

# **RE4F03A-HD2**

## ***Reprogramming Kit***™

### ***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.**

**Front Drive Nissan-- Without TV Cable**

**Sentra GXE 93-99 200SX 95-98 G20 Infinity 94-99**

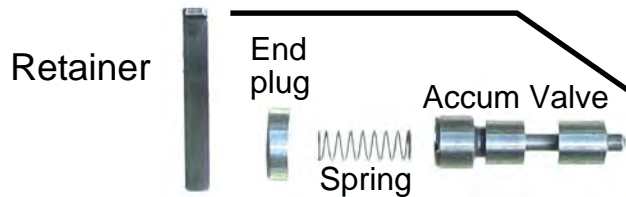


# You've never felt a Nissan shift this good, Hot or COLD.

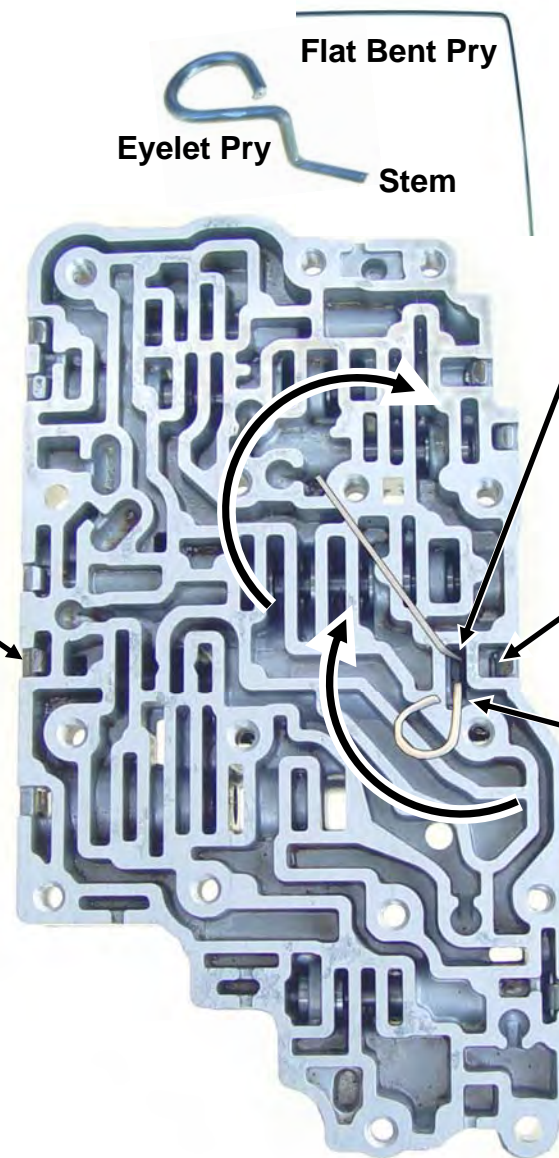
## This Kit is about:

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

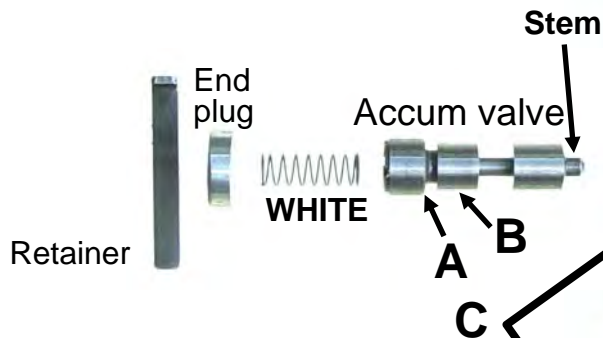
**Step 3.** With **Eyelet Pry** *push* the end plug **GENTLY** in various spots to remove it. Then remove 2nd accum piston, spring & washer on **Page 2**. Then *push* accum valve and end plug from this side of VB with a thin punch.

# Upper Valve Body

## © Checkballs:

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

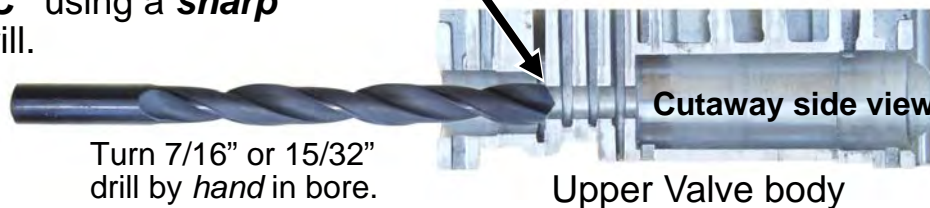
**Step 1.** Remove the accum valve.  
 Chamfer partition as shown at bottom  
 of page. Clean the bore. Reinstall  
 valve. Install the **WHITE** spring, end  
 plug and retainer.



**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.



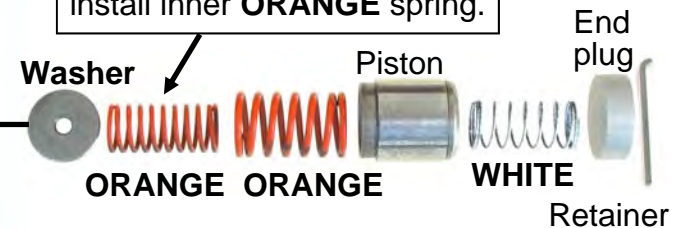
## Step 2. 2nd Accumulator

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.**

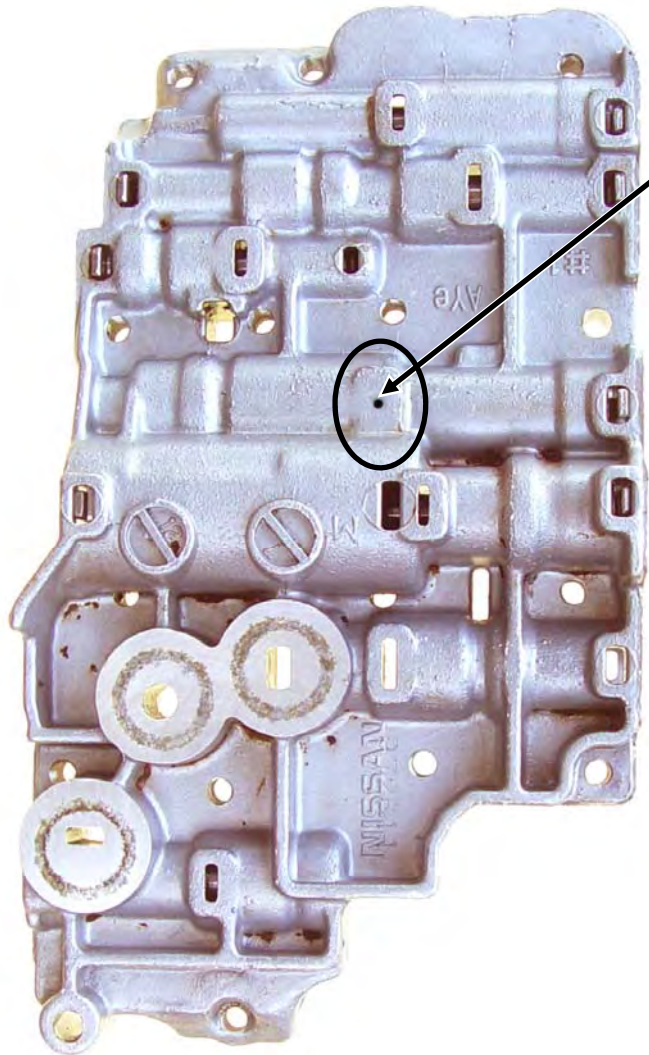
For *extra firm* 1-2 shift do not  
 install inner **ORANGE** spring.



## Step 3. Pilot valve.

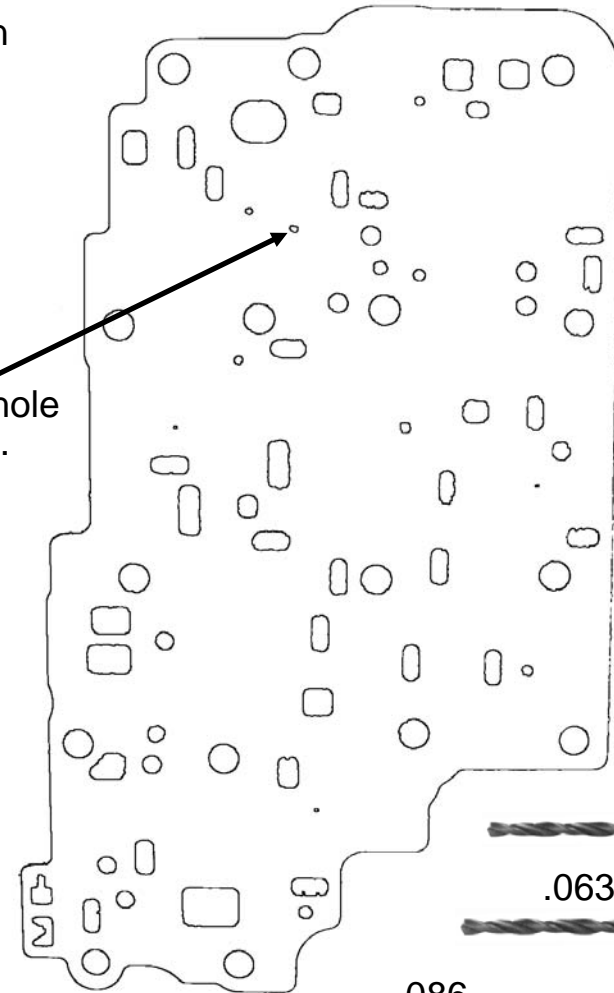
Install **RED** spring.

# Upper Valve Body

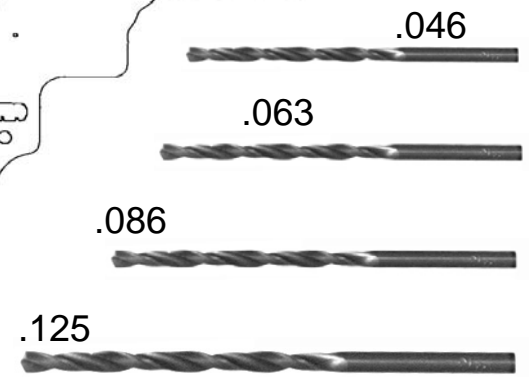


1. Enlarge this hole in VB with .125 drill.

# Upper Separator Plate



2. Enlarge this hole with .125 drill.

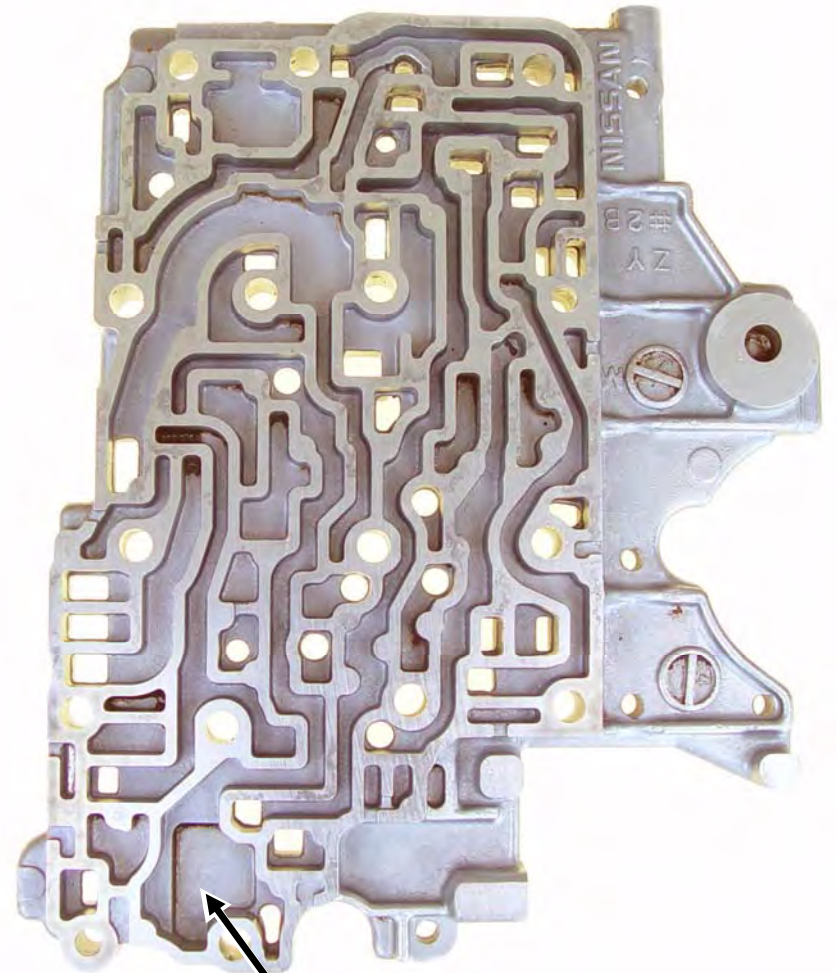
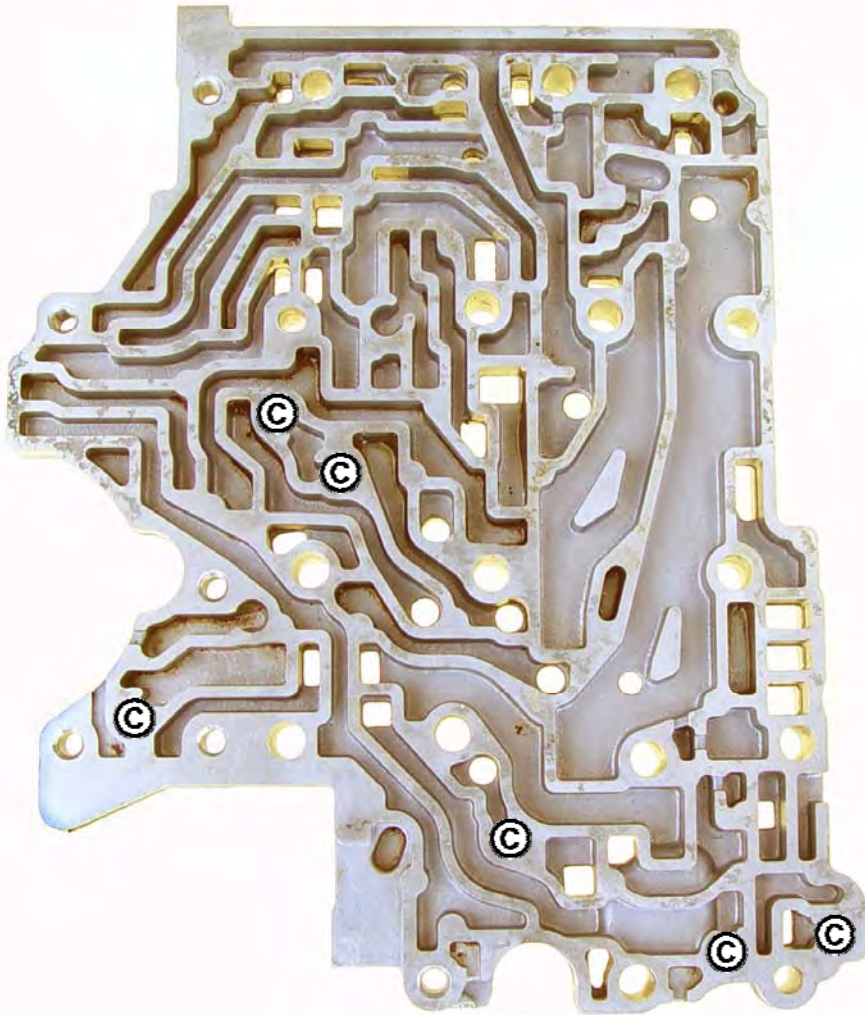


# Channel Casting

© 6 Steel balls: .214 to .218

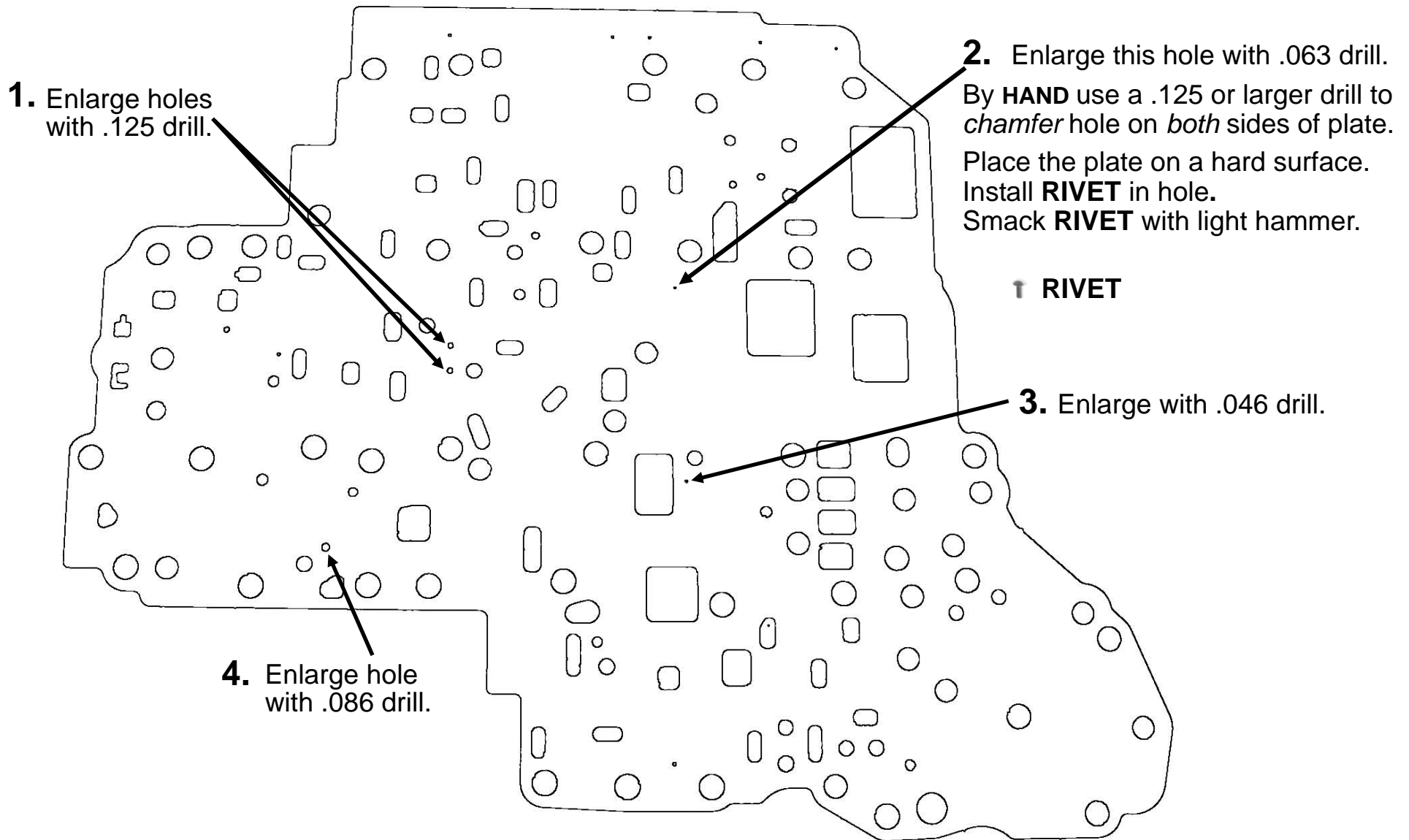
Don't use plastic balls.

Use **Vaseline** to keep check balls in place not grease.



Filter screen

# Main Separator Plate



Retainer

# Main Valve Body

No need to take apart.



**6.** Remove and discard the original modifier valve and spring. Install new valve, balls and springs as shown.

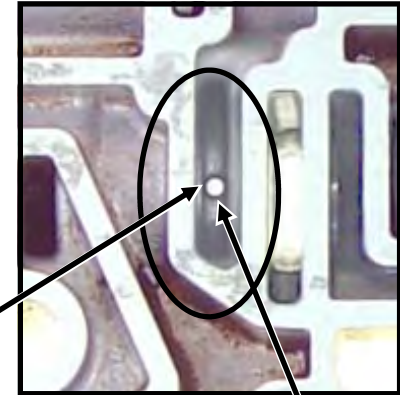
- WHITE
- 1/4" Steel Ball
- WHITE
- 3/16" Steel Ball
- Modifier Valve
- ORANGE



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

**2.** Install springs & steel balls furnished.

- Steel balls .265 diam
- ORANGE

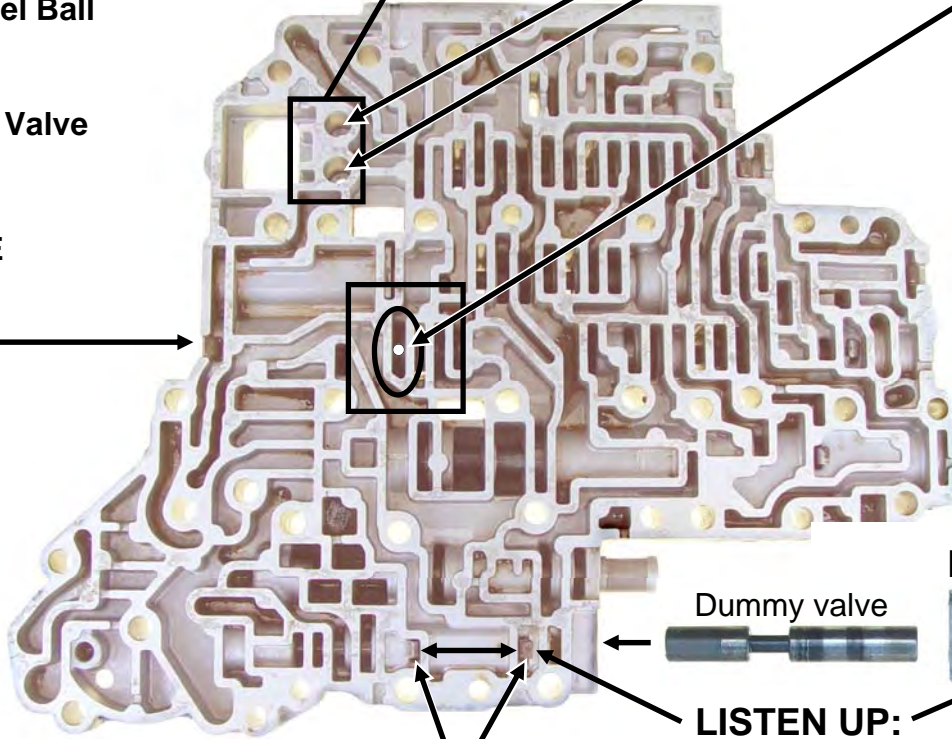


**3.** Drill .063 hole **straight down** into this passage thru bottom of the valve body.

**4.** Install **GREEN** Pressure regulator spring furnished.



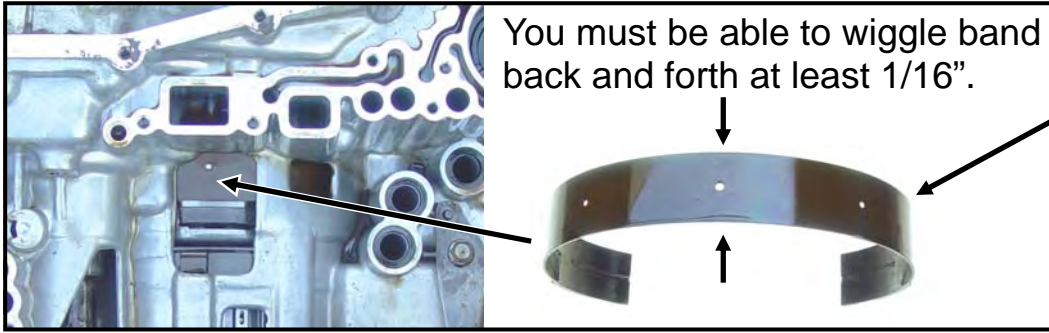
PR valve    **GREEN**    Boost valve  
Washer    Retainer



- Dummy valve
- Retainers
- ORANGE**
- End plug

**LISTEN UP:** Install the retainers in correct locations in VB.

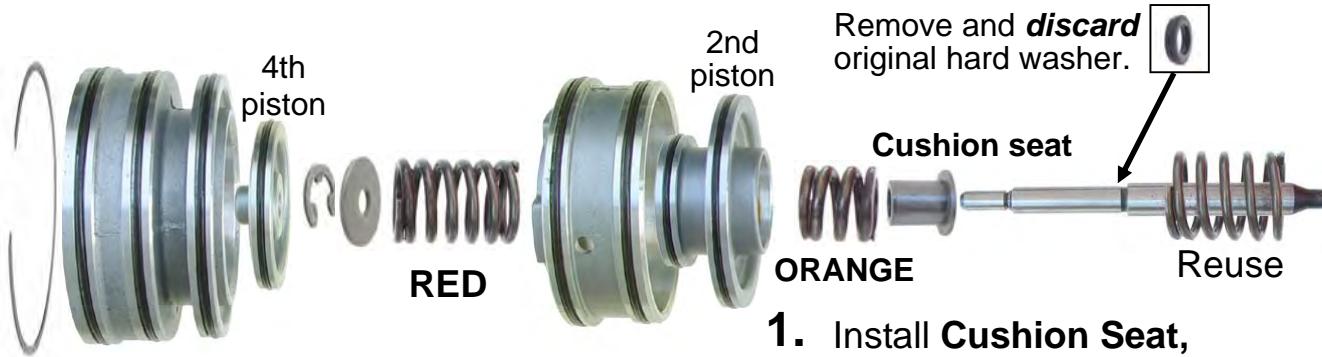
**5.** Install **ORANGE** spring furnished.



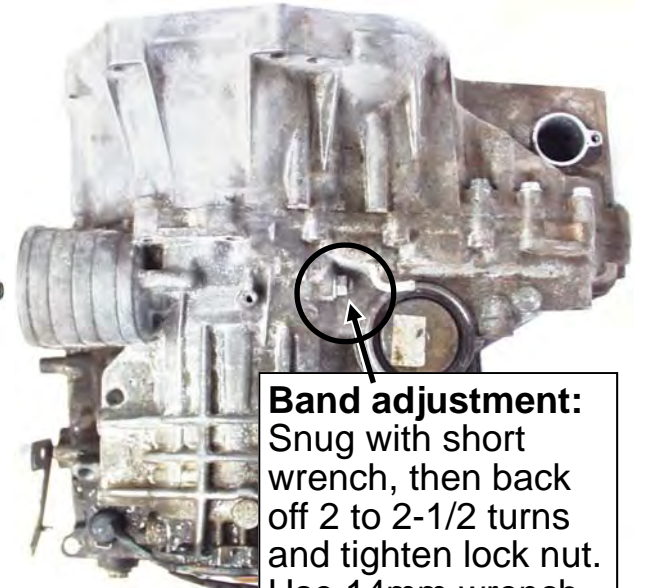
**Check Band Adjustment:**

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 below.

**See Page 8 for more information.**



**1.** Install **Cushion Seat, ORANGE and RED** springs furnished.

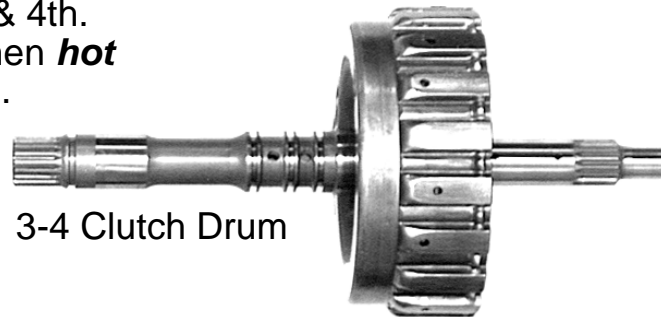


**Band adjustment:** Snug with short wrench, then back off 2 to 2-1/2 turns and tighten lock nut. Use 14mm wrench and T30 TORX bit.

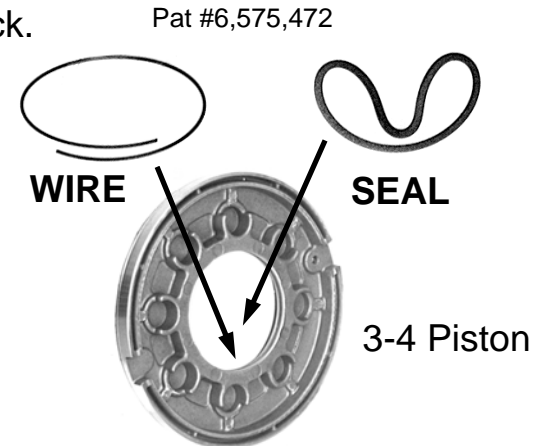
**Do step 2 if trans is out of vehicle.**

Poor design 3-4 clutch inner piston seal causes trans to lose 3rd & 4th. Usually worse when *hot* or after Kickdown.

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



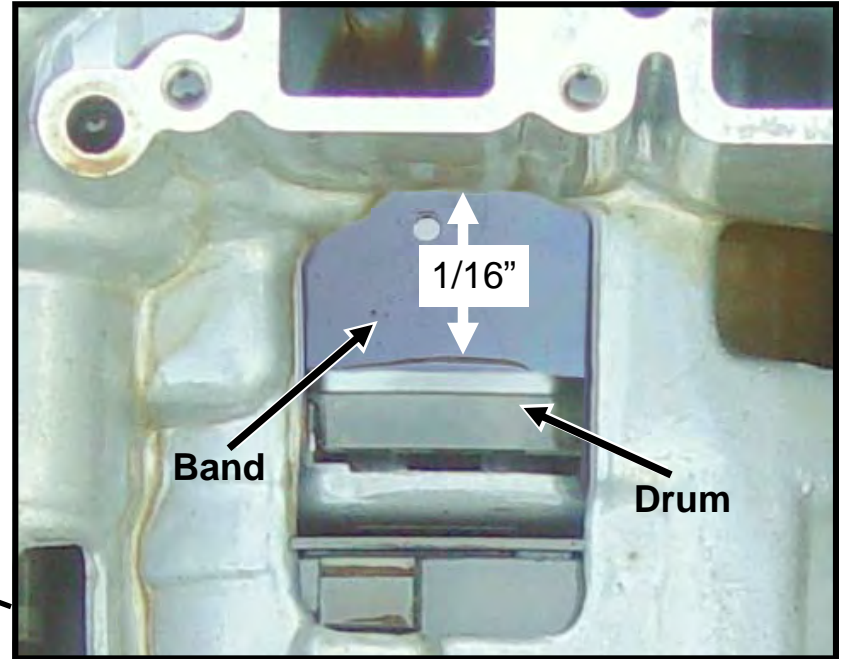
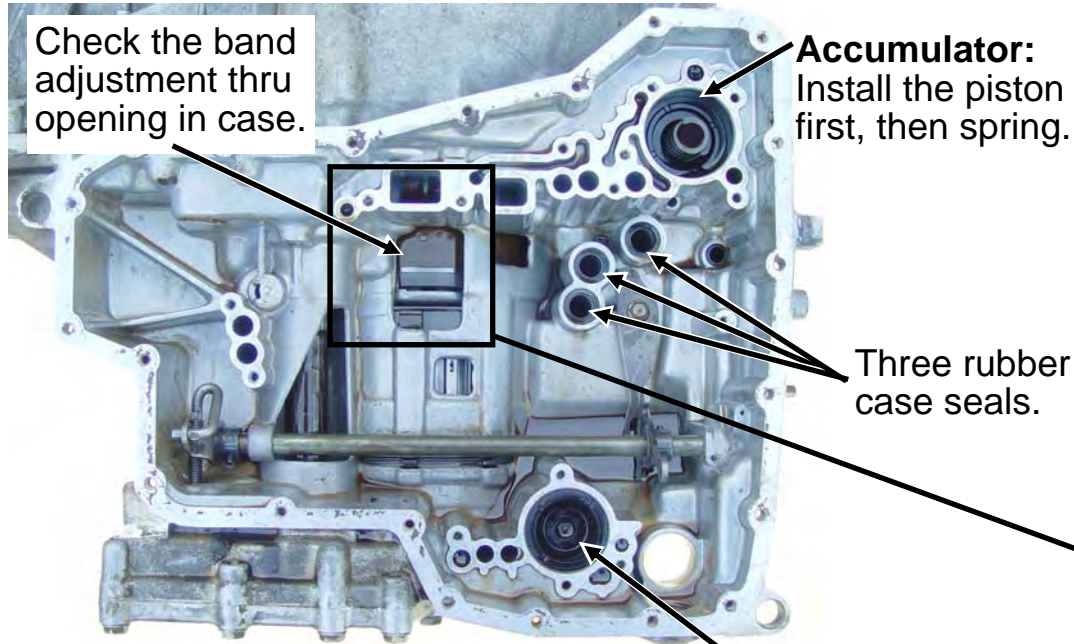
3-4 Clutch Drum



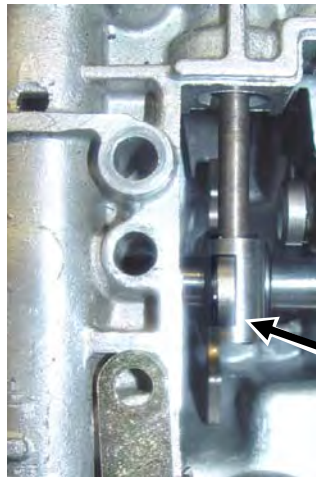


# Before installing Valve Body

## 1. Check position of parts in case.



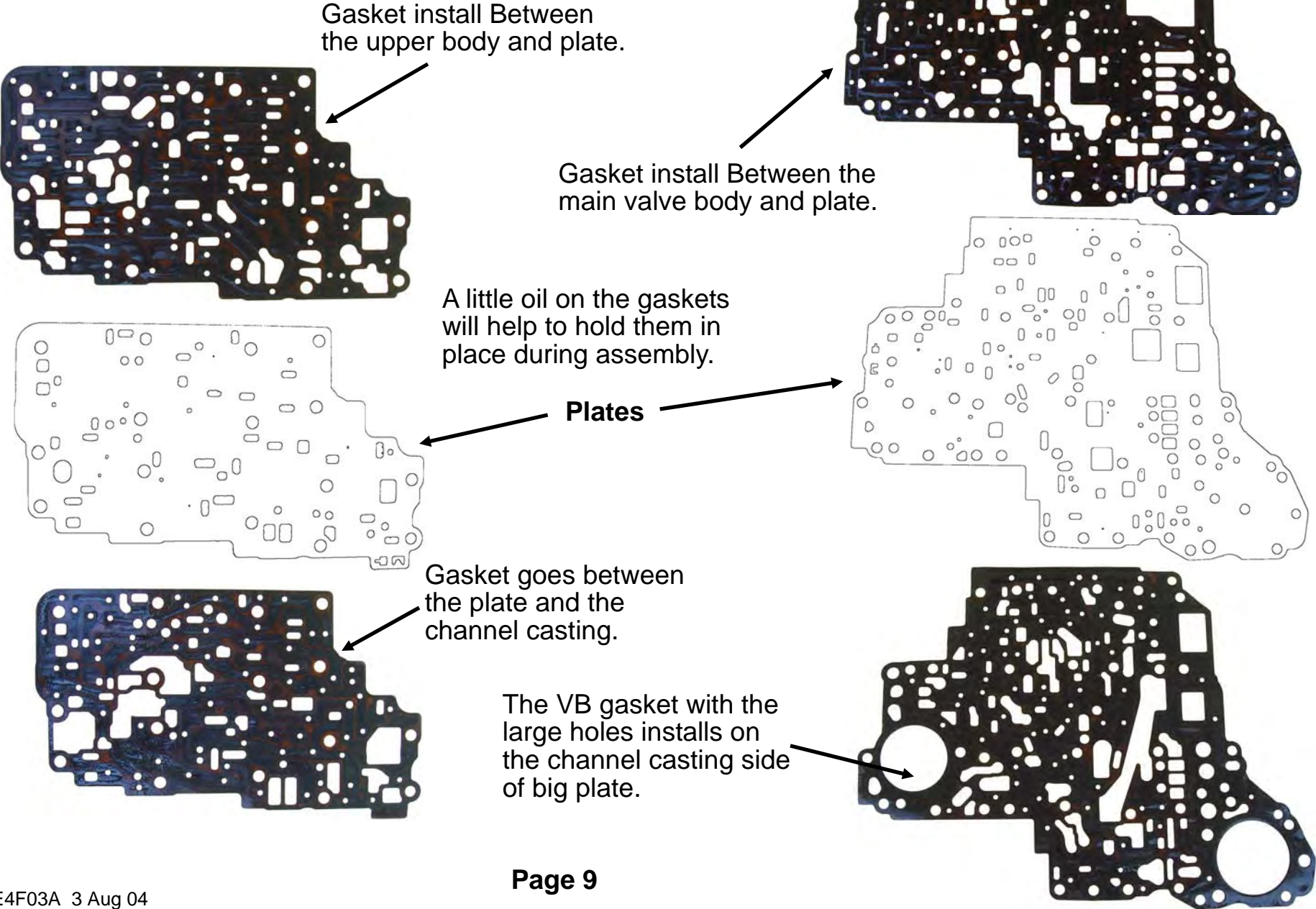
## 2. After installing the 2nd piston check band adjustment. With finger tip, band should wiggle back and forth on the drum at least 1/16".



## 3. When reinstalling the Valve Body on the case, install the manual valve in the direction shown.

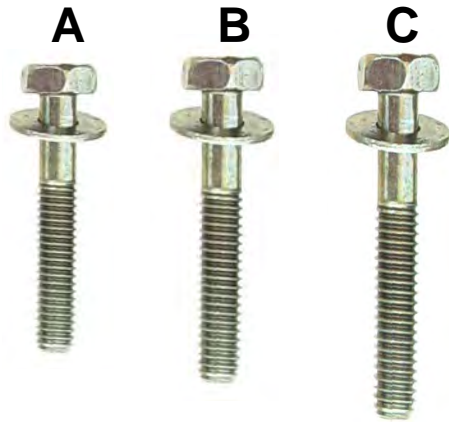


# Valve Body Gaskets

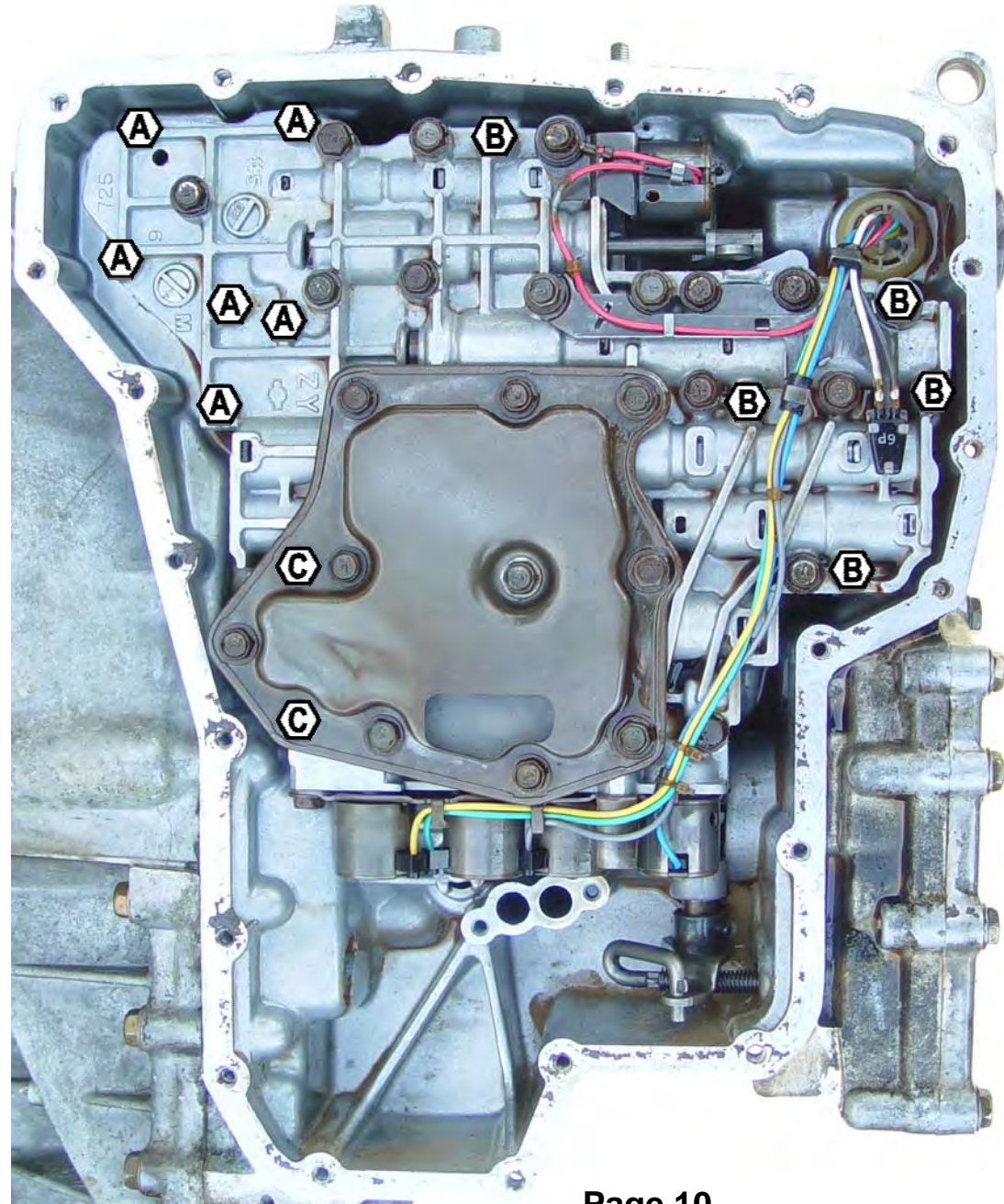


# VB to Case Bolts

- "A" Six bolts 1.455"
- "B" Five bolts 1.725"
- "C" Two bolts 1.885"



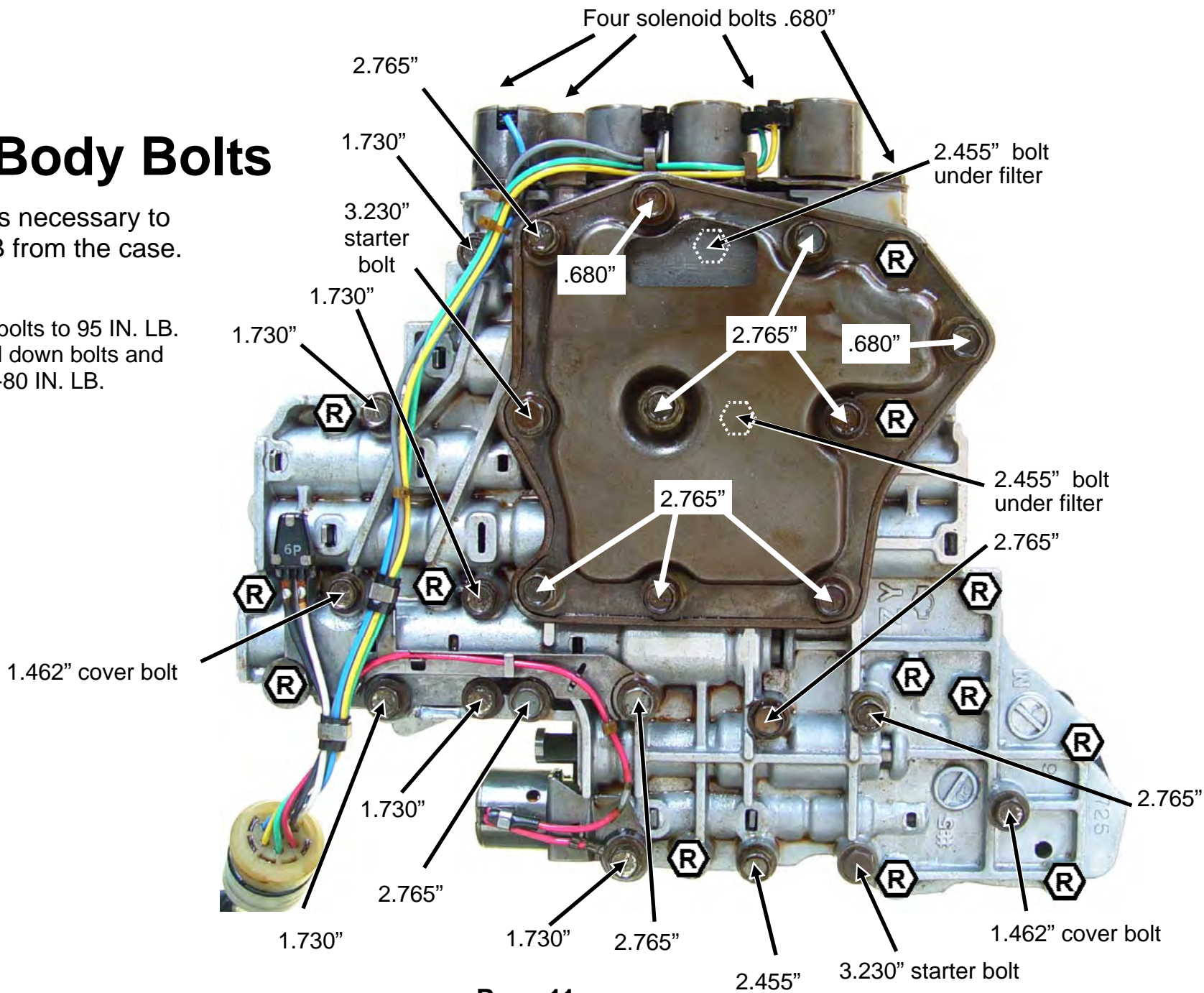
Tighten VB bolts to 95 IN. LB.  
Pan bolts to 65-80 IN. LB.  
Drain plug to 25 FT. LB.

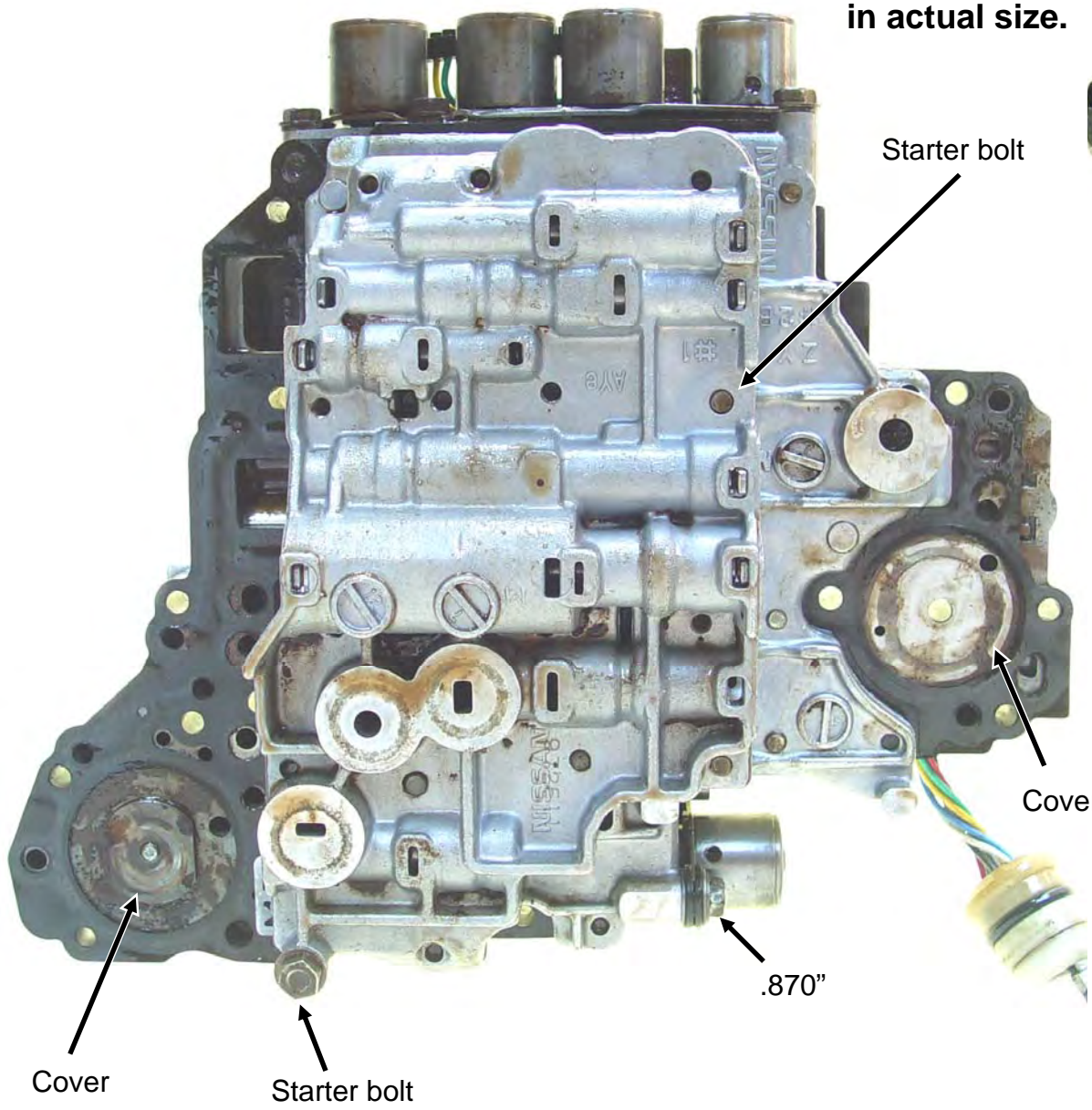


# Valve Body Bolts

**R** 13 bolts necessary to remove VB from the case.

Tighten VB bolts to 95 IN. LB.  
Tighten hold down bolts and plates to 70-80 IN. LB.





**Bolts shown  
in actual size.**



3.230" Two

2.765" Eleven

2.455" Three

1.730" Six

.870" One

.680" Six

1.462"

Hold down plates and bolts.