

## **HOLD IT!** Identify the valve body first!

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

**RE4FO4 B** models: The internal solenoid wiring

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

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

harness **DOES NOT** extend outside of the case! Use SK® RE4FO4B Use **SK® RE4FO4A** For **Hot Rods** Only: For **Hot Rods** Only: Use RE4FO4A HD-2 Reprogramming Kit® Use **RE4FO4B HD-2 Reprogramming Kit® Black** → Plastic This part of harness extends outside of case! ← Case O-ring Yellow **B** Bodies **Plastic** Have 1 hole in Has hole in casting -> 2 Has hole in casting→ circled area. Case O-ring **A&V Bodies** Have 2 holes in circled area. This VB has a This VB has a **PWM Lock-up** on-off Lock-up system. system. Maxima 2000-03 Altima 1993-99 Altima 2000-06 Maxima 1992-99 /04 SL Sentra SE-R 2.5L 2000-06 Quest 1993-02 /04 S&SL /05-06 S RE4FO4 Pan Infinity i30 2000-01 Infinity i30 1995-99 Gasket Infinity i35 2002 Mercury Villager 1993-02

Over



## **HOLD IT!** Identify the valve body first!

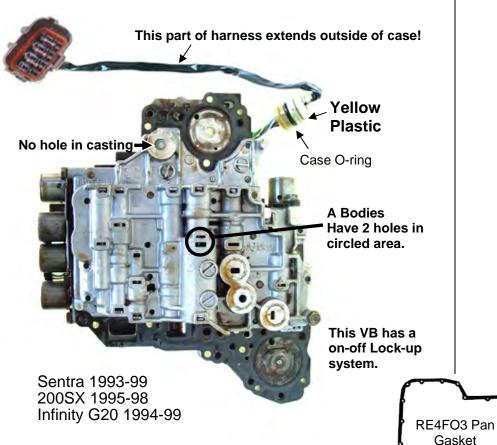
For RE4FO4 (Large Case) VB's See other side.

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

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

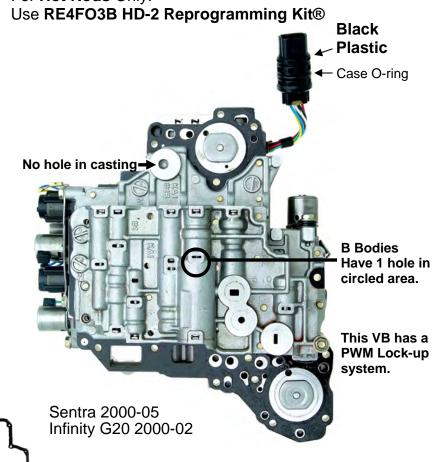
Use **SK® RE4FO3A** For **Hot Rods** Only:

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:



## **RE4F04B Shift Kit®**

NISSAN Quest-- 2003-04 Maxima--Altima 2000-04

MERCURY Villager 4F2OE 2003-04 Infinity i30 2000-04

Flat Bent Pry

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

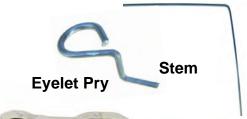
### This Kit is about:

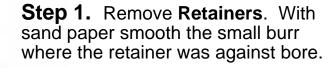
Rough 2nd cold. No 3rd after a 3 -2 or 4-2 kickdown. Direct clutch (3rd) inner seal leaks, wears or opens up, etc. Corrects Hard and Soft 1-2. Long 2-3 heavy throttle. Firmer 4th and Lockup.

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

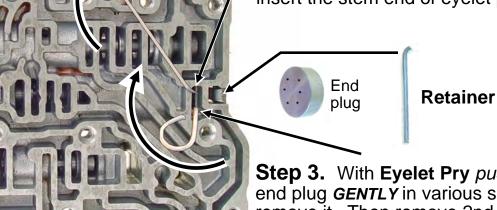
Retainer End plug Accum Valve Spring

LISTEN UP: If trans is out of vehicle do page 6 first.





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 accumpiston, spring & washer on **Page 2**.

Then *push* accum valve and end plug, out of the valve body, from this side 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 bore. Reinstall valve. Install **YELLOW** spring, end plug & retainer.

### Checkballs:

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

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

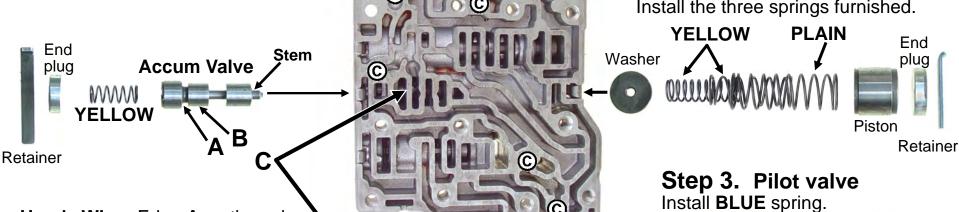


#### **Hello Mechanic:**

Install accumulator valve first. Then, from this 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.



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.

**Cutaway side view** 

Upper Valve body





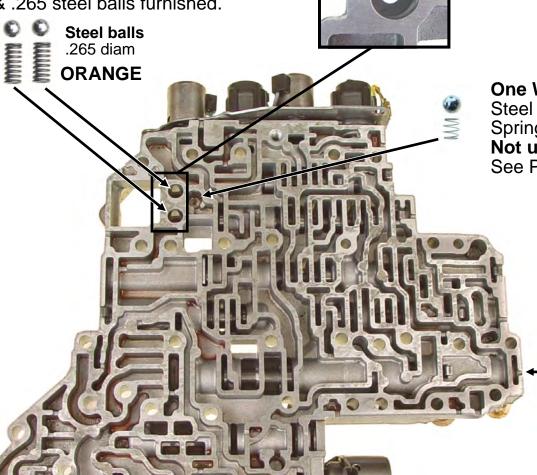
Mr. Shift

# **Main Valve Body**



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

**3.** Install new **orange** springs & .265 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 4, Step 2.

> 1 Install **GREEN** Pressure regulator spring furnished.

**GREEN** Boost valve & bushing PR valve

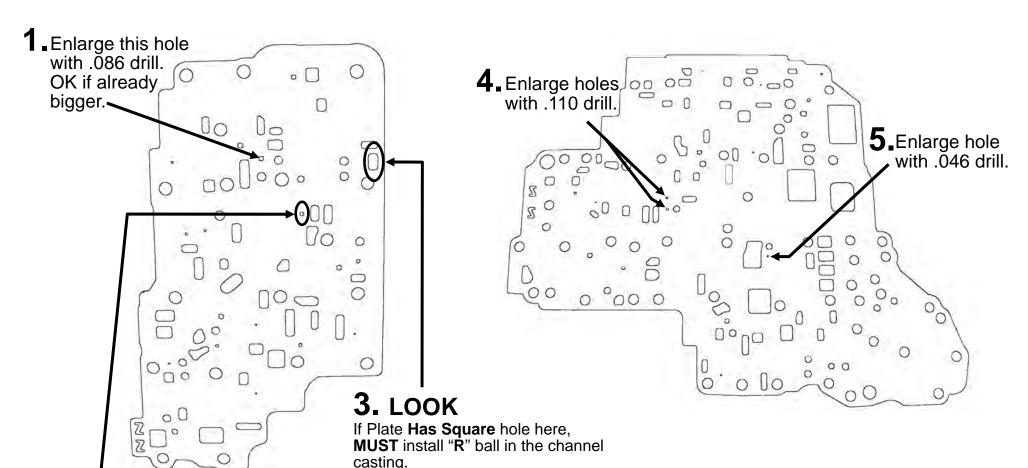
Washer

Retainer

# **Upper Separator Plate**

**Main Separator Plate** (Large Plate)

(Small Plate)



### 2. 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 3)

See Channel Casting Page 5.

casting.

If Plate Has Round hole here Do

NOT install "R" ball in the channel



## **Channel Casting**

Use some **Assembly Gel** to keep the checkballs in place **NOT** grease!

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

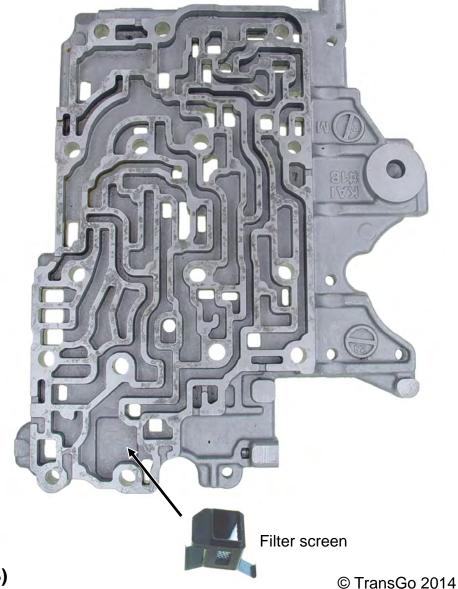
© Five, all models.

Model Dependant see Page 4, Step 3.



**LISTEN UP:** 

**Do NOT** install ball "R" if Upper Plate HAS a Round hole. (See Page 4, Step 3)

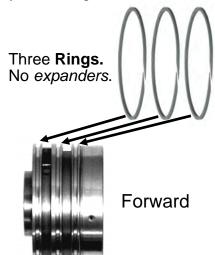


### Air checking Plastic Rings:

- 1) Put 20 squirts of oil into feed hole in case.
- 2) Apply clutch with full shop air and hold it for 20 seconds. Clutch MUST apply. If it does not, try rotating the drum or input and output shaft, add 10 more squirts and retry.
- 3) Reduce pressure to 40 psi and give the feed hole another 20 squirts. Clutch MUST apply.

### 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.



### 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.

## Hi-Temp Low-Shrink Rings

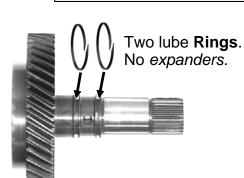
If trans is in vehicle skip this page.

### 2. Reverse Rings

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

### LISTEN UP: Steps 2 & 4

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



Seal

Wire Pat Pending

Reverse

Rings

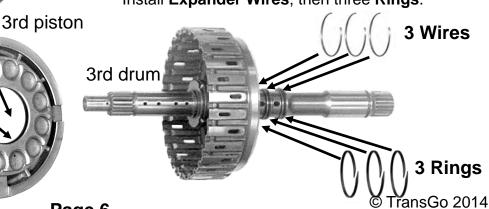


**Expander Wires** 

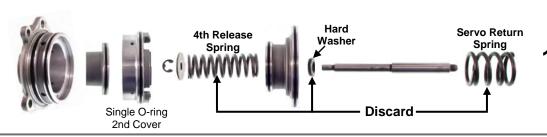
Pat Pending

### 4. Third Clutch Drum Rings

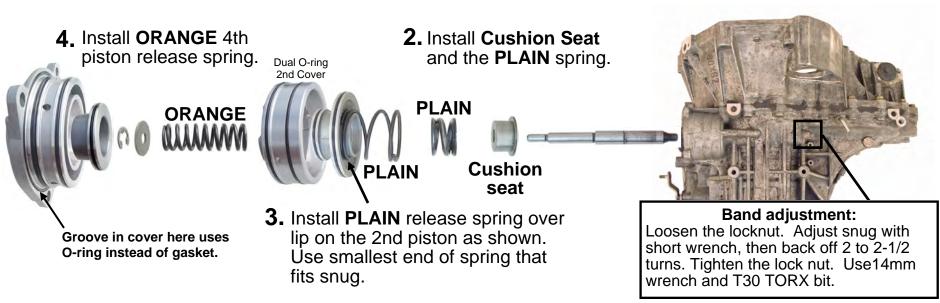
Fill the grooves with Trans Jel or Vaseline. Install Expander Wires, then three Rings.

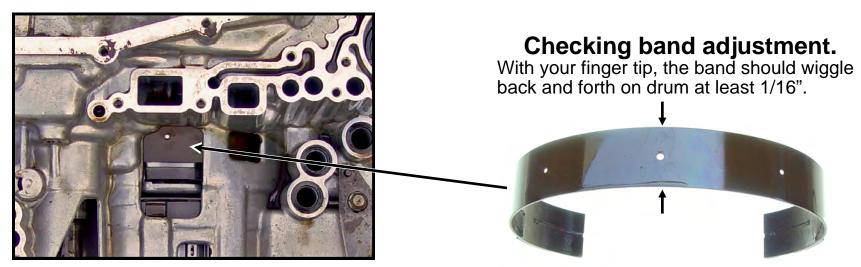


Page 6



 Remove and discard original servo return spring, hard washer and 4th return spring. Parts work on both types of servo assy's.



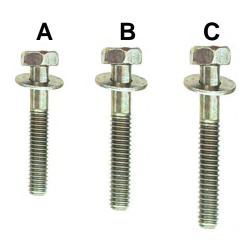




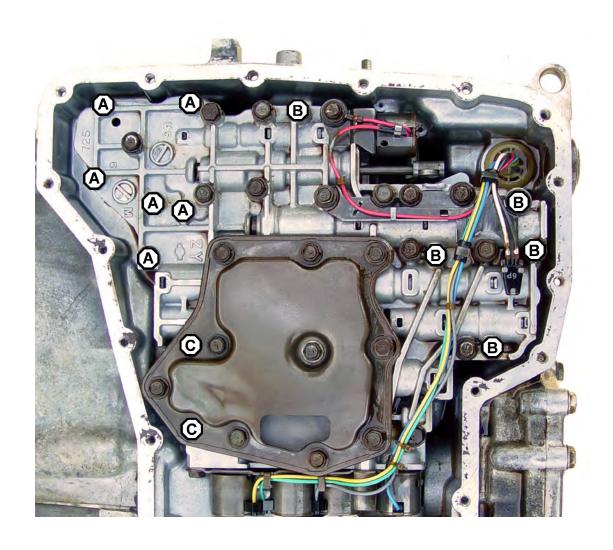
## **VB** to Case Bolts

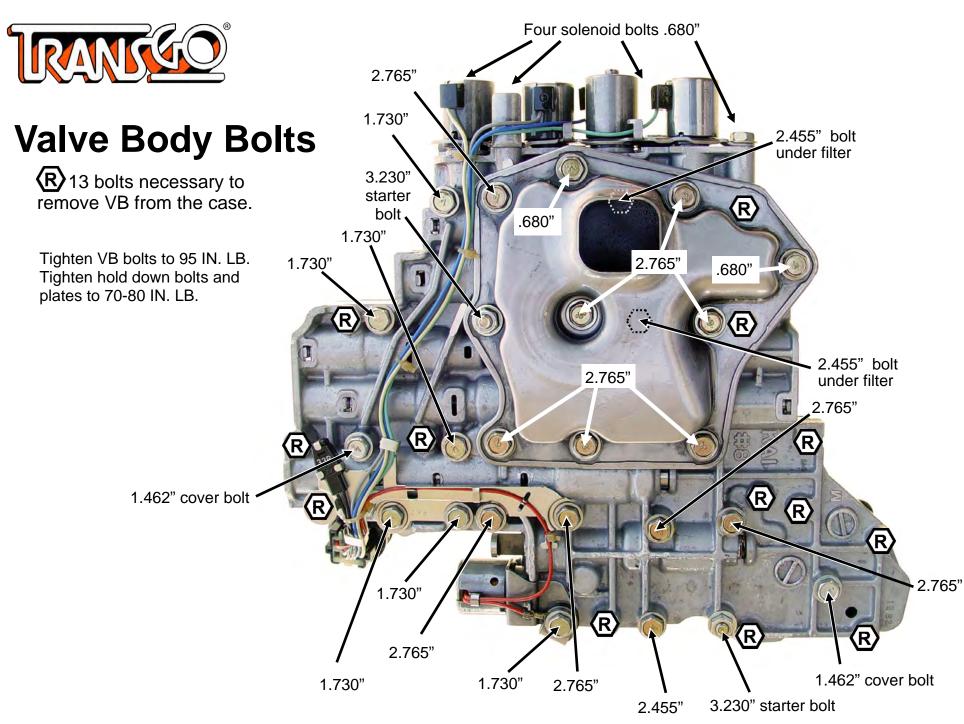
"**A**" Six bolts 1.455" "**B**" Five bolts 1.725"

"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.







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

