

RL4F03A-HD2

Reprogramming Kit™

Front Drive Nissan- with TV Cable
Sentra 91-99 NX 92-93
200SX 95-98 G20 Infinity 91-93

Corrects/Reduces/Prevents

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

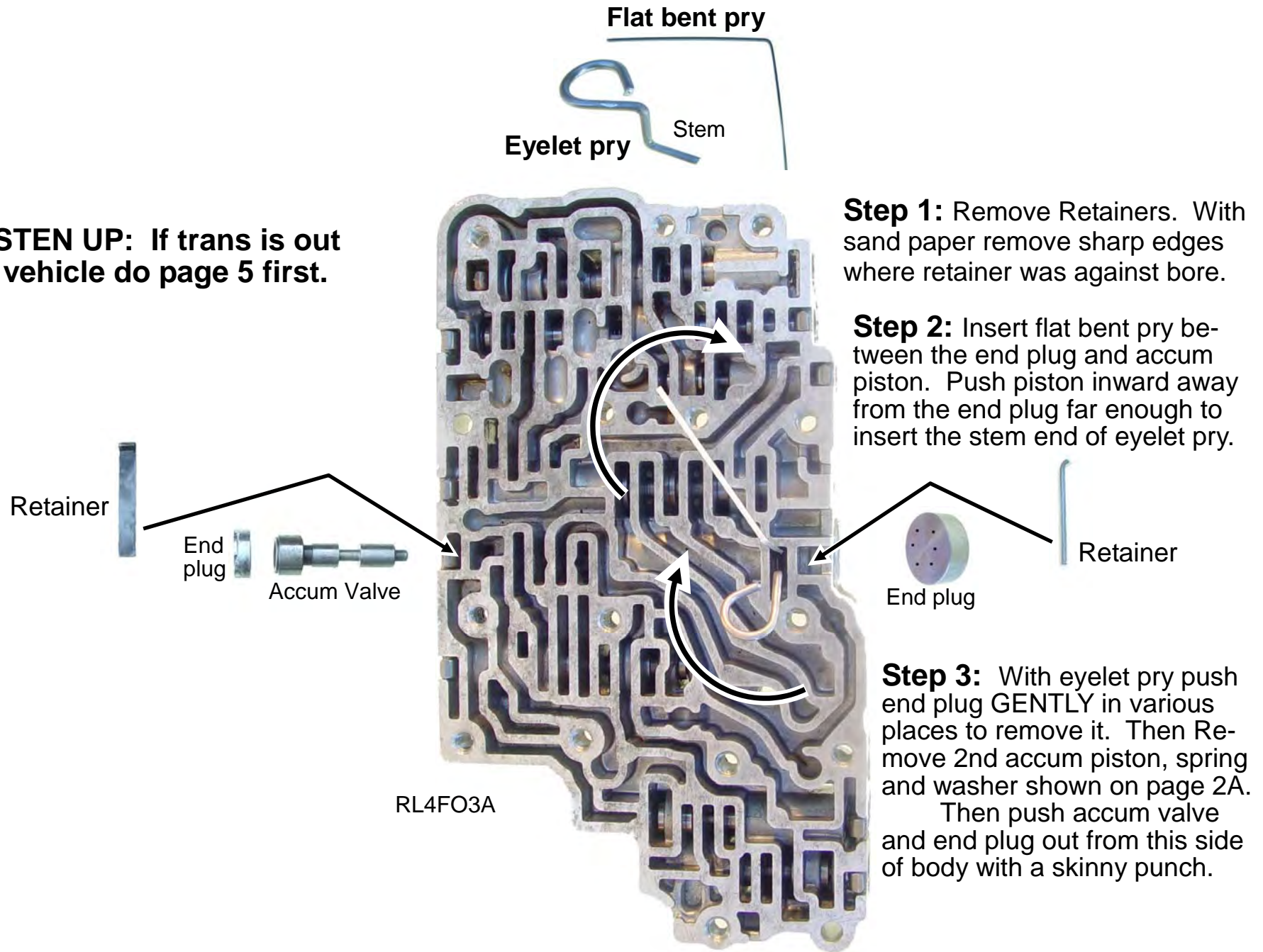
Direct clutch (3rd) inner seal leaks, wears or opens up, etc.

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

Nissan never shifted this good, until now.



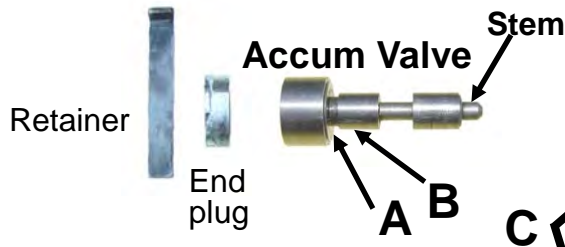
LISTEN UP: If trans is out of vehicle do page 5 first.



RL4FO3A

Upper Valve Body

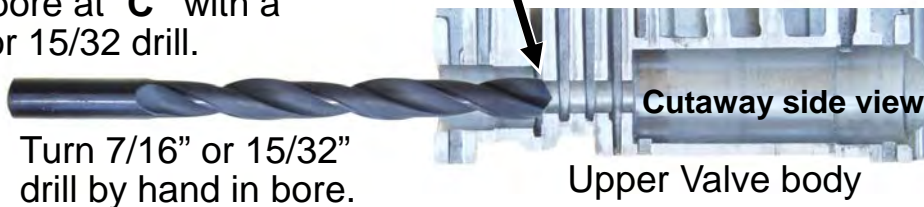
Step 1: Chamfer partition shown below. Clean bore and **reinstall** the valve.



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 small chamfer in the valve bore at "**C**" with a **sharp** 7/16 or 15/32 drill.

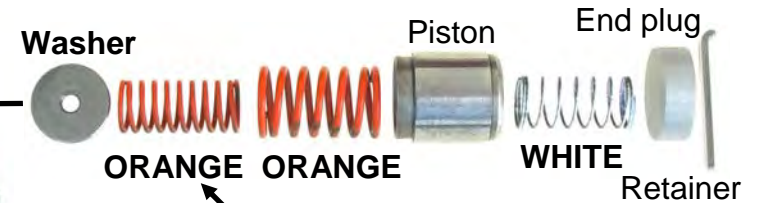


Step 2: 2nd Accumulator

Install **Three NEW** springs.

Install accum valve first. Then install the flat washer on the **stem** of accum valve, from this side, then the remaining parts as shown below.

You're going to love the 1-2 shift.



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

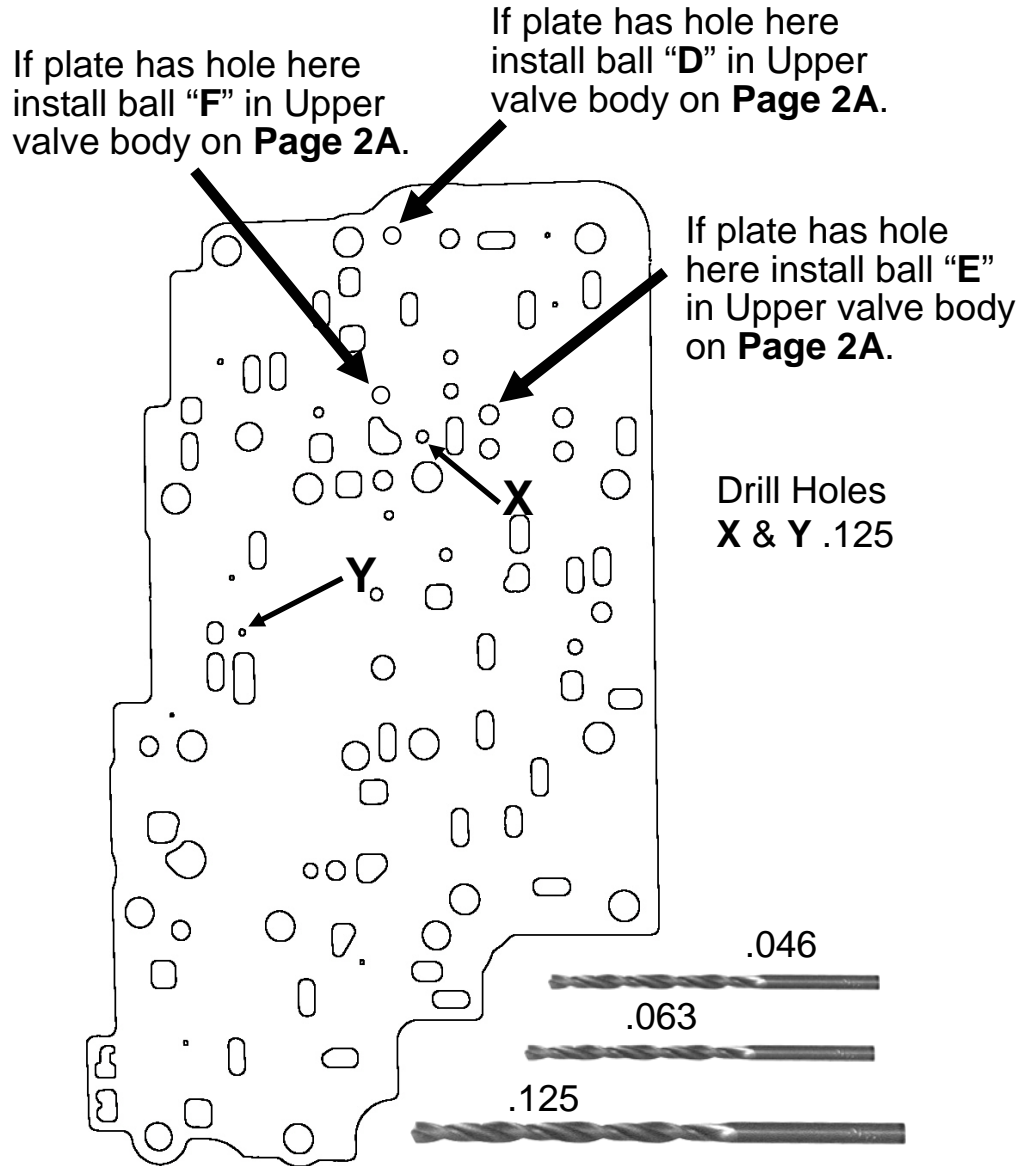
Checkballs: Steel .214 to .218

Ⓢ All models.

Ⓢ Ⓢ & Ⓢ Are model dependent, see the small plate on **Page 2B** to determine the correct positioning.

Don't use plastic balls.
Kit may have two spares.

Upper Separator Plate



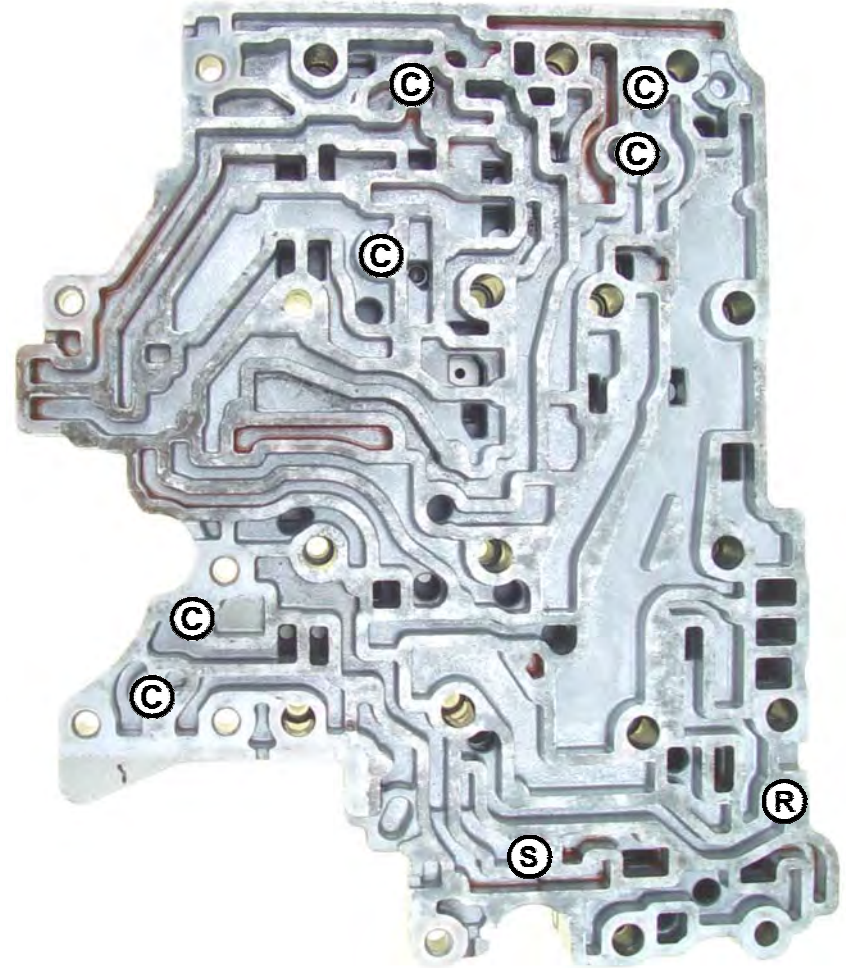
Page 2B

Channel Casting

Checkballs: Steel .214 to .218

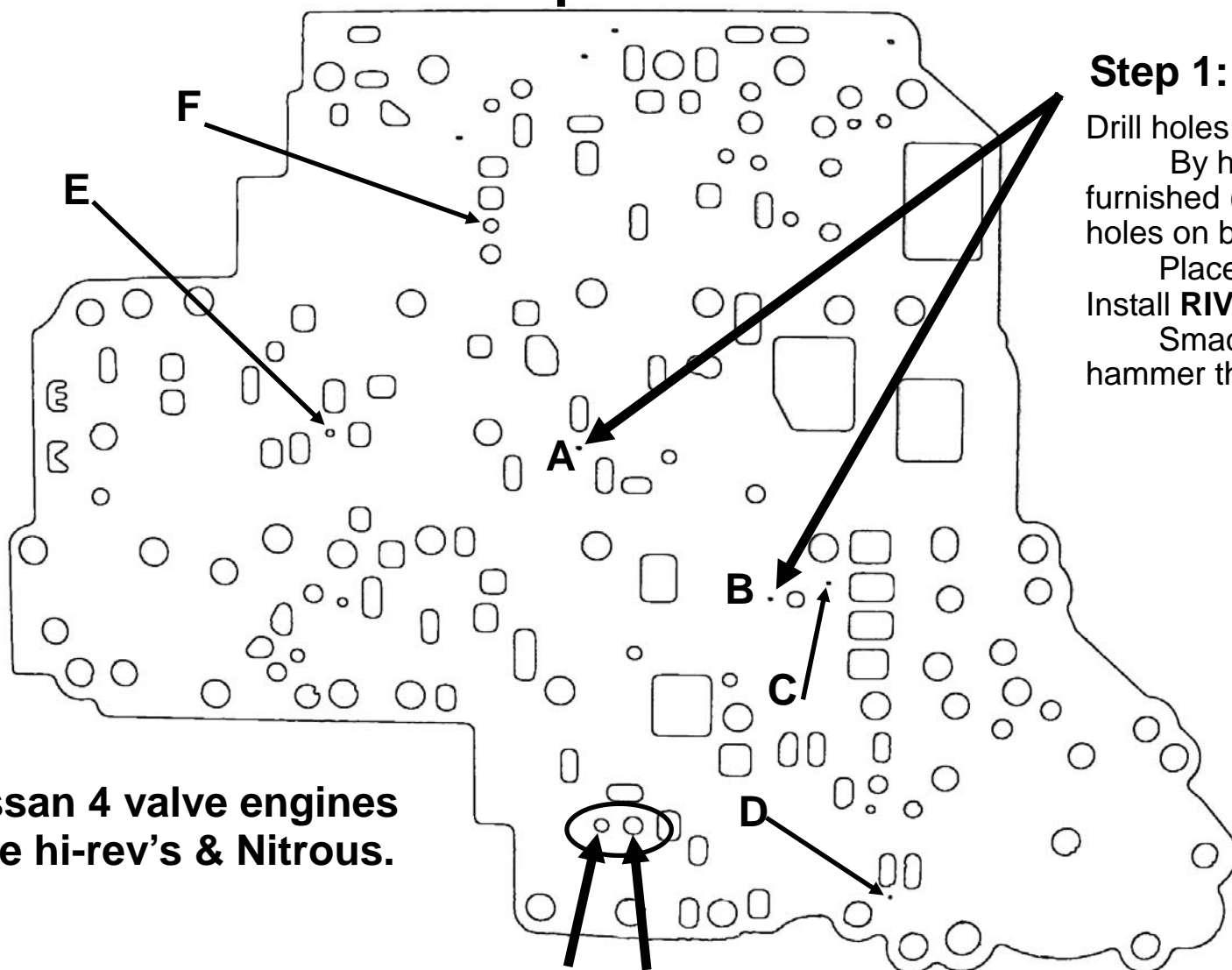
Ⓒ All models.

Ⓓ & Ⓔ Are model dependent, see the Main plate on Page 3B to determine the correct positioning.



Page 3A

Main Separator Plate



Step 1: Holes A & B

Drill holes **A** & **B** to .063.

By hand use the large drill furnished (.125) to Chamfer the holes on both sides of the plate.

Place plate on hard surface. Install **RIVETS** in holes.

Smack **RIVETS** with light hammer then file flush with plate.



Rivets

Step 2:

Drill Holes **C** & **D** .046

Drill Holes **E** & **F** .125

**Nissan 4 valve engines
love hi-rev's & Nitrous.**

Checkball Selection

If both holes are the same size, then install ball "**R**" on **Page 3A**.

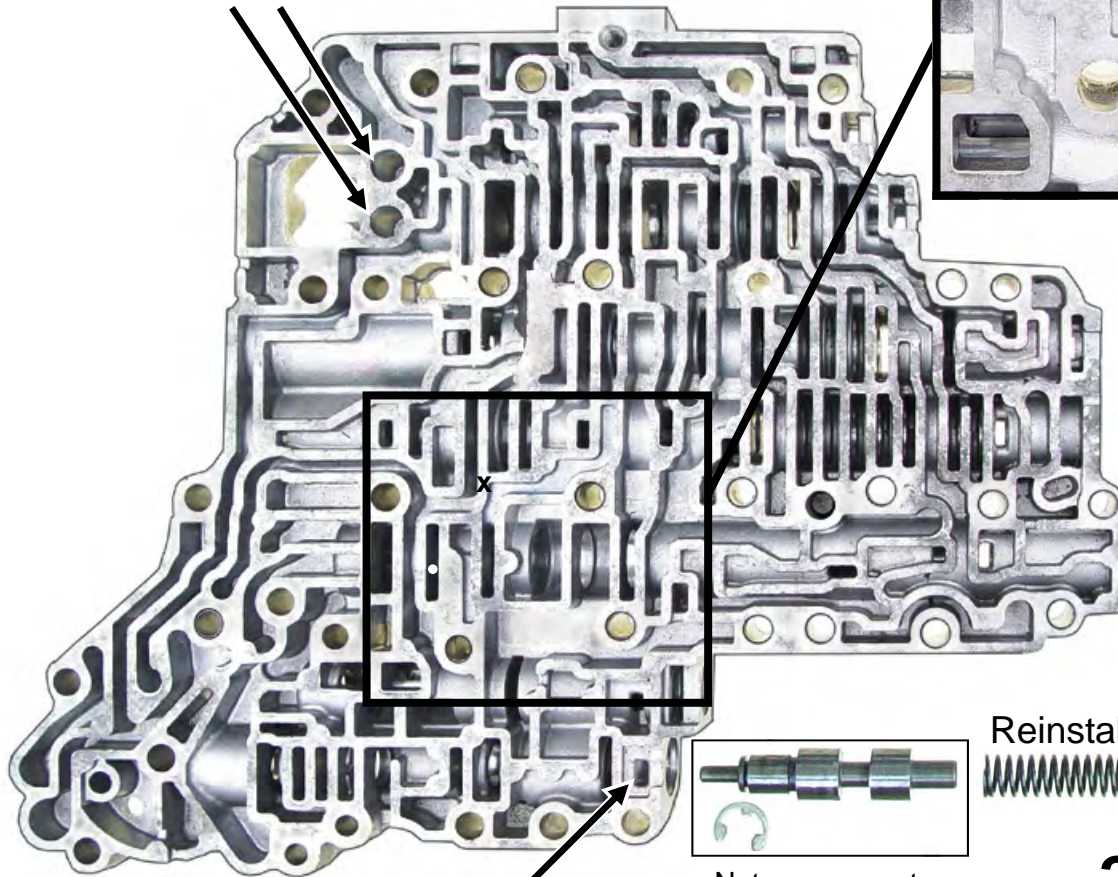
If the hole on the left is smaller, then install ball "**S**" on **Page 3A**.

Main Valve Body

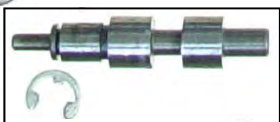
1. Enlarge the limit drain holes with 1/4 drill. Then install the two **ORANGE** springs and two .265 diam **Steel balls** furnished.



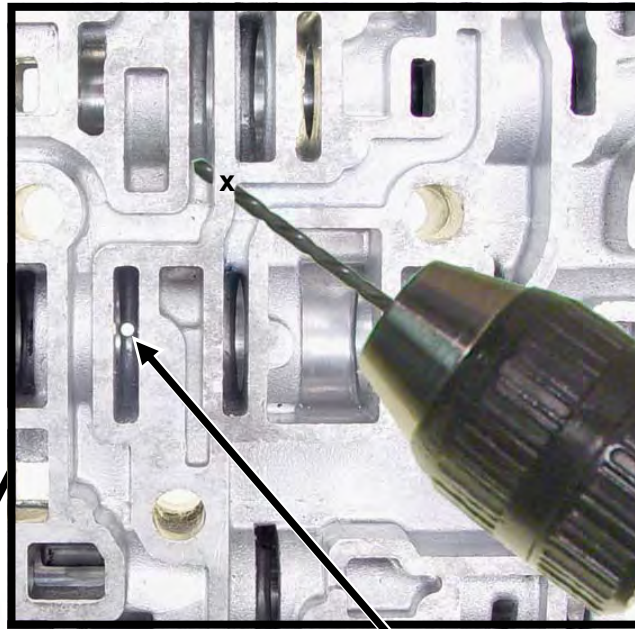
ORANGE



Reinstall keeper just below flush with trans jel.



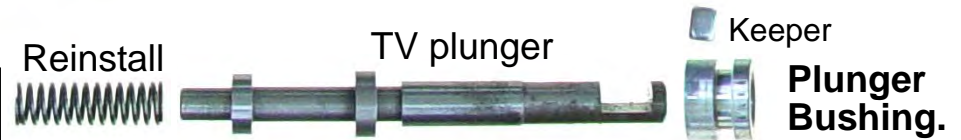
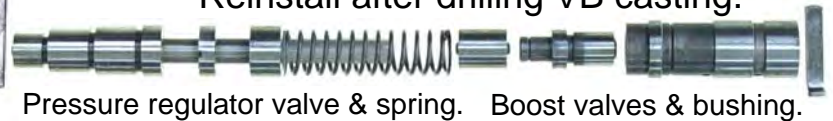
Not necessary to remove inner valve.



4. Drill a .063 hole **straight down** into this passage through bottom of valve body.

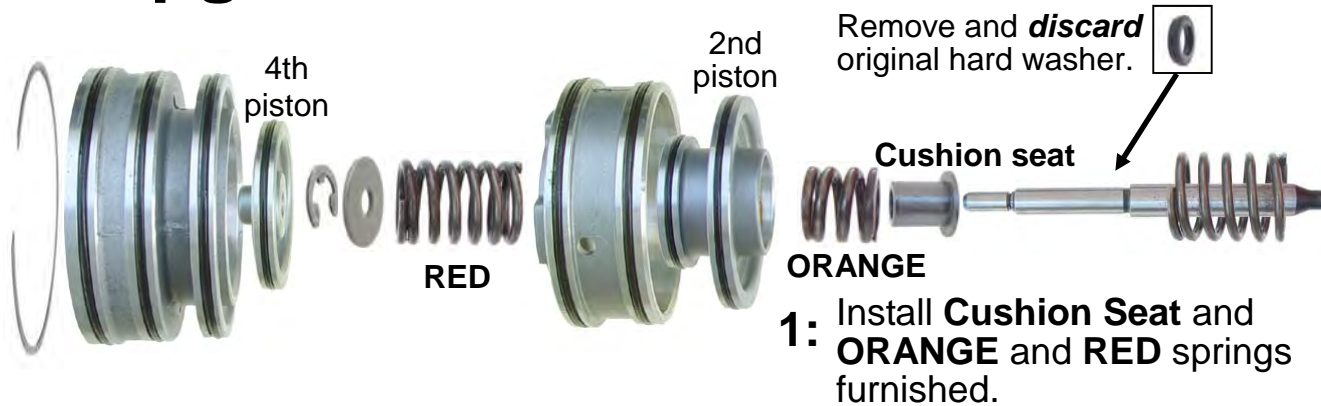
5. At the angle shown, drill a .063 hole thru partition under the "X".

3. Remove boost bushing, valves, pressure regulator spring & valve. Reinstall after drilling VB casting.

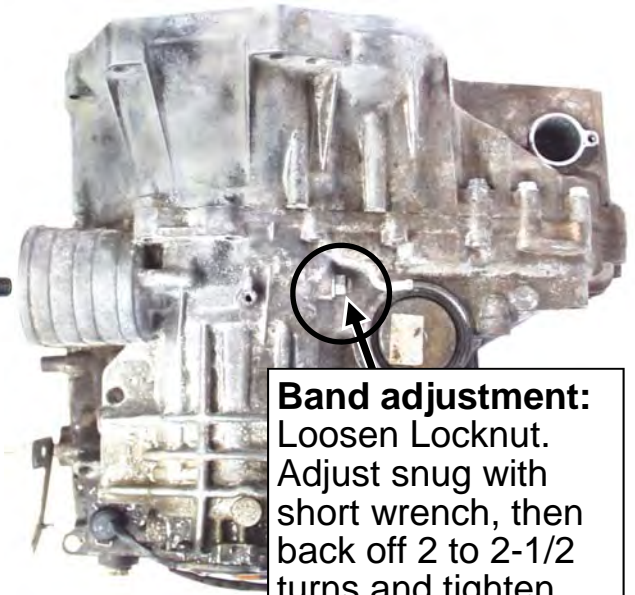


2. Pull TV Plunger out of valve body far enough to replace original bushing with **New Plunger Bushing** furnished.

Upgrade 2nd Piston



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



Band adjustment:
Loosen Locknut. Adjust snug with short wrench, then back off 2 to 2-1/2 turns and tighten the lock nut. Use 14mm wrench and T30 TORX bit.

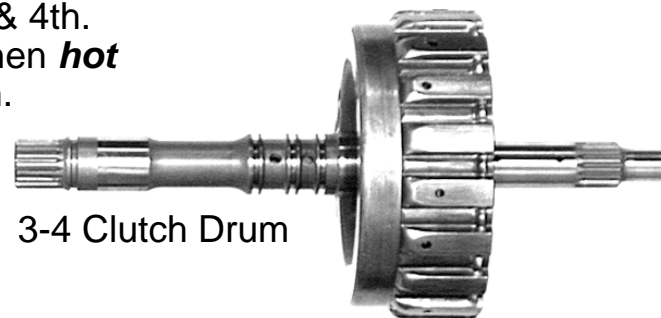
We love this little trans. When you fix it, it will work as good as it always wanted to.

Gil

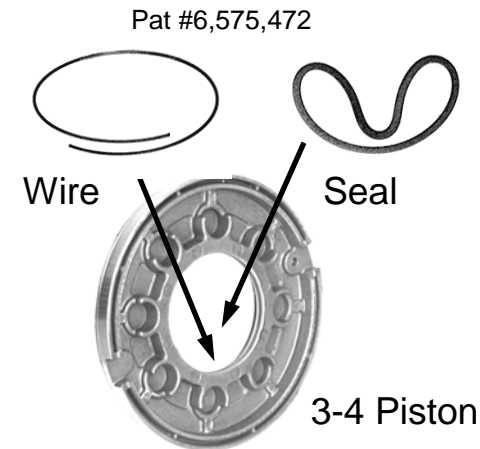
Do step 3 if the trans is out of car.

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

3: Insert overlap part of the wire into groove at 6 O'clock. Then shape seal as shown and install into the groove.

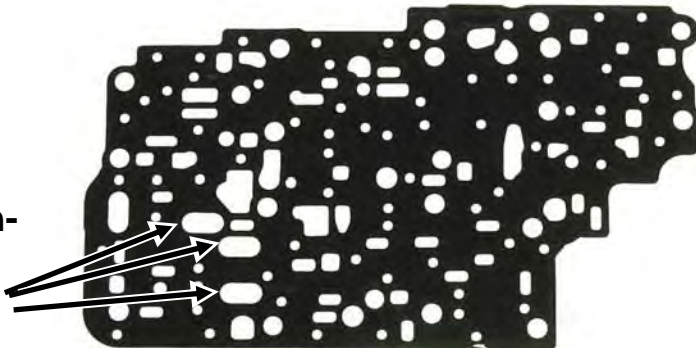


3-4 Clutch Drum

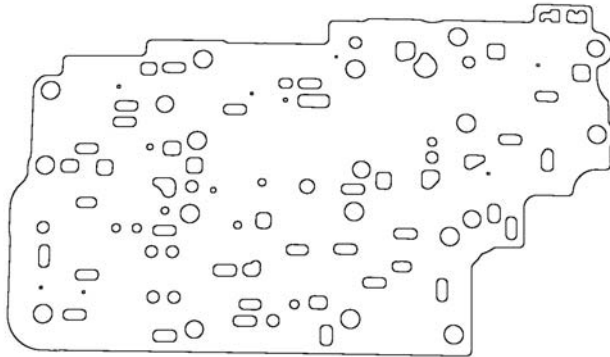


Valve Body Gaskets

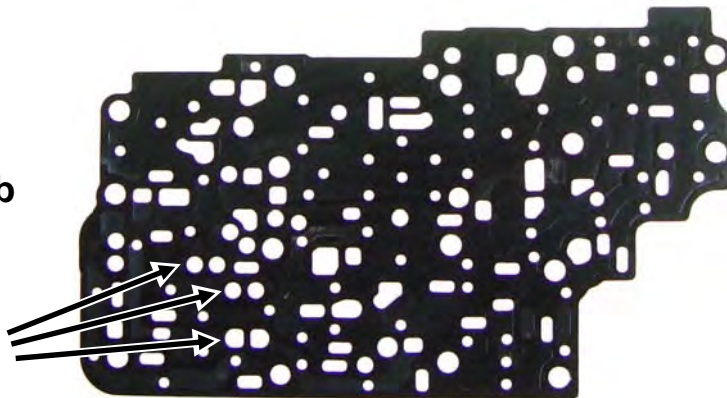
The gasket **with bathtub holes** installs on the bath tub holes in the upper valve body.



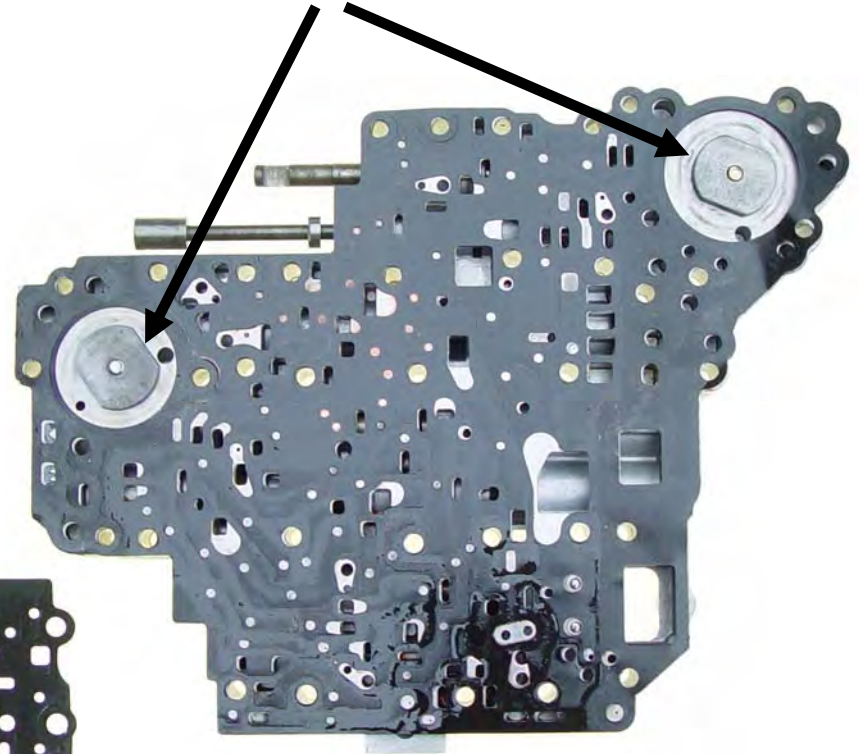
Plate



The gasket **without bathtub holes** goes between the plate and the channel casting.




The VB gasket with the large holes installs on this side of big plate.

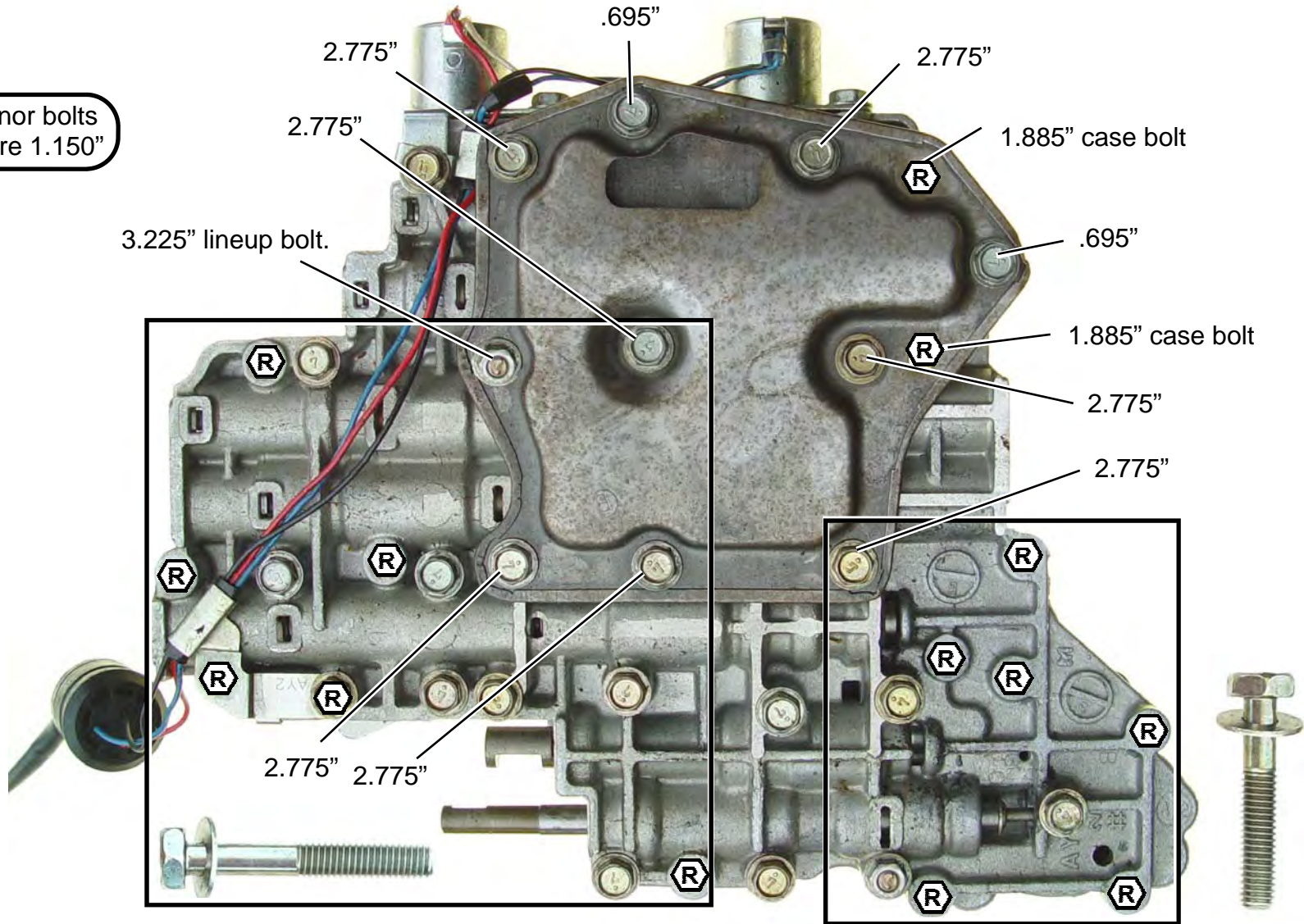


A little oil on the gaskets will help to hold them in place during assembly.

Valve Body Bolts

14  bolts are the ones necessary to remove the valve body from the case. Also remove the 3 solenoid bolts.

Governor bolts measure 1.150"



Case bolts in this area are 1.725"

Case bolts in this area are 1.465"

VB bolts torque to 95 Inch lbs.
 Hold down bolts and plates
 torque to 70-80 Inch lbs.



3.225" long shoulder line up bolt.



2.775"



2.440"



1.885"



1.725"



1.465"



1.150"

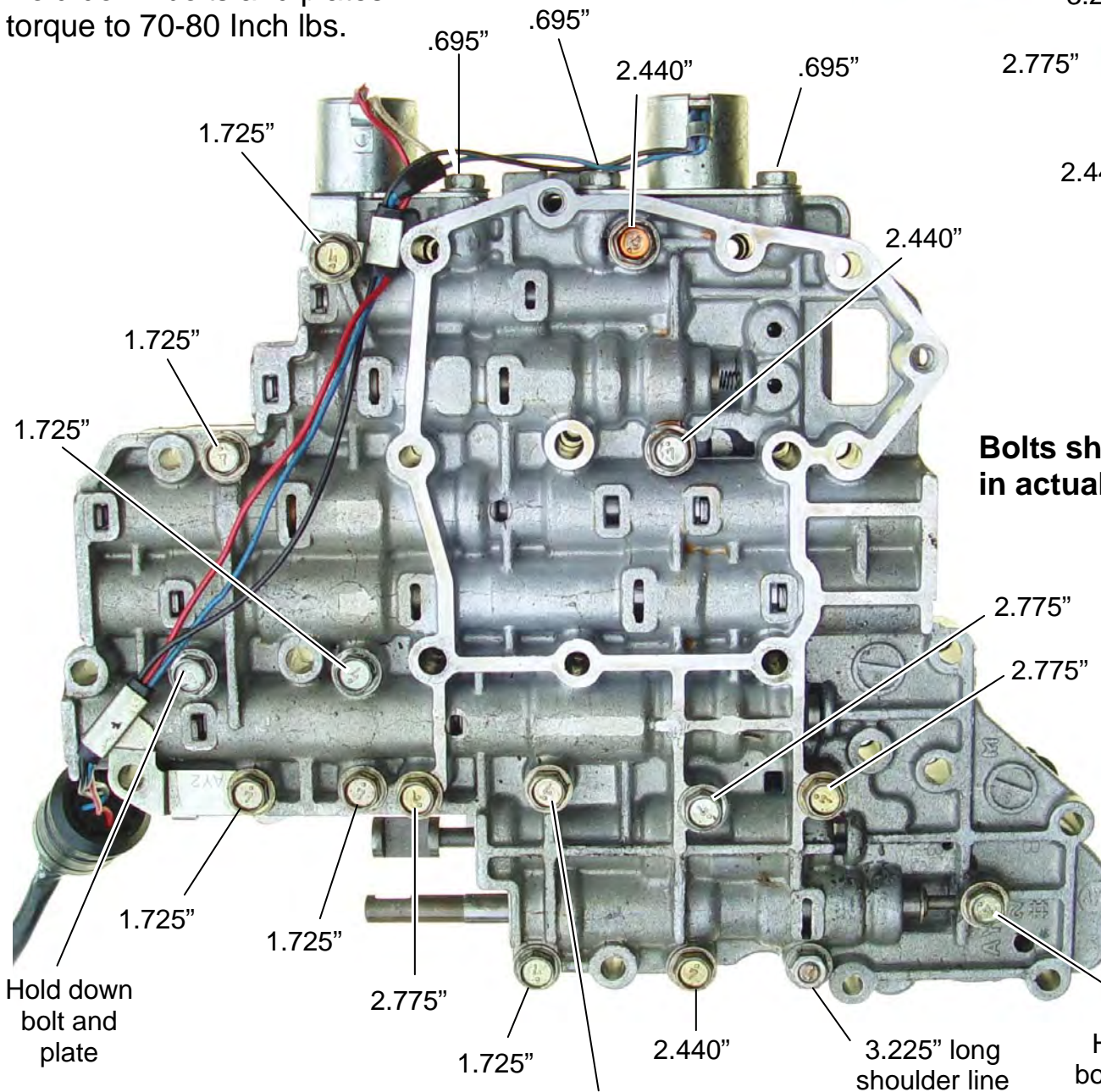


.695"

**Bolts shown
 in actual size.**



Hold down plates and bolts.



Hold down
 bolt and
 plate

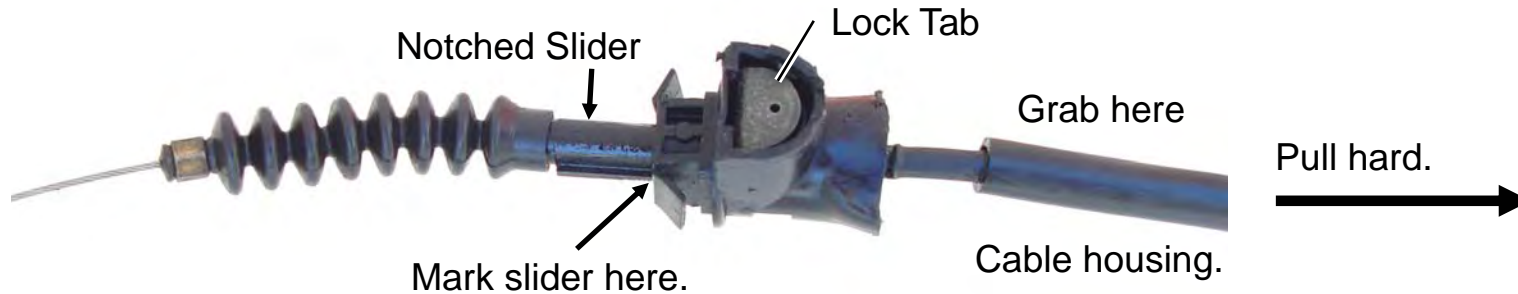
Hold down
 bolt and
 plate

3.225" long
 shoulder line
 up bolt.

Throttle Arm and TV Cable Adjustments

Step 1: Have someone floor the gas pedal inside the car. The throttle arm must bottom against the wide open stop. Adjust as needed.

Step 2: While someone is holding the gas pedal floored, push down on lock tab, and at the same time grab the cable housing and pull it in the direction of the arrow, really hard, and then release the lock tab.



Note: If adjustment was not disturbed it is probably OK.

This adjustment gives you max trans pressure, and full throttle when the gas pedal is floored.

Check adjustment like this:

Accelerate to 20 to 22 mph and lift foot off gas pedal. This will place the trans in 2nd or 3rd gear. Then floorboard the gas quickly. The trans must downshift into 1st gear.

If it does not downshift into 1st gear mark the slider with a pocket knife or hack saw blade. Then push the lock tab and move the slider one notch at a time, towards the lock tab, until it does downshift into first at 20 to 22 when gas pedal is floored.