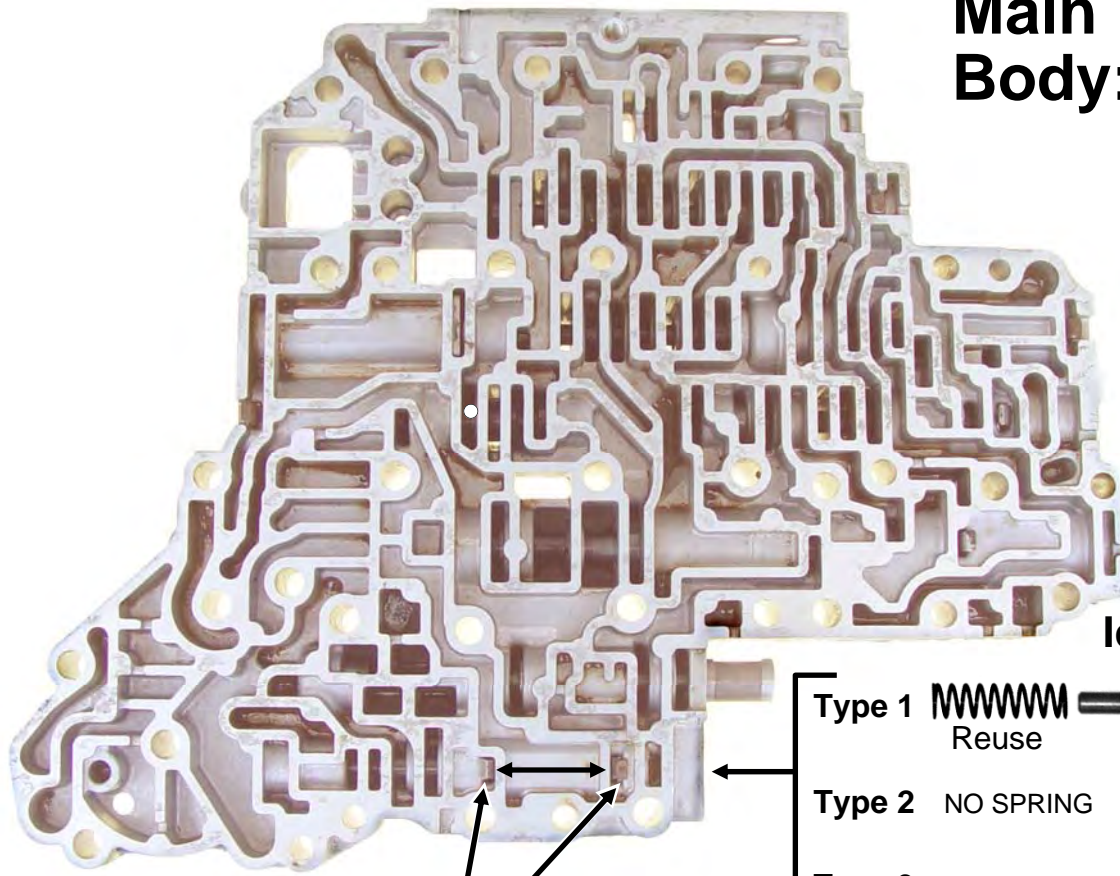
4. Enlarge the limit drain holes with a 1/4" drill.



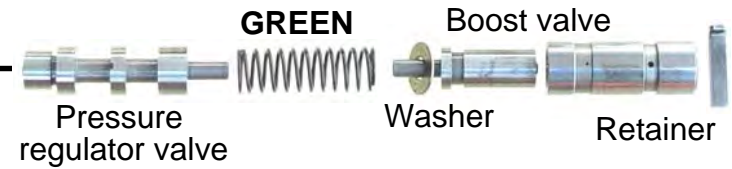
5. Install springs & steel balls furnished.



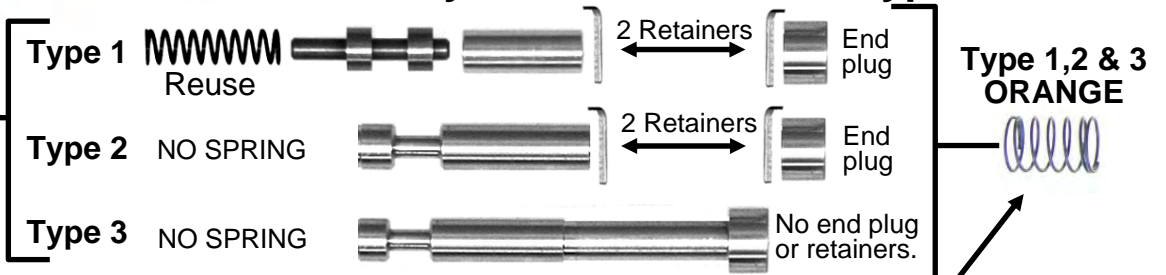
Main Valve Body: Part 2



1. Remove and discard original pressure regulator spring. Install the **GREEN** spring furnished.



Identify Accum Shift Valve Type



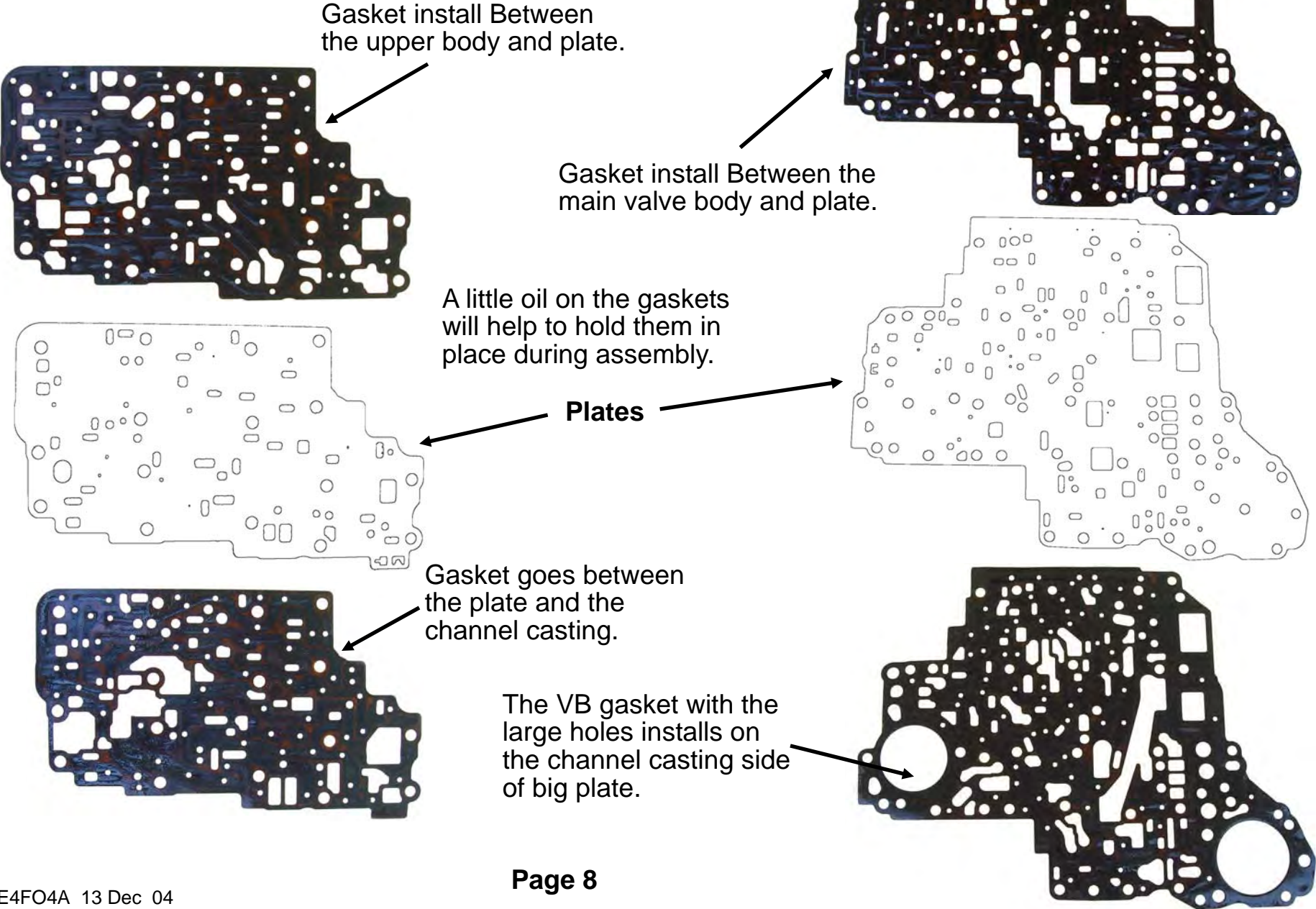
LISTEN UP: Type 1 & 2
Install the retainers in correct locations in VB.

LISTEN UP:
Accum Shift Valve Type 1,2,3 & 4
Verify retainers & parts are in correct locations.
Type 1 & 2 have **TWO** retainers. Missing spring, plug or retainers can cause **Total Trans BURNUP**.
Checkball Usage:
Type 1: **MUST** have ball "X" on Page 4.
Type 2, 3&4: **Do not** install ball "X" on Page 4.

2. **Type 1, 2 & 3 Accum Shift Valve:**
Remove and discard original outboard spring. Install **ORANGE** spring furnished.

Type 4 with empty bore:
Make no changes, reinstall solenoid.

Valve Body Gaskets

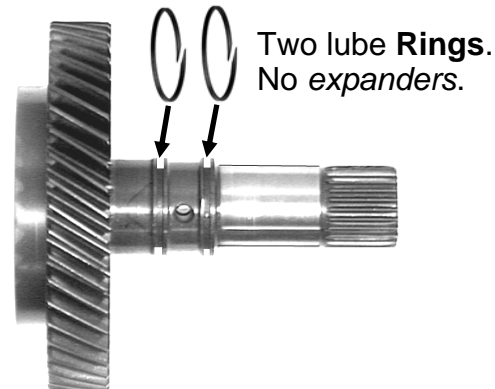
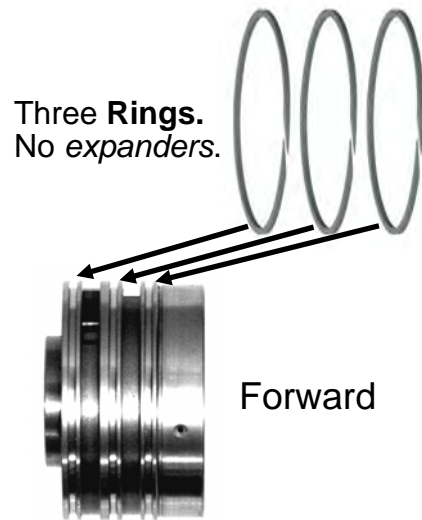


Hi-Temp Low-Shrink Rings

If trans is in vehicle skip this page.

1. Forward & Lube Rings

Use Trans Jel and **GENTLY** push rings down into grooves. Ends of rings should just touch or have small gap. If pushed together **FIRMLY** they **BIND** in groove & **WON'T SEAL**.

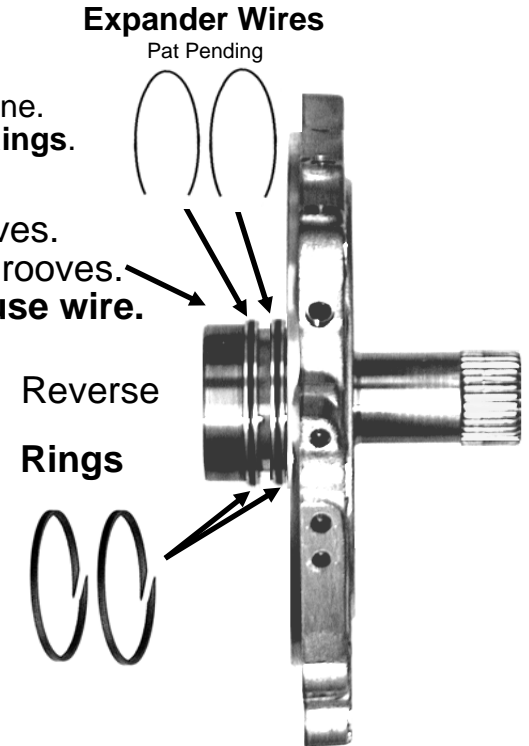


2. Reverse Rings

Fill grooves with Trans Jel or Vaseline. Install **Expander Wires**, then two **Rings**.

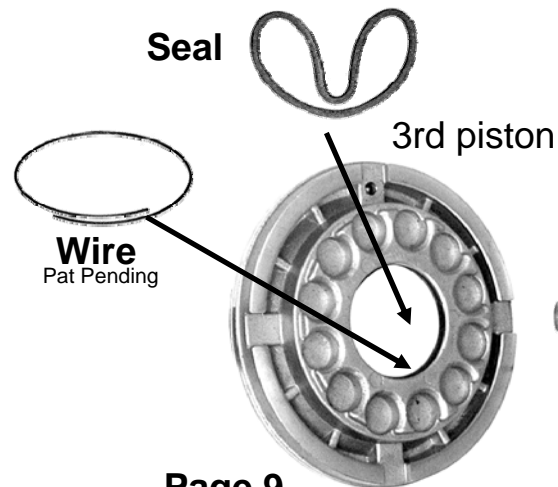
LISTEN UP:

Some models have shallow grooves. Rings **MUST** push **flush** into the grooves. If rings wont push flush don't use wire.



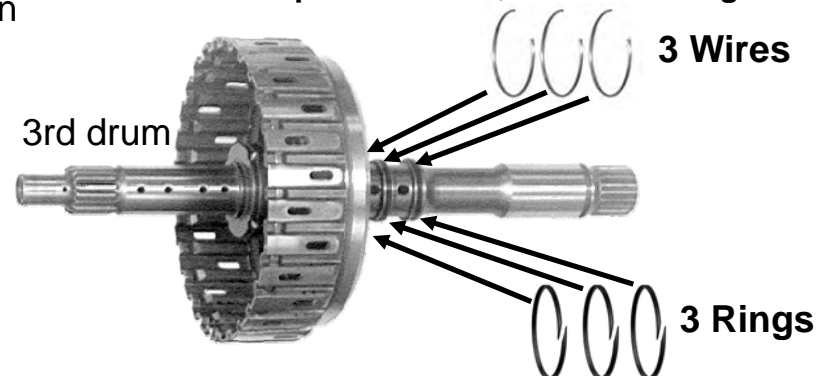
3. Third Clutch (Direct) Inner Piston Seal

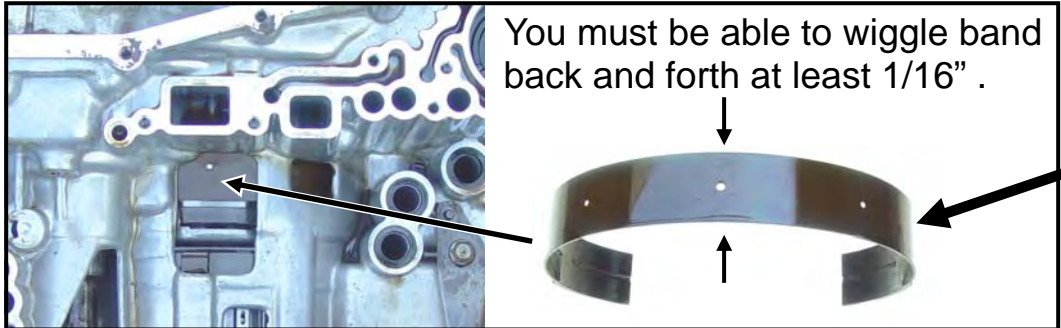
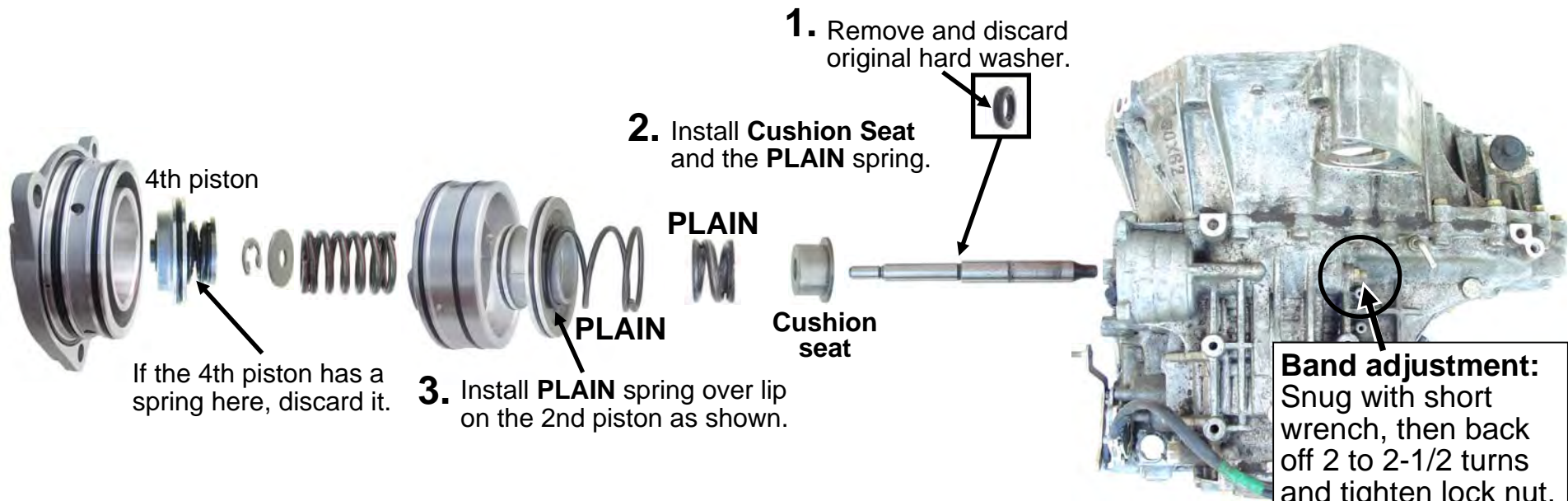
Insert overlap part of **Wire** into groove at 6 O'clock. Then shape the **Seal** as shown and install into the piston groove.



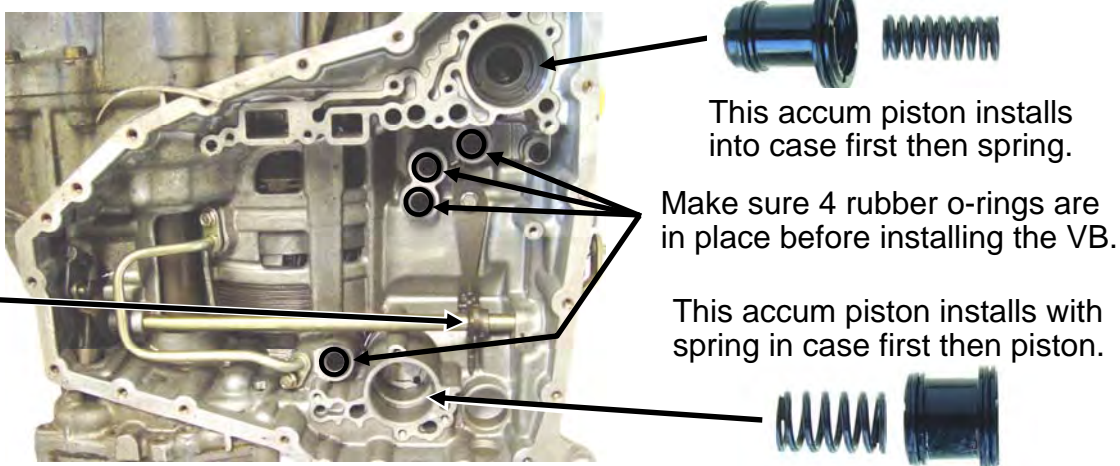
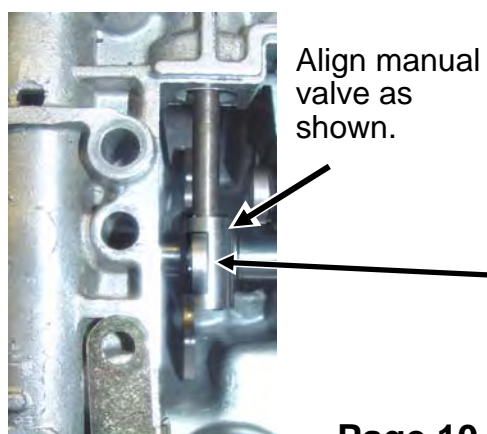
4. Third Clutch Drum Rings

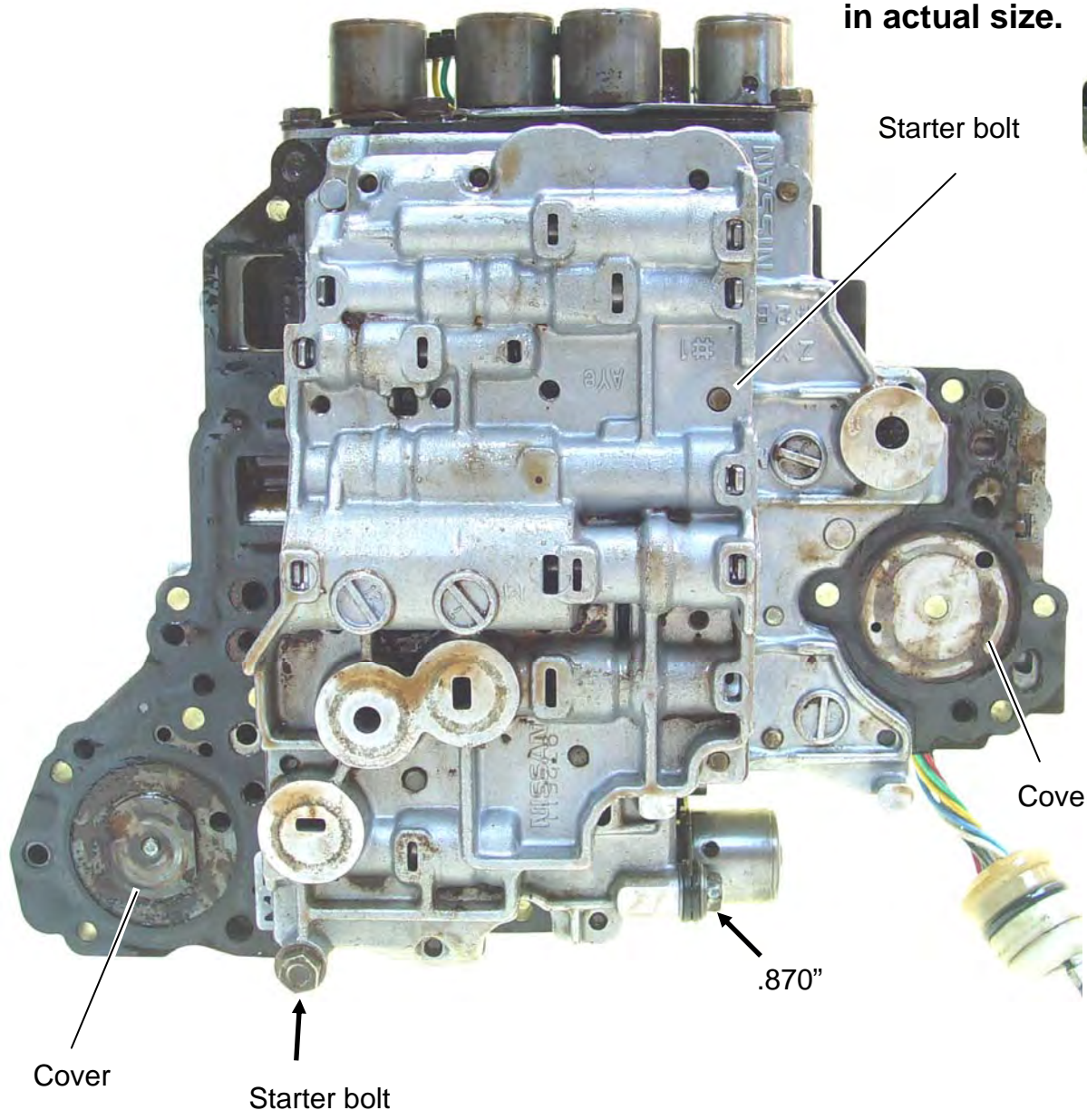
Fill the grooves with Trans Jel or Vaseline. Install **Expander Wires**, then three **Rings**.





Check Band Adjustment: Install 2nd piston with new cushion seat and spring. If band will wiggle on drum 1/16" by hand, you can skip the band adjustment shown above.





**Bolts shown
in actual size.**



3.230" 2 pieces

2.765" 11 pieces

2.455" 3 pieces

1.730" 6 pieces

.870" 1 piece

.680" 6 pieces

1.462"

Hold

down