AODE & 4R70W-3

Reprogramming Kit™

Stick Shift (Full Manual Control)

Installing this kit Eliminates all Automatic Shifting.
For transplants into non-computer controlled vehicles.
Short, Firm, Full Throttle Shifts With Class, Performance & Durability

THESE ARE THE TRANSMISSION RATIOS:

There are two models of this trans, standard ratio and wide ratio “W” type.
The “W” type [wide ratio] has a “W” molded on rear of trans housing.

“W” type:	“1st” 2:84	“2nd” 1.55	“3rd” 1.00	“4th” .7
Std type:	“1st” 2:40	“2nd” 1.40	“3rd” 1.00	“4th” .67

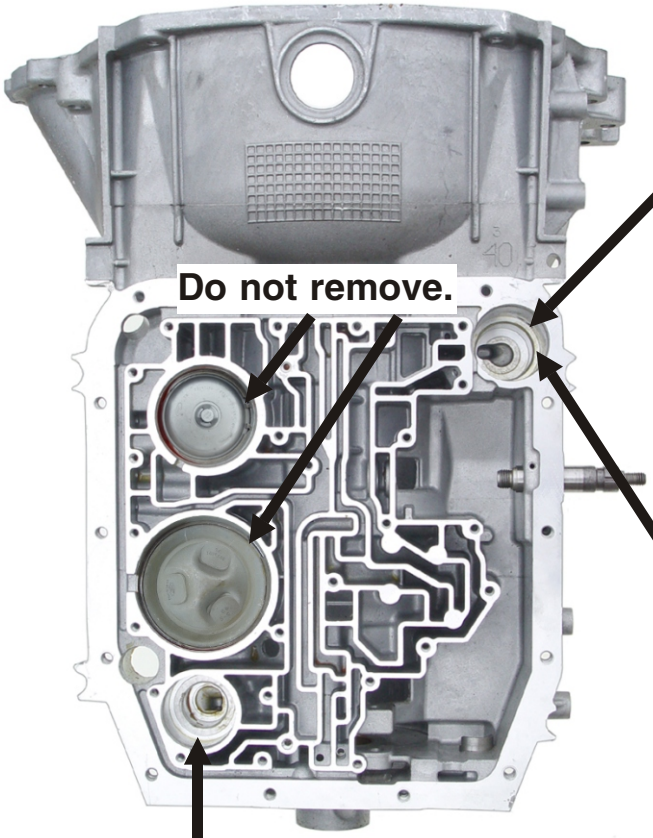
To find top gear ratio, multiply axle ratio x 4th ratio [Example 3.73 x .67= 2.50]
Other ratios: Multiply axle ratio x trans ratio. [Example 3.73 x 2.84 = 10.59]

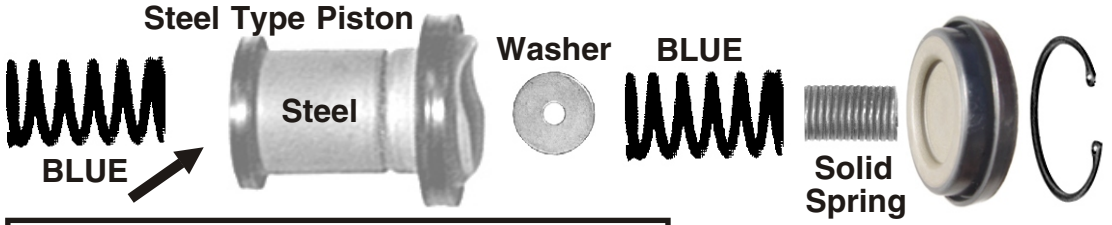
TRANSGO®

2621 Merced Ave El Monte, CA 91733-1997
Product Support: (626) 443-7451 Sales: (626) 443-7456

12 Dec 03

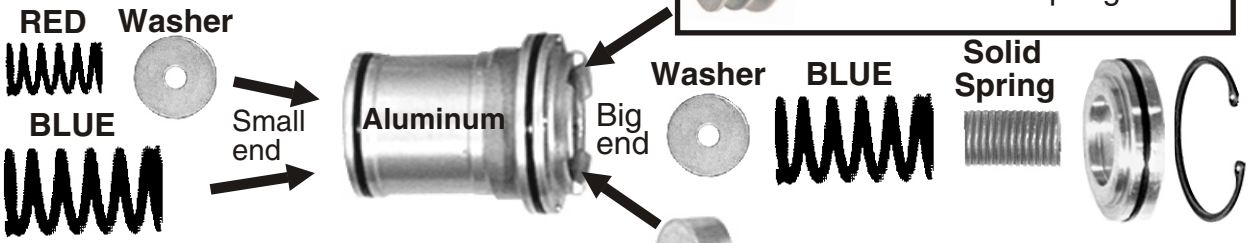
Step 1. 2nd Accumulator





After road test: For a firmer 2nd you can install **Spacer** under spring.

Aluminum Type Piston: It's best to upgrade to steel type. Ford #F7AZ-7F251-AA.



After road test: For a **firmer** 2nd you can install **3** ***more*** **Washers** under spring.

If the hole in the ***small end*** is **deeper** than the big end use **BLUE** spring.

If the hole in the ***big end*** is **deeper** install **Washer** and **RED** spring.

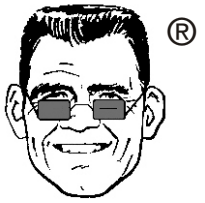
If the hole in this end is **deeper** than the small end install **Spacer**.

"If trans is out of the car read page 8 NOW."

3rd Accumulator:
It's best to upgrade to Steel type Ford #F7AZ-7H292-AB

3rd Accumulator
Reinstall the piston, spring and retainer.

Got a broken Spring?
Ford #E0AZ-7F285-A



"It's just that easy."

Product Support
Give our technicians a call.
(626) 443-7451

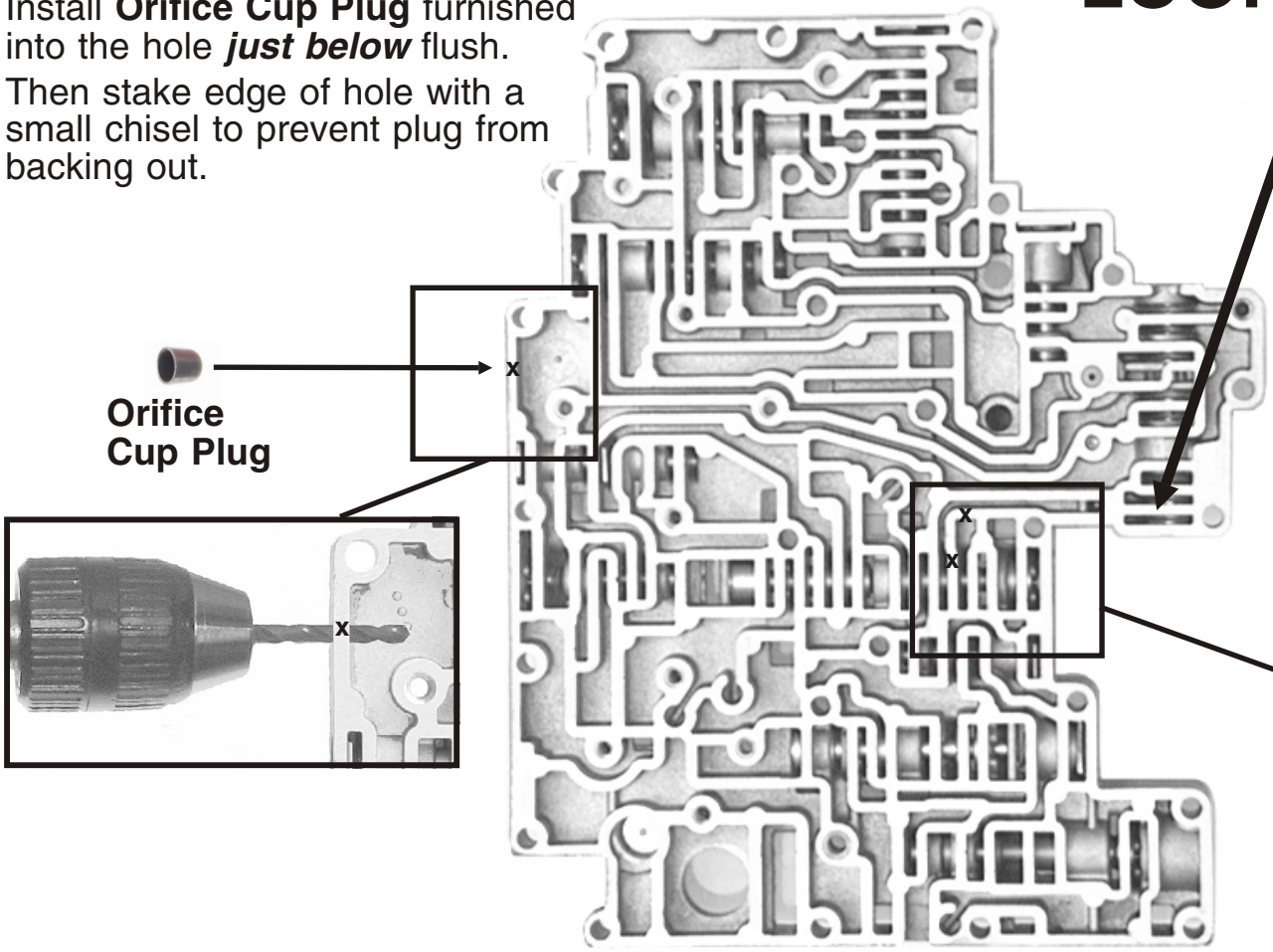
READ THIS FIRST:

If the valve body ***has*** this partition, **STOP**. You'll need to use VB and matching plate that ***does not*** have partition. 1994 up.

Step 1. With 5/32" drill furnished, drill a hole thru side of VB under the **"X"** into the passage as shown.

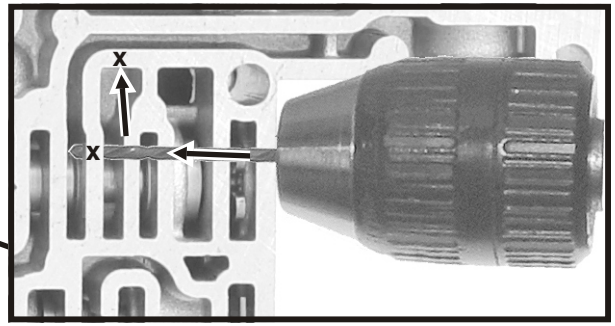
Install **Orifice Cup Plug** furnished into the hole ***just below*** flush.

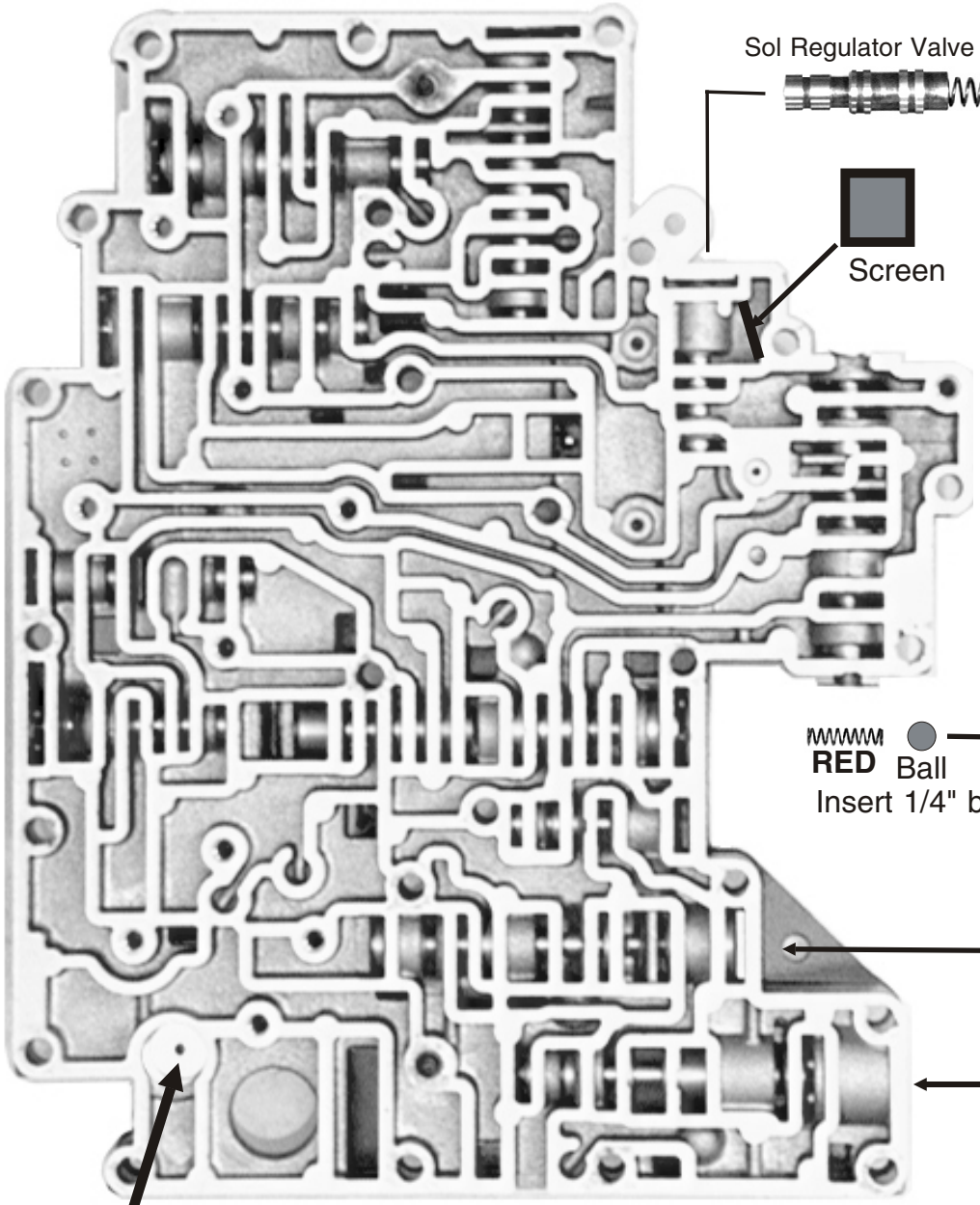
Then stake edge of hole with a small chisel to prevent plug from backing out.



Step 2. In the direction of the arrows, drill a hole thru partitions under each of the **"X's"**.

Use 1/8" drill furnished.





Sol Regulator Valve **ORANGE**

Screen

Step 1. Push unpainted spring furnished into open end of new solenoid reg valve. Using spring as a handle, cycle valve in and out of the bore with side pressure 50 times. The valve must fall out of the bore when valve body is tipped up. Discard unpainted spring, then install new valve with **ORANGE** spring.

Cycle

Sol Regulator Valve

Step 2.

New 1-2 valve ***Reuse*** spring ***Reuse*** 2-3 valve

RED Ball

Insert 1/4" ball and **RED** spring into new 1-2 valve.

Step 3. Install **TIGHT WOUND** spring as shown.

Lockup valve

Press Regulator Valve **WHITE**

Step 4. Install **WHITE** pressure regulator spring.

Reuse spring [If it had one]

Drain back valve

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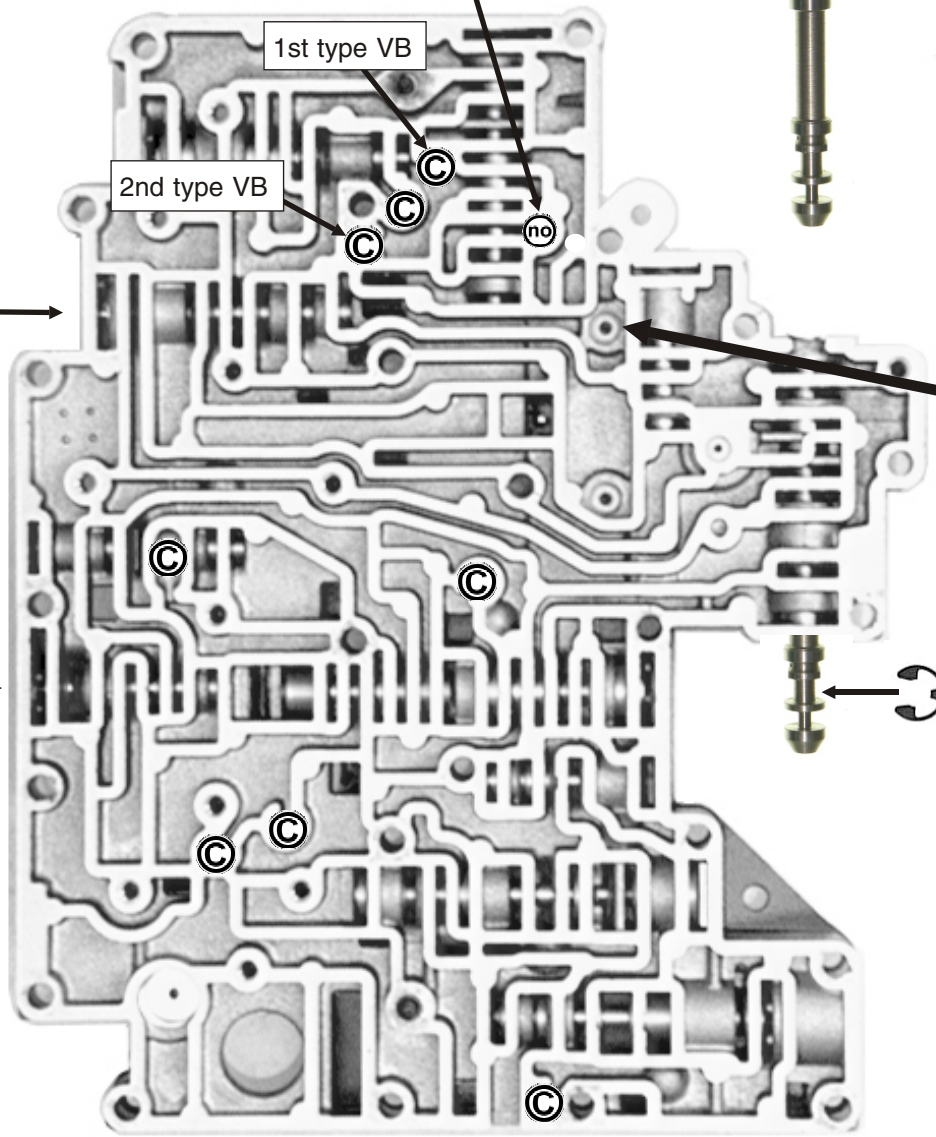
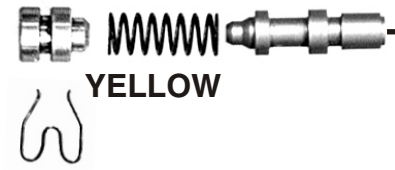
Do not install ball here. (no)



Step 1.
Install new **3-4 Valve** and **WHITE** spring.

Step 2.

Step 3. OD Reg Valve.



Step 4.
Install new **Manual Valve**.

Step 5. Twist the **Taper Spring** onto the big end of the **Orientation**. Insert **Orifice** into solenoid snout.

Reinstall E-Clip

(C) **CHECKBALLS**
Seven 1/4" plastic

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Drills furnished, actual size.

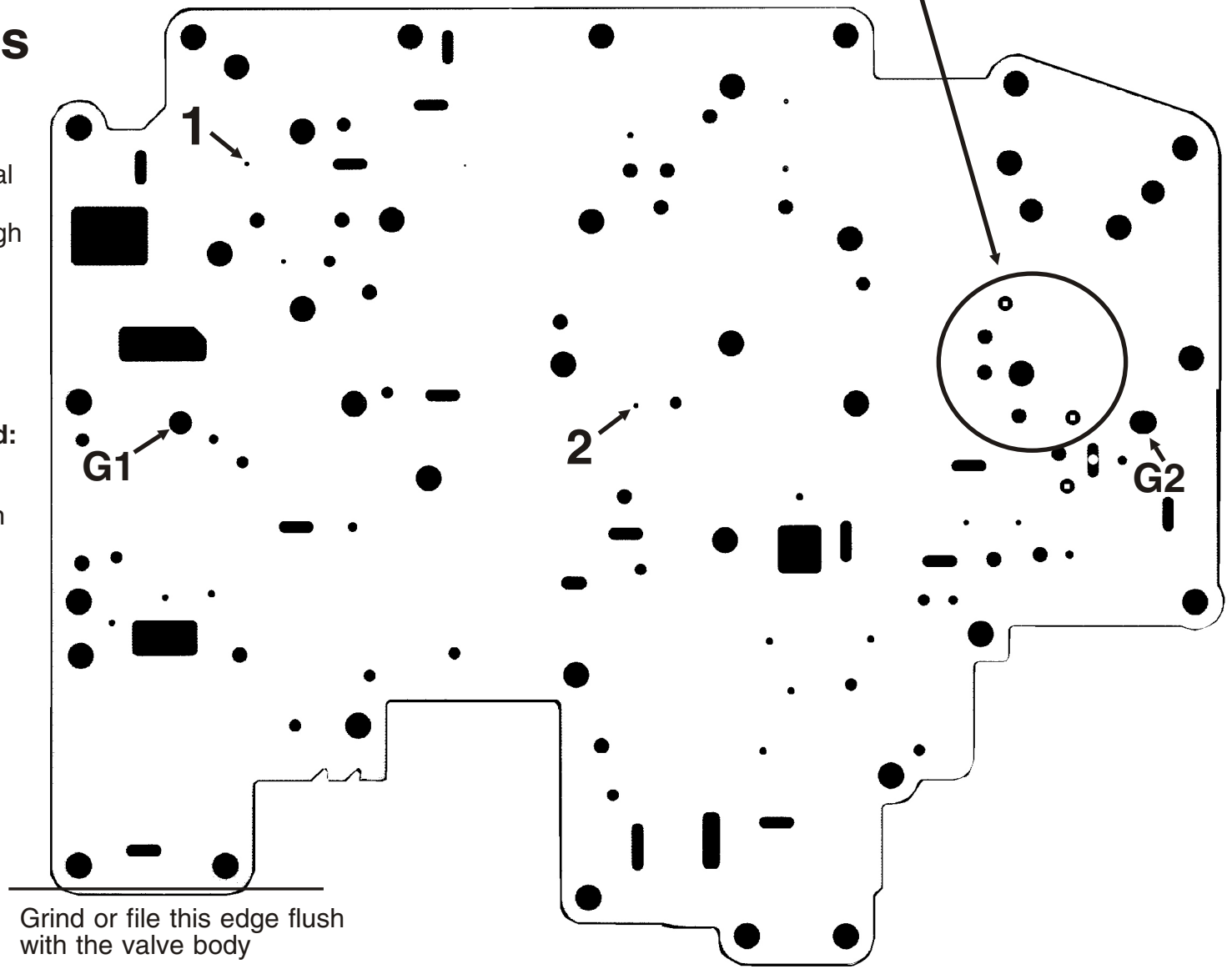
Plate Hole Sizes

#1 = 3/32" Hot Rod with original converter
#1 = 1/8" With smaller diam high stall converter

#2 = 1/8"

Two sets of gaskets furnished: Use the set that matches the **Guide pins**, holes **"G1 & G2"** and does not cover any holes in the plate.

Two sizes of Guide pin bolts.



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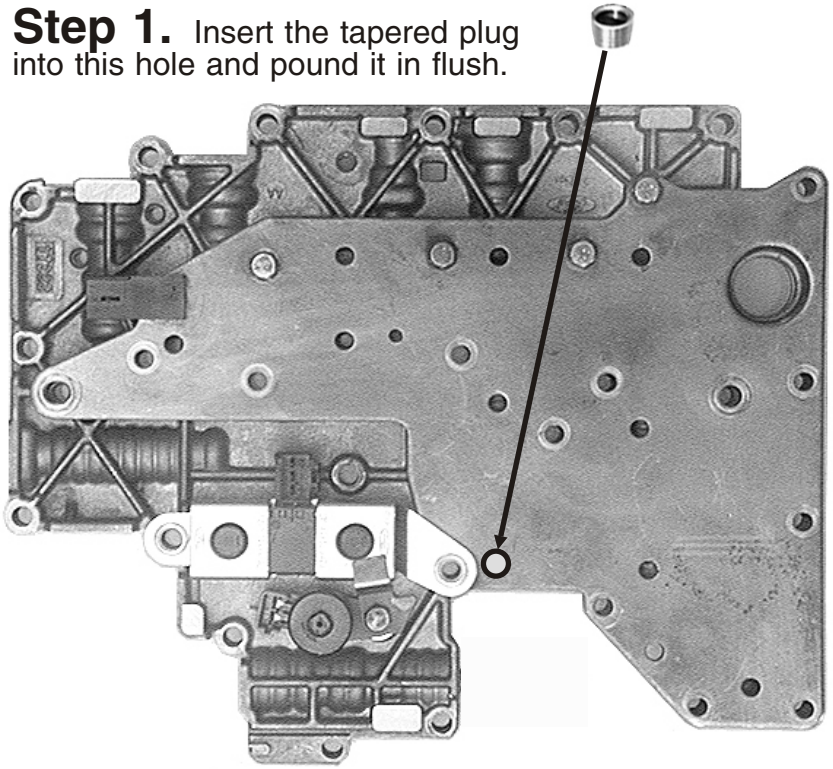
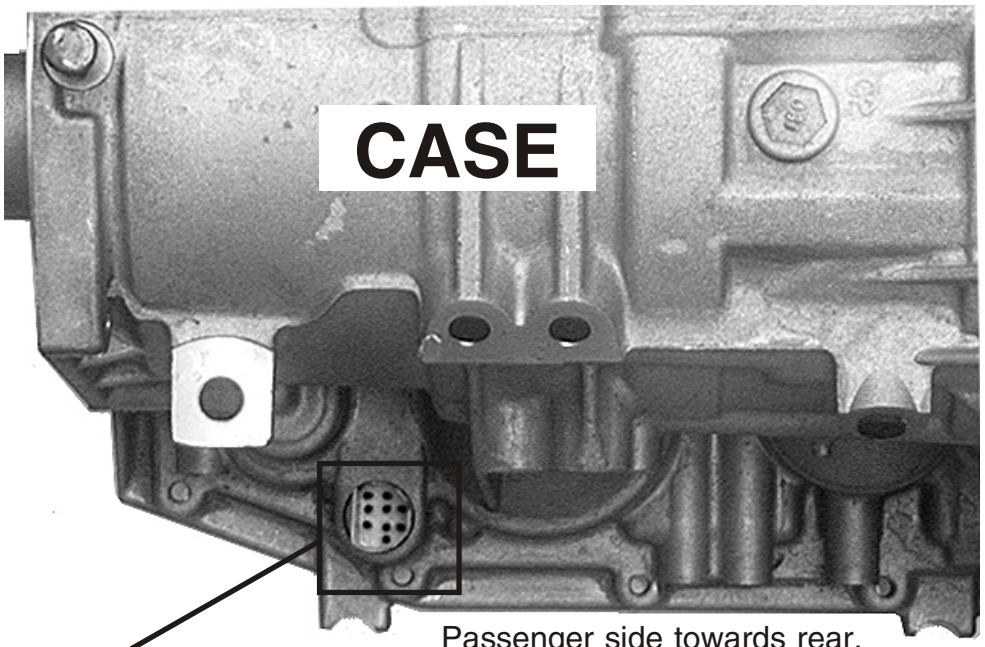
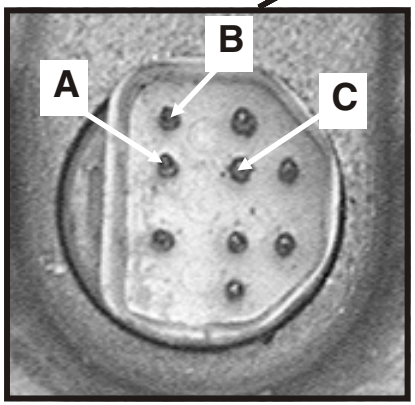
Step 1. Insert the tapered plug into this hole and pound it in flush.



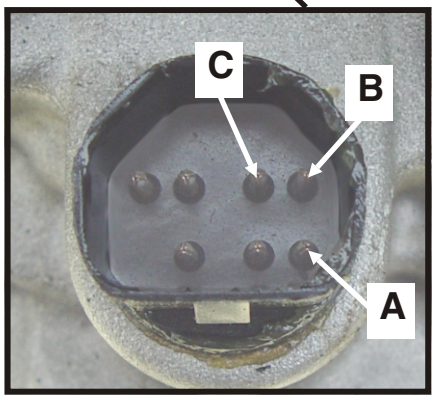
Complete Vacuum Modulator Pack Before Installing VB.



Passenger side towards rear.



Type 1



Type 2

Step 2. Driver Controlled 4th

This gives driver complete control of 3-4 and 4-3 shifts with a flip of the switch.

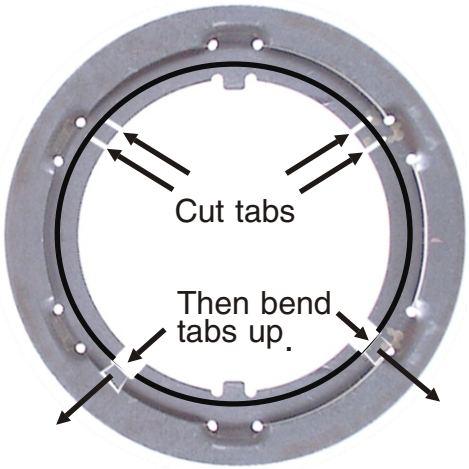
Connect terminal **"A"** to a toggle switch and the other side of the toggle switch to ignition switch operated 12 volt supply.

Connect terminals "**B**" and "**C**" to ground. Here or inside the trans.

If trans is apart: Consider these durability upgrades

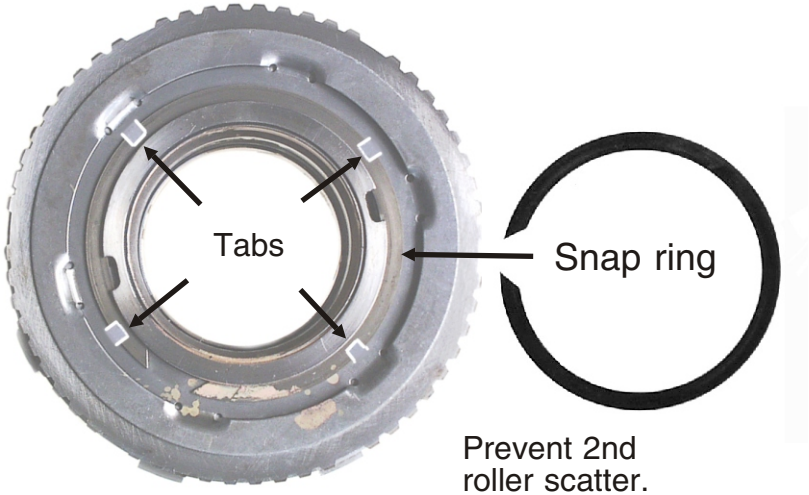
A. Assemble 2nd roller. Scribe a line on the retainer just outside the snap ring.

B. Cut four tabs about 5/16" wide in the retainer just a little deeper than the scribed line. Then bend tabs up.



Retainer

C. 1. Install the snap ring by rotating it into the groove inside of the tabs.
2. Bend the tabs over the snap ring to keep it from jumping out of the groove.

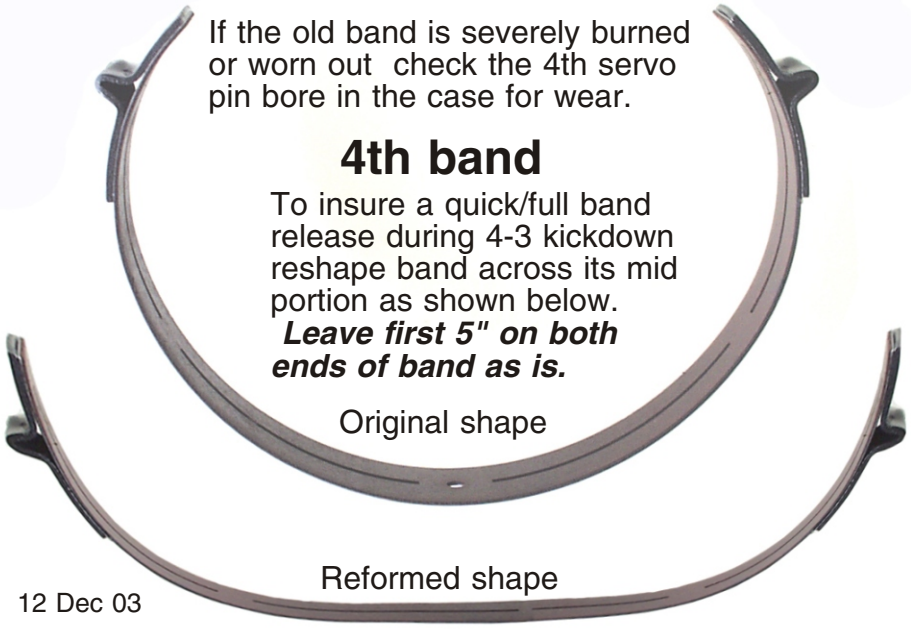


Prevent 2nd roller scatter.

If the old band is severely burned or worn out check the 4th servo pin bore in the case for wear.

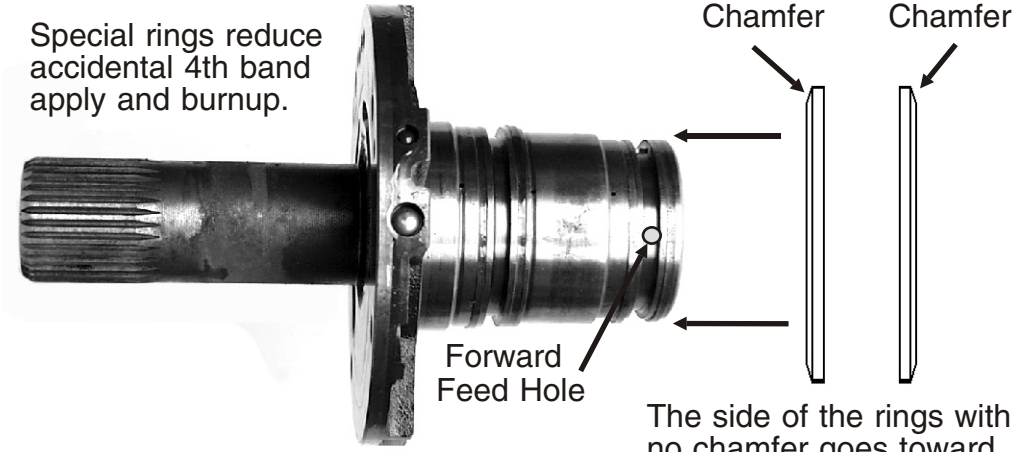
4th band

To insure a quick/full band release during 4-3 kickdown reshape band across its mid portion as shown below.
Leave first 5" on both ends of band as is.



D. Special new plastic forward clutch rings have slight chamfer on one side. Install rings with the chamfer as shown.

Special rings reduce accidental 4th band apply and burnup.



The side of the rings with no chamfer goes toward the feed hole.

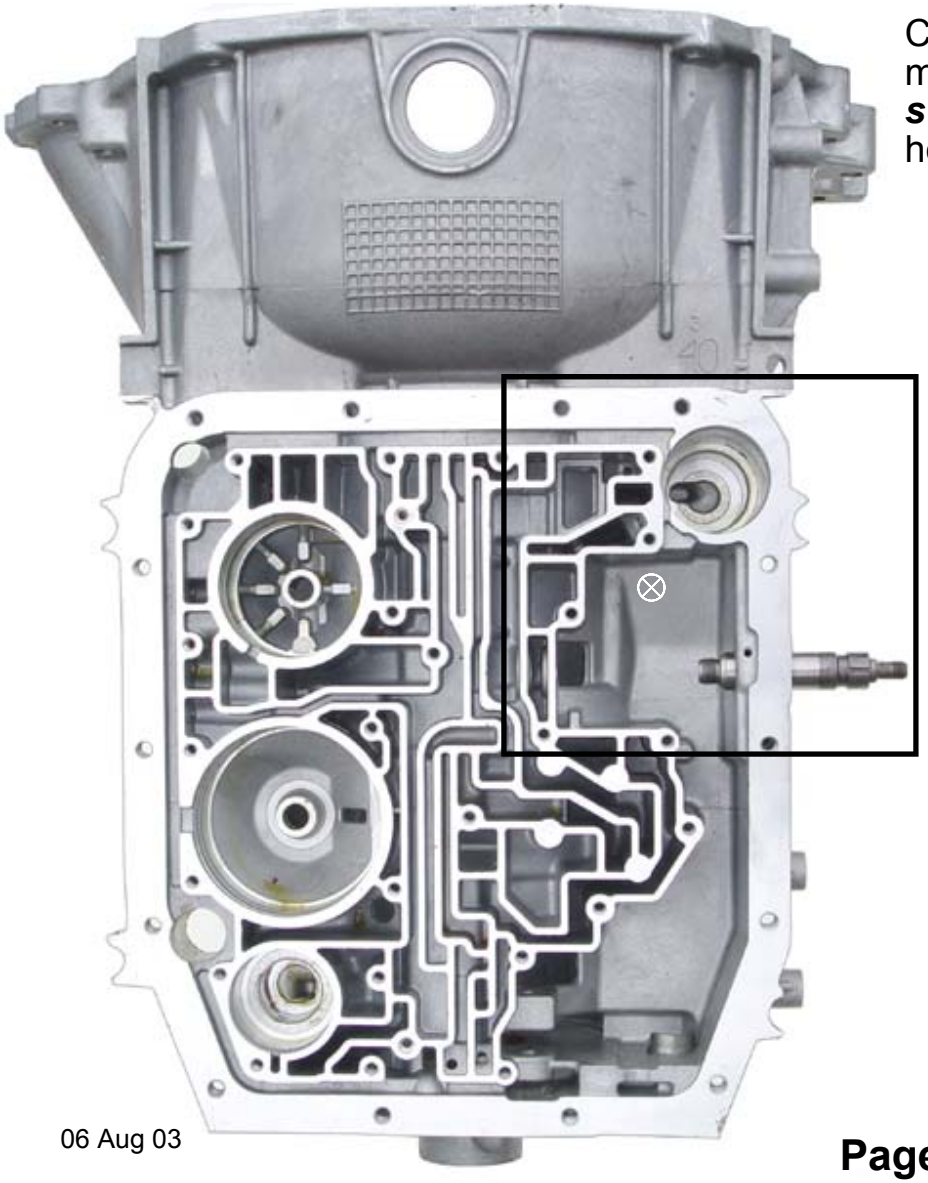
Product support 626-443-7451
CD & Tech Sales 626-443-0991

AODE-MOD

AODE- 4R70W Vacuum Modulator System

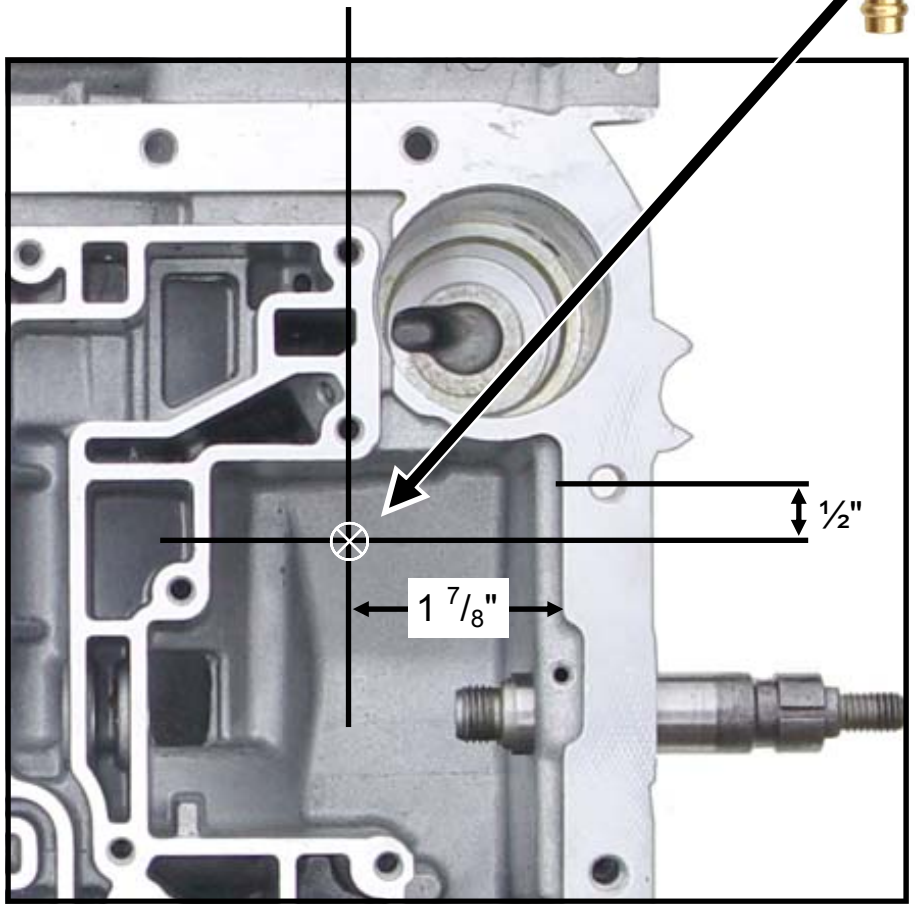
Step 1

Center punch the center of the marked **X.** Drill an $^{11}/_{32}$" hole ***straight*** into center spot. Tap hole, from this side $^{1}/_{8}$" NPT.



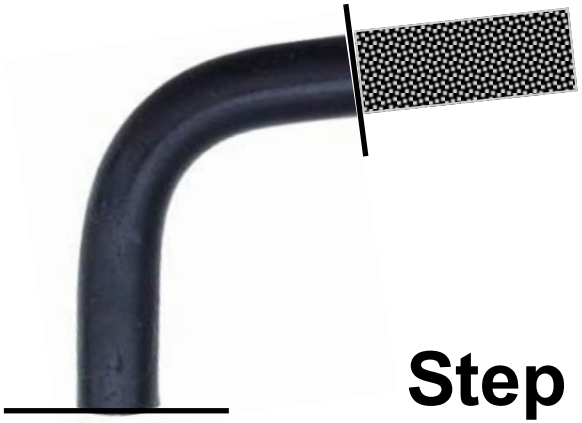
Step 2

Install **FITTING** into the case with some sealer.



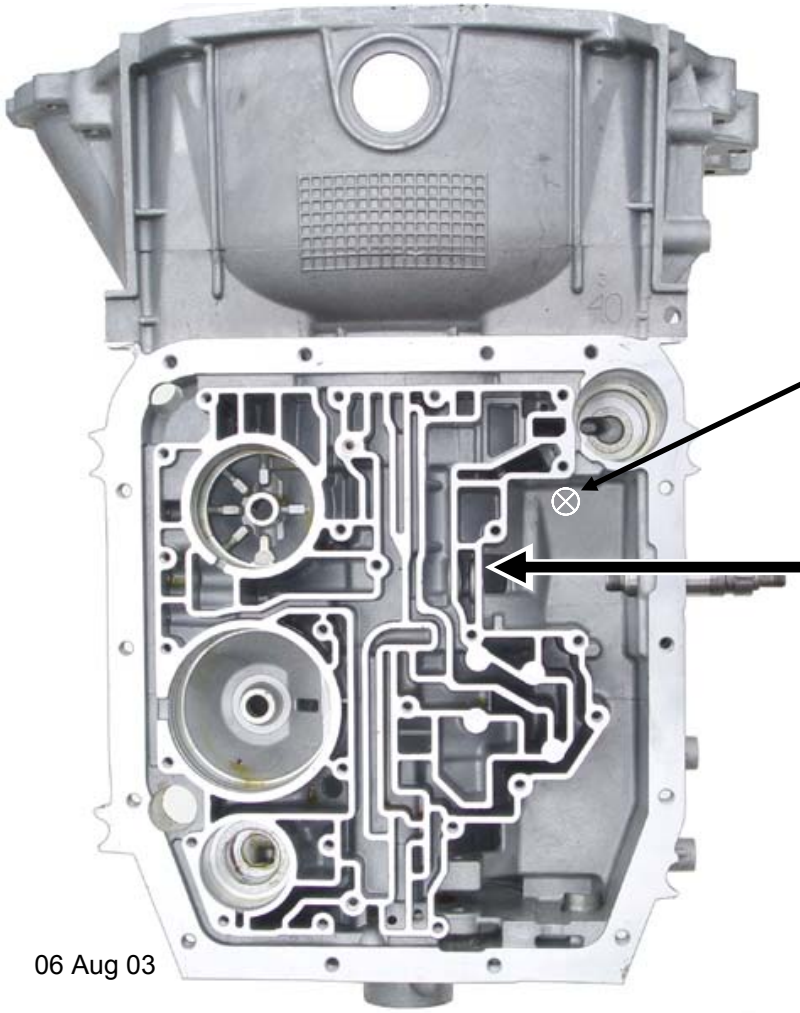
Step 1

Place the **HOSE** on this picture and cut it to match picture.



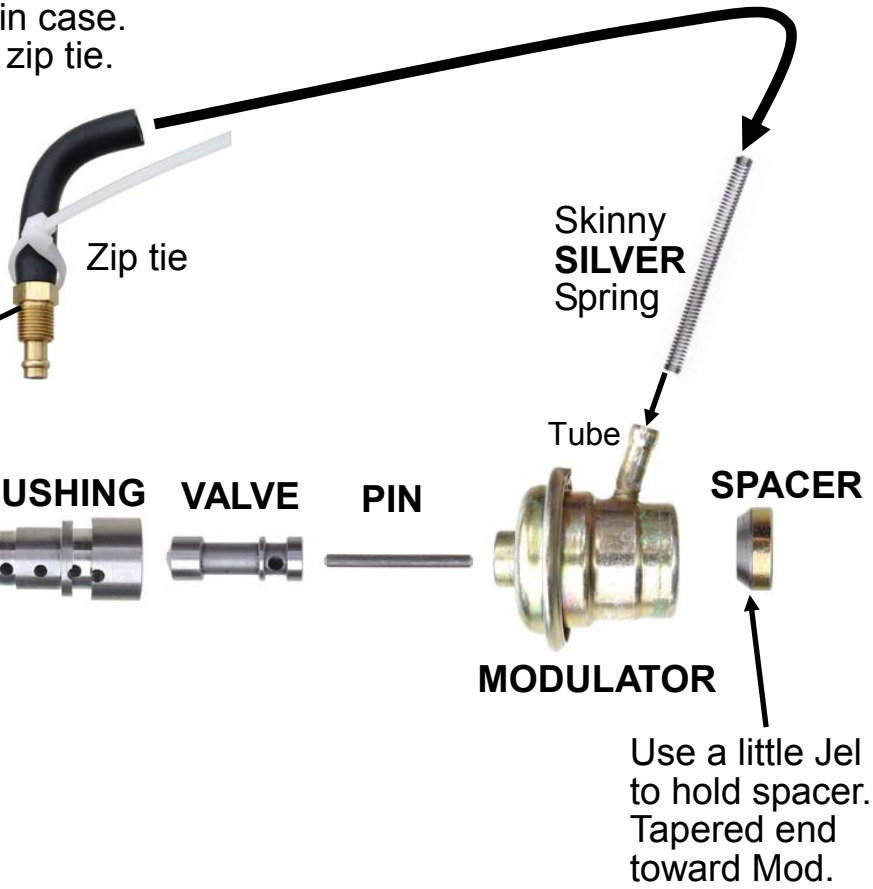
Step 2

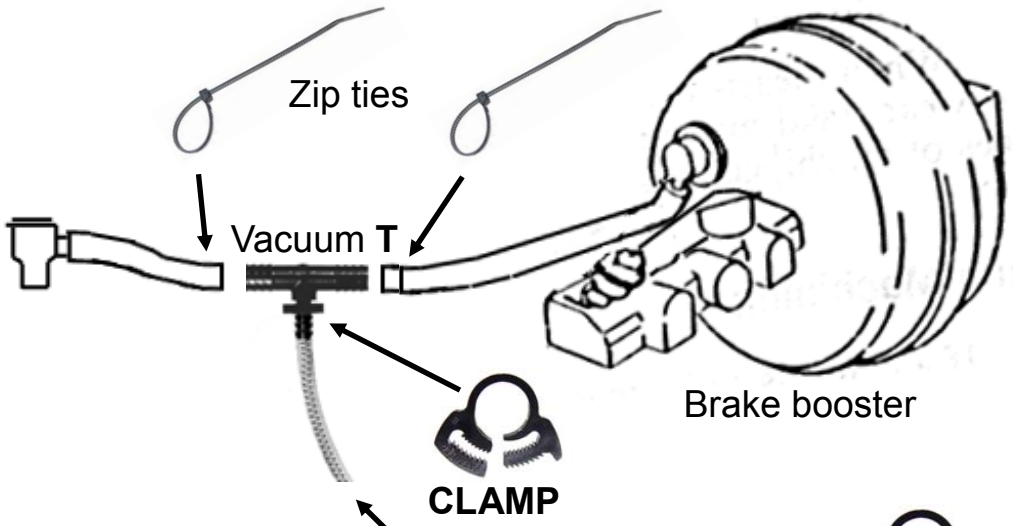
Slip **HOSE** on fitting in case. Install zip tie.



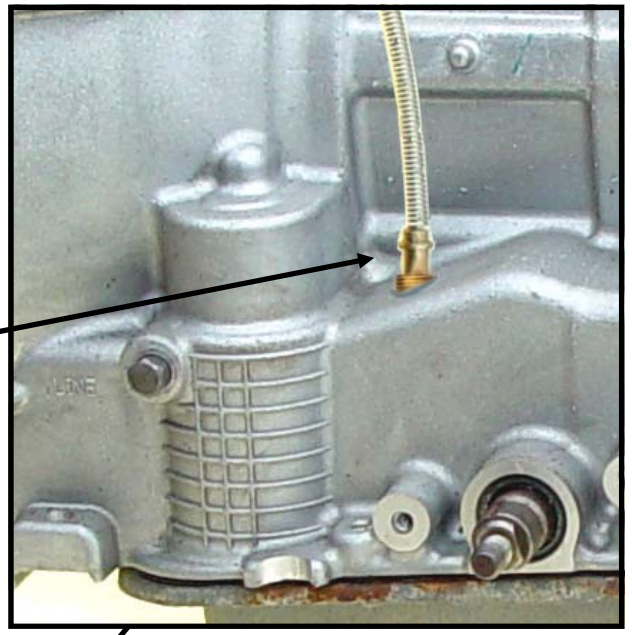
Step 3

Assemble Bushing, Valve, Pin, Modulator and Spacer into case. Install Skinny **SILVER** Spring into the modulator ***tube.*** Install **HOSE** over ***skinny spring.*** Install zip tie on hose end.





CLAMP



Vacuum Line

Install “T” into vacuum hose as shown. Clamp hose with zip ties. Install modulator hose on “T” and fitting on trans, install black clamps on both ends. Zip tie hose in 3 or 4 places to wire harness.

Turbo or Supercharged Engines
Must have pressure bypass. Install **TransGo VBP-BST** bypass kit into modulator hose