

TRANS-GO[®]

REPROGRAMMED AUTOMATIC

Turbo Hydra-Matic 425 (FRONT WHEEL DRIVE)

TOOLS RECOMMENDED
FOR EASIEST, QUICKEST INSTALLATION

SPEED HANDLE



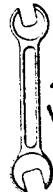
OR RATCHET



7/16" SOCKET



1/2" SOCKET



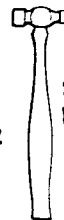
1/2"
WRENCH



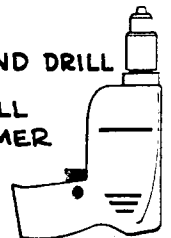
SNAP RING
PLIERS



SCREW
DRIVER



HAND DRILL
SMALL
HAMMER



This Trans-GO Kit was a very intelligent decision. Your transmission will love you for it. This kit transforms a good working "stock" automatic transmission into a rugged, responsive, hi-performance unit.

A Trans-GO Kit will more than double the life of your transmission under high load conditions. There's no reason to lose precious efficiency with soft shifts that generate heat and consume horsepower.

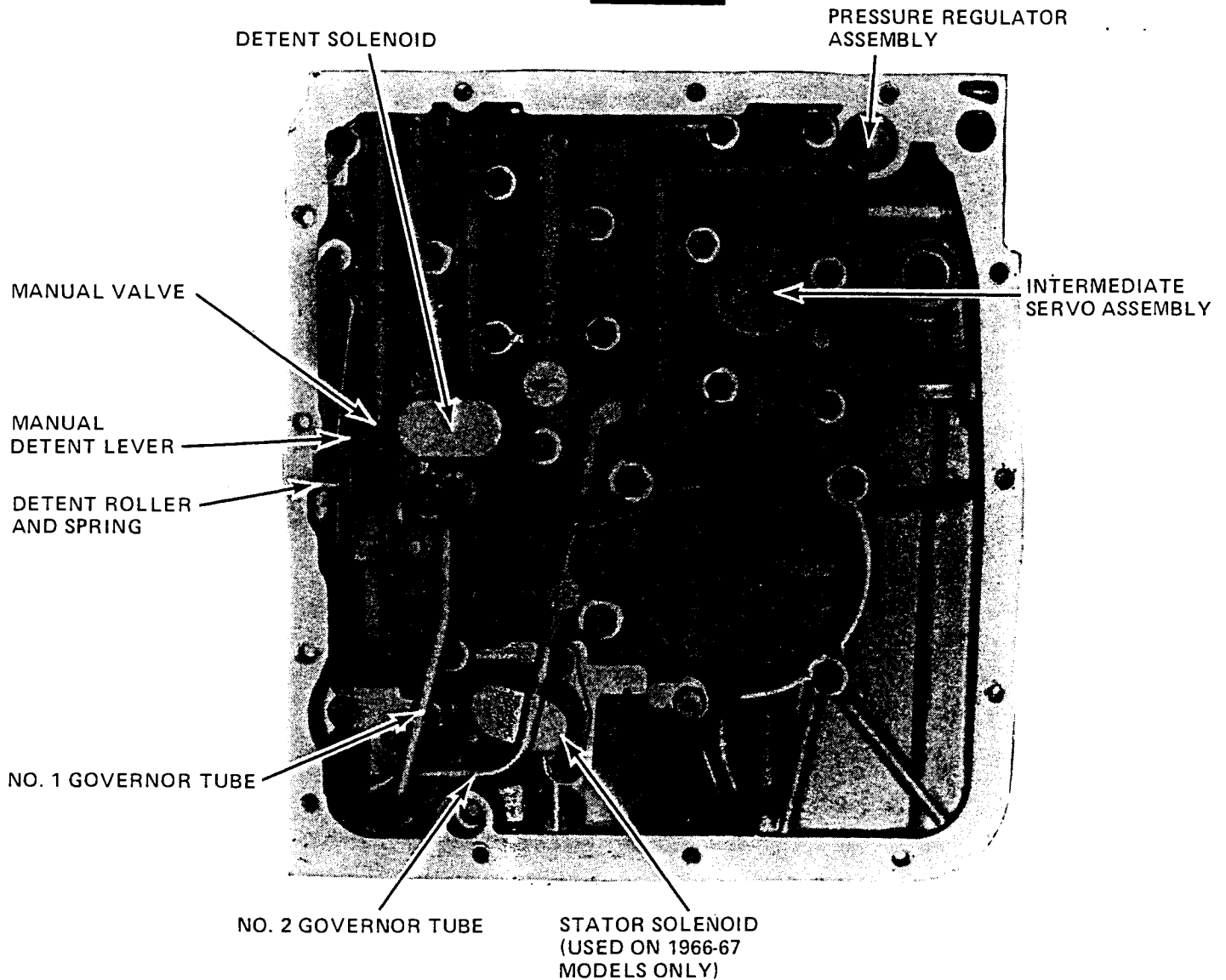
Trans-GO brings automatic transmission performance out of the dark ages into the space age, in one giant step. Installed in your transmission, a Trans-GO Kit recalibrates it to hi-performance specifications. It controls shift timing and "shift feel" for instant response and racing performance.

Cleanliness is important. An ideal place for valve body work is a clean table or work bench free of any other parts or springs. A piece of cardboard makes an excellent working surface once the valve body has been drained of transmission fluid.

Now you are ready to throw a shift that will make the 4 Speeders Jealous!

TRANS-GO 2621 MERCED AVE., EL MONTE, CALIFORNIA 91733

FIGURE 2A



STEP 1

With ½ inch socket remove 13 bolts holding transmission oil pan to case. If fluid is to be re-used, remove pan carefully and pour fluid into a clean container.

STEP 2

Remove oil strainer by pulling down on front of strainer until pick-up tube pulls out of case. Remove and discard pick-up tube O-Ring.

STEP 3 – REMOVE VALVE BODY (See FIGURE 2A)

A. Remove No. 1 governor tube by wiggling and pulling down on tube.

B. Remove screws holding detent solenoid to valve body and gently remove solenoid letting it hang on wire. Discard gasket.

C. With 7/16" socket remove detent roller and spring.

D. With 7/16" and ½ inch socket remove the remaining 20 bolts attaching valve body to transmission. Pull No. 2 governor tube out of transmission as you lower valve body. Hold manual valve carefully while removing valve body so manual valve will not fall out.

NOTE: Intermediate servo assembly may fall out. If it does save the parts for re-installation in Step 13.

STEP 4 – REMOVING SEPARATOR PLATE

1968 AND LATER MODELS

Separator plate and 7 check balls may come off with valve body. If separator plate stays on transmission pull it off.

1966-67 MODELS

Separator plate will be held onto transmission by stator solenoid. With 7/16" socket remove 2 bolts holding stator solenoid to transmission and gently remove solenoid letting it hang on wire. Lower separator plate and 7 check balls. (See FIGURE 3A)

Discard both gaskets making sure that no portion of the gasket remains stuck to transmission or valve body passages.

NOTE: New Check Balls are furnished in kit.

STEP 5 – INSTALLING PRESSURE REGULATOR SPRING. (See FIGURE 3B)

A. Push boost sleeve slightly deeper into bore with screw driver or flat punch to relieve tension on snap ring.

B. While pushing on boost sleeve remove snap ring with snap ring pliers. Slowly and carefully.

C. Slowly and carefully lower boost sleeve to prevent parts falling onto floor.

NOTE: Occasionally burrs at snap ring groove will prevent easy removal of boost sleeve. To remove burrs, scrape around snap ring groove with pocket knife.

D. Install spring seat and ORANGE spring on valve as shown. Discard old spring and horseshoe shims. Assemble boost valve and sleeve so that they are ready for installation.

E. Install valve, seat and spring into bore by gently rotating and pushing on spring until end of spring is about flush with edge of bore. DO NOT FORCE.

F. Place boost sleeve and valve assembly against spring and push into bore. Install new snap ring.

FIGURE 3A

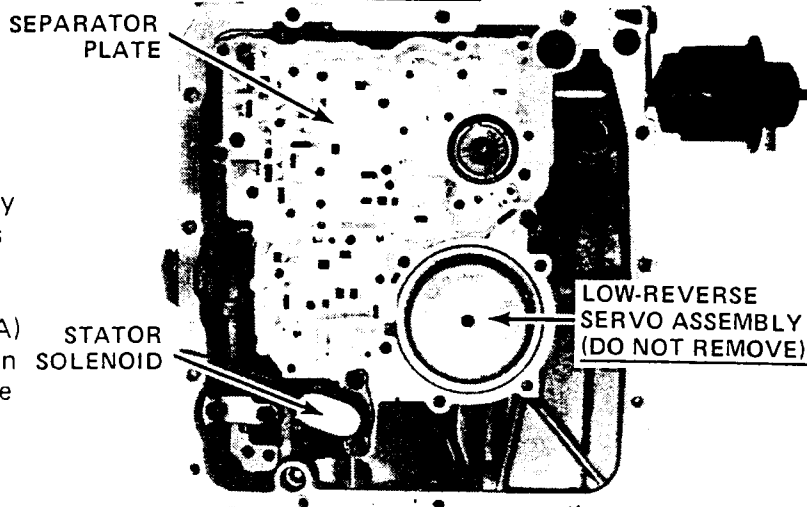


FIGURE 3B

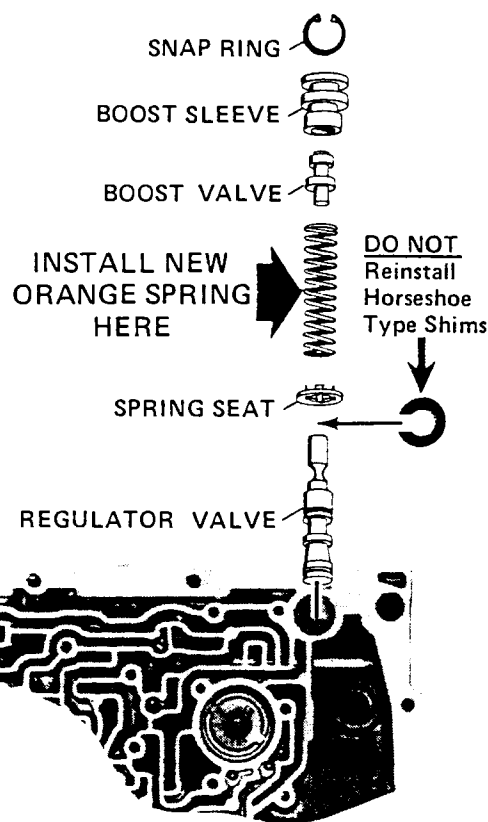
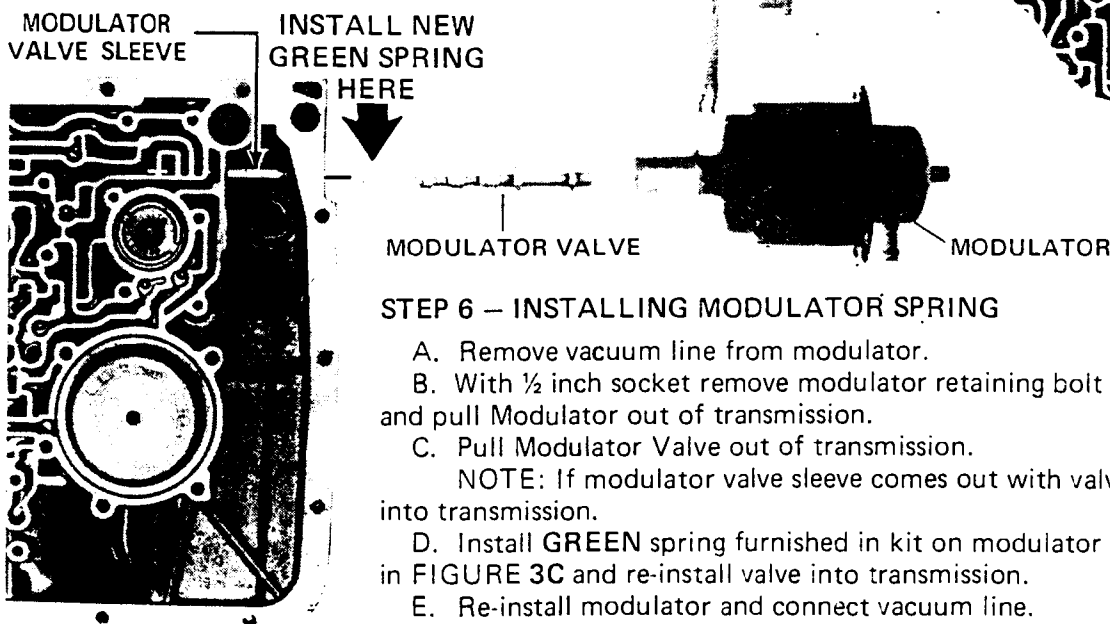


FIGURE 3C



STEP 6 – INSTALLING MODULATOR SPRING

A. Remove vacuum line from modulator.

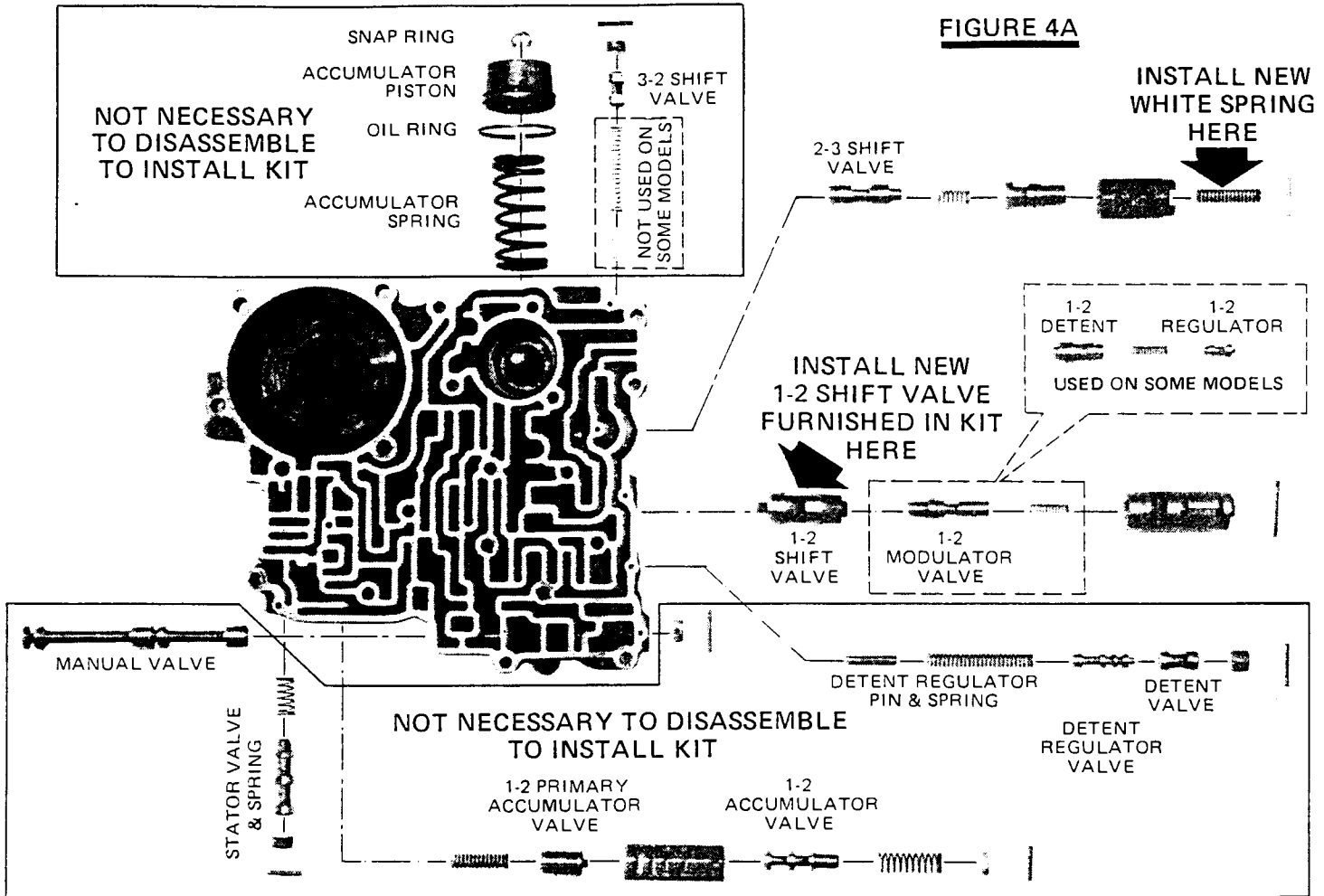
B. With 1/2 inch socket remove modulator retaining bolt and bracket and pull Modulator out of transmission.

C. Pull Modulator Valve out of transmission.

NOTE: If modulator valve sleeve comes out with valve push it back into transmission.

D. Install GREEN spring furnished in kit on modulator valve as shown in FIGURE 3C and re-install valve into transmission.

E. Re-install modulator and connect vacuum line.



STEP 7 – VALVE BODY

Install new 1-2 Shift Valve and new White Spring as shown in FIGURE 4A.

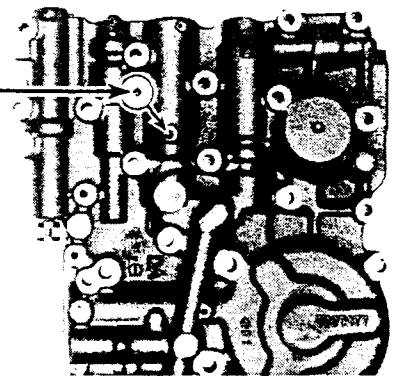
Discard old parts that new parts replace.

STEP 8

Install Cup Plug with a light hammer as shown in FIGURE 4B.

INSTALL 3/16" CUP PLUG FLUSH WITH CASTING IN DRILLED HOLE

FIGURE 4B

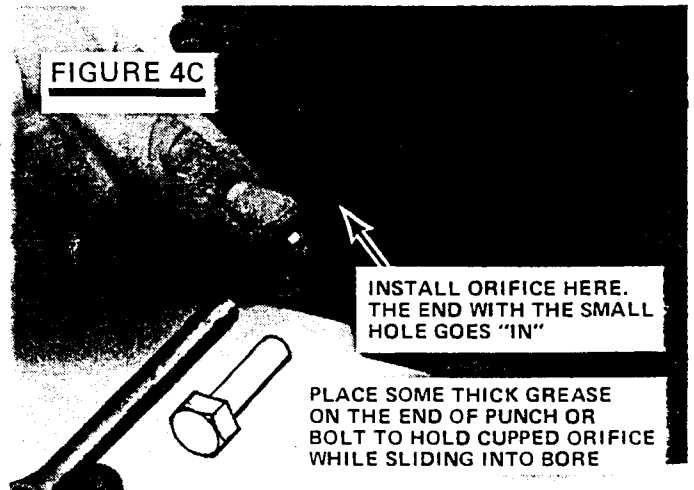


STEP 9

Install Governor Stabilizing Orifice in valve body passage at the bottom of No. 2 governor tube bore as shown in FIGURE 4C. This orifice is brass colored, 9/32" diameter, with small hole in center. This cupped orifice will slide freely (about 1") into valve body governor tube bore. It will then butt against the smaller passage that it installs into. Using a 5/16 bolt ground flat on the thread end, or a 5/16 punch, and a hammer, drive cupped orifice into smaller passage until it is flush.

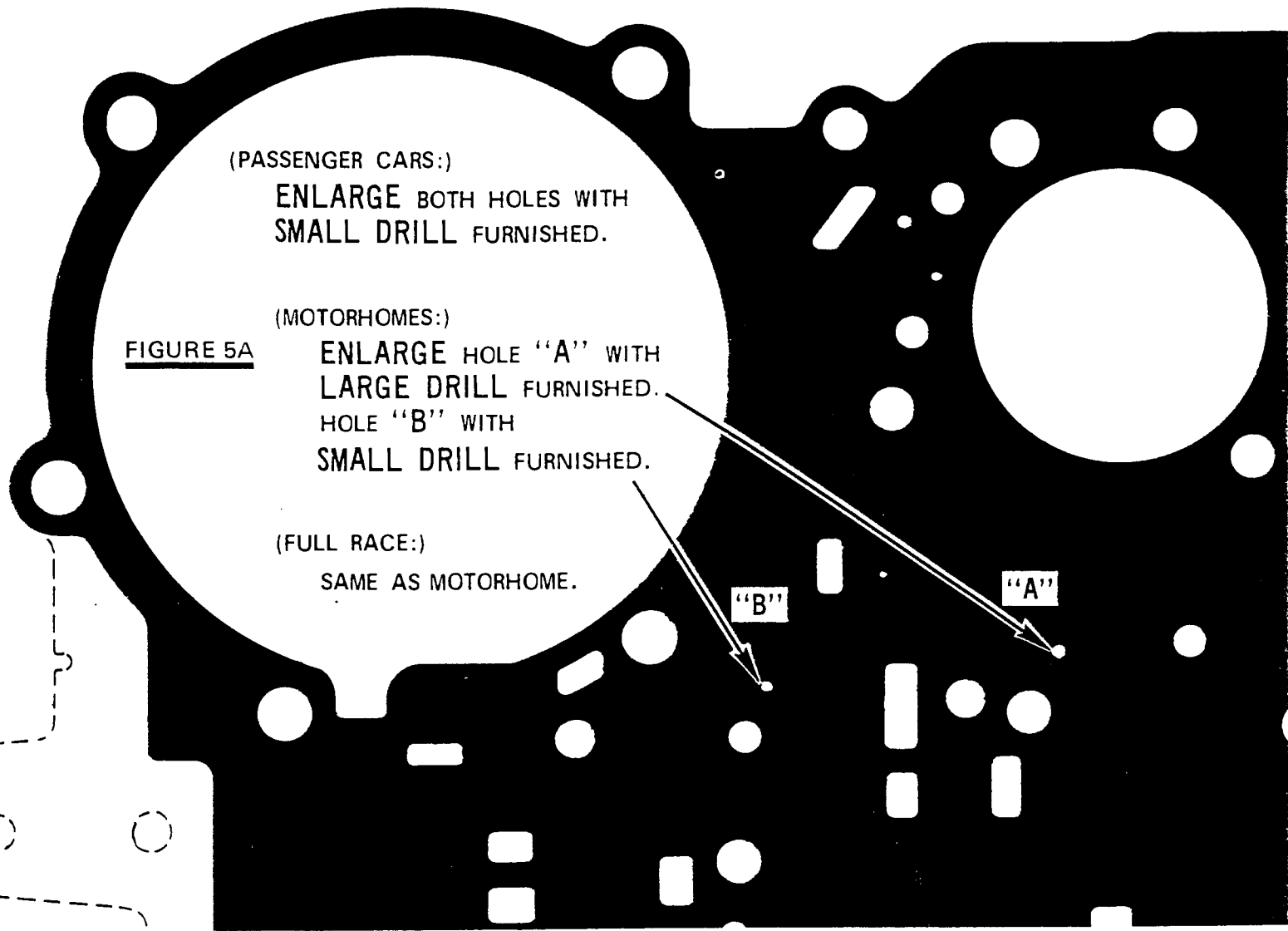
WARNING: Plug only drives in slightly over 1/8" in order to be flush.

FIGURE 4C



INSTALL ORIFICE HERE. THE END WITH THE SMALL HOLE GOES "IN"

PLACE SOME THICK GREASE ON THE END OF PUNCH OR BOLT TO HOLD CUPPED ORIFICE WHILE SLIDING INTO BORE



STEP 10

Enlarge holes in separator plate as shown in FIGURE 5A.

THIS SOLENOID MOUNTING TAB
WAS OMITTED ON 1968 MODELS
AND LATER

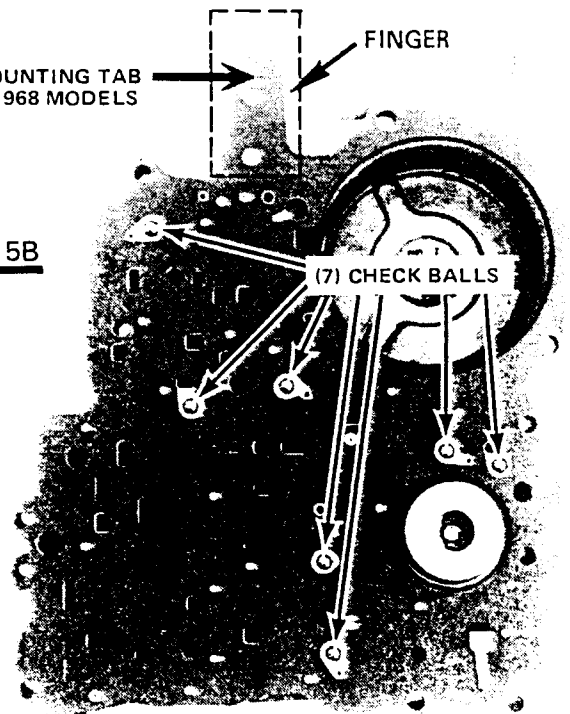
STEP 11

Place new Lower Gasket, Separator Plate and new Upper Gasket onto valve body using thick grease to hold them in position. The upper gasket (one used between separator plate and transmission) can be identified by a finger shaped section (See FIGURE 5B). On 1968 and later models finger shaped section will not be supported by separator plate.

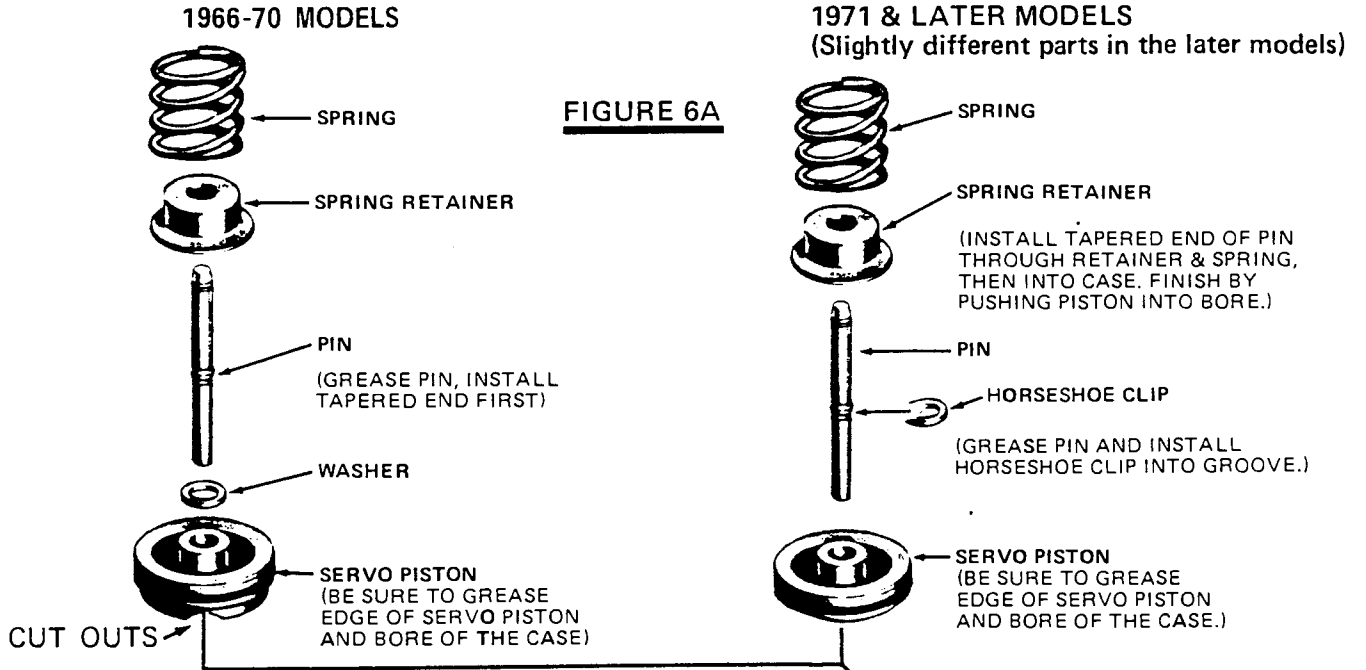
STEP 12

Position 7 new Check Balls onto separator plate using thick grease to hold them in place (See FIGURE 5B)

FIGURE 5B



INTERMEDIATE SERVO ASSEMBLY



STEP 13

If intermediate servo assembly has fallen out clean parts thoroughly and reinstall as follows. Wipe the bore dry then coat it with thick grease. Also coat the pin and the outside diameter of the servo piston with grease. (See FIGURE 6A).

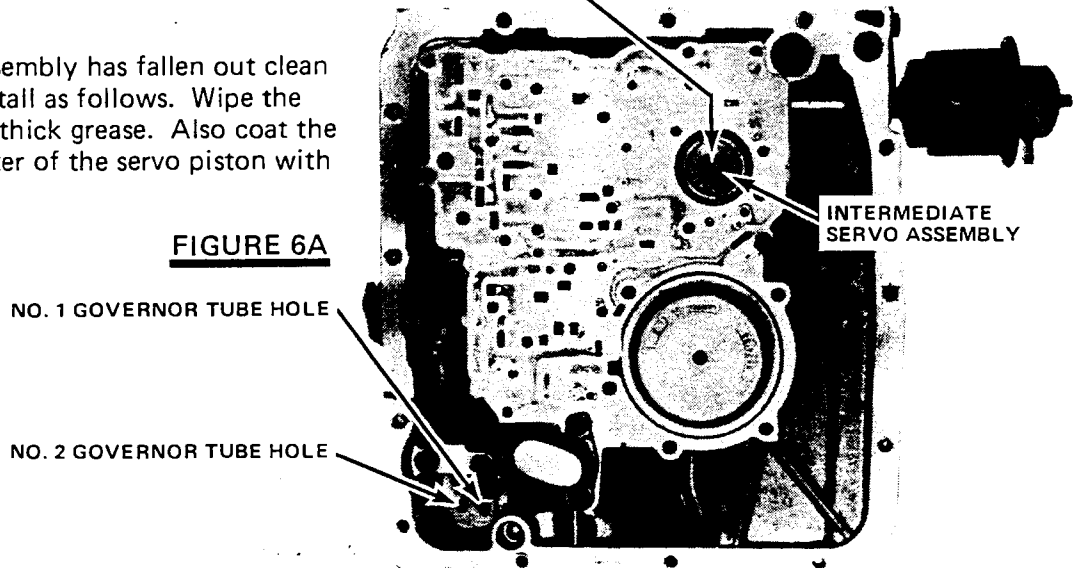


FIGURE 6A

VALVE BODY BOLT

IDENTIFICATION CHART (See FIGURE 6B)

These bolts are shown actual size. It is very important that the right length bolt goes into its proper location. See FIGURE 7B for proper location and tightening sequence.

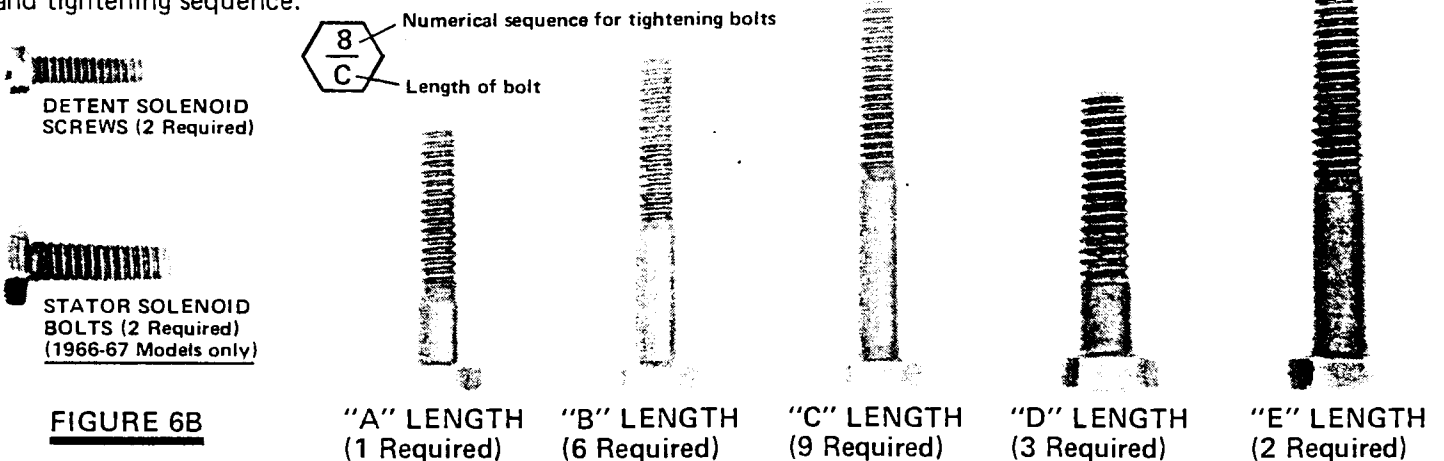
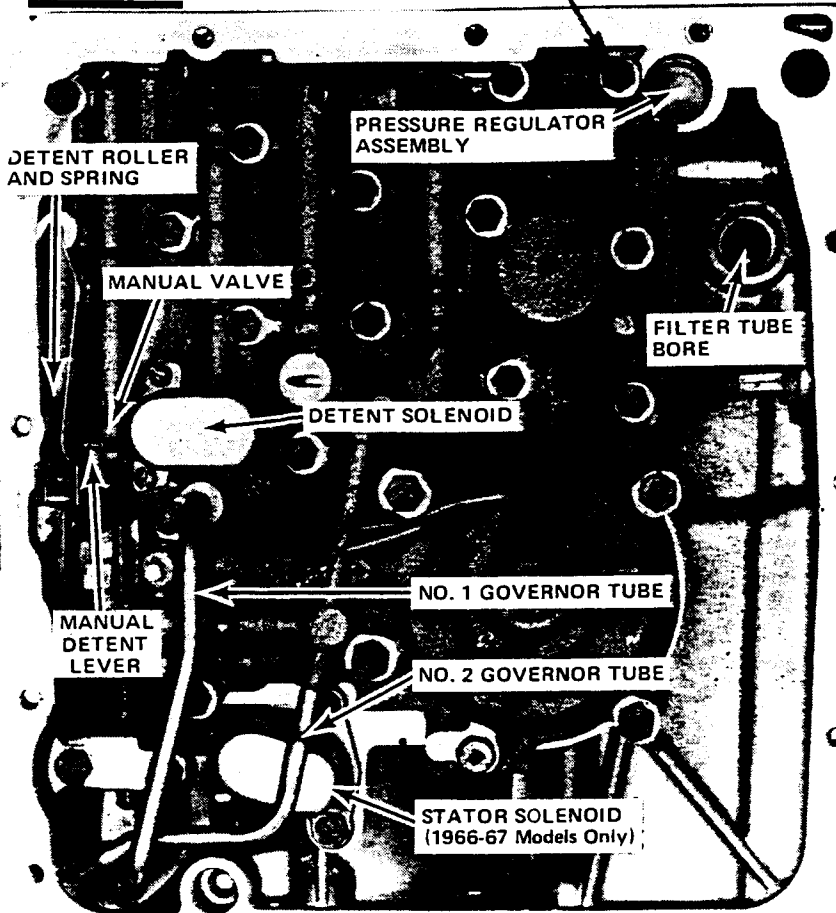


FIGURE 6B

FIGURE 7A

#20



**STEP 14
VALVE BODY INSTALLATION**

A. While holding valve body and separator plate about 1/2 inch from transmission, start "C" length bolt in position No. 20. (See FIGURE 7A) (NOTE: This long bolt holds the valve body in alignment for steps "B" & "C").

B. Position No. 2 Governor Tube into valve body.

C. Push valve body against transmission while starting No. 2 Governor Tube into hole in transmission case. (See FIGURE 6A)

Be sure the Manual Valve is properly indexed with the pin on the manual detent lever as shown in FIGURE 7A.

D. Finger start bolt 21C for alignment, then start all other valve body bolts exactly as shown in FIGURE 7B. Be sure the proper length bolts are placed in position as indicated. (See FIGURE 6B). After starting a few bolts, remove the bolt installed in position #20 and insert it into proper position. **DO NOT TIGHTEN ANY BOLTS AT THIS TIME.**

E. Install detent roller and spring assembly. Be sure detent roller is centered on manual detent lever as shown in FIGURE 7A.

STEP 15

Install detent solenoid using New Paper gasket furnished in kit and tighten screws hand tight with a screwdriver. See FIGURE 7A. On 1966-67 models install stator solenoid using NEW METAL gasket furnished in kit and tighten bolts snugly (7-9 ft. lbs.). See FIGURE 7A.

**STEP 16
TIGHTENING VALVE BODY BOLTS**

NOTE: The numerical sequence shown in FIGURE 7B must be followed exactly or valve body will be pulled down unevenly causing malfunctions.

Tighten all valve body bolts snug with speed wrench or ratchet. Do not over tighten valve body bolts. Use one hand only with speed or ratchet wrench. (7-9 ft. lbs.).

Start No. 1 governor tube into hole in valve body and hole in transmission case and tap tube in until it bottoms. (See FIGURE 7A).

NOTE: No. 1 governor tube will cross over No. 2 governor tube when installed properly.

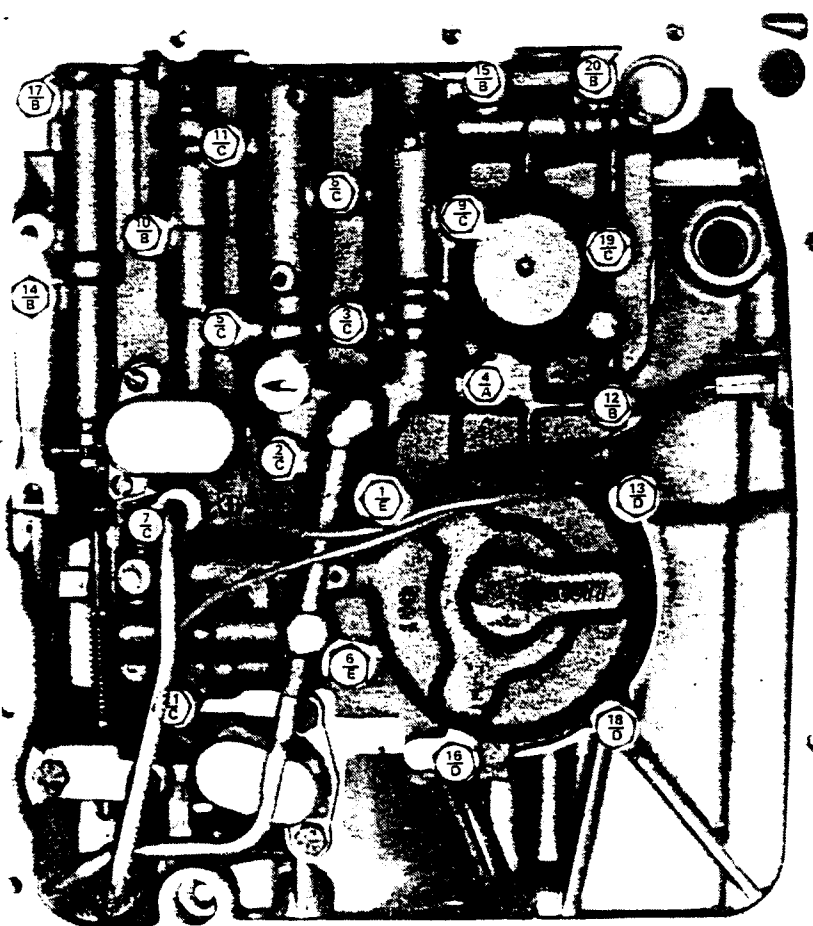


FIGURE 7B

STEP 17

Reinstall oil strainer using NEW "O" ring furnished in kit.

STEP 18

Wash oil pan in clean solvent, scrape old gasket from pan and transmission case. Install oil pan using new gasket furnished in kit.

STEP 19

Pour three quarts of transmission fluid into transmission. Start engine with selector in "P" (park). Add fluid until level is approximately ½ inch below full mark on dipstick.

We do not recommend any special fluid. Most of these "special" fluids lack some lubricating qualities, and can shorten the life of bushings, bearings, pumps and thrust washers.

STEP 20

Drive approximately two miles easy before attempting any heavy throttle up-shifts. During this two miles move shift lever to all forward positions a dozen or more times. Check oil level and add oil if necessary. Do not run above full mark.

STEP 21 – CORRECTING VACUUM FLOW: FAILURE TO PERFORM THIS STEP CAN RESULT IN TOTAL FAILURE OF TRANSMISSION.

Restricted vacuum flow or vacuum connected wrong at engine is one of the most common causes of failure on this transmission.

A. CHECK: Perform this test with engine at operating temperature. With engine idling pull hose off at the modulator. Engine must speed up with hose off. If engine does not speed up vacuum is restricted or connected at wrong place on engine.

B. CORRECTION: If the vacuum line is connected to carburetor or any "tee" connection from carburetor, move the line to a connection on the intake manifold. Check for collapsed hoses. Use drill furnished in kit to drill out any restrictions in vacuum line or fitting on intake manifold.

C. FINAL CHECK: (ENGINE MUST SPEED UP WITH HOSE OFF AT MODULATOR.)

YOU ARE NOW READY TO LET IT HAPPEN.

STEP 22

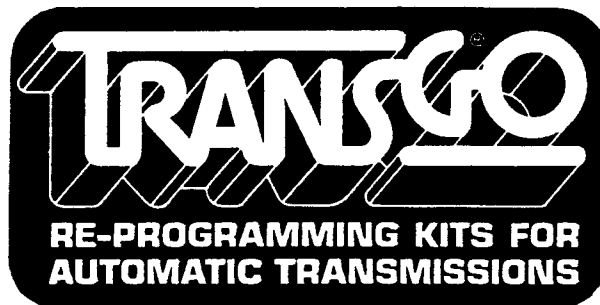
TRANSGO makes it happen. In "L" or "1" position the transmission will start in low and will not shift until YOU move the lever. You will now be able to downshift to any gear at any car speed simply by moving the lever.

Only TransGO's exclusive reprogramming gives you everything.

PERFORMANCE: *Positive upshifts and downshifts at your finger tips for maximum performance.*

CONVENIENCE: *Automatic shifts in "D" position.*

SAFETY: *Manual downshifts to 2nd or Low for positive engine braking at any speed.*



2621 MERCED AVE. EL MONTE, CALIFORNIA 91733