



# HOLD IT! Identify the valve body first!

For RE4FO4 (Large Case) VB's See other side.

**ONLY use kit that matches VB! No Exceptions!**

**RE4FO3 A** models: The internal solenoid wires extend outside of the case as shown below.

Use **SK® RE4FO3A**

For Hot Rods Only:

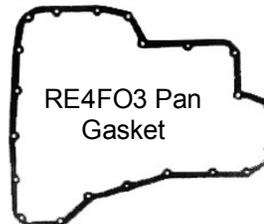
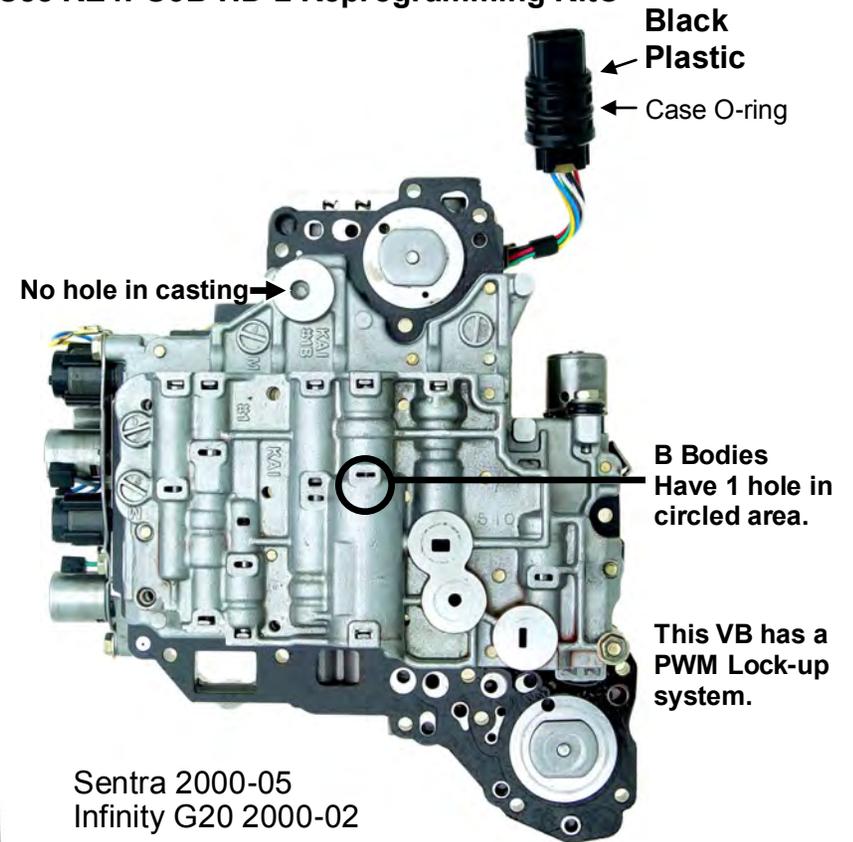
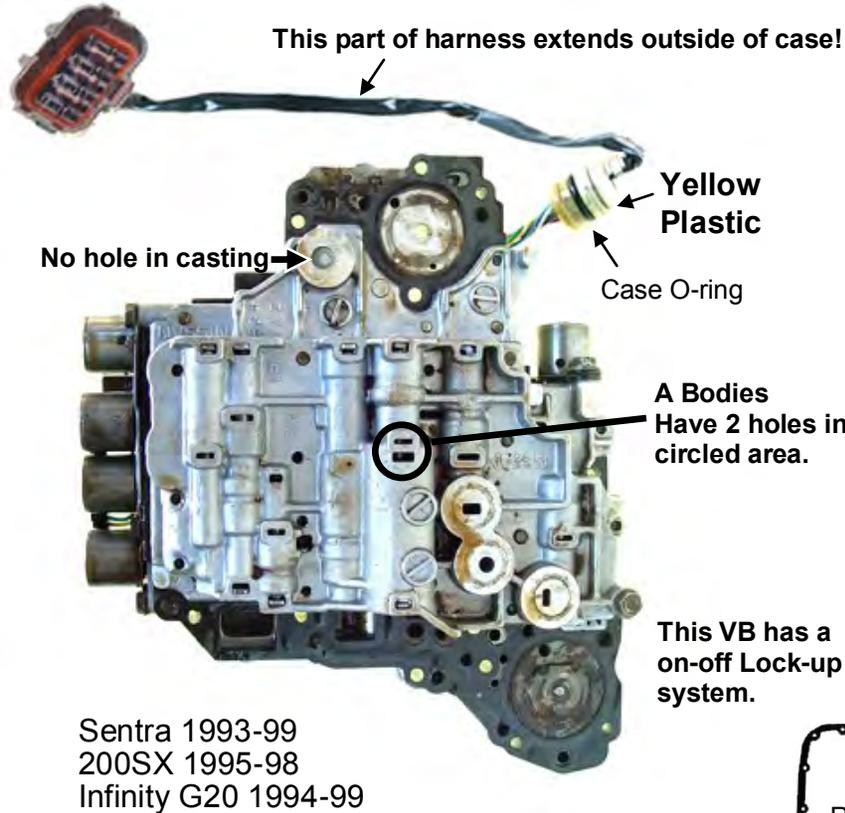
Use **RE4FO3A HD-2 Reprogramming Kit®**

**RE4FO3 B** models: The internal solenoid wiring harness **DOES NOT** extend outside of the case!

Use **SK® RE4FO3B**

For Hot Rods Only:

Use **RE4FO3B HD-2 Reprogramming Kit®**



Over



# HOLD IT! Identify the valve body first!

For RE4FO3 (Small Case) VB's See other side.

**ONLY use kit that matches VB! No Exceptions!**

**RE4FO4 A&V** models: The internal solenoid wires extend outside of the case as shown below.

Use **SK® RE4FO4A**

For Hot Rods Only:

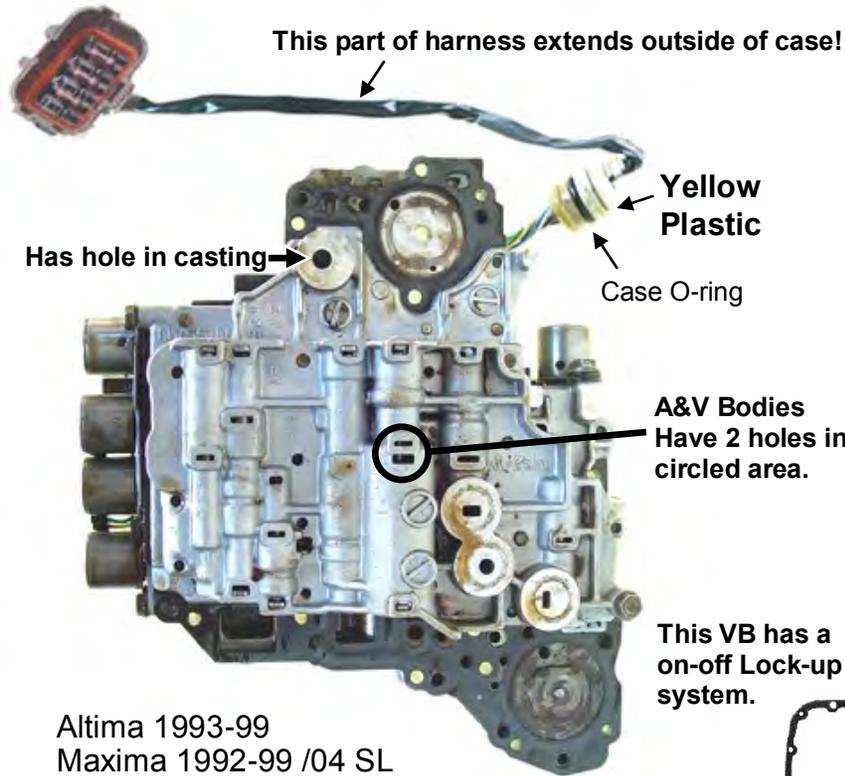
Use **RE4FO4A HD-2 Reprogramming Kit®**

**RE4FO4 B** models: The internal solenoid wiring harness **DOES NOT** extend outside of the case!

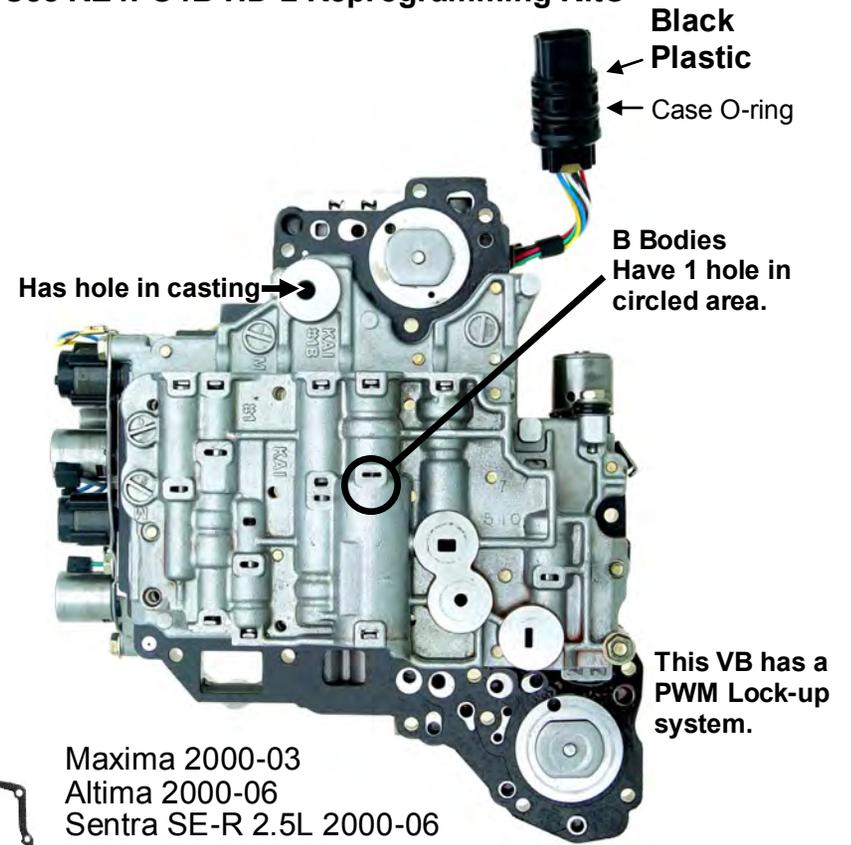
Use **SK® RE4FO4B**

For Hot Rods Only:

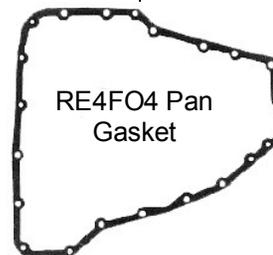
Use **RE4FO4B HD-2 Reprogramming Kit®**



Altima 1993-99  
 Maxima 1992-99 /04 SL  
 Quest 1993-02 /04 S&SL /05-06 S  
 Infinity i30 1995-99  
 Mercury Villager 1993-02



Maxima 2000-03  
 Altima 2000-06  
 Sentra SE-R 2.5L 2000-06  
 Infinity i30 2000-01  
 Infinity i35 2002



Over

# RE4F03B Shift Kit<sup>®</sup>

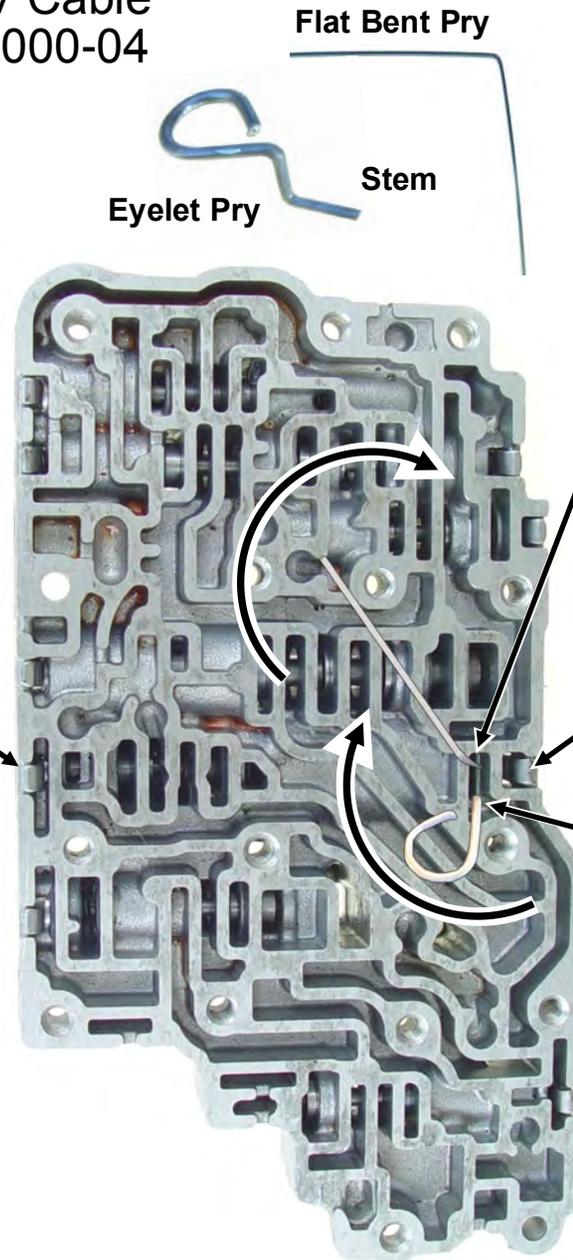
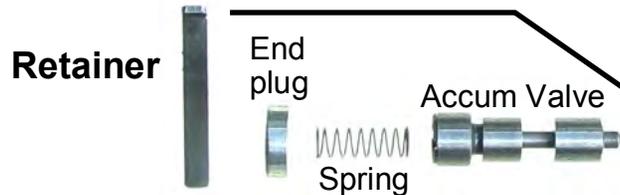
Front Drive Nissan - Without TV Cable  
Sentra 2000-04 G20 Infinity 2000-04

You 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.

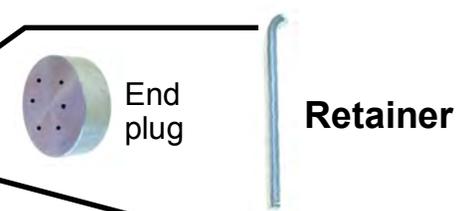


**LISTEN UP:** If trans is out of vehicle do page 7 first.

**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.

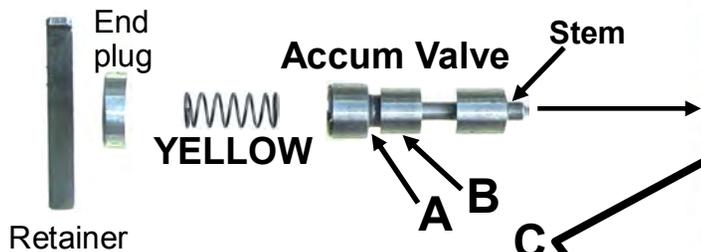
**Step 3.** With **Eyelet Pry** *push* the end plug **GENTLY** in various spots to remove it. Then remove 2nd accum piston, spring & washer on **Page 2**. Then *push* accum valve and end plug from this side of VB with a thin punch.



# Upper Valve Body

You'll love the 1- 2 shift.  
Short--Smooth--No bangs

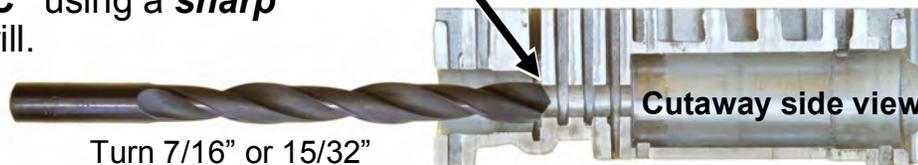
**Step 1.** Remove the accum valve. Chamfer partition as shown at bottom of page. Clean the bore. Reinstall valve. Install the **YELLOW** spring, end plug and retainer.



**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.



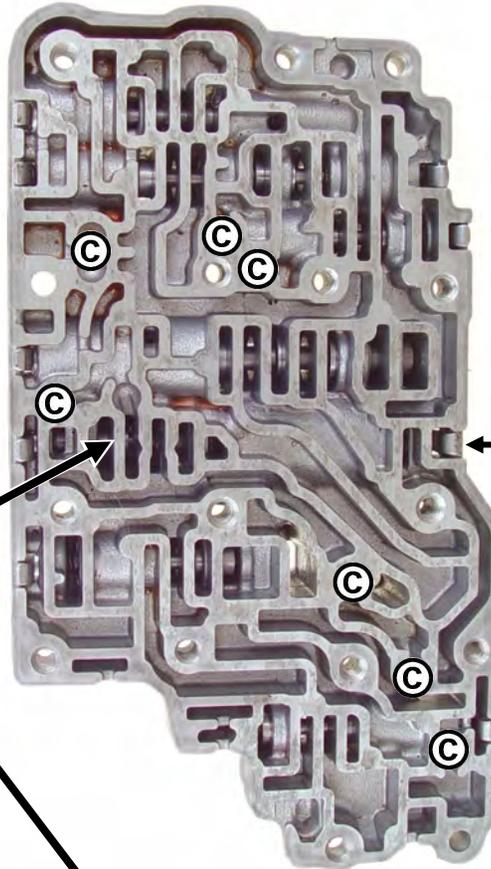
Turn 7/16" or 15/32" drill by hand in bore.

Upper Valve body

## © Checkballs:

Seven Steel .214 to .218  
Don't use plastic balls.

Use some **Vaseline** to keep the checkballs in place **NOT** grease.

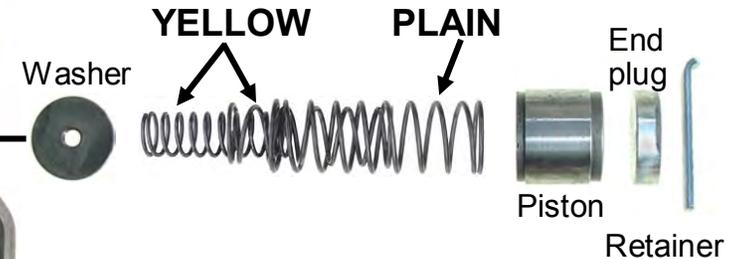


## Hello Mechanic:

Install accumulator valve first. Then, from this is side, install the flat washer on the stem of Accum Valve, then the remaining parts as shown.

## Step 2. 2nd Accum Piston

Remove & discard original spring. Install the three springs furnished.



## Step 3. Pilot valve

Install **YELLOW** spring.



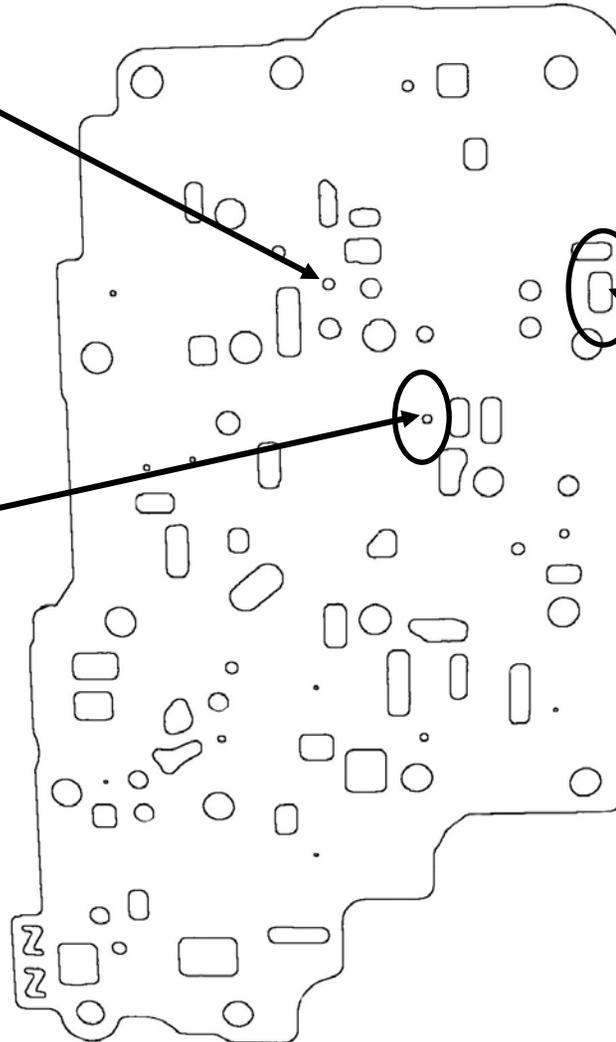
Mr. Shift

# Upper Separator Plate (Small Plate)

Enlarge this hole with .086 drill. OK if already bigger.

## LOOK

If the plate **HAS** hole here, Main VB **MUST HAVE** Steel One Way Ball and Spring.  
**No Hole, No Ball & Spring.**  
See main VB **Page 6.**



## LOOK

If Plate **Has Square** hole here, **MUST** install "R" ball in the channel casting.  
If Plate **Has Round** hole here **Do NOT** install "R" ball in the channel casting.  
See Channel Casting **Page 4.**

Actual size



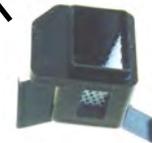
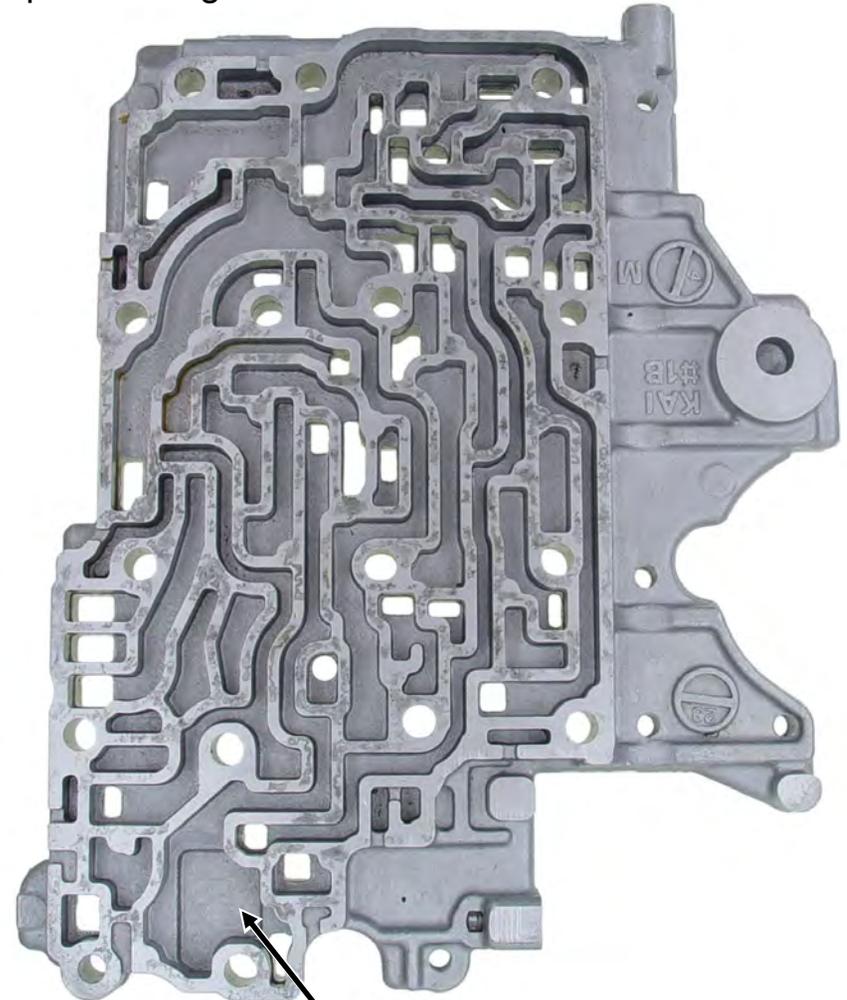
# Channel Casting

**Checkballs:** Steel .214 to .218 Don't use plastic balls

Ⓒ Five, all models.

Ⓓ Model Dependent see **Page 3**.

Use some **Vaseline** to keep the checkballs in place **NOT** grease.



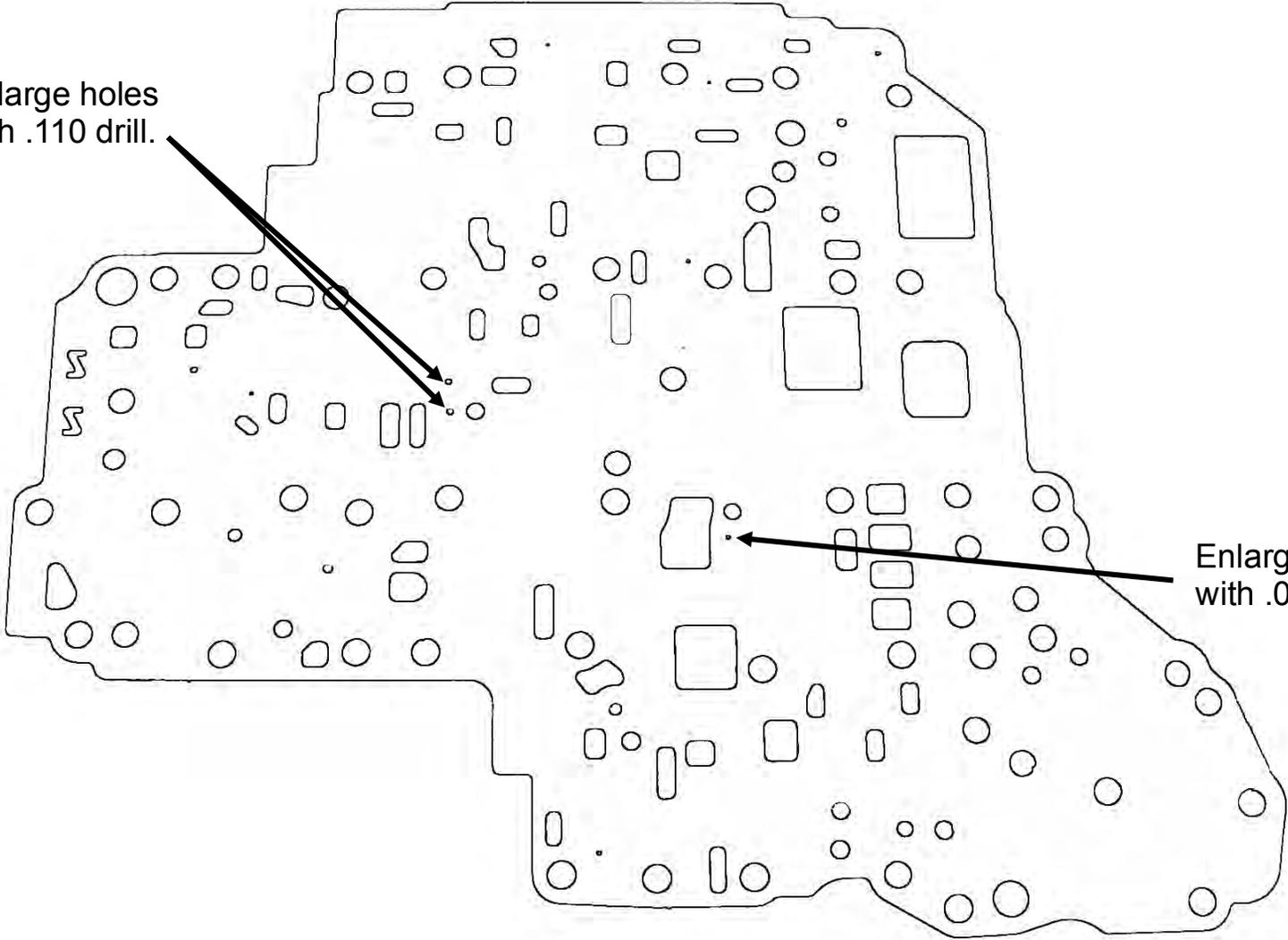
Filter screen

**LISTEN UP:**  
Do **NOT** install ball "R" if Upper Plate  
HAS a Round hole. See **Page 3**.

# Main Separator Plate

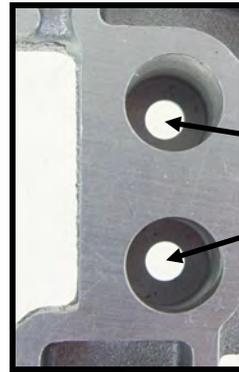


Enlarge holes  
with .110 drill.



Enlarge hole  
with .046 drill.

# Main Valve Body

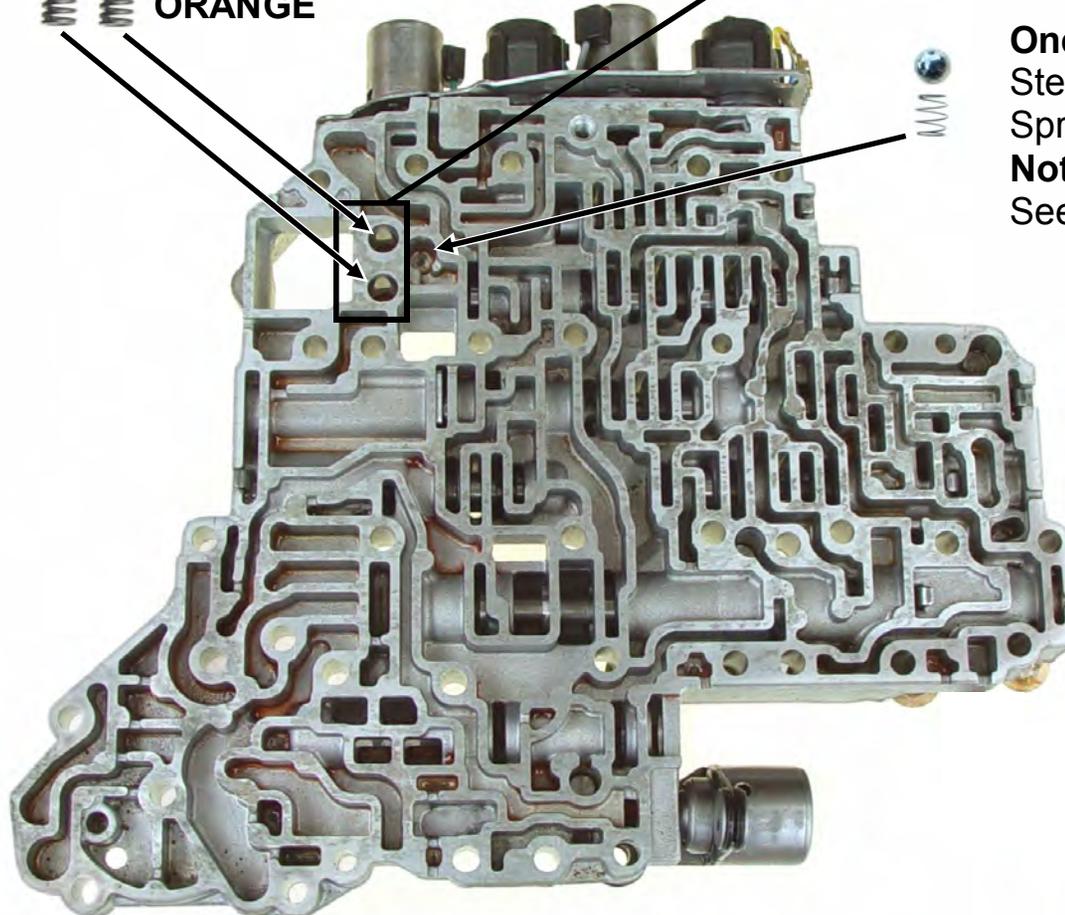


**2.** Enlarge the limit drain holes with a 1/4" drill.

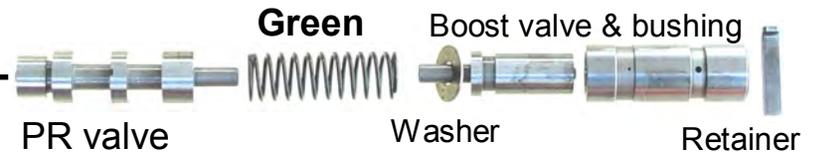
**3.** Install springs & steel balls furnished.

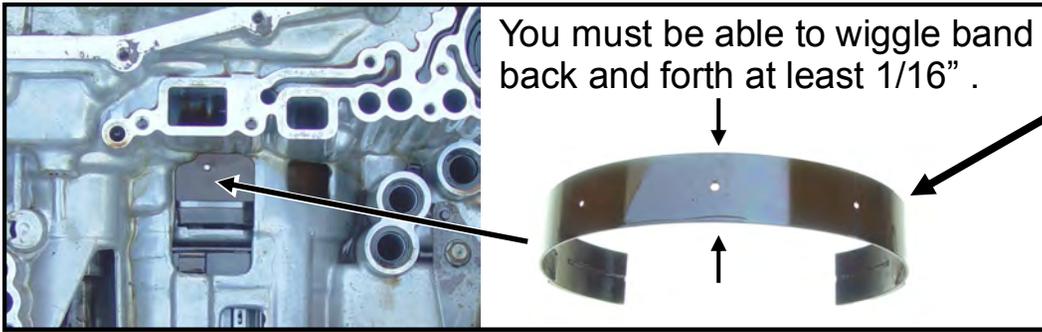


**One Way Ball & Spring**  
Steel ball 5/16" (.312)  
Spring .012 x .285 x .330  
**Not used all models.**  
See Plate on **Page 3.**



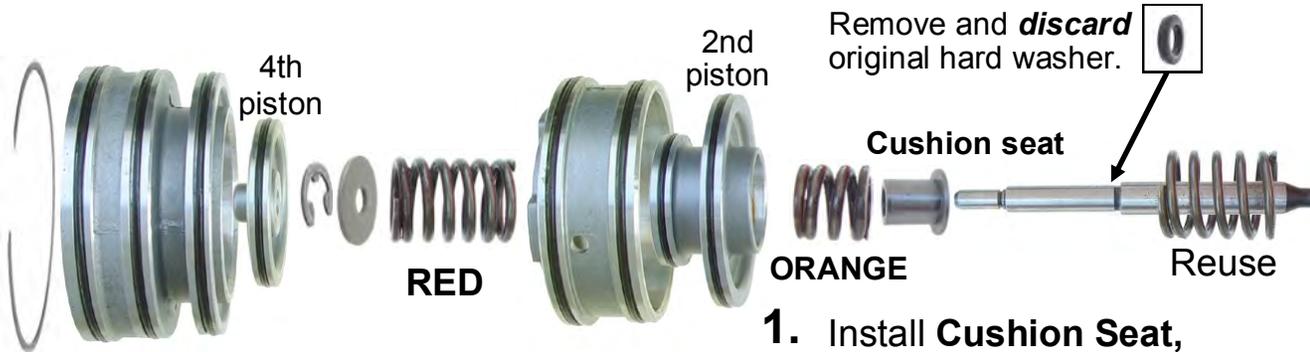
**1.** Install **Green** Pressure regulator spring furnished.



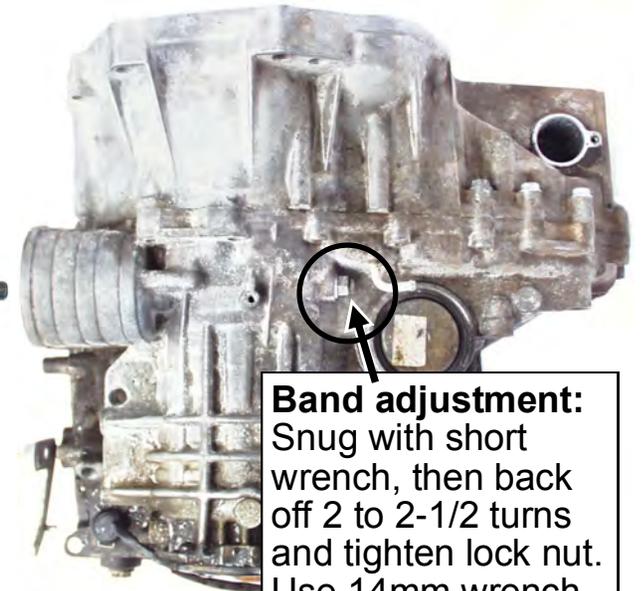


**Check Band Adjustment:**

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.



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.

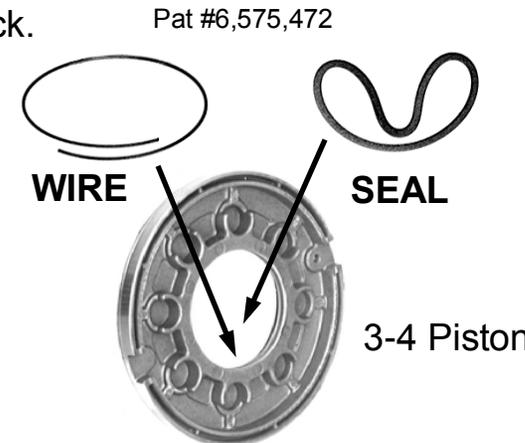
**Do step 2 if trans is out of vehicle.**

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

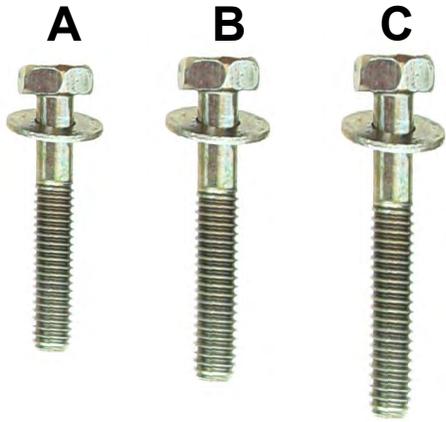


3-4 Piston

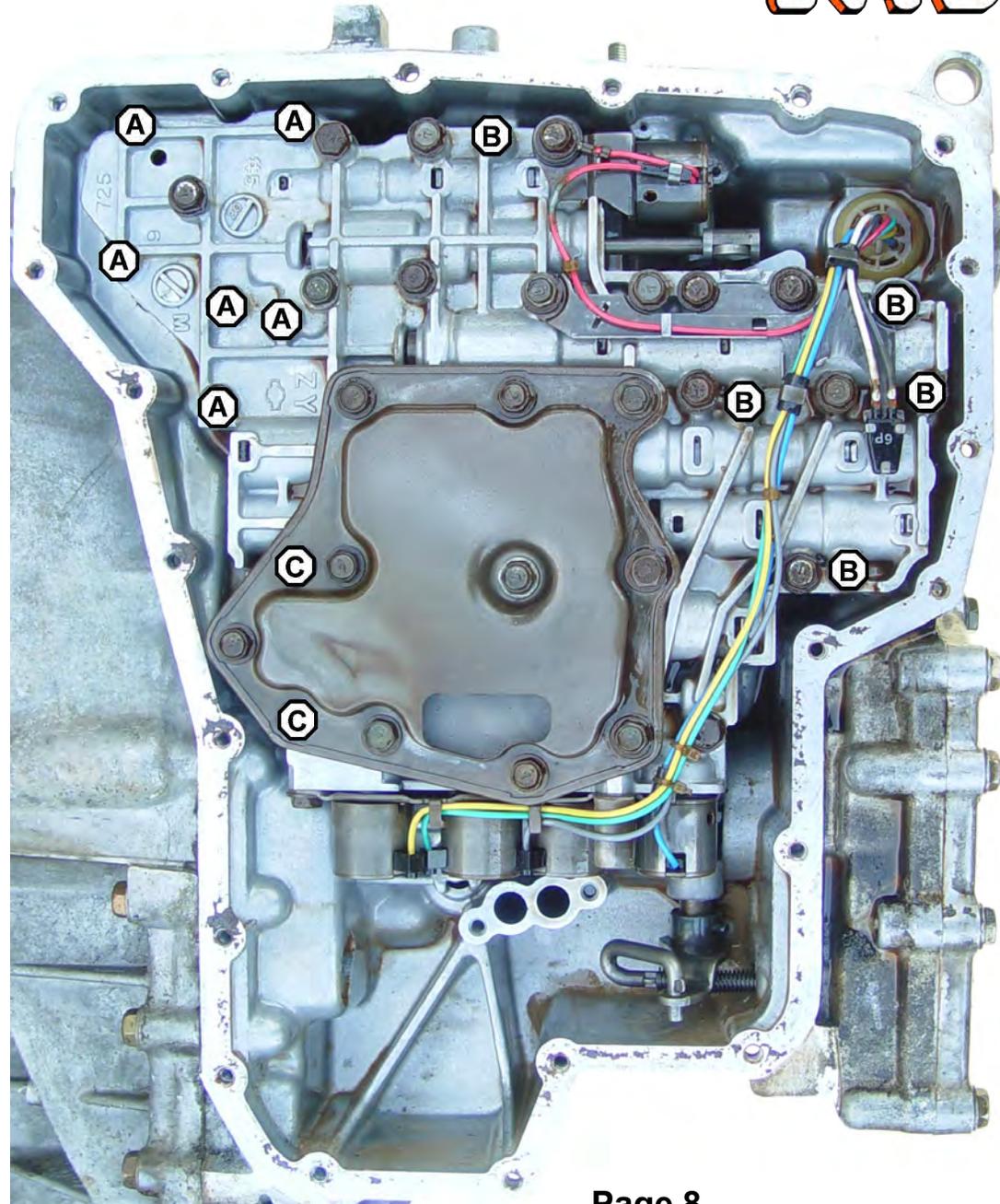
# VB to Case Bolts



- "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.

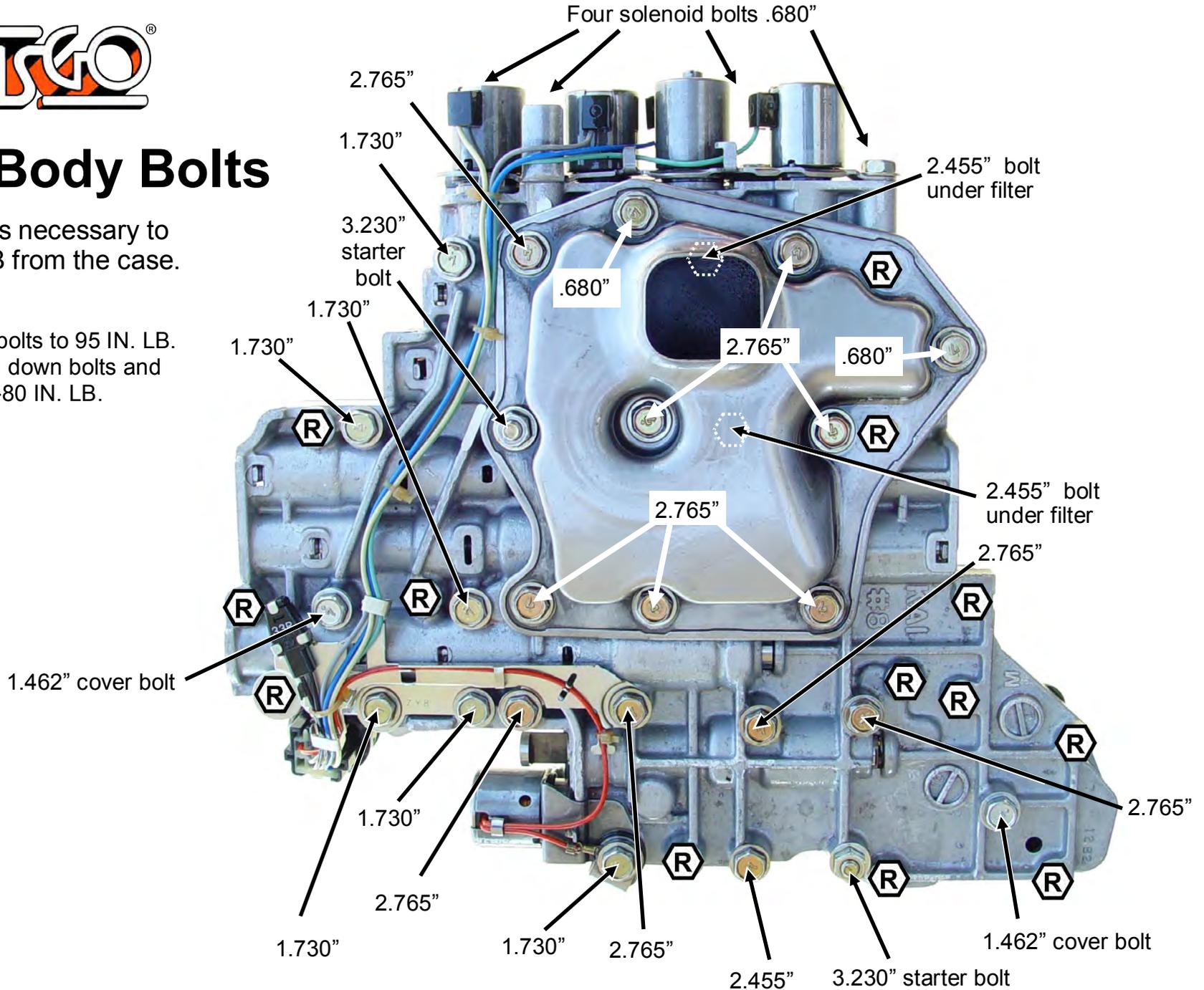




# Valve Body Bolts

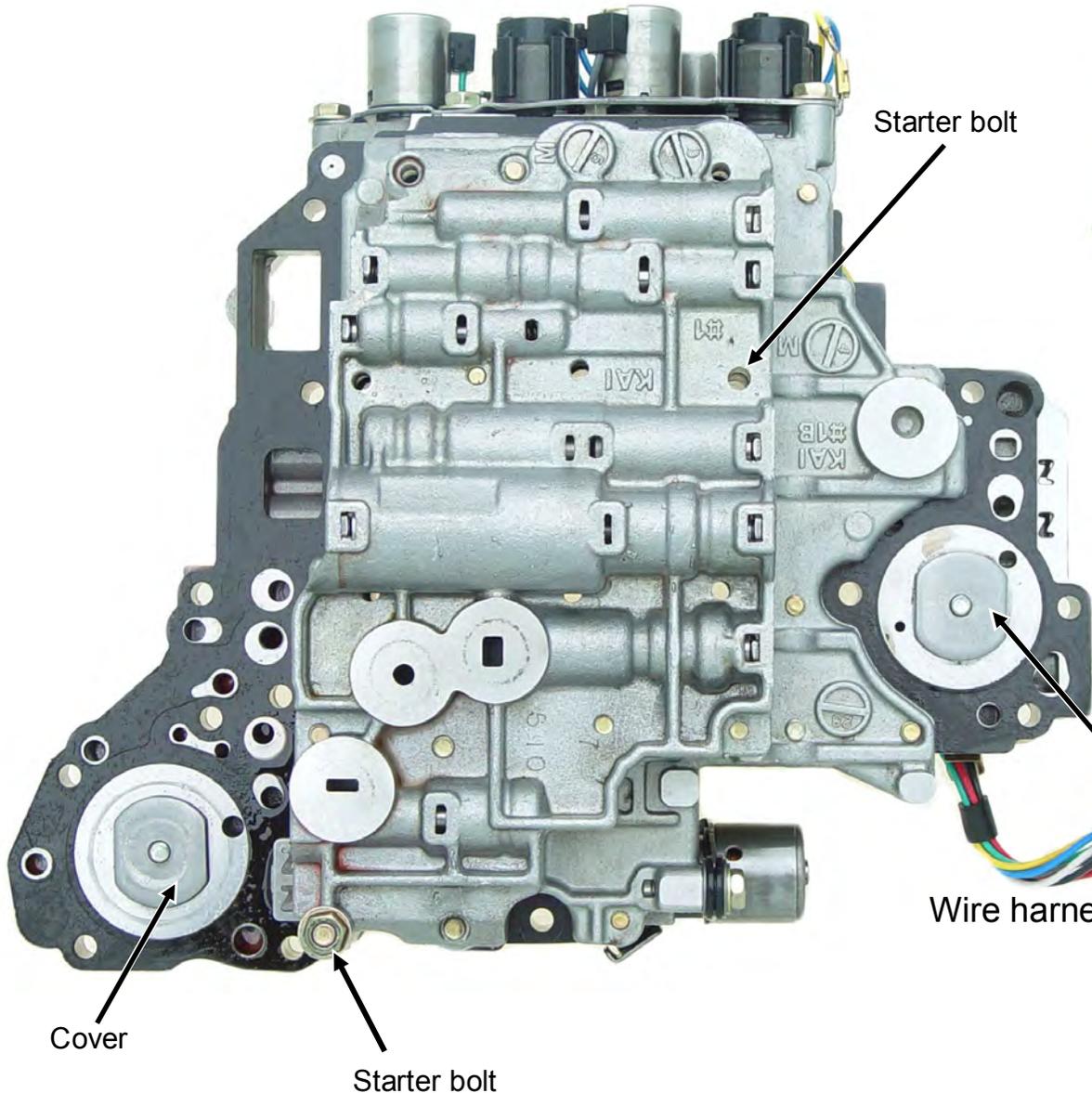
**R** 13 bolts necessary to remove VB from the case.

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

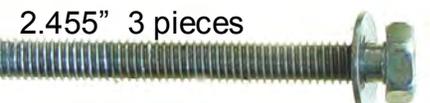




Tighten VB bolts to 95 IN. LB.  
Tighten hold down bolts and plates to 70-80 IN. LB.



1.462" length cover bolts



**RE4FO3B** has **Black** connector thru case, wire harness prox 7" long coming from VB.  
**RE4FO3A** has **Tan** connector thru the case, wire harness prox 21" long coming from VB.