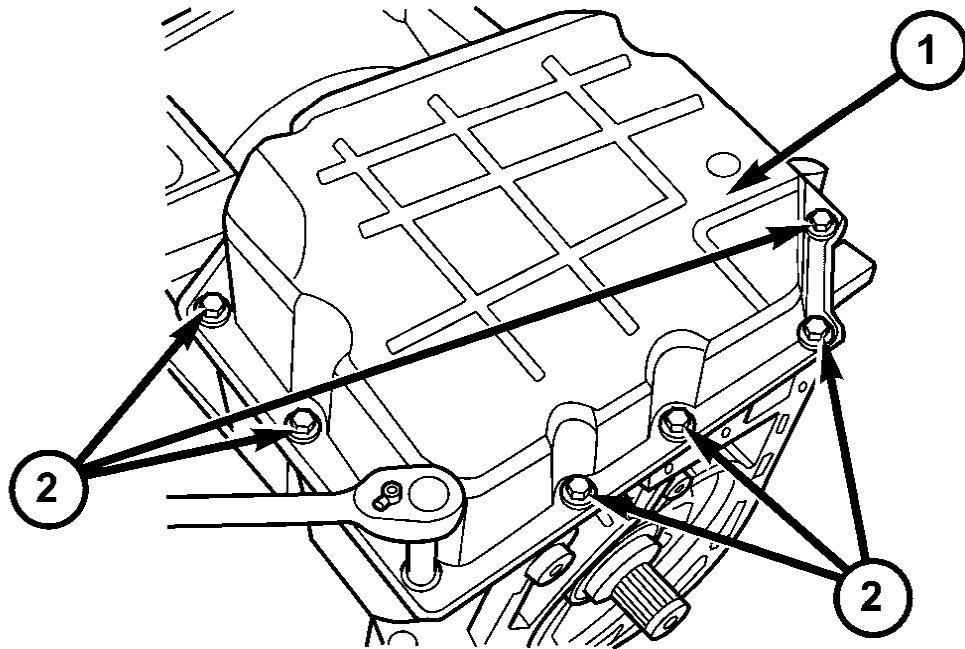


42RLE 4 SPEED

REMOVAL

NOTE: If valve body is being reconditioned or replaced, it is necessary to perform the Quick Learn Procedure.

1. Disconnect the TRS and solenoid wiring connectors.
2. Disconnect the shift cable from the shift lever (at the transmission).
3. Move the manual shift lever clockwise as far as it will go. This should be one position past the L position. Then remove the manual shift lever.

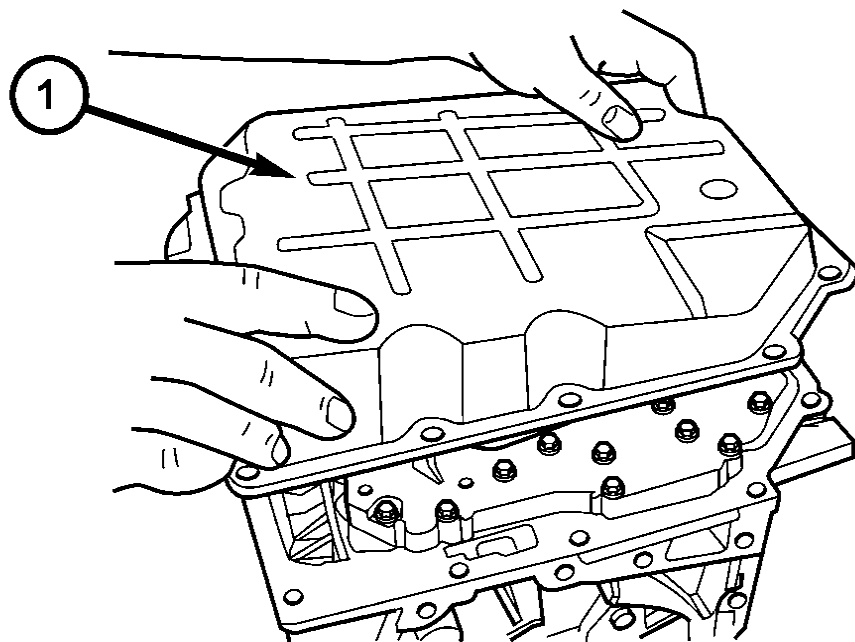


80f8afb3

Fig. 280 Remove Transmission Oil Pan Bolts

- 1 - TRANSMISSION OIL PAN
2 - BOLTS

4. Remove transmission pan bolts (Fig. 280).

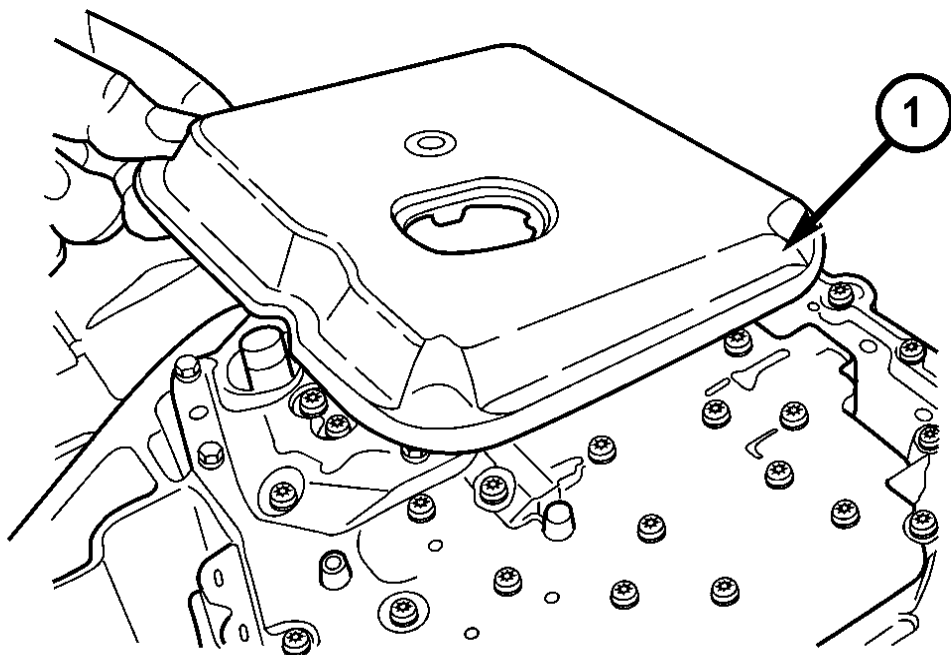


80f7d8bb

Fig. 281 Remove Transmission Oil Pan

1 - TRANSMISSION OIL PAN

5. Remove transmission oil pan (Fig. 281).

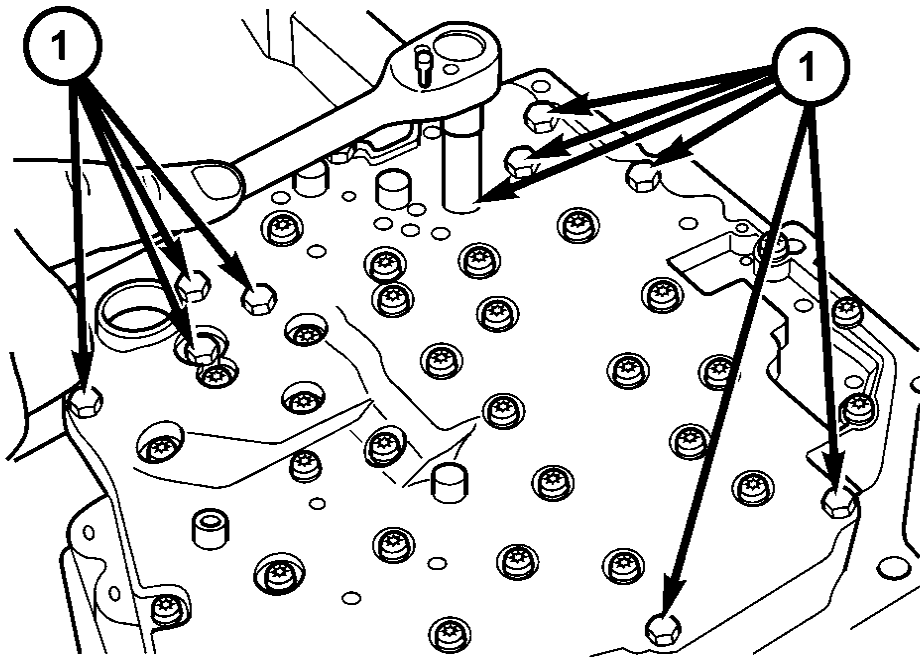


80f7d8c8

Fig. 282 Remove Transmission Filter

1 - TRANSMISSION FILTER

6. Remove oil filter from valve body (Fig. 282). It is held in place by two screws.

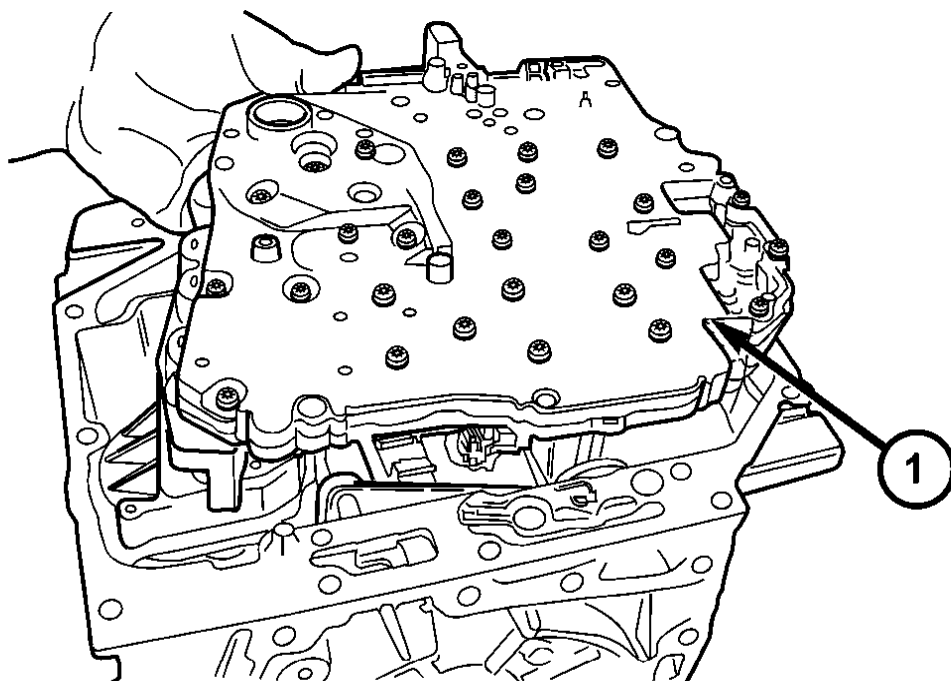


80f7d908

Fig. 283 Remove Valve Body Bolts

1 - BOLTS

7. Remove valve body bolts-to-case (Fig. 283).

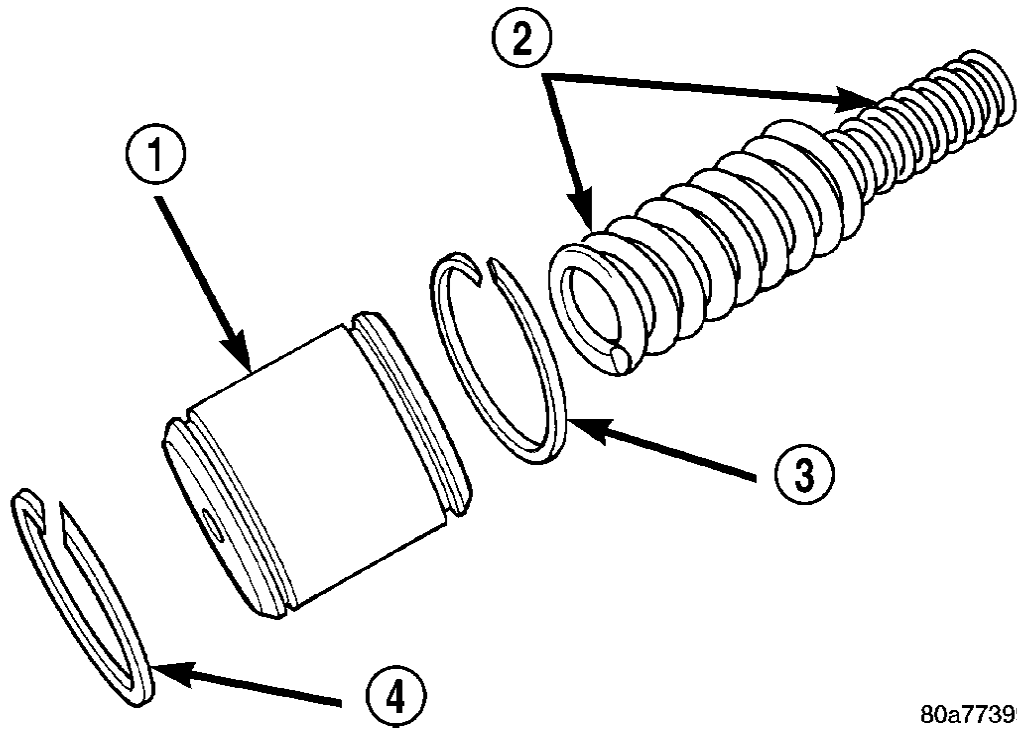


80f7d935

Fig. 284 Remove Valve Body From Transmission

1 - VALVE BODY

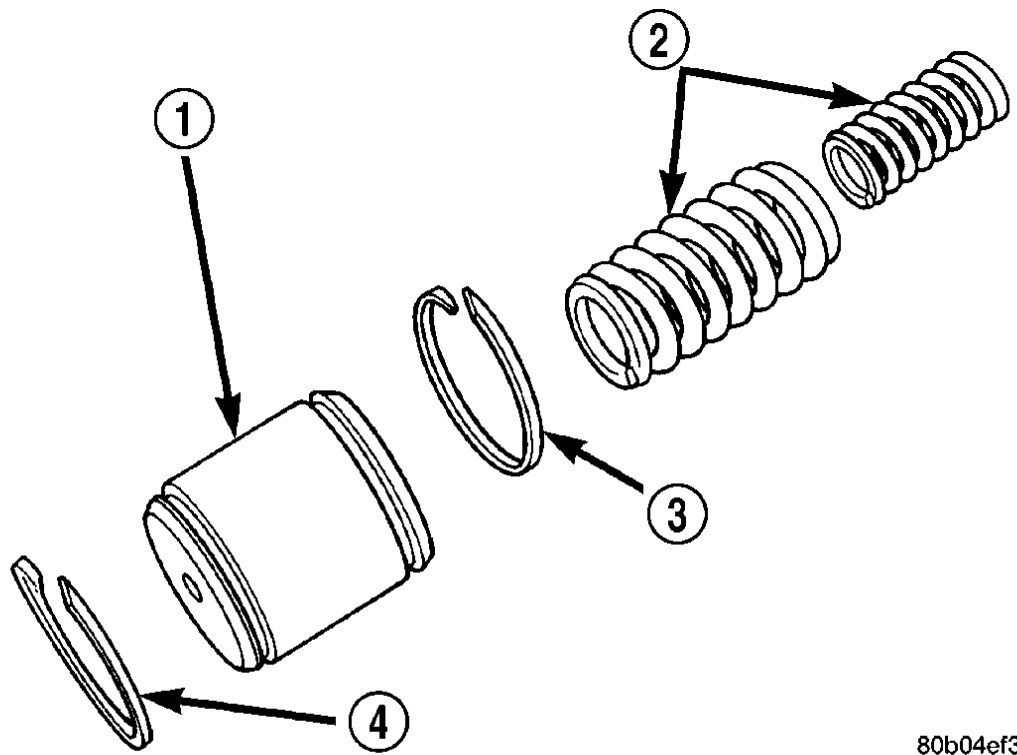
8. Carefully remove valve body assembly from transmission (Fig. 284).



80a77399

Fig. 285 Accumulator Assembly - Typical

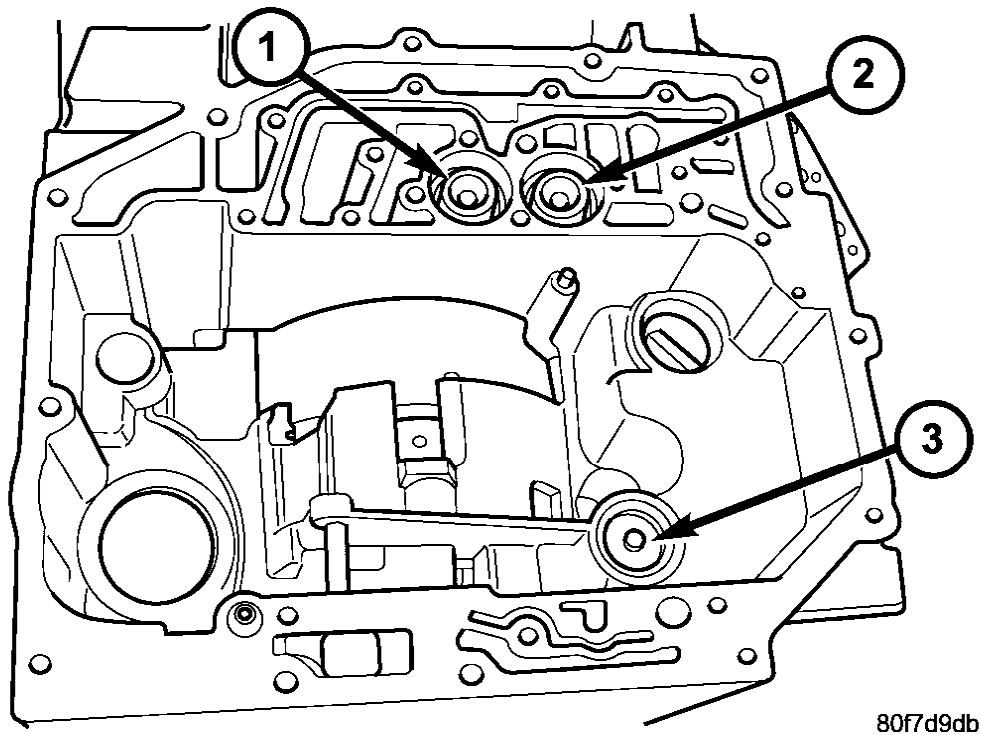
- 1 - ACCUMULATOR PISTON (UNDERDRIVE)
- 2 - RETURN SPRINGS
- 3 - SEAL RING
- 4 - SEAL RING



80b04ef3

Fig. 286 Overdrive Accumulator and Springs

- 1 - OVERDRIVE ACCUMULATOR PISTON
- 2 - RETURN SPRINGS
- 3 - SEAL RING
- 4 - SEAL RING



80f7d9db

Fig. 287 Accumulator Location

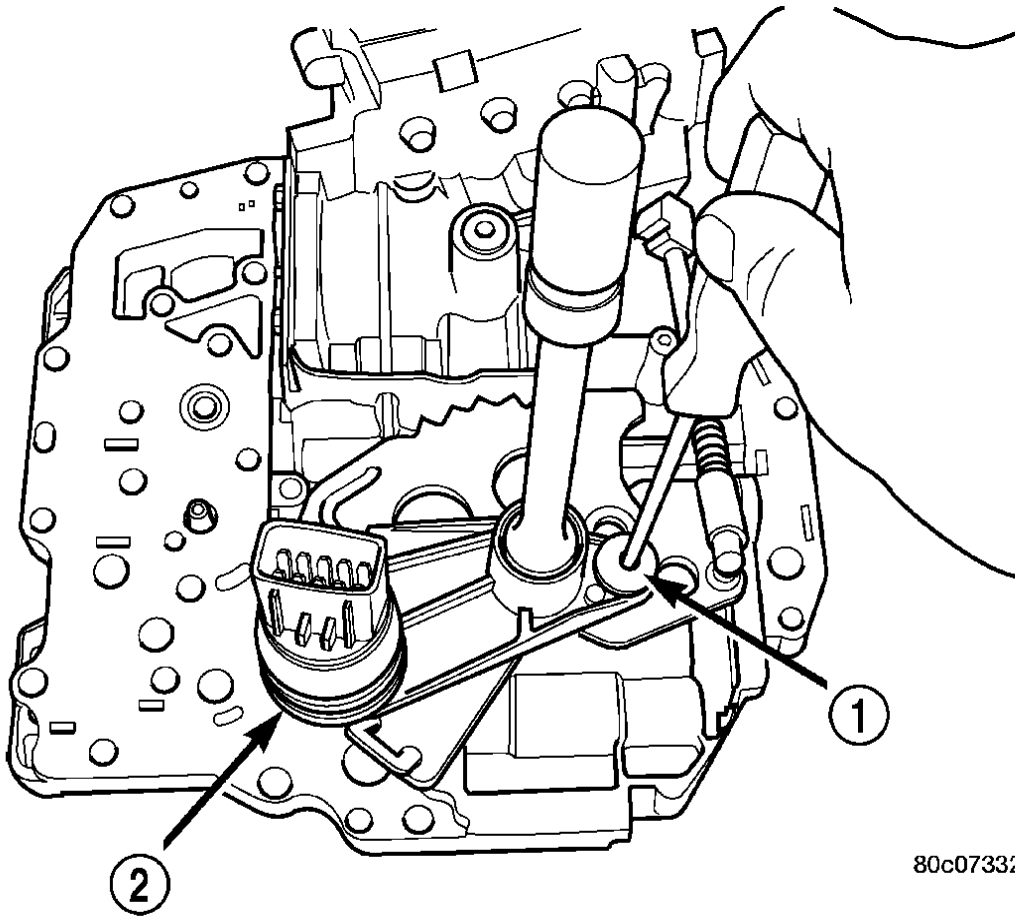
- 1 - OVERDRIVE ACCUMULATOR LOCATION
- 2 - UNDERDRIVE ACCUMULATOR LOCATION
- 3 - LOW/REVERSE ACCUMULATOR

CAUTION: The overdrive and underdrive accumulators and springs may fall out when removing the valve body (Fig. 285) (Fig. 286) (Fig. 287).

DISASSEMBLY

NOTE: If the valve body is being reconditioned or replaced, it is necessary to perform the Quick Learn Procedure using the DRB III Scan Tool.

1. Remove manual shaft seal.

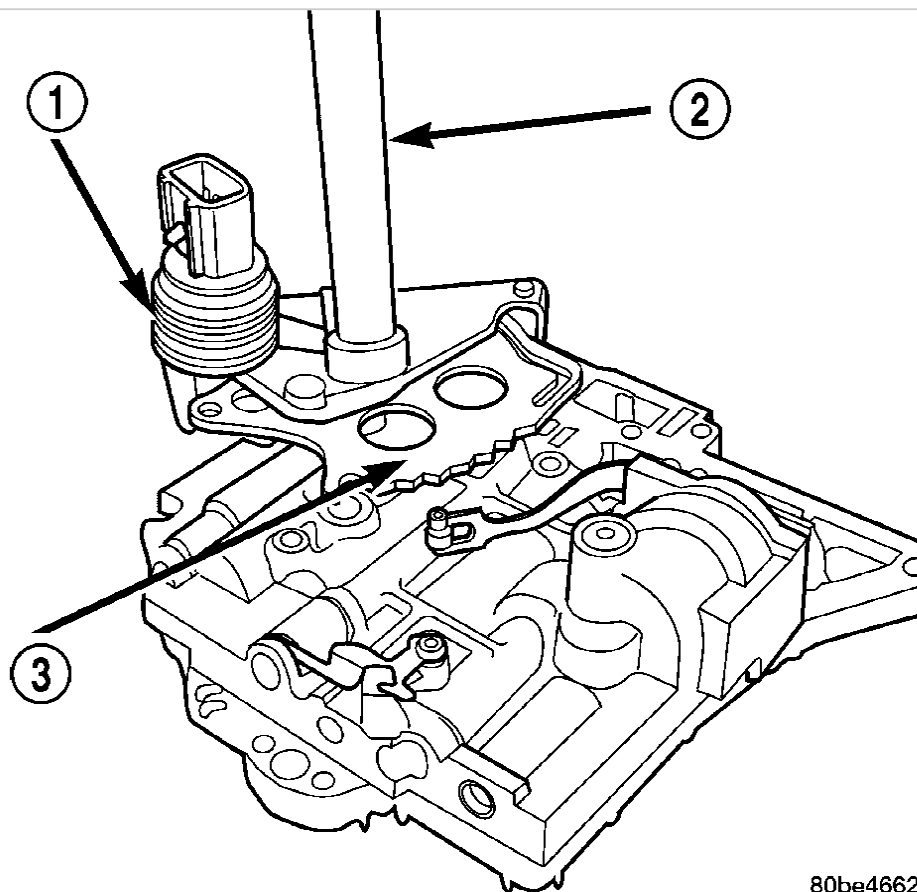


80c07332

Fig. 288 Manual Shaft Retaining Screw

- 1 - SCREW
- 2 - TRS

2. Remove manual shaft screw (Fig. 288).

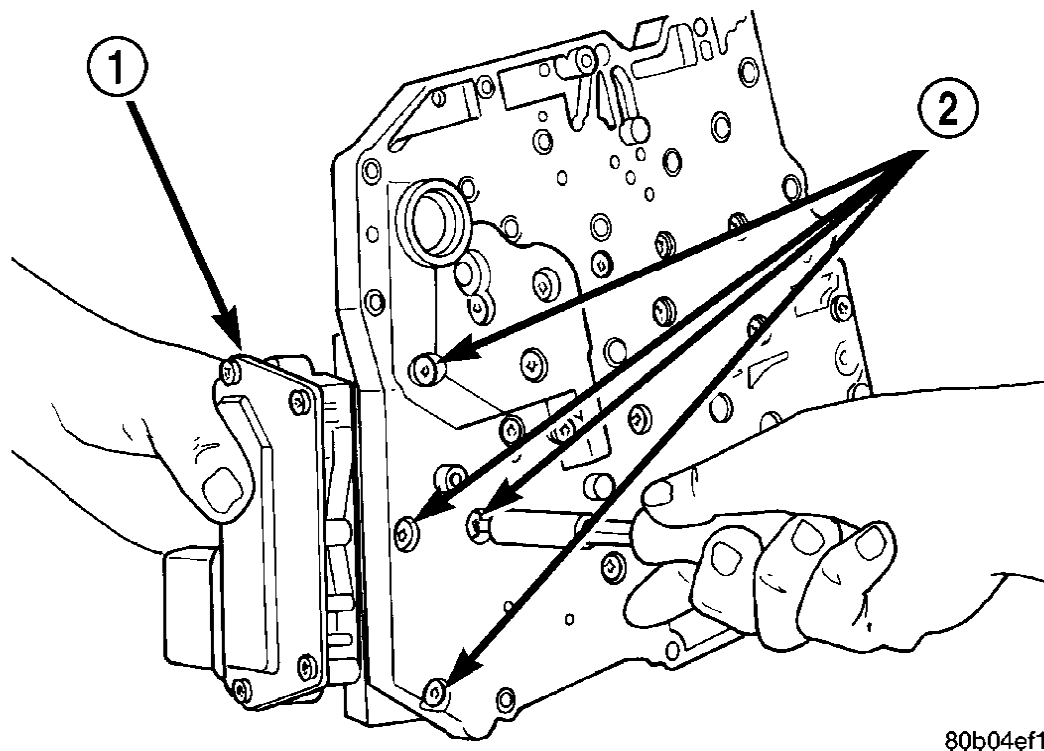


80be4662

***Fig. 289 Manual Shaft/Rooster Comb and
Transmission Range Sensor***

- 1 - TRANSMISSION RANGE SENSOR
- 2 - MANUAL SHAFT
- 3 - ROOSTER COMB

3. Remove Transmission Range Sensor (TRS) and manual shaft (Fig. 289).

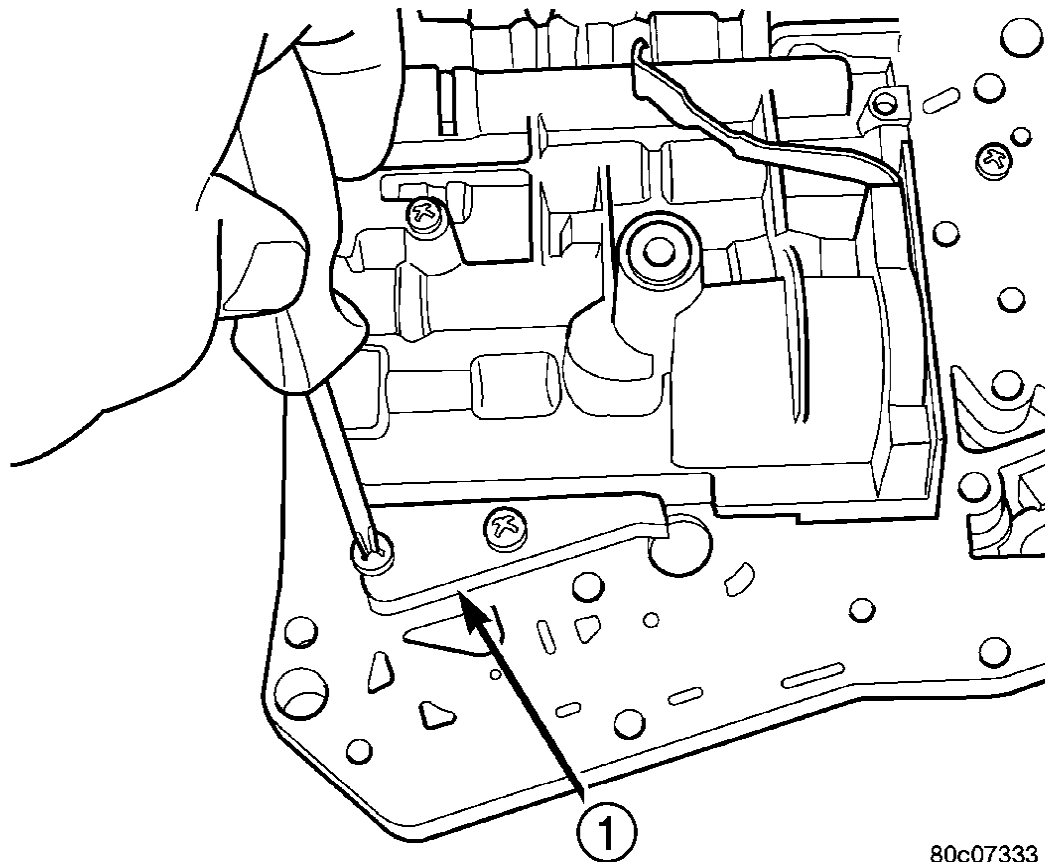


80b04ef1

Fig. 290 Solenoid Retaining Screws

- 1 - SOLENOID/PRESSURE SWITCH ASSEMBLY
- 2 - RETAINING SCREWS

4. Remove Solenoid/Pressure Switch Assembly from valve body (Fig. 290).

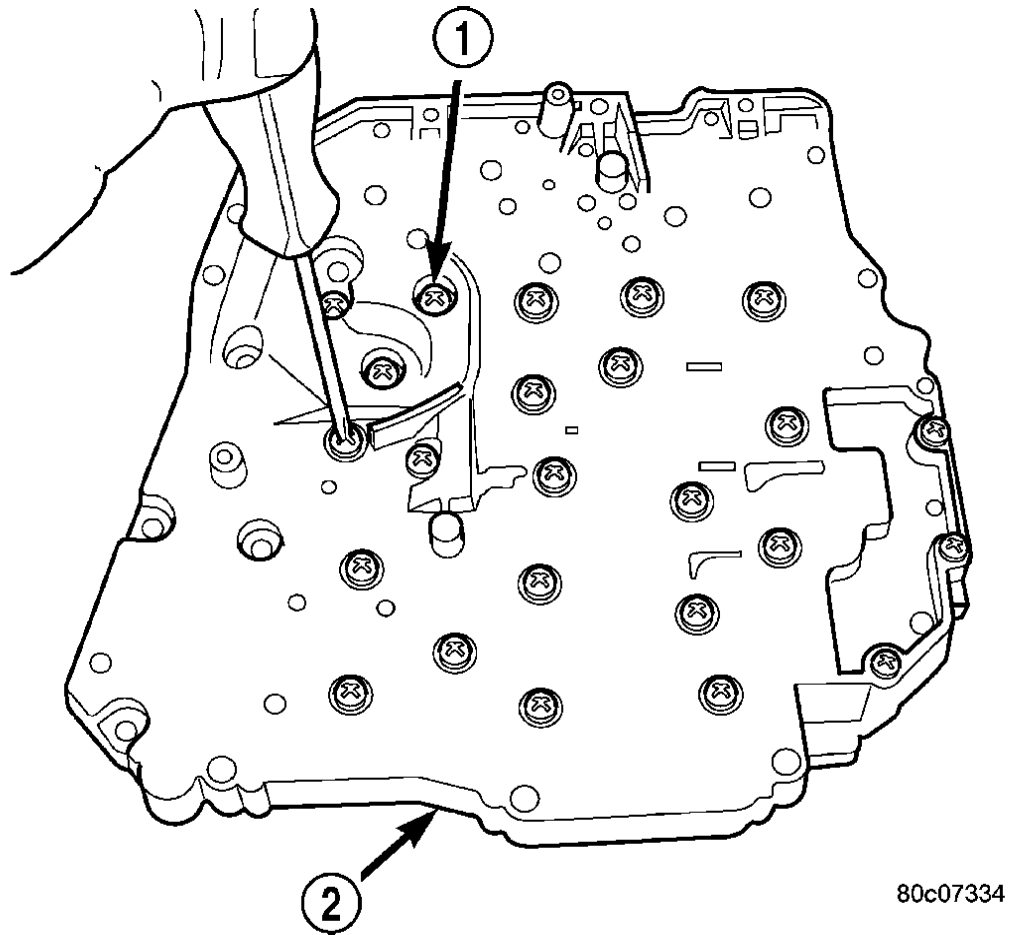


80c07333

Fig. 291 Remove Stiffener Plate

1 - STIFFENER PLATE

5. Remove valve body stiffener plate (Fig. 291).

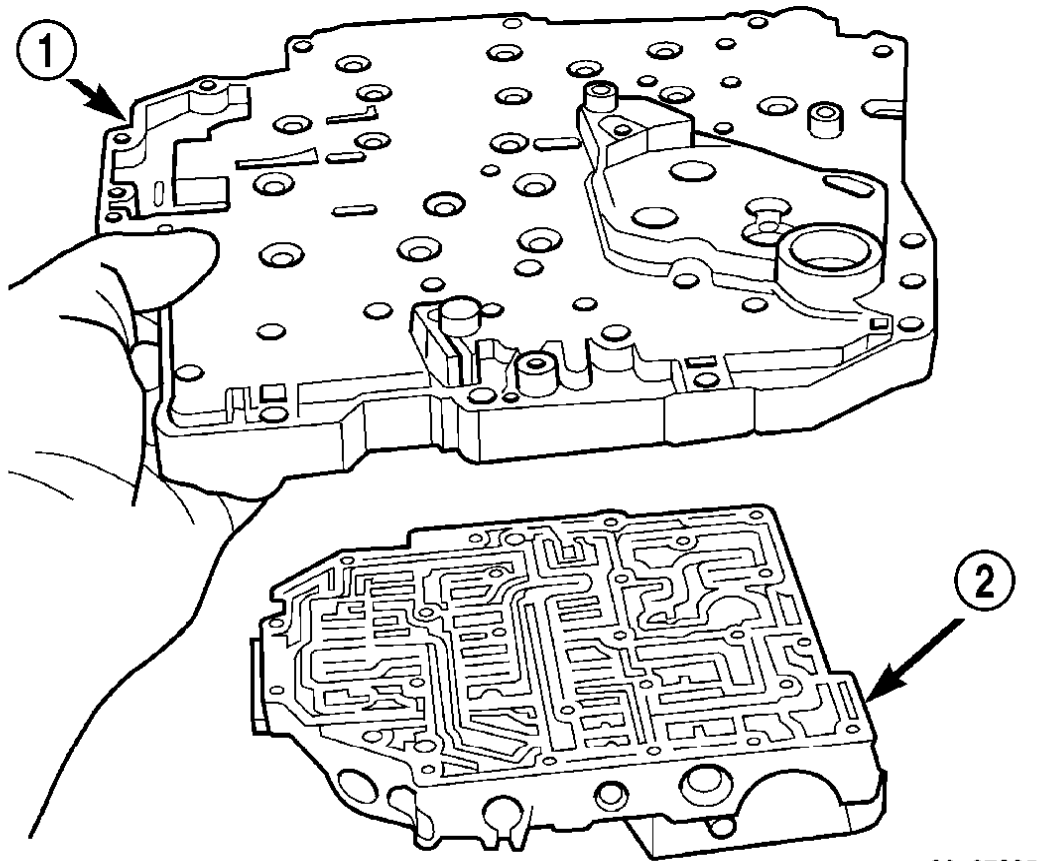


80c07334

**Fig. 292 Remove Transfer Plate-to-Valve Body
Screws**

- 1 - SCREW (24)
- 2 - TRANSFER PLATE

6. Invert valve body assembly and remove transfer plate-to-valve body screws (Fig. 292).



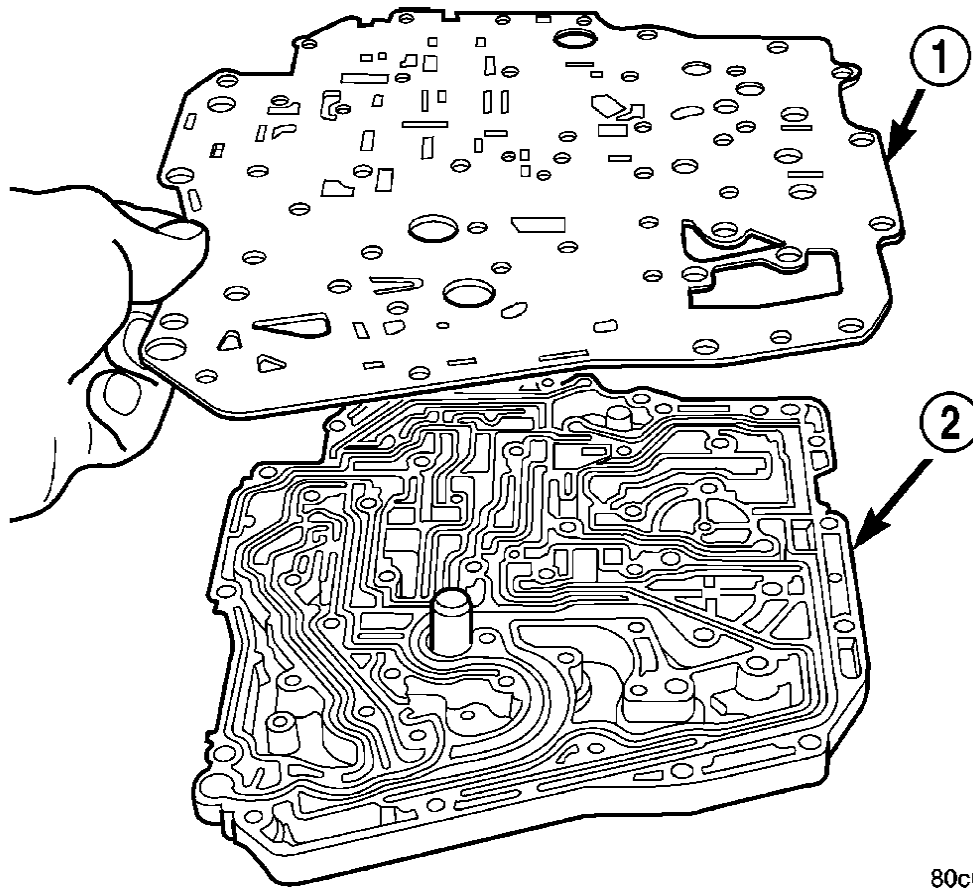
80c07335

Fig. 293 Remove Transfer Plate to Valve Body

1 - TRANSFER PLATE

2 - VALVE BODY

7. Remove transfer/separater plate from valve body (Fig. 293).

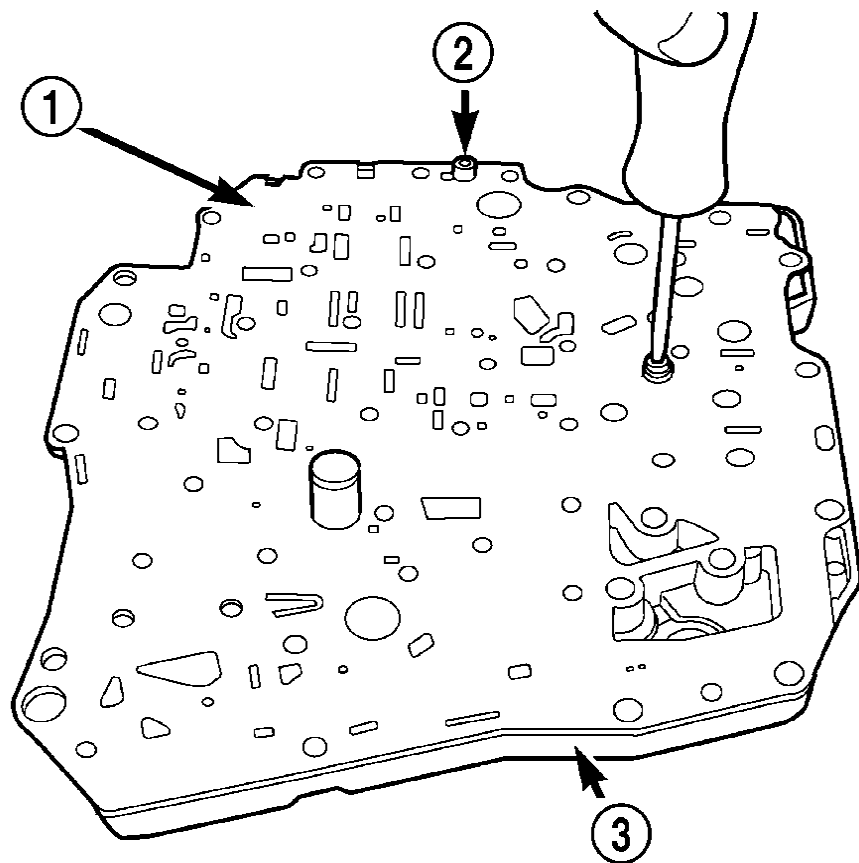


80c07339

Fig. 295 Remove Separator Plate to Transfer Plate

- 1 - SEPARATOR PLATE
- 2 - TRANSFER PLATE

8. Remove separator plate-to-transfer plate screws (Fig. 294).



80c07336

**Fig. 294 Remove Separator Plate-to-Transfer Plate
Screws**

- 1 - SEPARATOR PLATE
- 2 - SCREW (2)
- 3 - TRANSFER PLATE

9. Remove separator plate from transfer plate (Fig. 295).

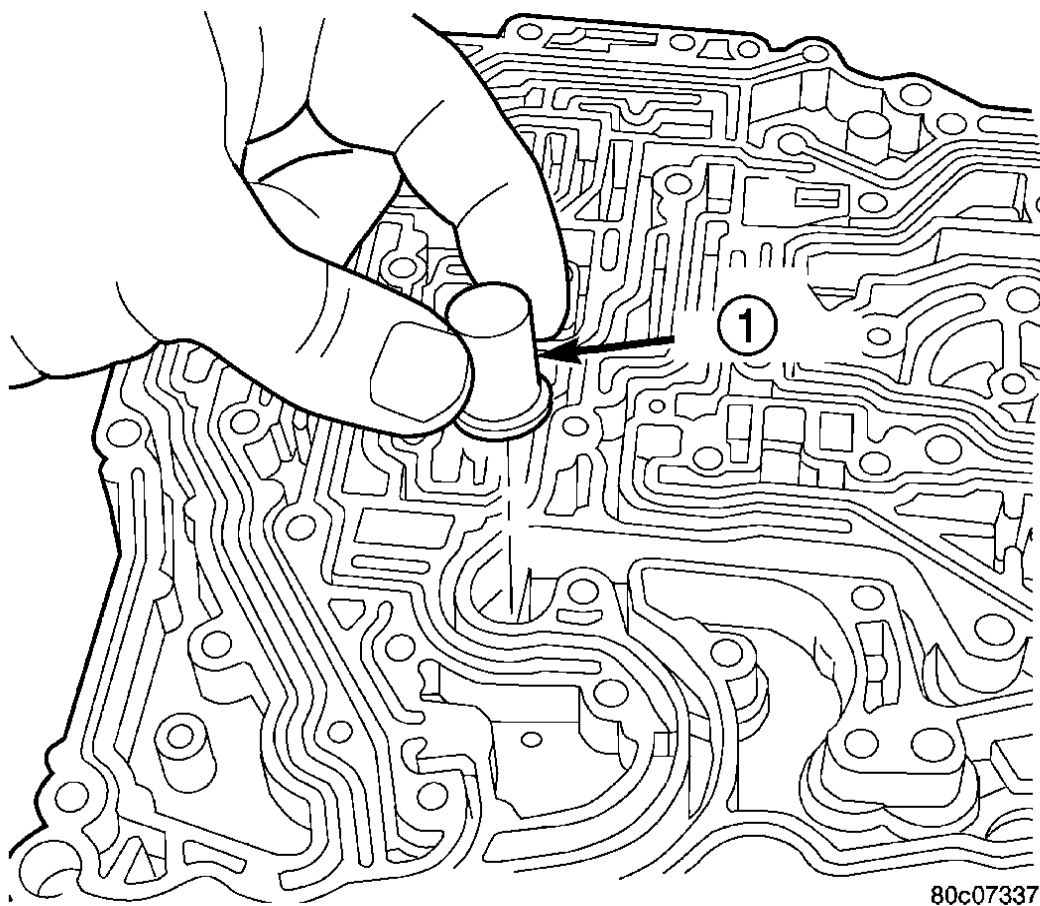
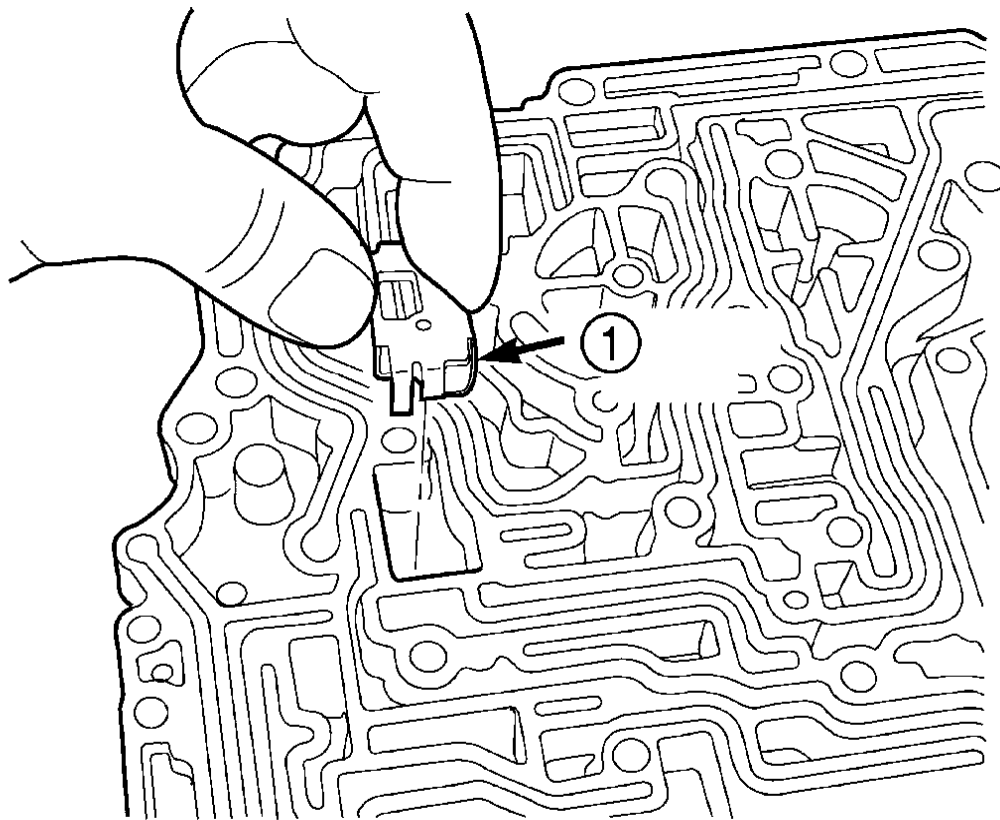


Fig. 296 Remove Oil Screen to Transfer Plate

1 - OIL SCREEN

10. Remove the oil screen from the transfer plate (Fig. 296).

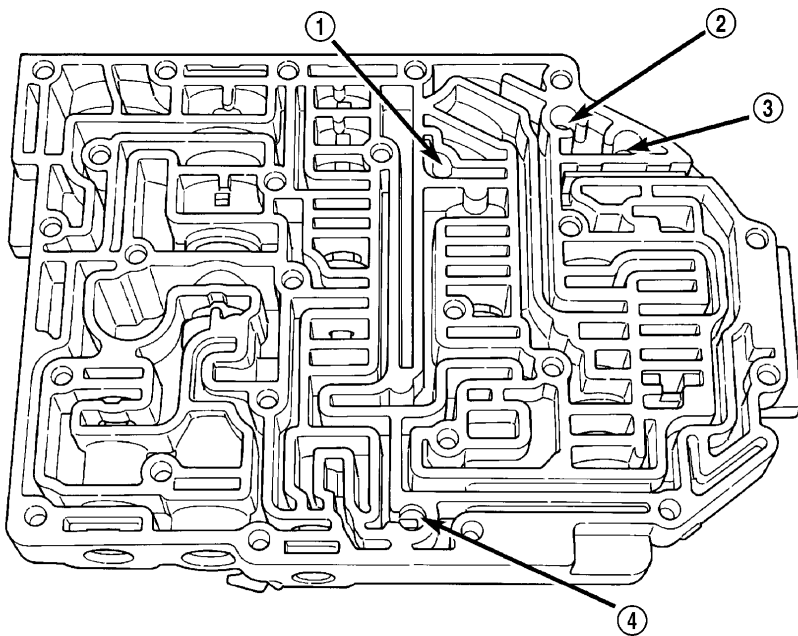


80c07338

Fig. 297 Remove Thermal Valve to Transfer Plate

1 - THERMAL VALVE

11. Remove thermal valve (Fig. 297) from transfer plate.



80c07030

Fig. 298 Ball Check Location

1 - (#4) BALL CHECK LOCATION
2 - (#2) BALL CHECK LOCATION

3 - (#5) BALL CHECK LOCATION
4 - (#3) BALL CHECK LOCATION

12. Remove valve body check balls. Note their location for assembly ease (Fig. 298).

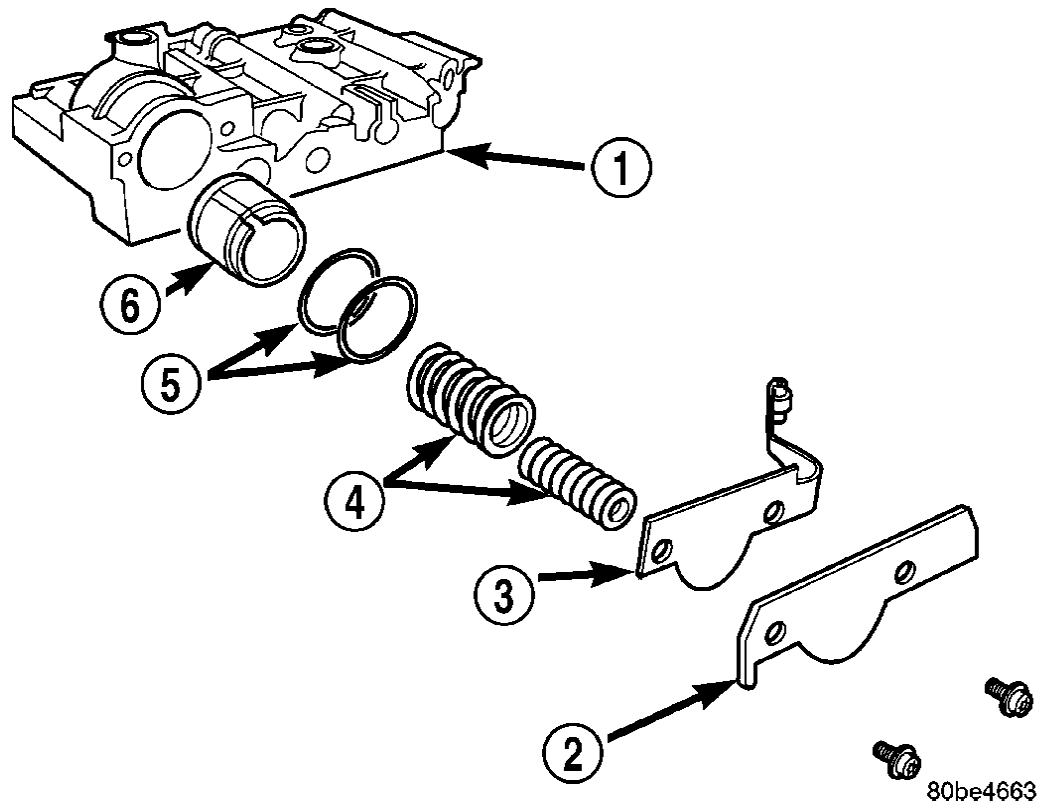
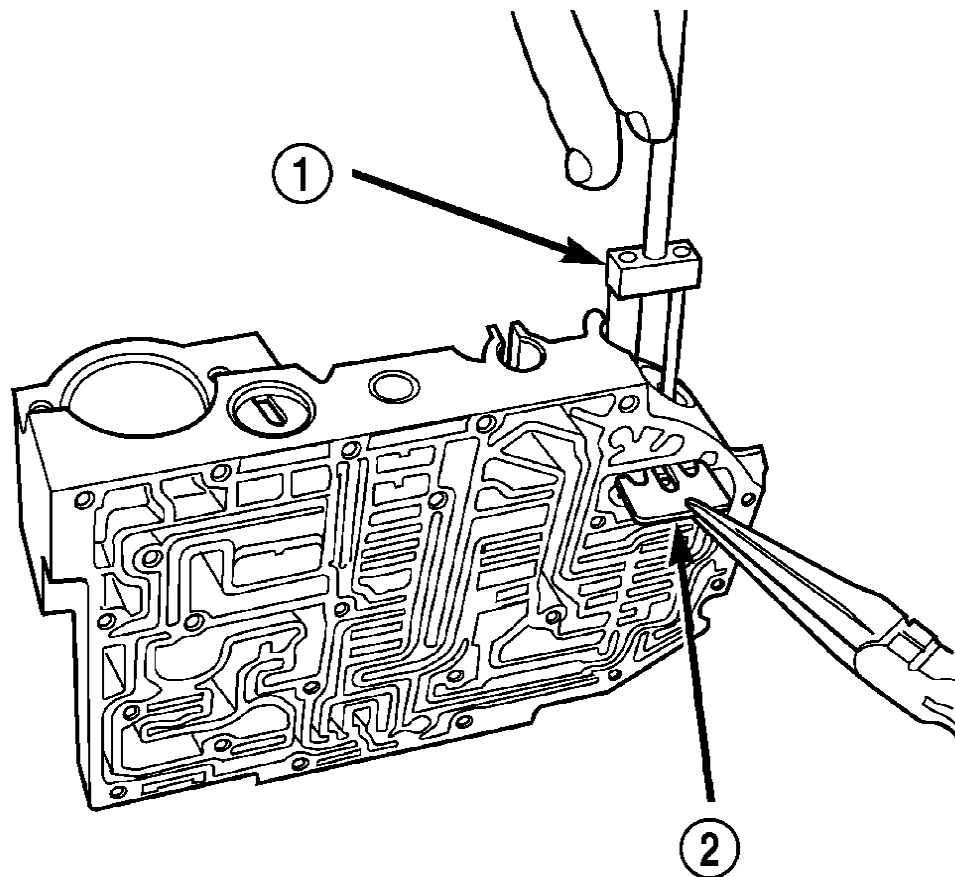


Fig. 299 2/4 Accumulator Assembly

- 1 - VALVE BODY
- 2 - RETAINER PLATE
- 3 - DETENT SPRING
- 4 - SPRINGS
- 5 - SEALS
- 6 - PISTON

13. Remove 2/4 accumulator assembly as shown in (Fig. 299).

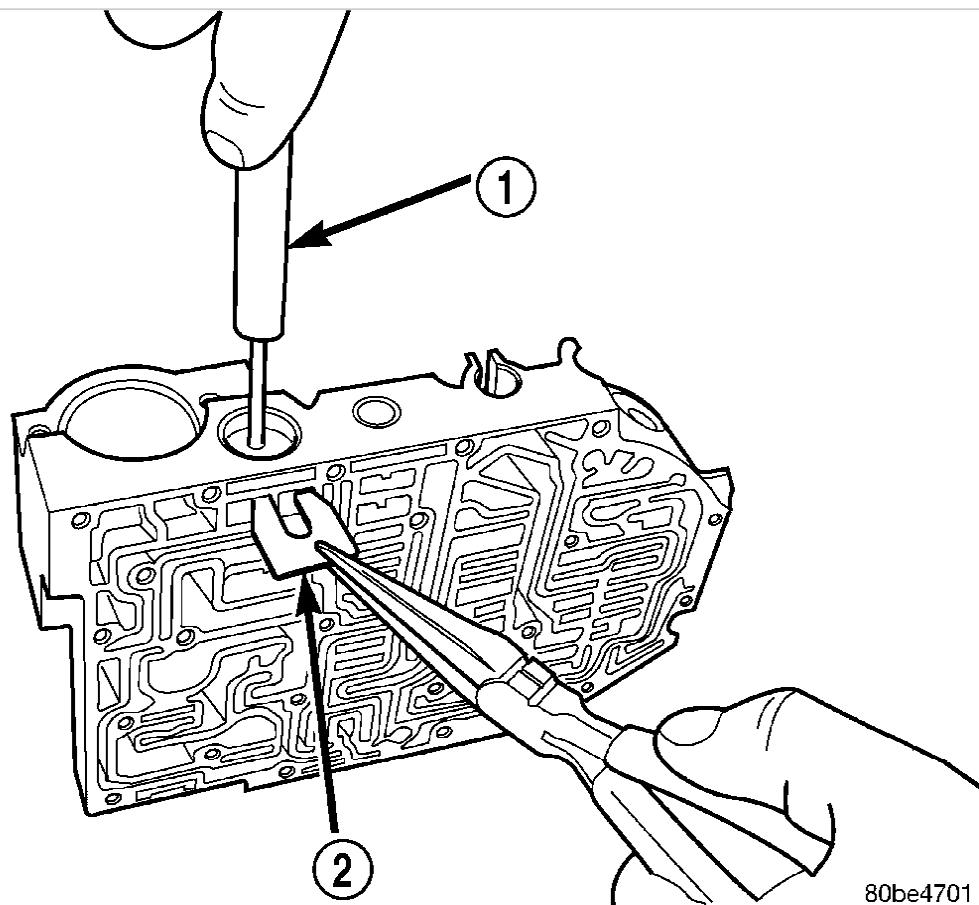


80be4700

Fig. 300 Remove Dual Retainer Plate using Tool 6301

- 1 - TOOL 6301
- 2 - RETAINER

14. Remove dual retainer plate from valve body Use special tool 6301 to remove plate (Fig. 300).

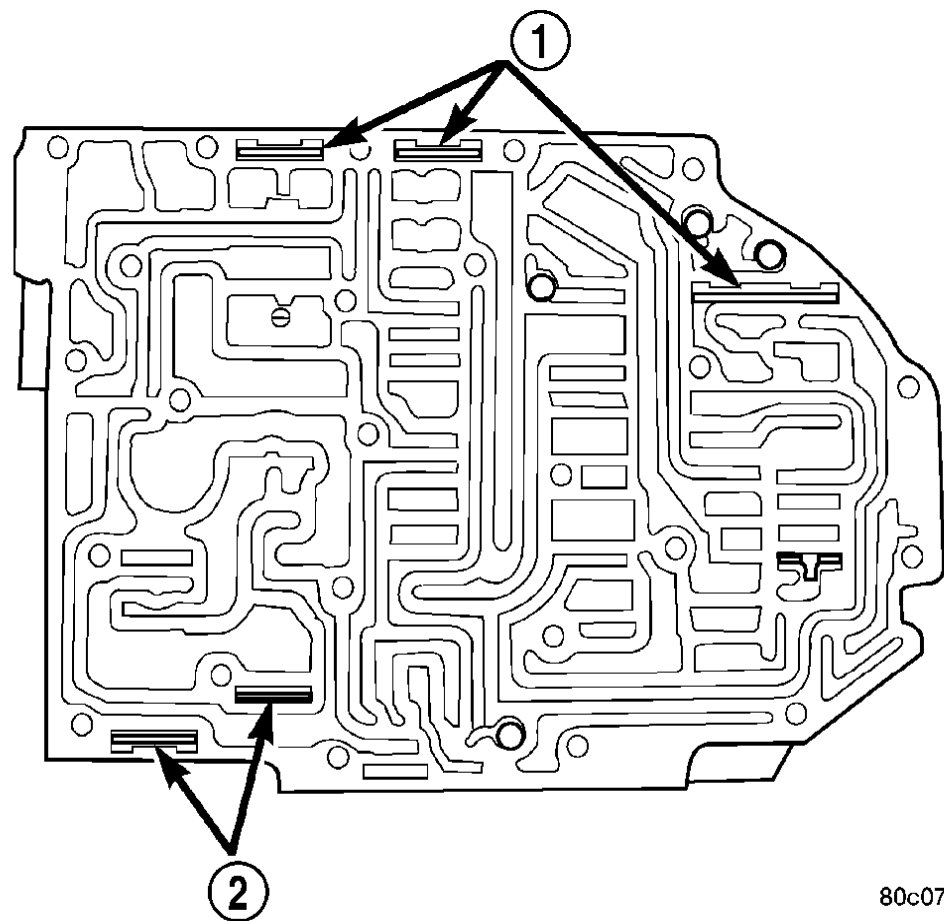


80be4701

***Fig. 301 Remove Regulator Valve Spring Retainer
using Tool 6302***

- 1 - TOOL 6302
- 2 - RETAINER

15. Remove regulator valve spring retainer (Fig. 301).



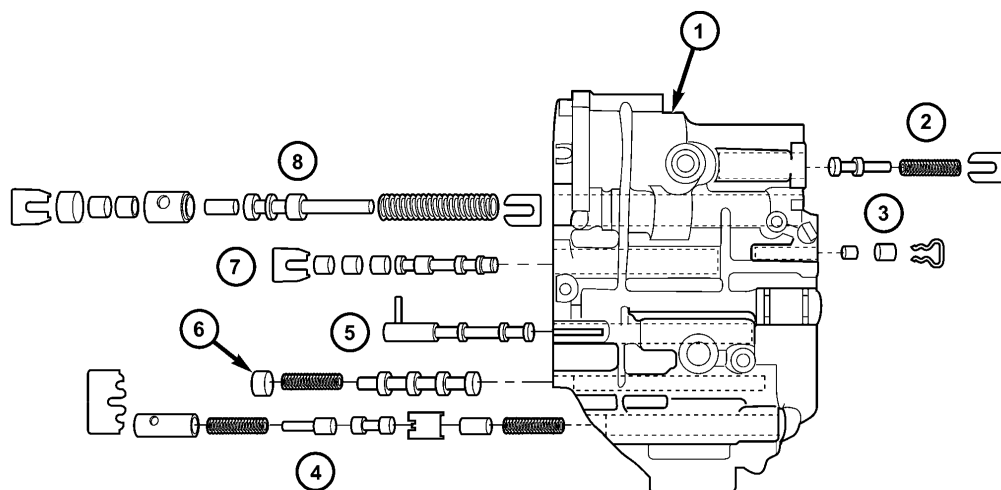
80c07330

Fig. 302 Valve Retainer Location

1 - RETAINER

2 - RETAINER

16. Remove remaining retainers as shown in (Fig. 302).



80865/21

Fig. 303 Valve Body Assembly

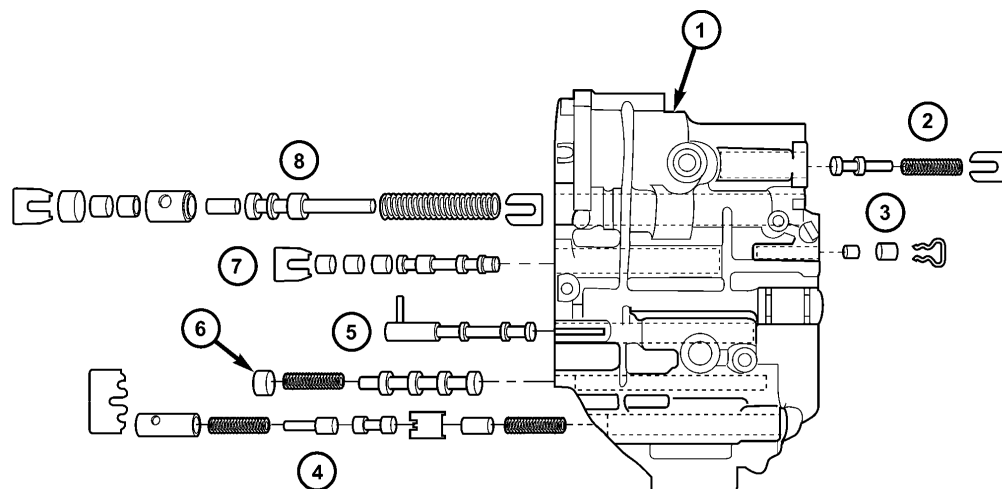
- | | |
|------------------------------------|-----------------------------------|
| 1 - VALVE BODY | 5 - MANUAL VALVE |
| 2 - T/C REGULATOR VALVE | 6 - CONVERTER CLUTCH SWITCH VALVE |
| 3 - L/R SWITCH VALVE | 7 - SOLENOID SWITCH VALVE |
| 4 - CONVERTER CLUTCH CONTROL VALVE | 8 - REGULATOR VALVE |

17. Remove valves and springs as shown in (Fig. 303).

18. Cleanliness through entire disassembly and assembly of the valve body cannot be overemphasized. When disassembling, each part should be washed in a suitable solvent, then dried by compressed air. Do not wipe parts with shop towels. All mating surfaces in the valve body are accurately machined; therefore, careful handling of all parts must be exercised to avoid nicks or burrs.

ASSEMBLY

NOTE: If the valve body assembly is being reconditioned or replaced, it is necessary to perform the Quick Learn Procedure using the DRB III Scan Tool.

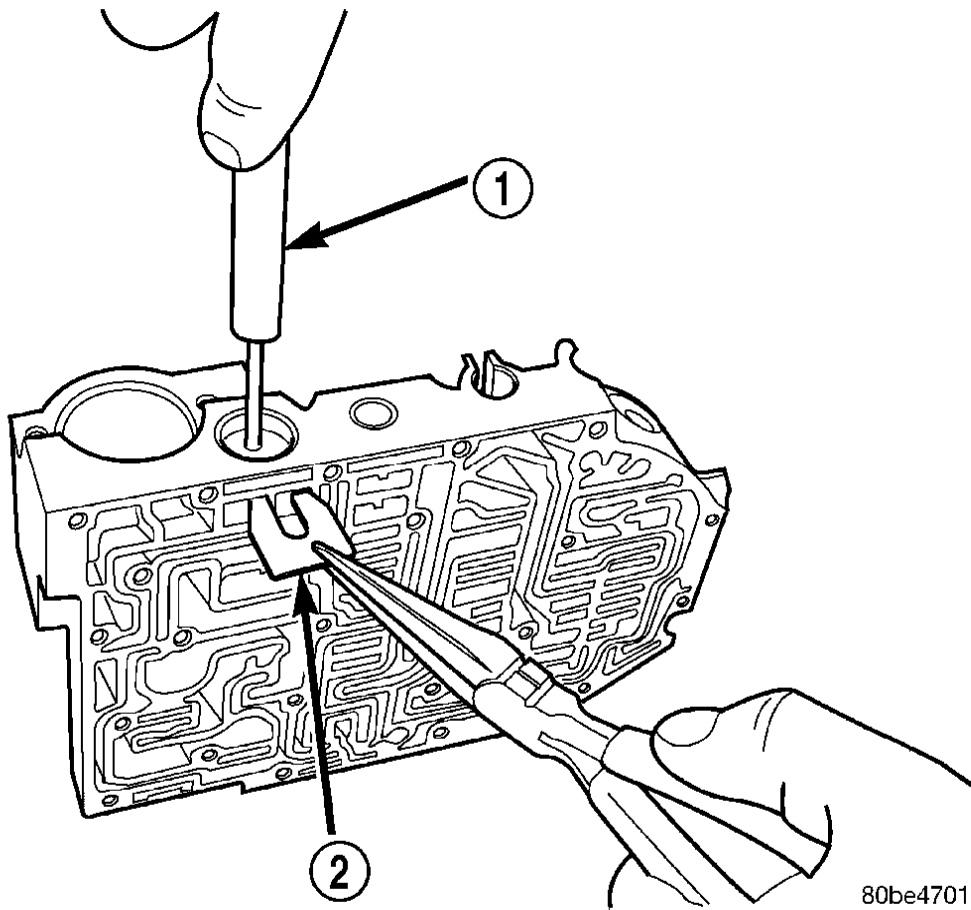


80865f21

Fig. 304 Valve Body Assembly

- | | |
|------------------------------------|-----------------------------------|
| 1 - VALVE BODY | 5 - MANUAL VALVE |
| 2 - T/C REGULATOR VALVE | 6 - CONVERTER CLUTCH SWITCH VALVE |
| 3 - L/R SWITCH VALVE | 7 - SOLENOID SWITCH VALVE |
| 4 - CONVERTER CLUTCH CONTROL VALVE | 8 - REGULATOR VALVE |

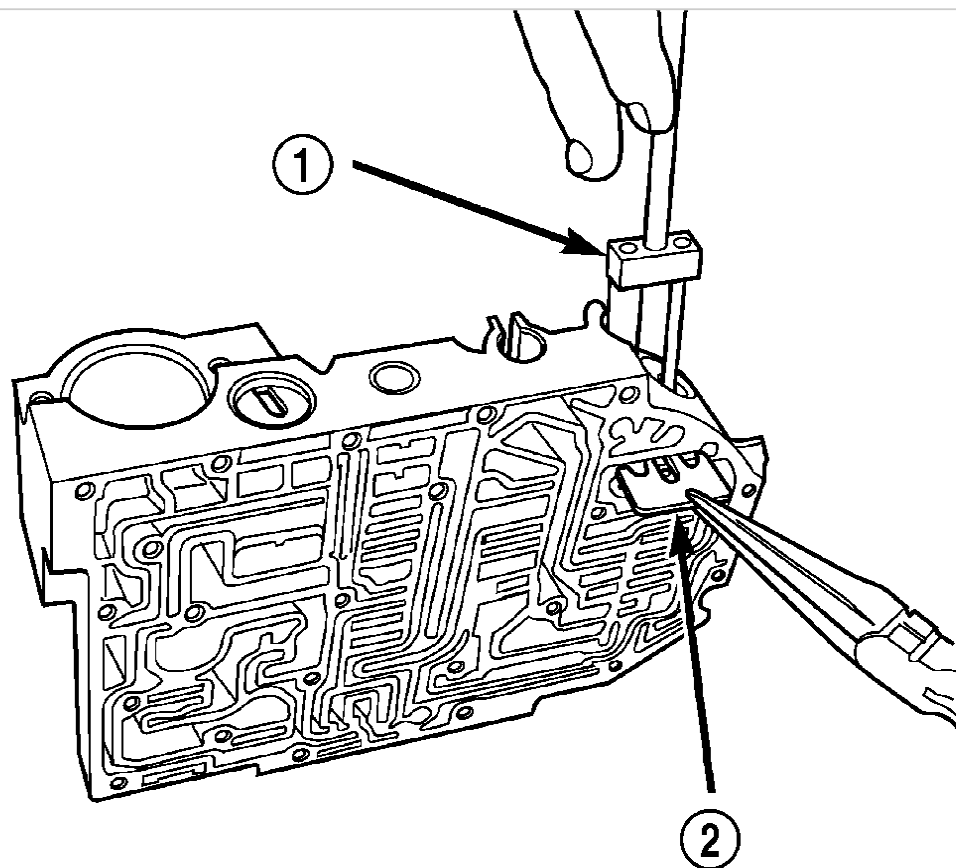
1. Install valves and springs as shown in (Fig. 304).



***Fig. 305 Install Regulator Valve Spring Retainer
using Tool 6302***

- 1 - TOOL 6302
- 2 - RETAINER

2. Install regulator valve spring retainer (Fig. 305).



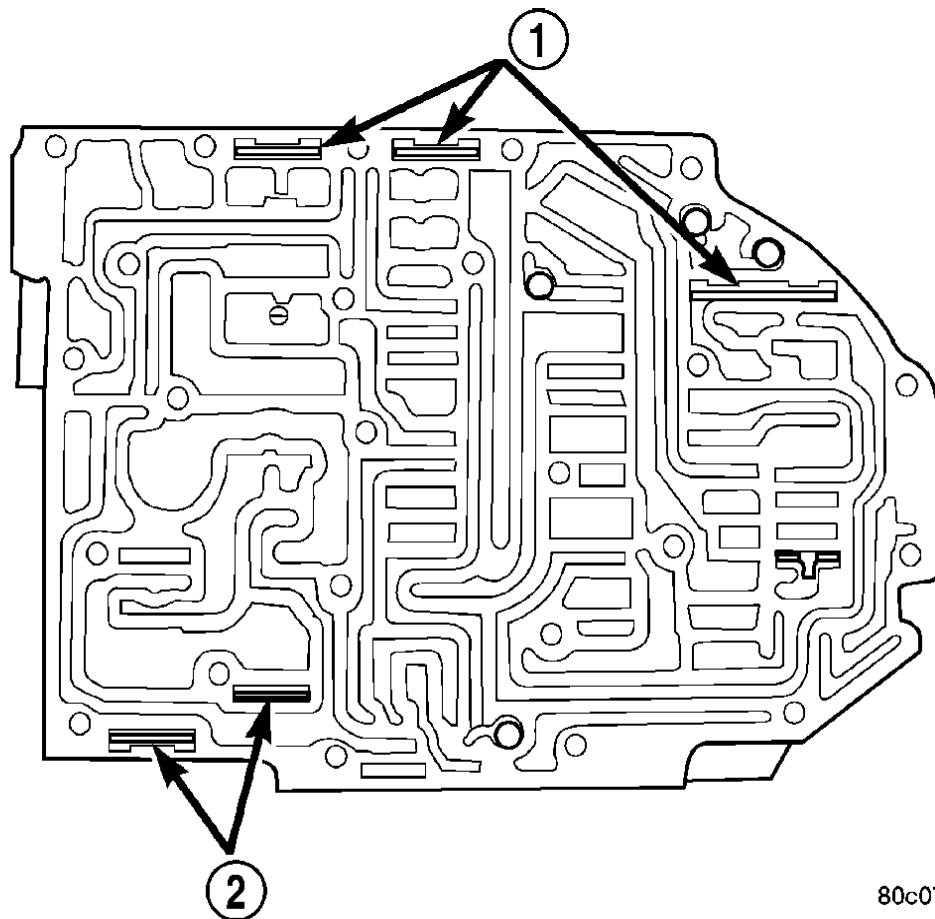
80be4700

Fig. 306 Install Dual Retainer Plate using Tool 6301

1 - TOOL 6301

2 - RETAINER

3. Install dual retainer plate using Tool 6301 (Fig. 306).



80c07330

Fig. 307 Valve Retainer Location

1 - RETAINER

2 - RETAINER

4. Verify that all retainers are installed as shown in (Fig. 307). Retainers should be flush or below valve body surface.

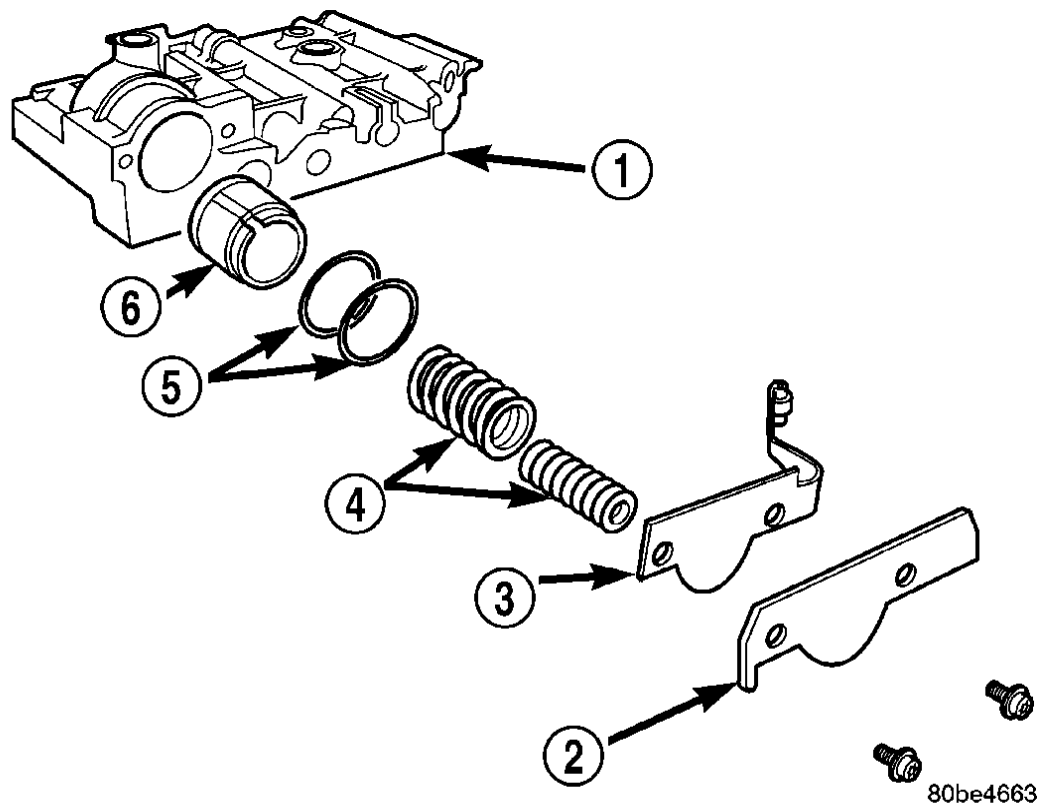
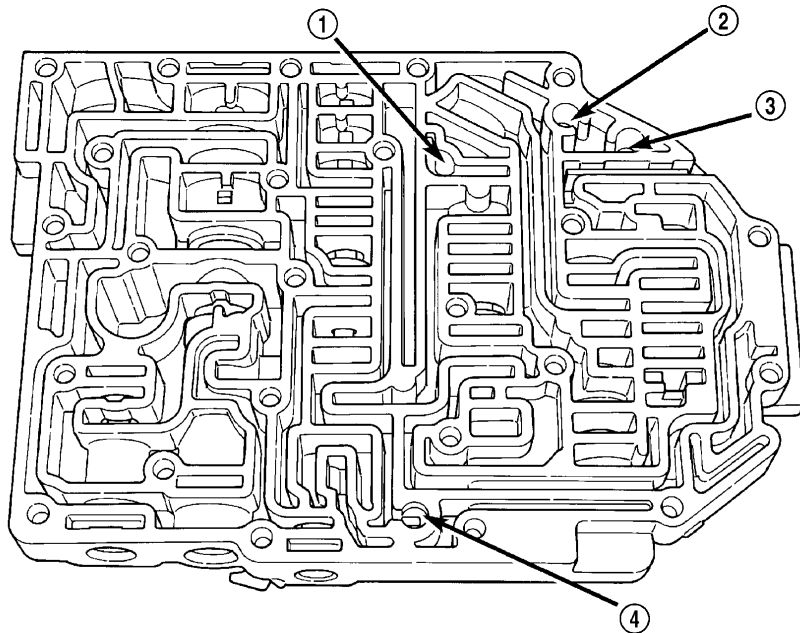


Fig. 308 2/4 Accumulator Assembly

- 1 - VALVE BODY
- 2 - RETAINER PLATE
- 3 - DETENT SPRING
- 4 - SPRINGS
- 5 - SEALS
- 6 - PISTON

5. Install 2/4 Accumulator components as shown in (Fig. 308). Torque 2/4 Accumulator retainer plate to **5 Nm (45 in. lbs.)**.



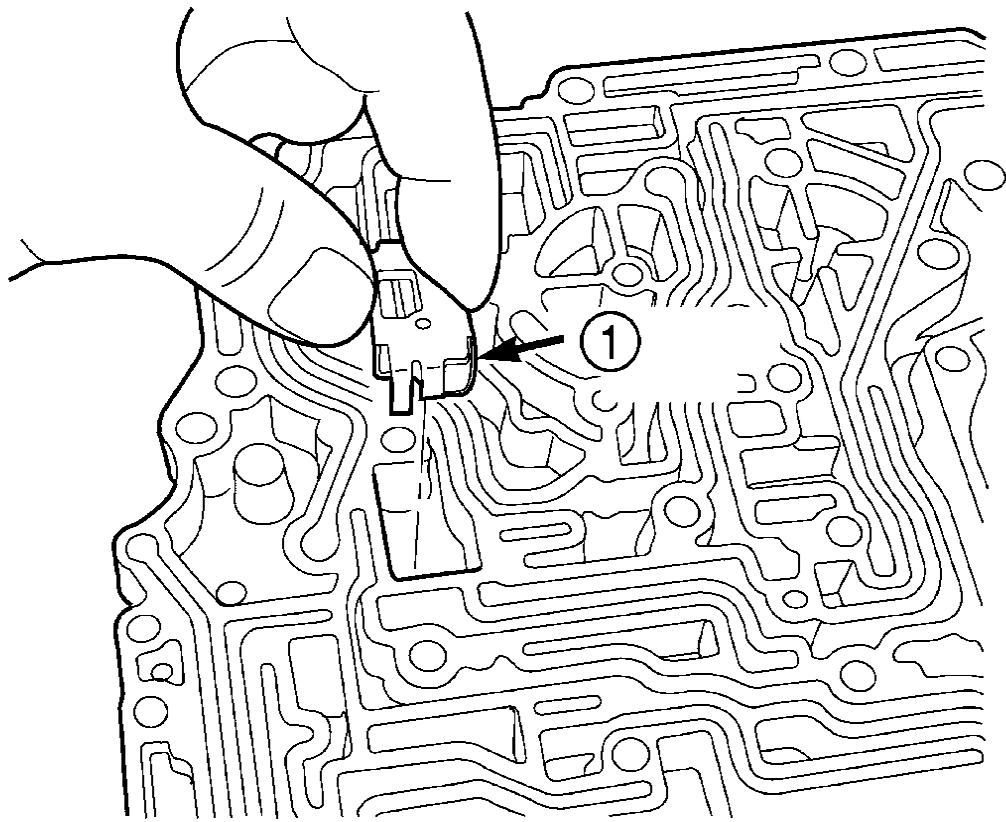
80c07030

Fig. 309 Ball Check Location

1 - (#4) BALL CHECK LOCATION
2 - (#2) BALL CHECK LOCATION

3 - (#5) BALL CHECK LOCATION
4 - (#3) BALL CHECK LOCATION

6. Install check balls into position as shown in (Fig. 309). If necessary, secure them with petrolatum or transmission assembly gel for assembly ease.



80c07338

Fig. 310 Install Thermal Valve to Transfer Plate

1 - THERMAL VALVE

7. Install thermal valve to the transfer plate (Fig. 310).

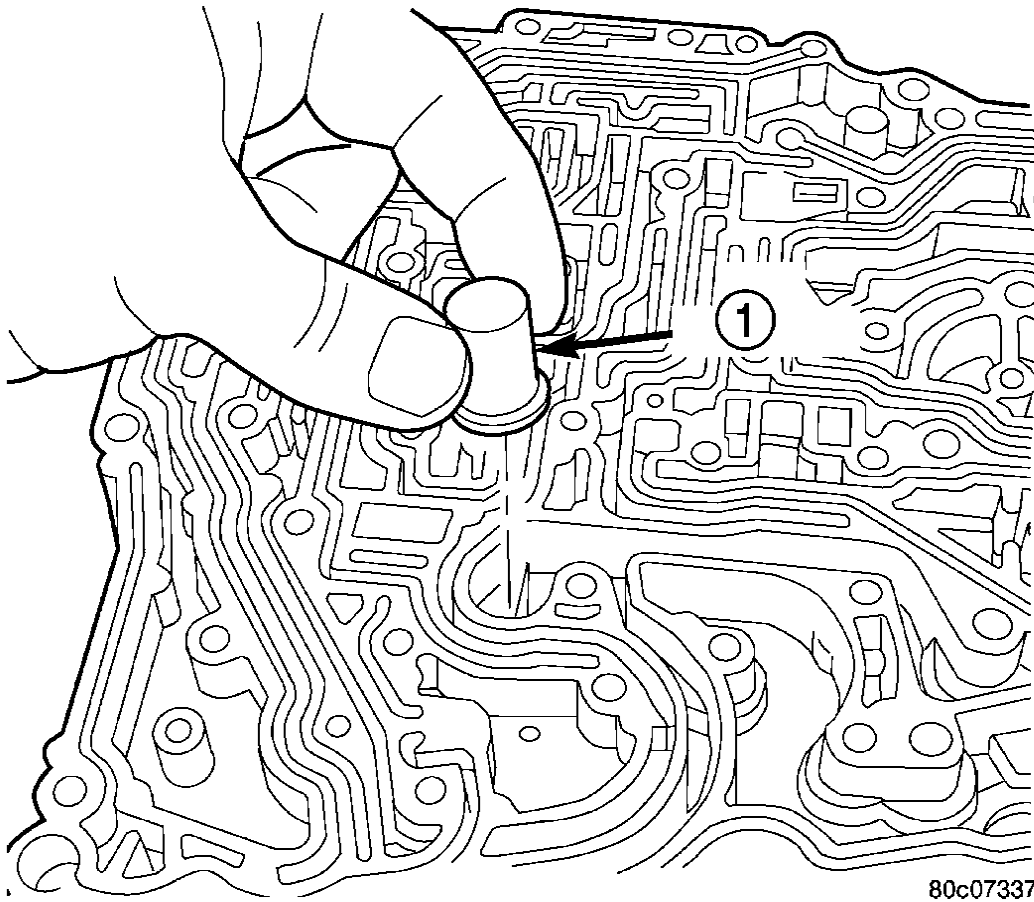
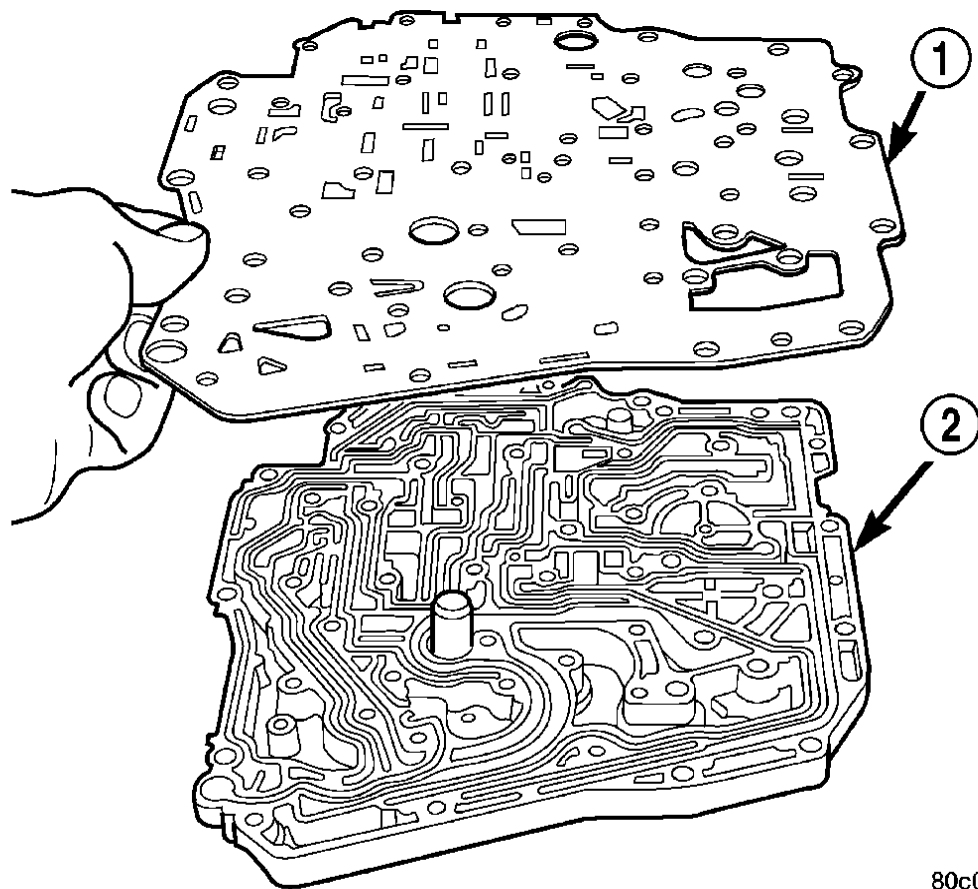


Fig. 311 Install Oil Screen to Transfer Plate

1 - OIL SCREEN

8. Install the oil screen to the transfer plate (Fig. 311).

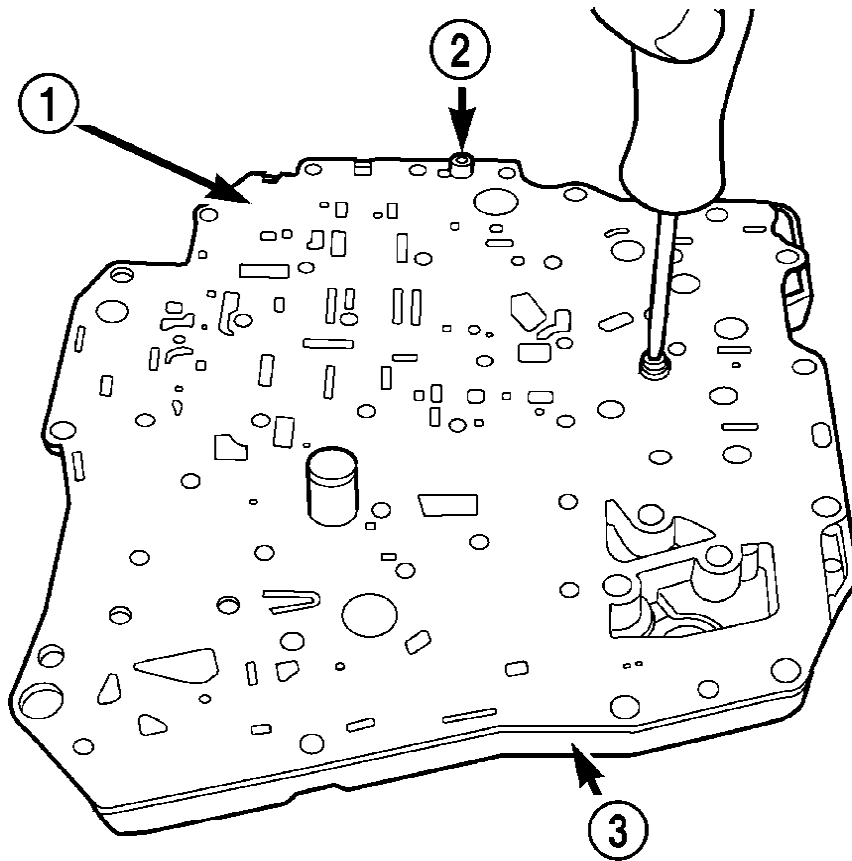


80c07339

Fig. 312 Install Separator Plate to Transfer Plate

- 1 - SEPARATOR PLATE
- 2 - TRANSFER PLATE

9. Install separator plate to transfer plate (Fig. 312).



80c07336

**Fig. 313 Install Separator Plate-to-Transfer Plate
Screws**

- 1 - SEPARATOR PLATE
- 2 - SCREW (2)
- 3 - TRANSFER PLATE

10. Install the two separator plate-to-transfer plate screws (Fig. 313).

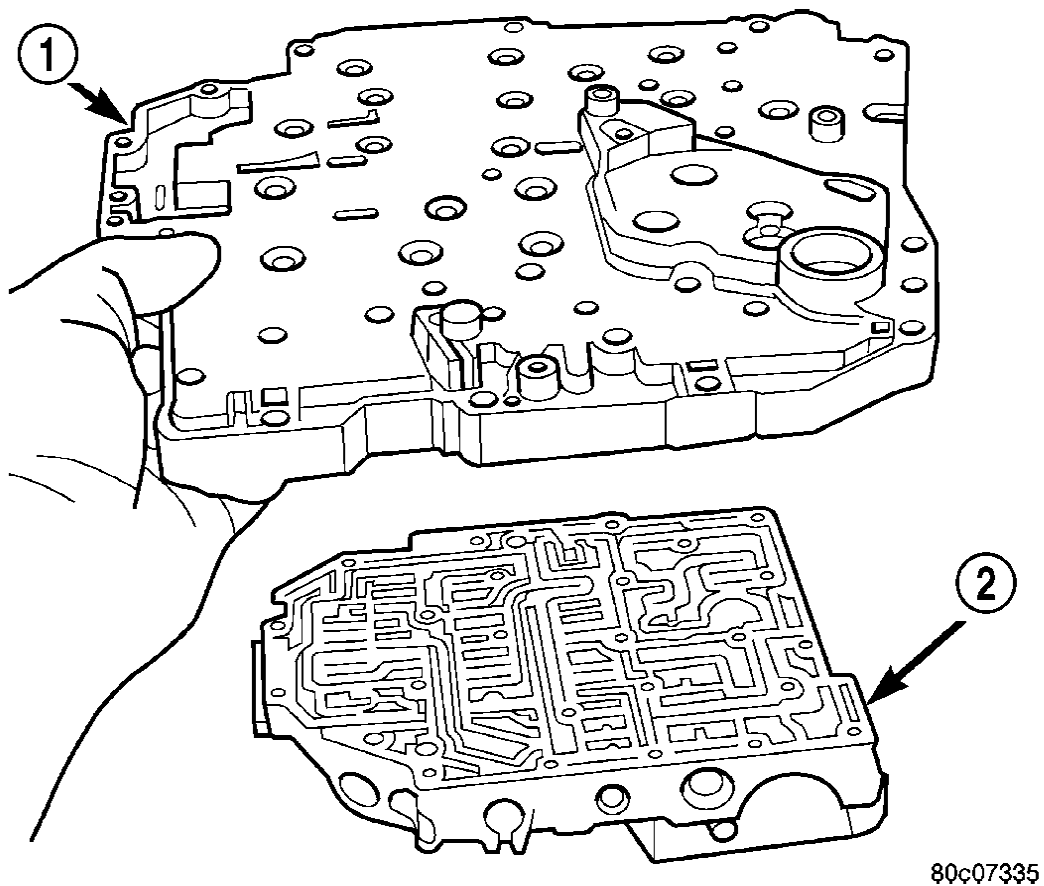
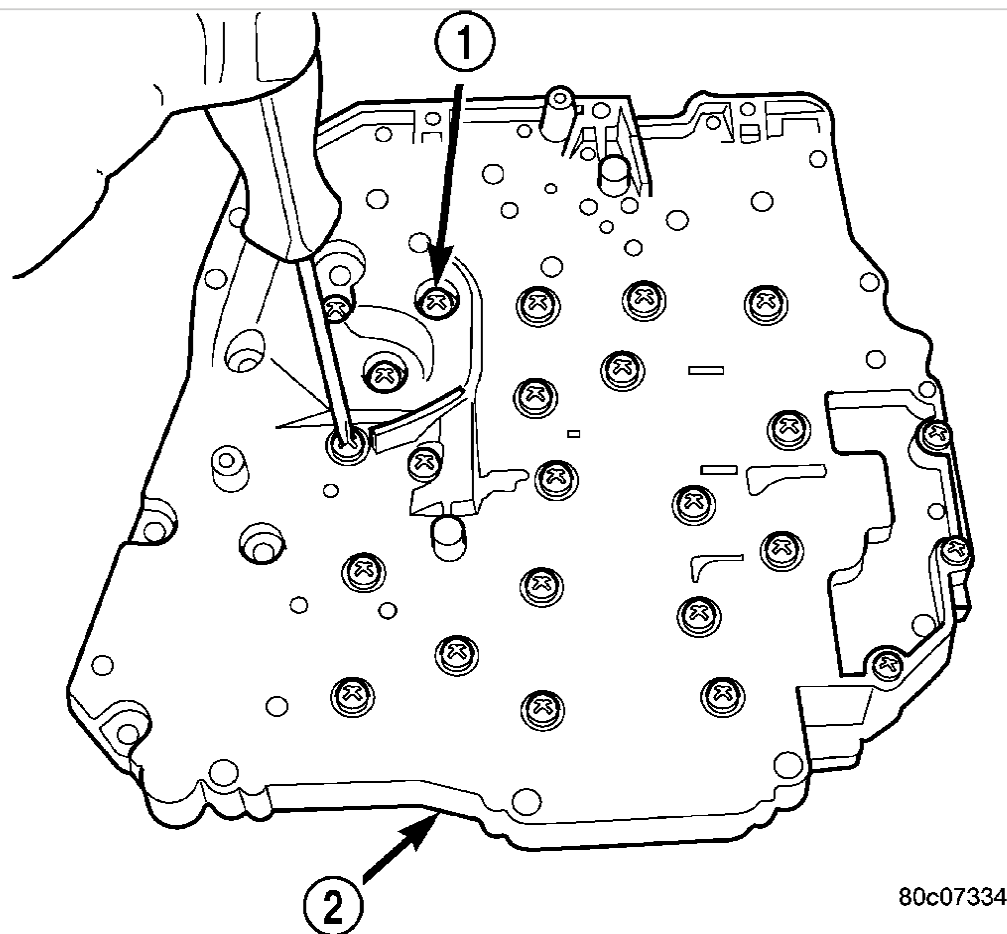


Fig. 314 Install Transfer Plate to Valve Body

- 1 - TRANSFER PLATE
- 2 - VALVE BODY

11. Install the transfer plate to the valve body (Fig. 314).



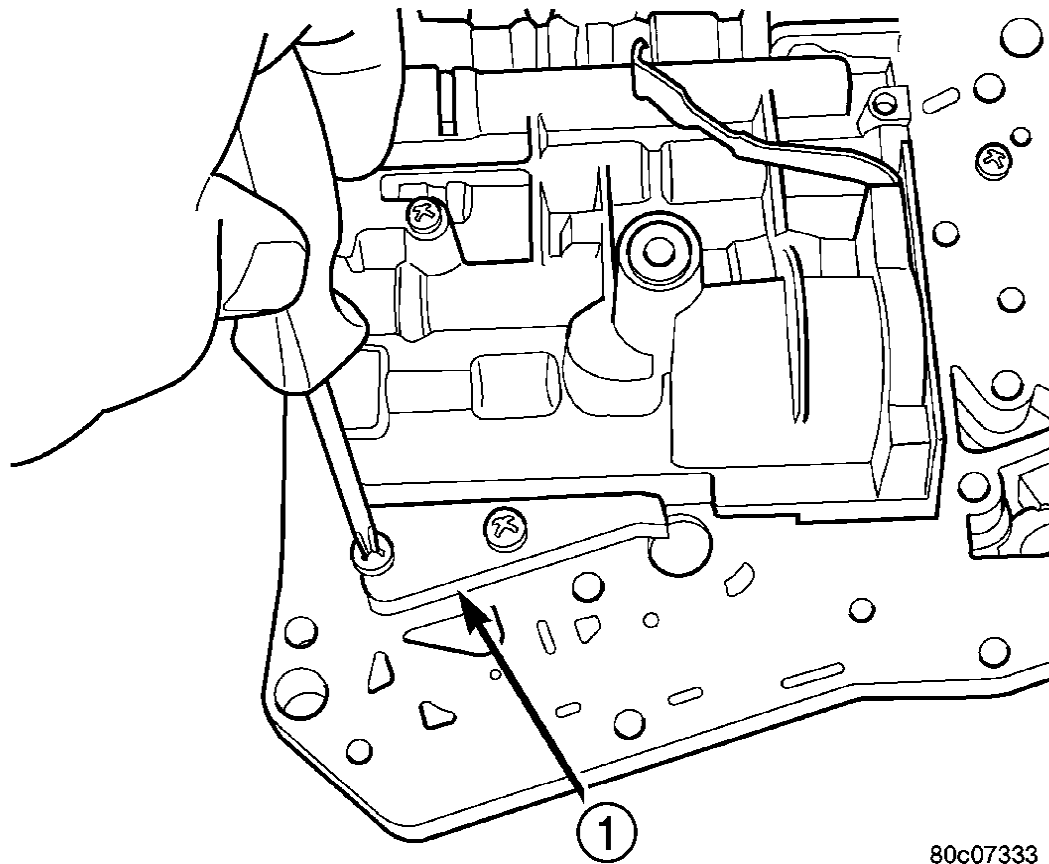
80c07334

Fig. 315 Install Transfer Plate-to-Valve Body Screws

1 - SCREW (24)

2 - TRANSFER PLATE

12. Install the transfer plate-to-valve body screws (Fig. 315) and torque to **5 Nm (45 in. lbs.)**.

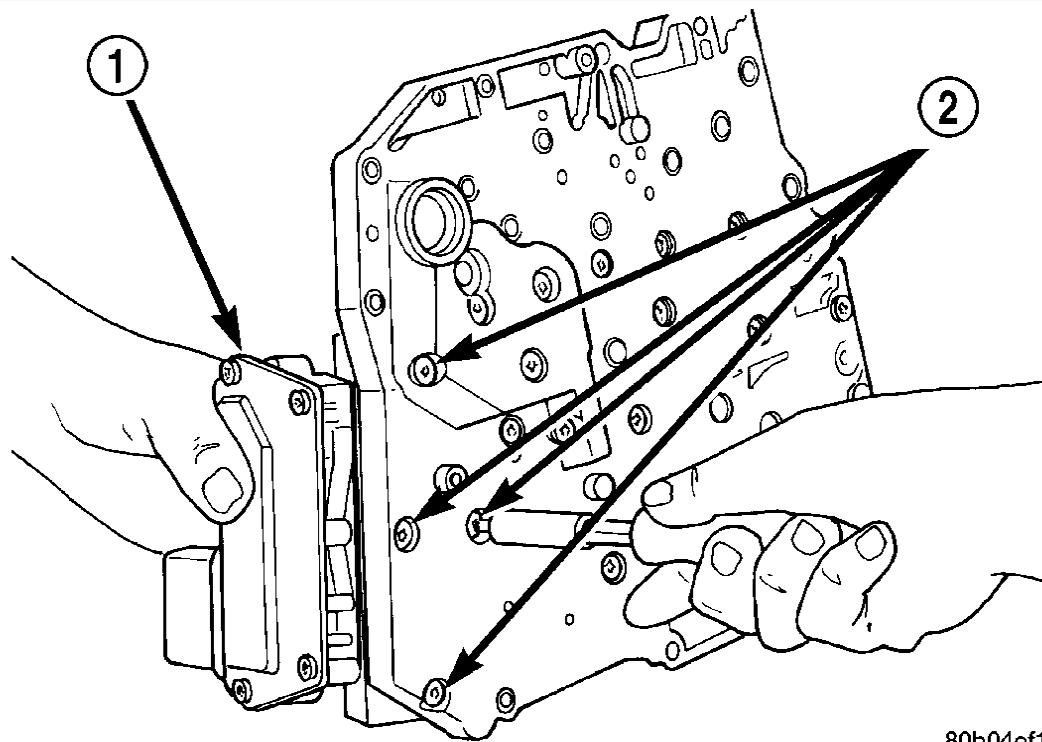


80c07333

Fig. 316 Install Stiffener Plate

1 - STIFFENER PLATE

13. Install the stiffener plate (Fig. 316).

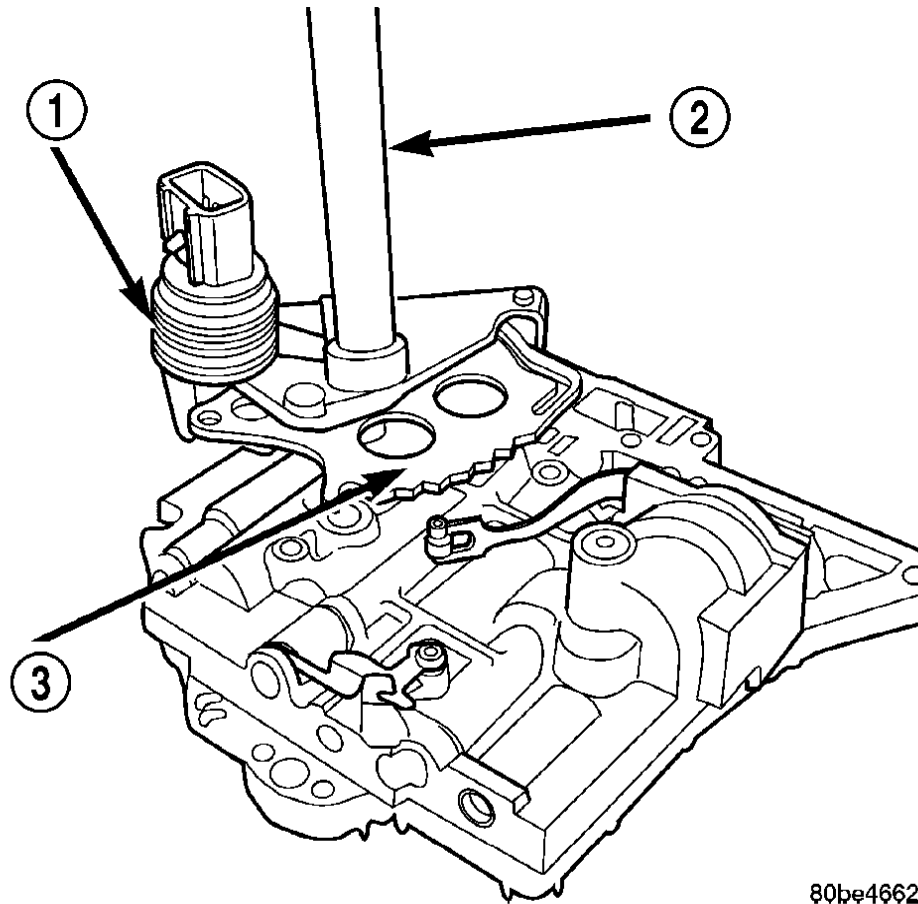


80b04ef1

Fig. 317 Solenoid Retaining Screws

- 1 - SOLENOID/PRESSURE SWITCH ASSEMBLY
- 2 - RETAINING SCREWS

14. Install the solenoid/pressure switch assembly and to the transfer plate (Fig. 317) and torque to **5.5 Nm (50 in. lbs.)**.



80be4662

***Fig. 318 Manual Shaft/Rooster Comb and
Transmission Range Sensor***

- 1 - TRANSMISSION RANGE SENSOR
- 2 - MANUAL SHAFT
- 3 - ROOSTER COMB

15. Install the manual shaft/rooster comb and transmission range sensor to the valve body (Fig. 318).

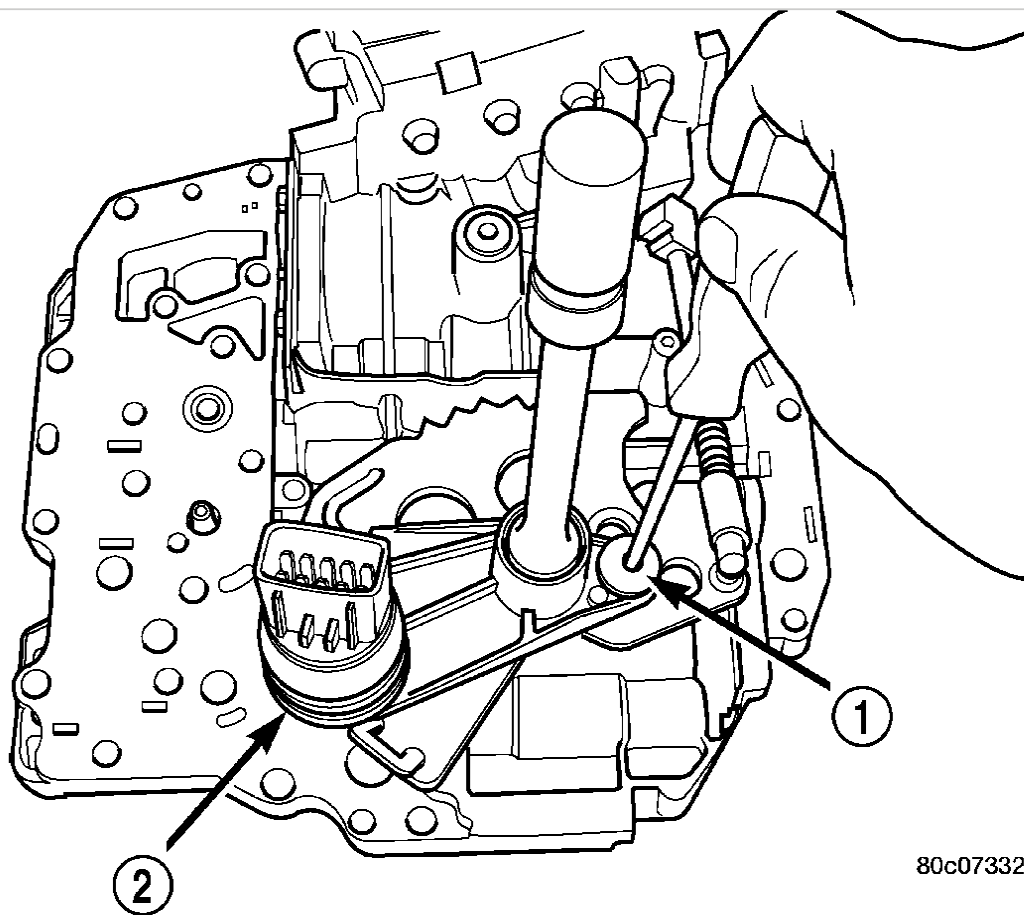


Fig. 319 Manual Shaft Retaining Screw

- 1 - SCREW
- 2 - TRS

- 16. Install the TRS/manual shaft retaining screw (Fig. 319) and torque to **5 Nm (45 in. lbs.)**.
- 17. Install manual shaft seal.

INSTALLATION

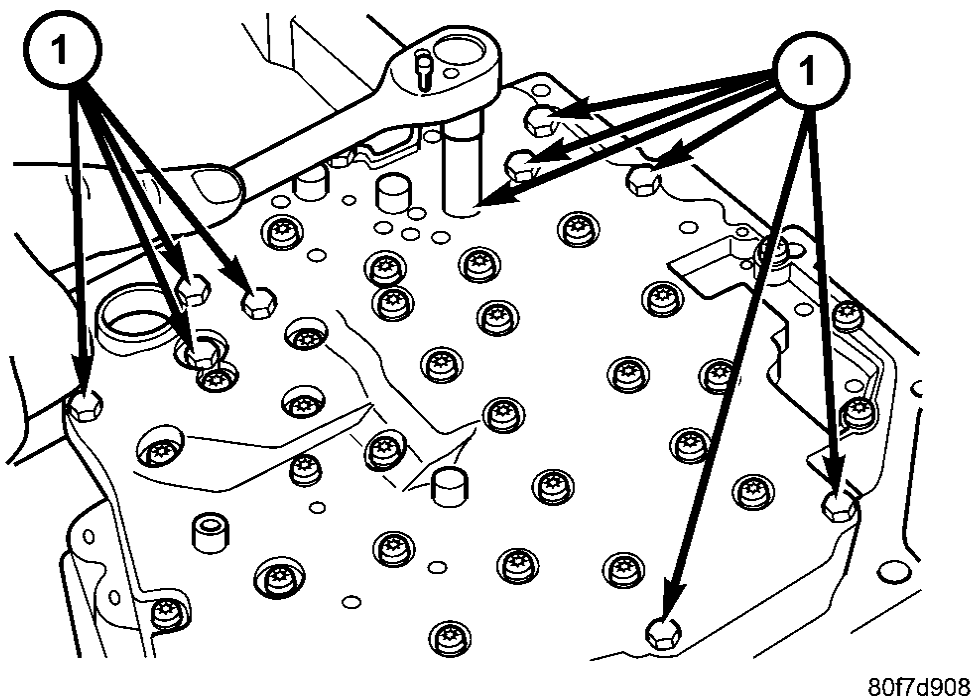
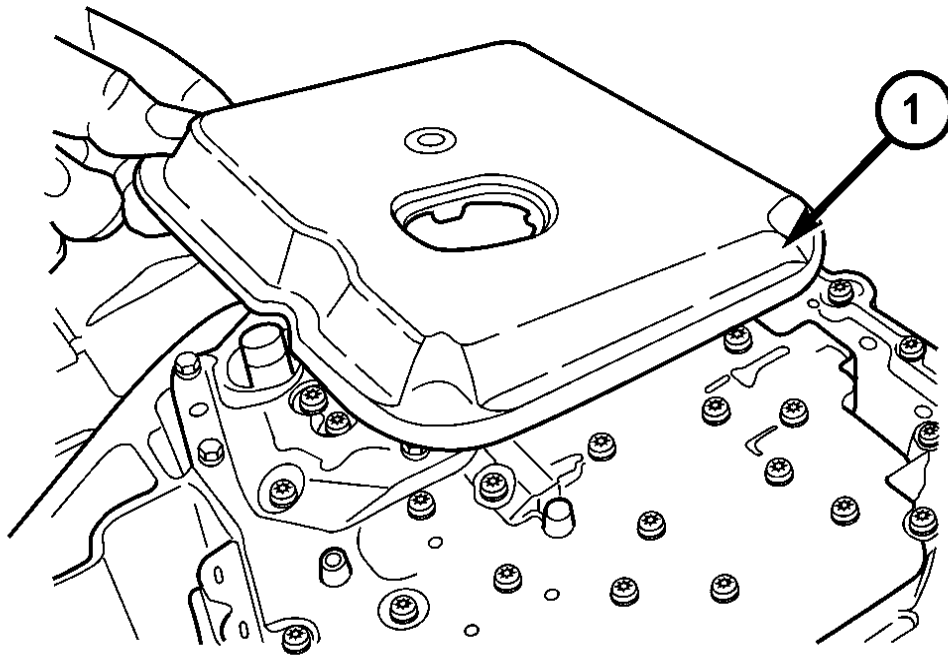


Fig. 320 Install Valve Body Bolts

1 - BOLTS

1. Install valve body into position and start bolts. Torque valve body to transmission case bolts (Fig. 320) to **12 Nm (105 in. lbs.)** torque.

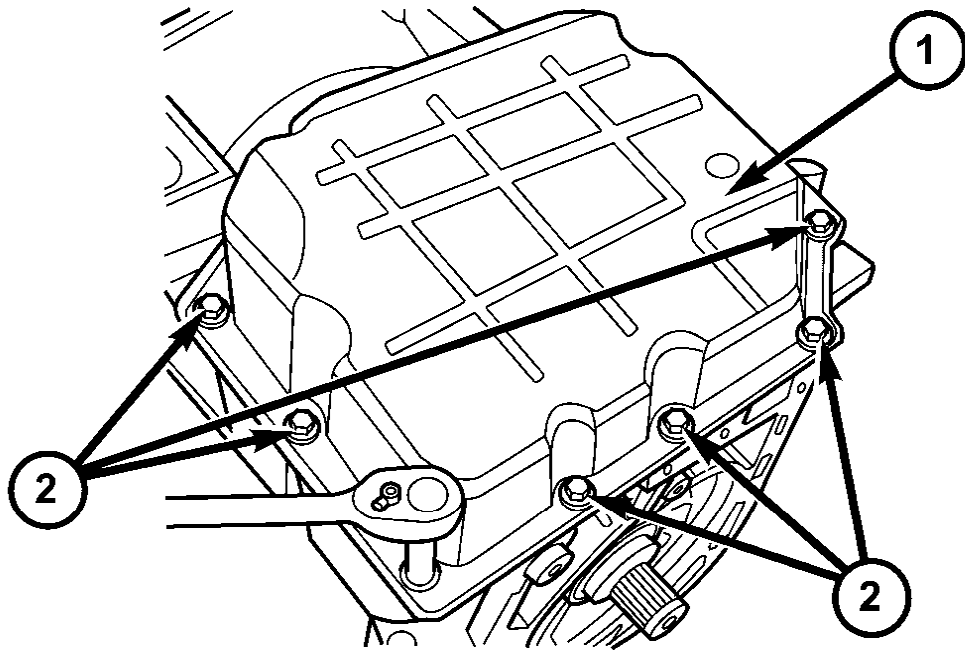


80f7d8c8

Fig. 321 Install Transmission Filter

1 - TRANSMISSION FILTER

2. Install transmission oil filter (Fig. 321).



80f8afb3

Fig. 322 Install Transmission Oil Pan Bolts

- 1 - TRANSMISSION OIL PAN
- 2 - BOLTS

3. Make sure oil pan and case rail are clean and dry. Install an 1/8" bead of RTV to the transmission oil pan and install to case. Tighten bolts (Fig. 322) to **20 Nm (14.5 ft. lbs.)**.
4. Lower vehicle and connect the TRS connector.
5. Connect solenoid/pressure switch assembly connector.
6. Lower vehicle.
7. Fill transmission with ATF +4, Automatic Transmission Fluid. Verify proper fluid level.

NOTE: If the valve body has been reconditioned or replaced, it is necessary to perform the Quick Learn Procedure.