

AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])

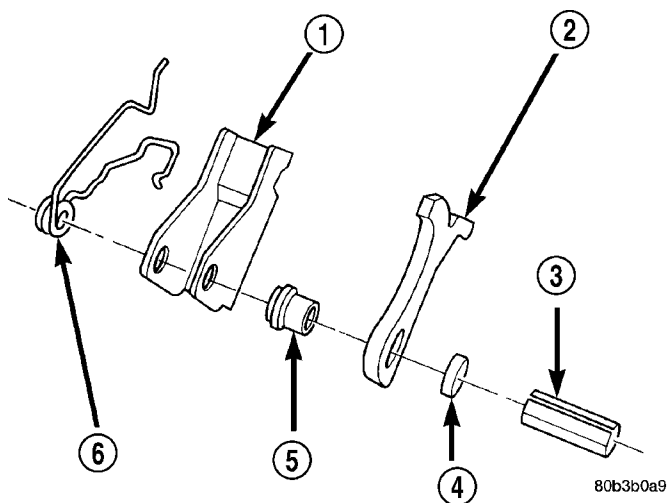


Fig. 77 Guide Bracket Disassembled

- 1 - GUIDE BRACKET
- 2 - PAWL
- 3 - SPLIT SLEEVE
- 4 - SPACER
- 5 - STEPPED SPACER
- 6 - ANTIRATCHET SPRING

(54) Remove the low/reverse clutch piston (Fig. 78).

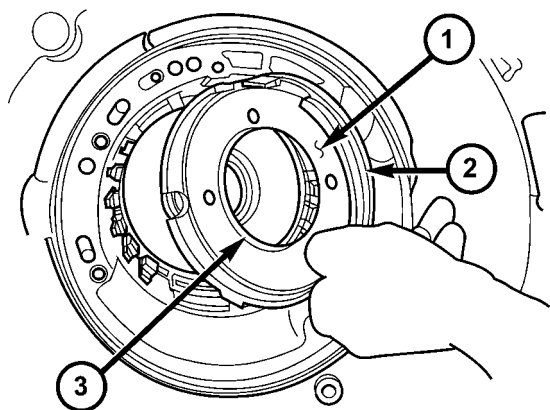


Fig. 78 Remove Low/Reverse Clutch Piston

- 1 - LOW/REVERSE CLUTCH PISTON
- 2 - D-RING SEAL
- 3 - D-RING SEAL

(55) Remove the low/reverse piston retainer screws.

(56) Remove low/reverse piston retainer (Fig. 79).

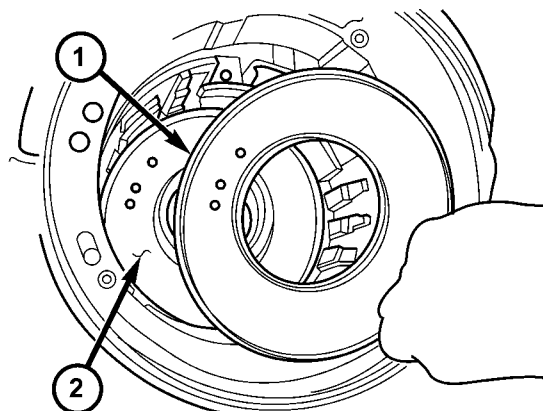


Fig. 79 Remove Piston Retainer

- 1 - LOW/REVERSE CLUTCH PISTON RETAINER
- 2 - GASKET

(57) Remove the low/reverse piston retainer gasket (Fig. 80).

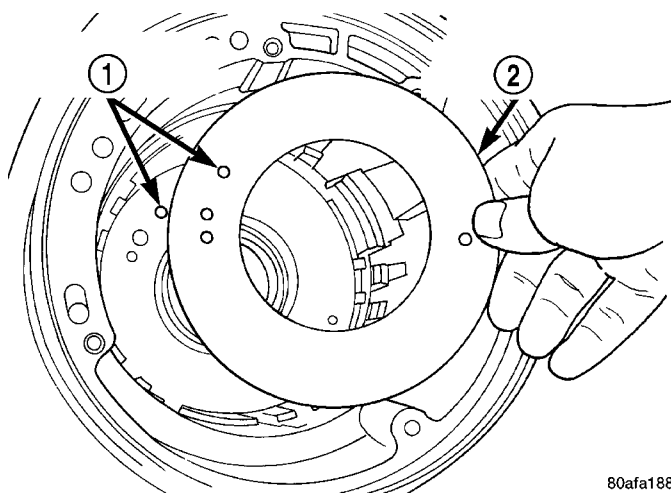


Fig. 80 Remove Piston Retainer Gasket

- 1 - GASKET HOLES MUST LINE UP
- 2 - LOW/REVERSE CLUTCH PISTON RETAINER GASKET

AUTOMATIC TRANSMISSION - 42RLE (C**ASSEMBLY**

NOTE: If the transmission assembly is being reconditioned (clutch/seal replacement) or replaced, it is necessary to perform the Quick Learn Procedure using the DRBIII® Scan Tool (Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/TRANSMISSION CONTROL MODULE - STANDARD PROCEDURE).

(1) Install the output bearing cups using Special Tool - 5050A (Fig. 81).

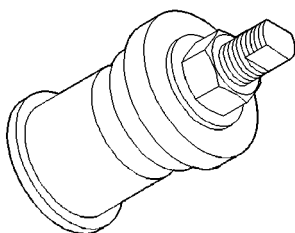
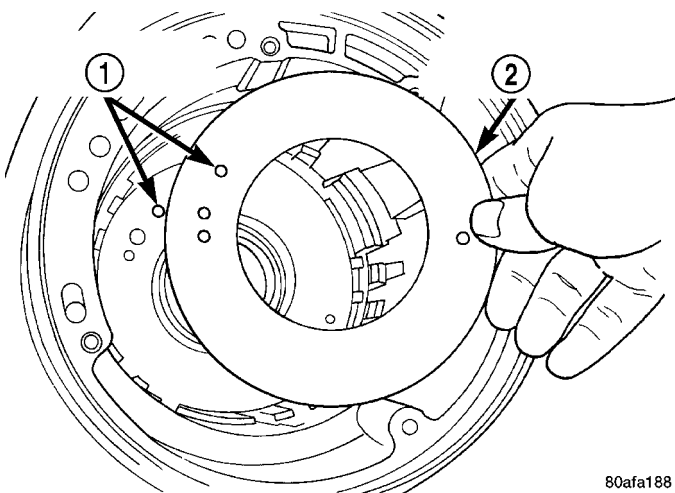


Fig. 81 Bearing Cup Installation Special Tool - 5050A

(2) Install low/reverse piston retainer gasket (Fig. 82).

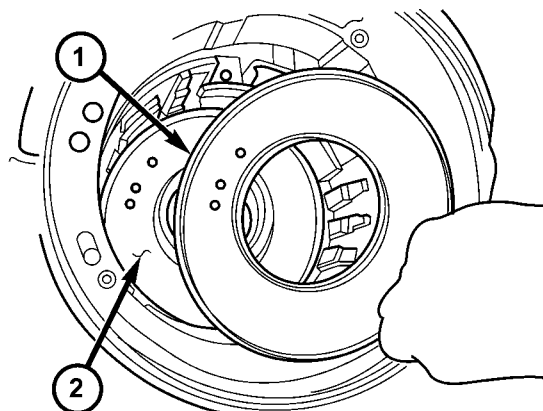


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Fig. 82 Install Piston Retainer Gasket

- 1 - GASKET HOLES MUST LINE UP
- 2 - LOW/REVERSE CLUTCH PISTON RETAINER GASKET

(3) Install low/reverse piston retainer (Fig. 83).

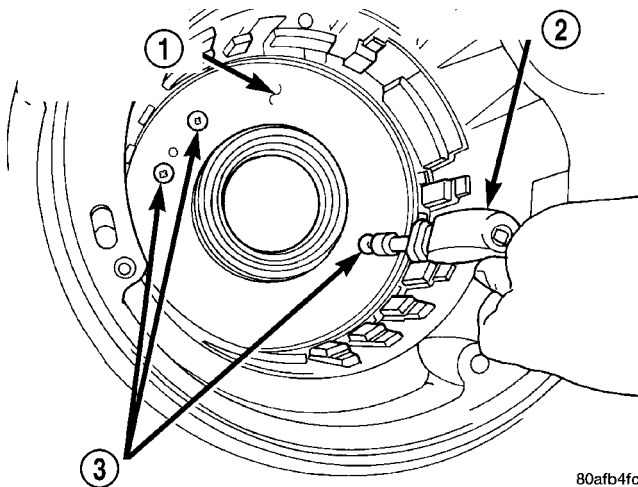


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Fig. 83 Install Piston Retainer

- 1 - LOW/REVERSE CLUTCH PISTON RETAINER
- 2 - GASKET

(4) Install low/reverse piston retainer-to-case screws (Fig. 84) and torque to 5 N·m (45 in. lbs.).



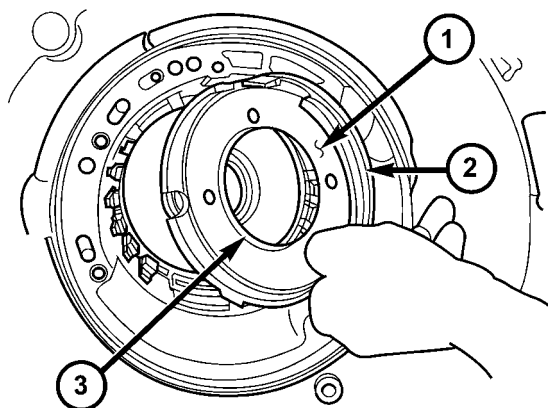
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Fig. 84 Install Retainer Attaching Screws

- 1 - LOW/REVERSE CLUTCH PISTON RETAINER
- 2 - SCREWDRIVER
- 3 - TORX-LOC SCREWS

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(5) Install low/reverse clutch piston (Fig. 85).

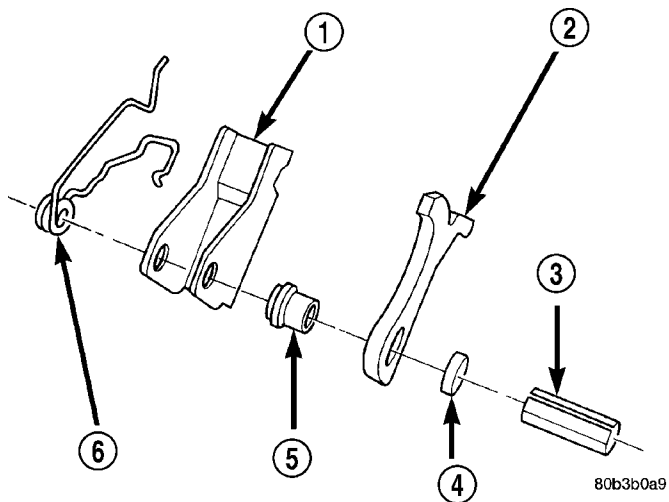


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Fig. 85 Install Low/Reverse Clutch Piston

- 1 - LOW/REVERSE CLUTCH PISTON
- 2 - D-RING SEAL
- 3 - D-RING SEAL

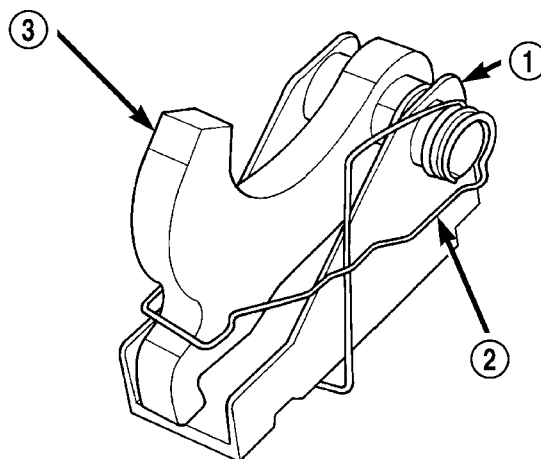
(6) Assemble guide bracket assembly as shown in (Fig. 86) (Fig. 87).



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Fig. 86 Guide Bracket Assembly

- 1 - GUIDE BRACKET
- 2 - PAWL
- 3 - SPLIT SLEEVE
- 4 - SPACER
- 5 - STEPPED SPACER
- 6 - ANTIRATCHET SPRING

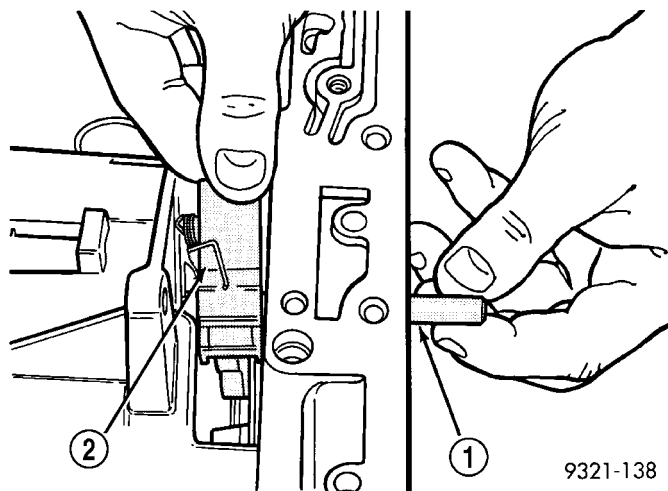


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Fig. 87 Guide Bracket

- 1 - GUIDE BRACKET
- 2 - ANTIRATCHET SPRING (MUST BE ASSEMBLED AS SHOWN)
- 3 - PAWL

(7) Install guide bracket pivot shaft (Fig. 88).



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Fig. 88 Install Guide Bracket Pivot Shaft

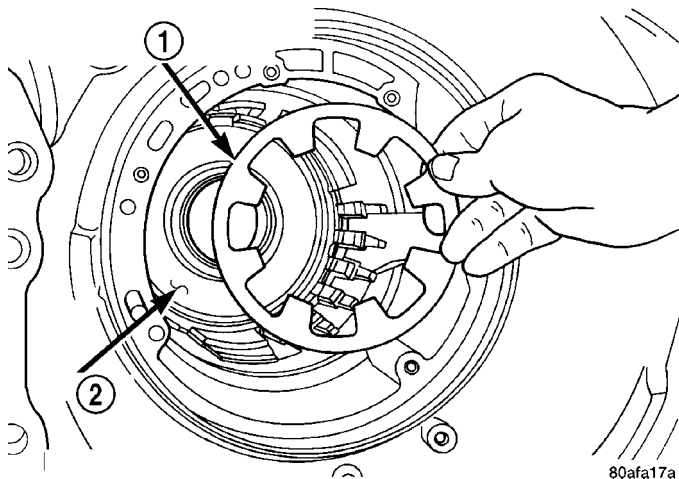
- 1 - PIVOT PIN
- 2 - GUIDE BRACKET ASSEMBLY

CAUTION: When installing, be sure guide bracket and split sleeve touch the rear of the transmission case.

(8) Install park sprag pivot retaining screw and torque to 4.5 N·m (40 in. lbs.).

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(9) Install low/reverse piston belleville spring into position (Fig. 89).

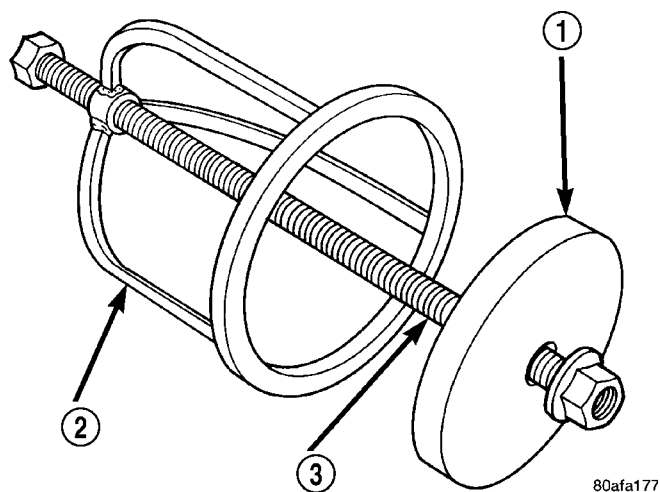


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Fig. 89 Install Low/Reverse Piston Return Spring

- 1 - LOW/REVERSE PISTON RETURN SPRING
- 2 - PISTON

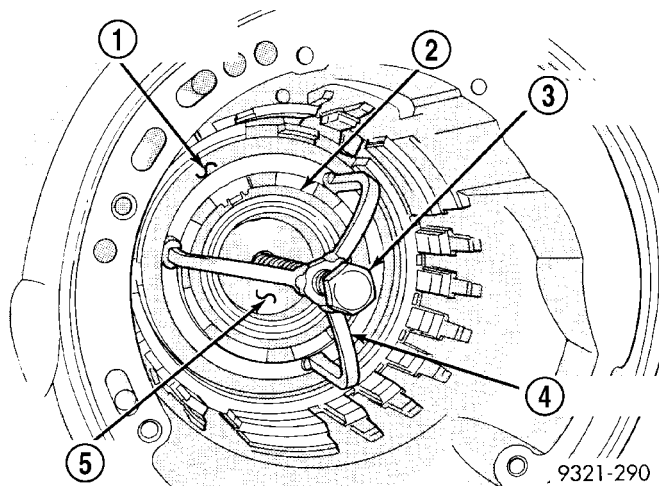
(10) Install and load low/reverse spring compressor tool as shown in (Fig. 90) (Fig. 91) to facilitate snap ring installation.



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Fig. 90 Low/Reverse Spring Compressor Tool

- 1 - TOOL 6057
- 2 - TOOL 5059
- 3 - TOOL 5058-3

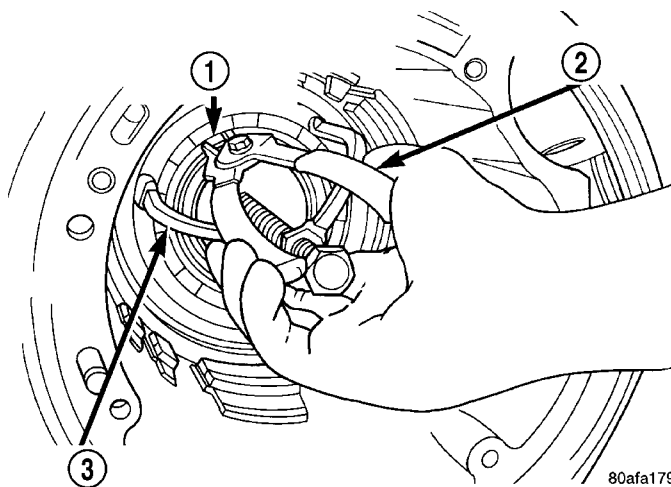


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Fig. 91 Compressor Tool in Use

- 1 - LOW/REVERSE CLUTCH RETURN SPRING
- 2 - SNAP RING (INSTALL AS SHOWN)
- 3 - TOOL 5058A-3
- 4 - TOOL 5059A
- 5 - SPECIAL TOOL 6057

(11) Install snap ring and remove compressor tool (Fig. 92).



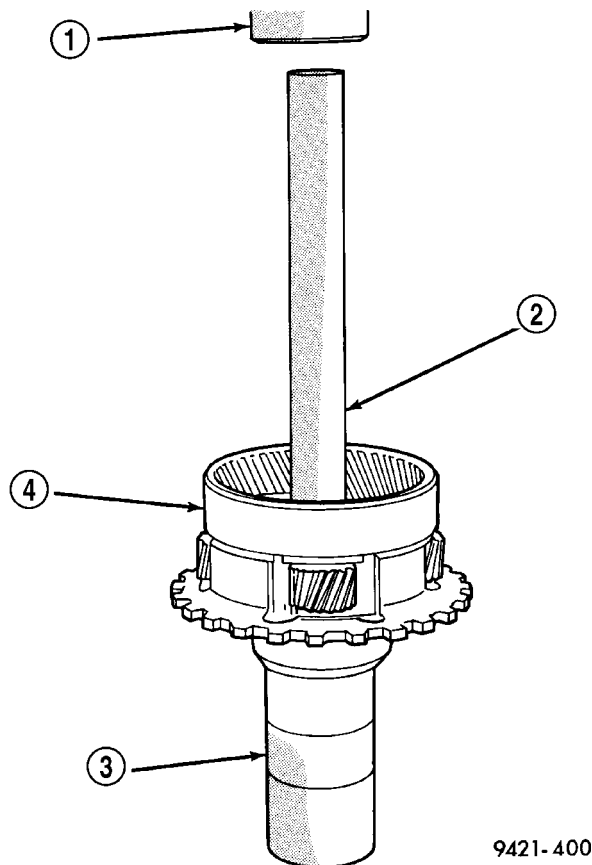
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Fig. 92 Install Snap Ring

- 1 - SNAP RING OPENING MUST BE BETWEEN SPRING LEVERS (AS SHOWN)
- 2 - SNAP RING PLIERS
- 3 - TOOL 6057

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(12) Install rear carrier front bearing cone (Fig. 93).



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Fig. 93 Install Rear Carrier Front Bearing Cone

- 1 - ARBOR PRESS
- 2 - SPECIAL TOOL C-4171
- 3 - SPECIAL TOOL 6052
- 4 - REAR CARRIER

(13) Check output bearing preload. **Output bearing preload must be checked and/or adjusted if any of the following items have been replaced:**

- Output shaft (rear carrier assembly)
- Output shaft bearings
- Transmission case

(a) **PRELOAD CHECK/SHIM SELECTION:** Install rear output shaft bearing cone and special tool 6618A (Fig. 94).

(b) Install special tool 6618A (Fig. 95). Lightly tighten retaining screws. Screws should be below the plate surface, but do not snug screws.

(c) Turn case over on arbor press so that the plate is resting on the press base. **CAUTION: The output shaft will extend through the hole of tool 6618A. Ensure your press table has clearance for the output shaft.**

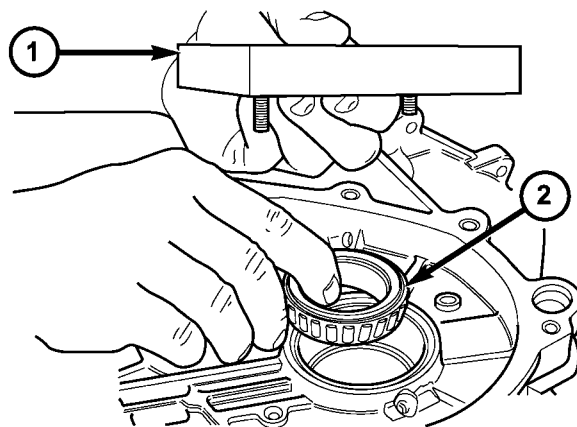
(d) Install shim on output shaft (Fig. 96). Apply small amount of petrolatum onto the shim to hold it in place. Use the original shim as a starting point. If original shim is not available, use the thickest shim available.

(e) Install output shaft/rear carrier into rear bearing. The shaft must be pressed into position. Use special tool MD-998911 (Disc) and C- 4171 and C4171-2 (Handle) to press shaft into rear bearing (Fig. 97).

(f) **Do not re-use old output shaft nut because the removed stake weakens the nut flange.** Using special tools 6497 and 6498-A, install new output shaft nut. Do not reuse old output shaft nut. Tighten new output shaft nut to 271 N·m (200 ft. lbs.).

(g) Check the turning torque of the output shaft (Fig. 98). The shaft should have 1 to 8 in. lbs. of turning torque. If the turning torque is **higher than 8 in. lbs.**, install a thicker shim. If turning torque is **less than 1 in. lb.**, install a thinner shim. Make sure there is no end play.

(h) The new nut must be staked after the correct turning torque is obtained (Fig. 99) (Fig. 100). Use special tool 6639 to stake output shaft nut. **CAUTION: Failure to stake nut could allow the nut to back-off during use.**

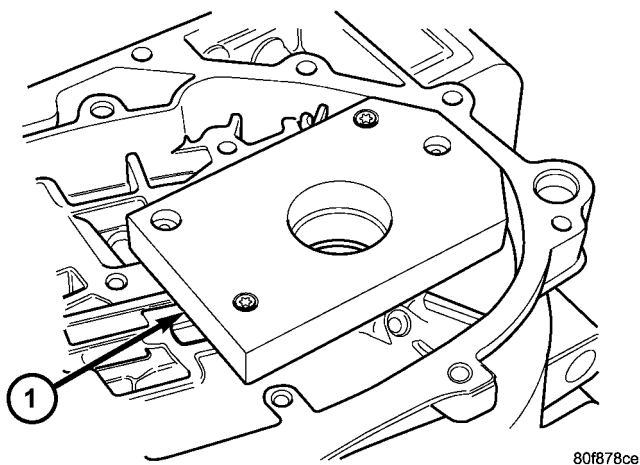


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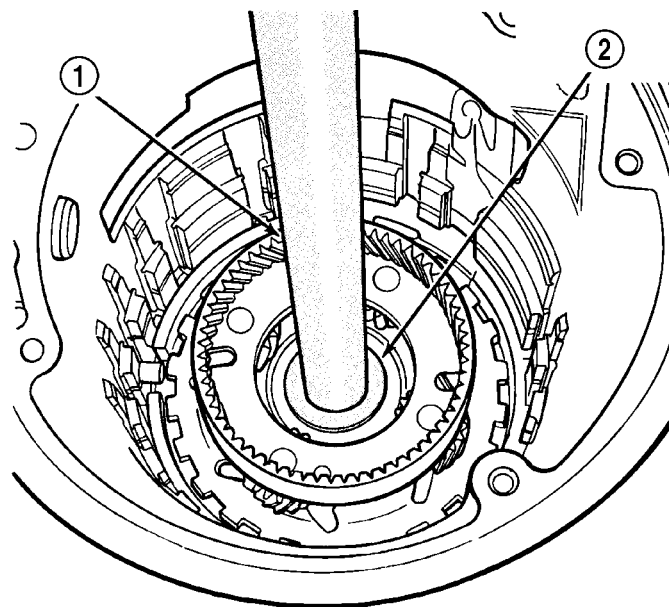
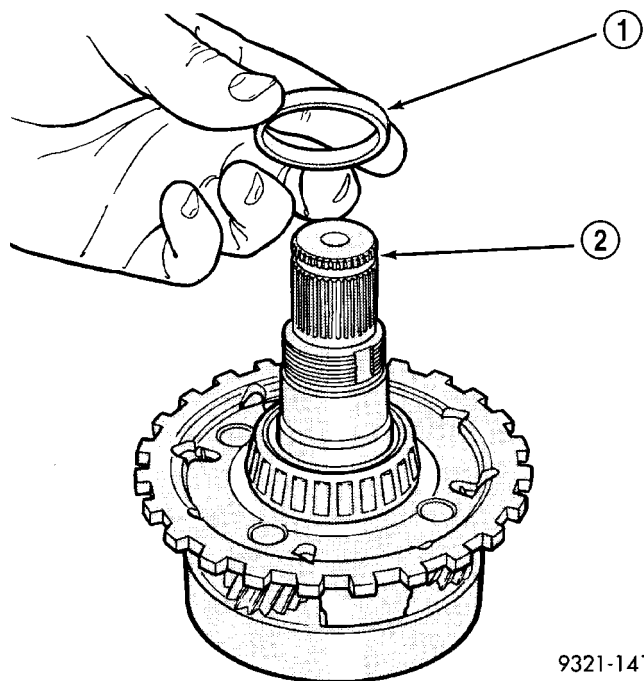
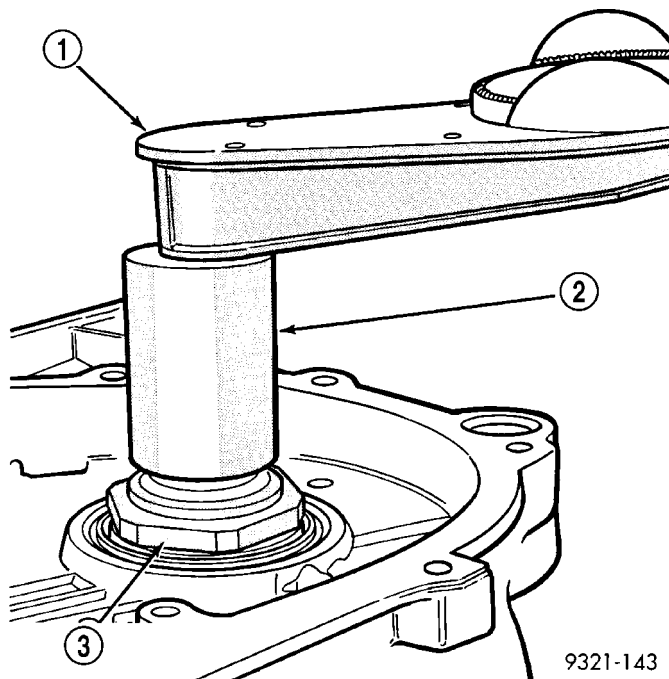
Fig. 94 Bearing Installation

- 1 - SPECIAL TOOL 6618-A
- 2 - REAR OUTPUT SHAFT BEARING

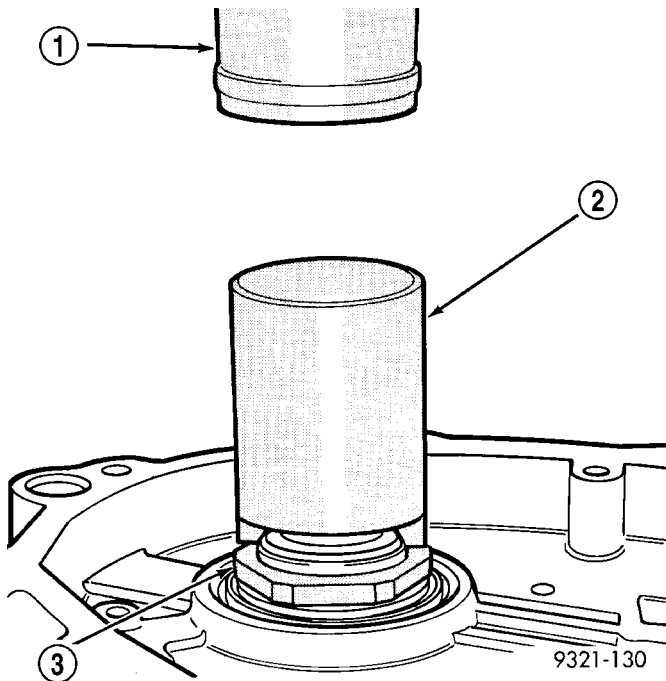
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**Fig. 95 Special Tool Installed**

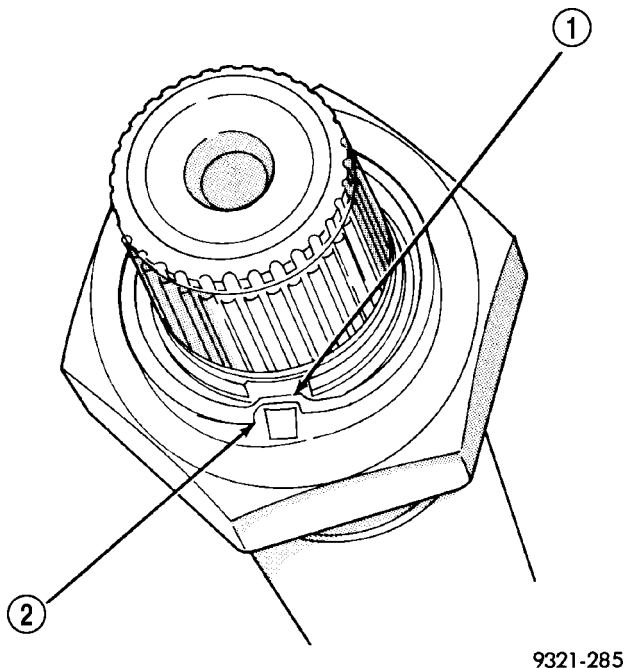
1 - SPECIAL TOOL 6618-A

**Fig. 97 Press Shaft Into Case**1 - SPECIAL TOOL C-4171 AND C-4171-2
2 - SPECIAL TOOL MD-998911**Fig. 96 Shim Installation**1 - SHIM
2 - OUTPUT SHAFT**Fig. 98 Checking Turning Torque**1 - TORQUE WRENCH
2 - SPECIAL TOOL 6498-A
3 - OUTPUT SHAFT NUT

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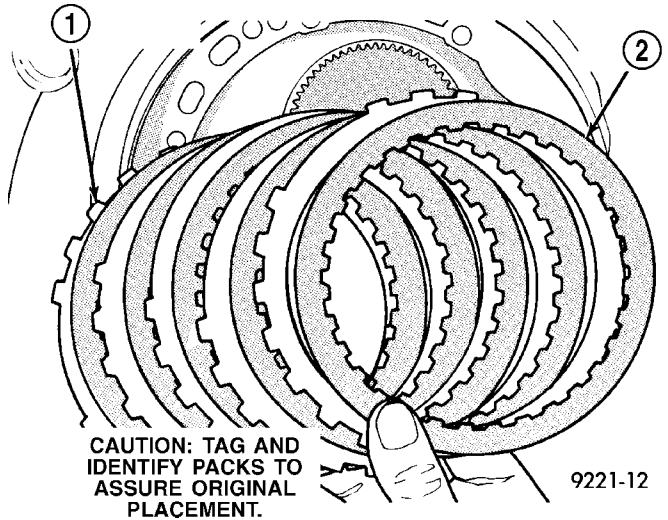
**Fig. 99 Staking Output Shaft Nut - Typical**

- 1 - ARBOR PRESS
- 2 - STAKING TOOL - 6639
- 3 - NEW NUT

**Fig. 100 Properly Staked Nut**

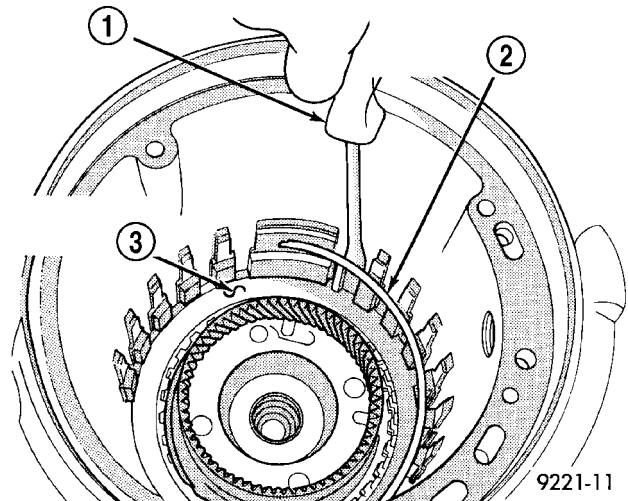
- 1 - BOTTOMED IN SLOT
- 2 - CORRECTLY STAKED NUT

(14) Install low/reverse clutch pack (Fig. 101). Leave uppermost disc out to facilitate snap ring installation.

**Fig. 101 Install Low/Reverse Clutch Pack**

- 1 - CLUTCH PLATES (5)
- 2 - CLUTCH DISCS (5)

(15) Install low/reverse reaction plate snap ring (Fig. 102).

**Fig. 102 Install Low/Reverse Reaction Plate Snap Ring**

- 1 - SCREWDRIVER
- 2 - LOW/REVERSE REACTION PLATE FLAT SNAP RING
- 3 - DO NOT SCRATCH CLUTCH PLATE

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(16) Install one low/reverse clutch disc (Fig. 103).

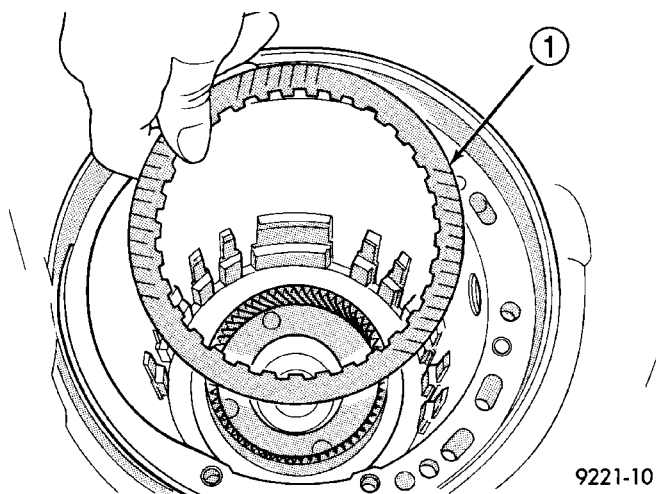


Fig. 103 Install One Disc

1 - ONE DISC FROM LOW/REVERSE CLUTCH

(17) Install low/reverse reaction plate with flat side up (Fig. 104).

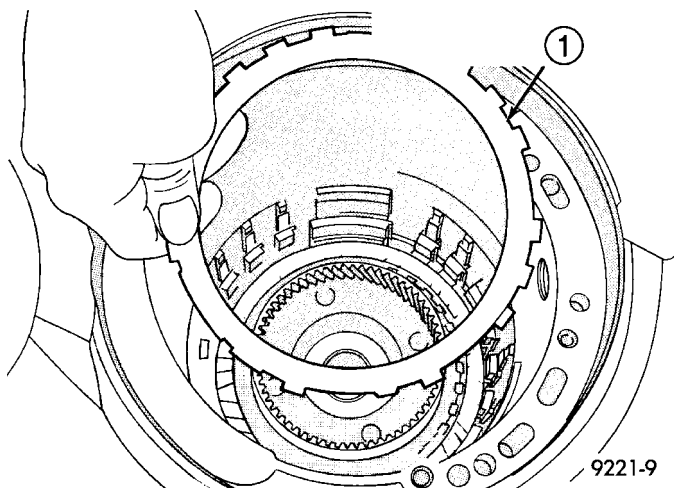


Fig. 104 Install Low/Reverse Reaction Plate

1 - LOW/REVERSE REACTION PLATE (FLAT SIDE UP)

(18) Install tapered snap ring (tapered side out) (Fig. 105). Make sure that the snap ring ends are oriented as shown (Fig. 106).

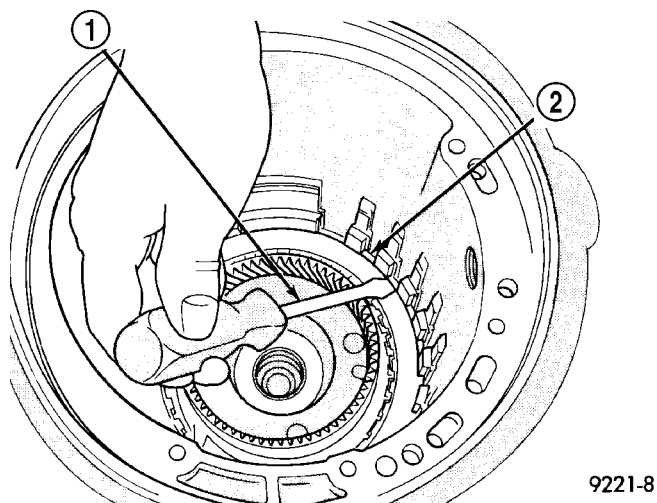


Fig. 105 Snap Ring Installed

1 - SCREWDRIVER
2 - TAPERED SNAP RING (INSTALL AS SHOWN)

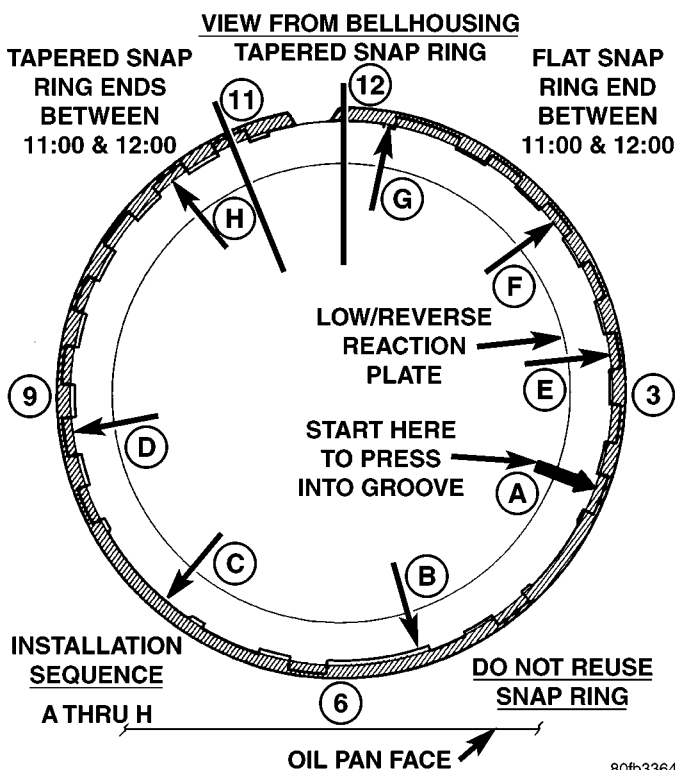


Fig. 106 Tapered Snap Ring Instructions

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(19) Measure low/reverse clutch pack. Set up dial indicator as shown in (Fig. 107). Press down clutch pack with finger and zero dial indicator. Record measurement in four (4) places and take average reading. **Low/Reverse clutch pack clearance is 0.84 to 1.60 (0.033 to 0.063 inch).**

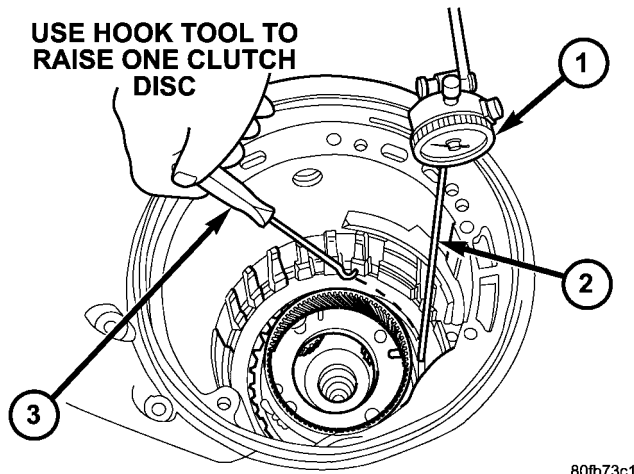


Fig. 107 Check Low/Reverse Clutch Clearance

- 1 - DIAL INDICATOR
- 2 - DIAL INDICATOR TIP TOOL 6268
- 3 - HOOK TOOL

(20) Select the proper low/reverse reaction plate to achieve specifications.

(21) Install 2/4 clutch pack (Fig. 108).

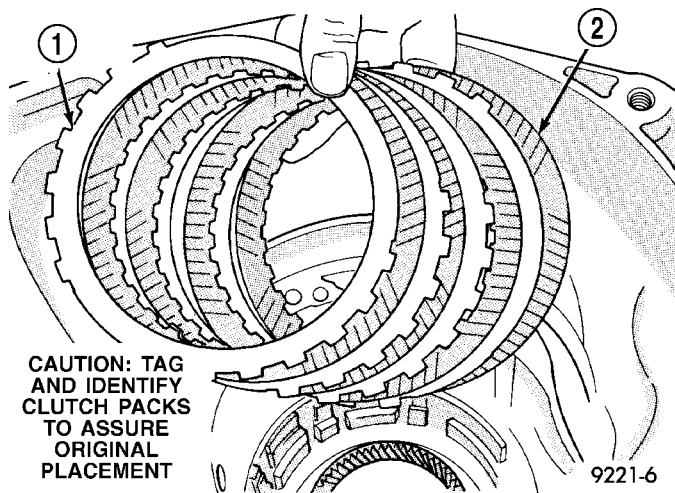


Fig. 108 Install 2/4 Clutch Pack

- 1 - CLUTCH PLATE (4)
- 2 - CLUTCH DISC (4)

(22) Install 2/4 clutch belleville spring (Fig. 109) (Fig. 110).

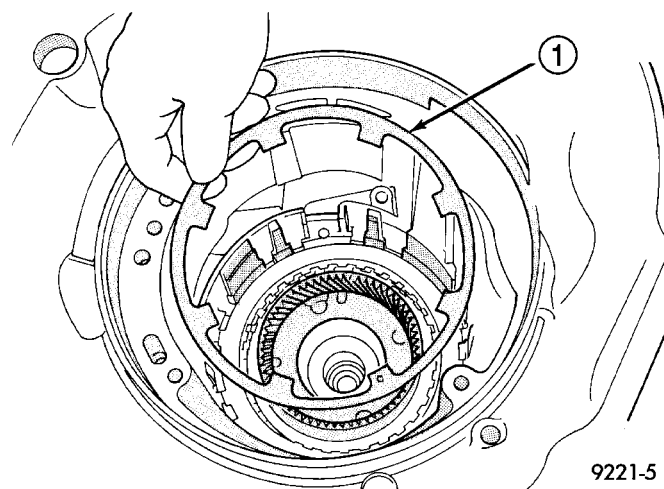


Fig. 109 Install 2/4 Clutch Return Spring

- 1 - 2/4 CLUTCH RETURN SPRING

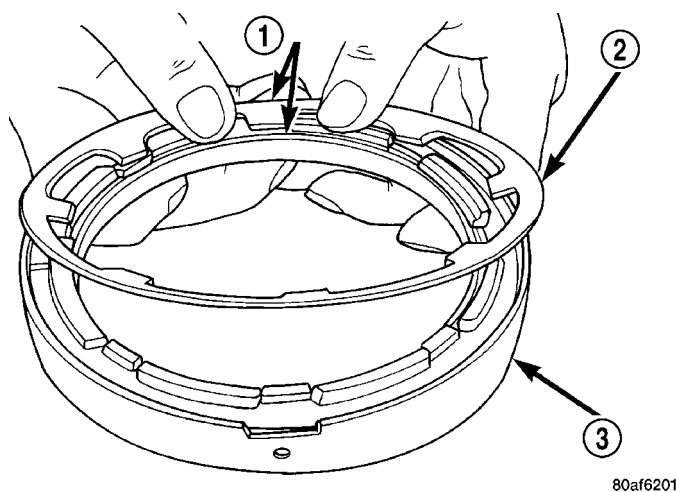
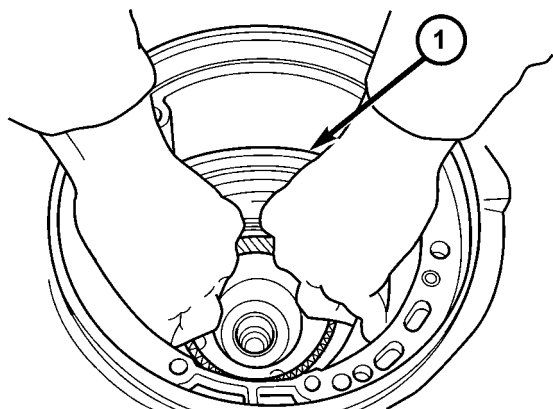


Fig. 110 Proper Orientation of 2/4 Clutch

- 1 - NOTE POSITION
- 2 - RETURN SPRING
- 3 - 2/4 CLUTCH RETAINER

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(23) Install 2/4 clutch retainer (Fig. 111).



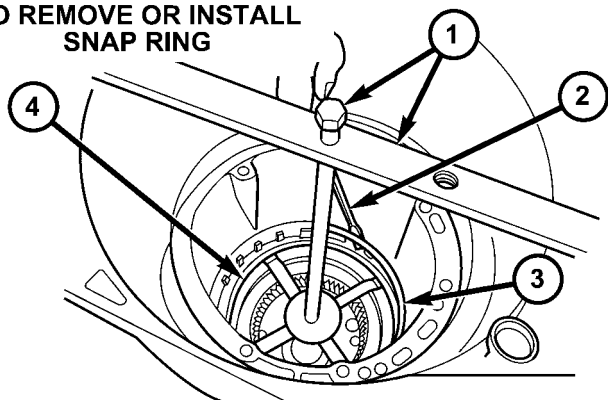
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Fig. 111 Install 2/4 Clutch Retainer

1 - 2/4 CLUTCH RETAINER

(24) Set up Tool 5058 as shown in (Fig. 112). Compress 2/4 clutch just enough to facilitate snap ring installation.

**COMPRESS JUST ENOUGH
TO REMOVE OR INSTALL
SNAP RING**

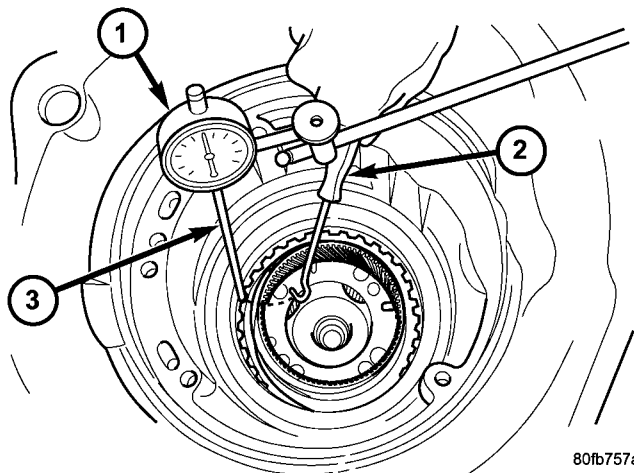


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Fig. 112 Remove 2/4 Clutch Retainer Snap Ring

1 - TOOL 5058
2 - SCREWDRIVER
3 - SNAP RING
4 - 2/4 CLUTCH RETAINER

(25) **Measure 2/4 clutch clearance:** Set up dial indicator as shown in (Fig. 113). Press down clutch pack with finger and zero dial indicator. Record measurement in four (4) places and take average reading. **The 2/4 clutch pack clearance is 0.76 to 2.64 mm (0.030 to 0.104 inch).** If not within specifications, the clutch is not assembled properly. **There is no adjustment for the 2/4 clutch clearance.**

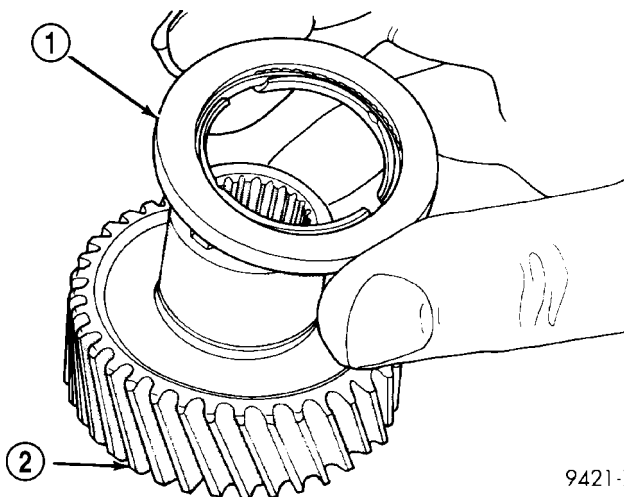


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Fig. 113 Check 2/4 Clutch Clearance

1 - DIAL INDICATOR
2 - HOOK TOOL
3 - DIAL INDICATOR TIP TOOL 6268

(26) Install the #7 needle bearing to the rear sun gear (Fig. 114). **The number 7 needle bearing has three antireversal tabs and is common with the number 5 and number 2 position.** The orientation should allow the bearing to seat flat against the rear sun gear. A small amount of petrolatum can be used to hold the bearing to the rear sun gear.



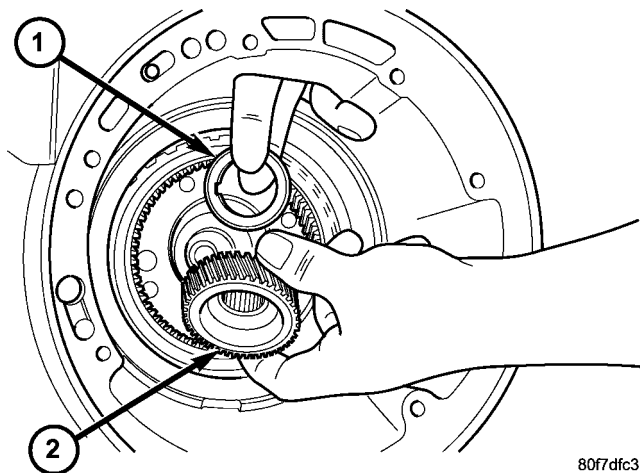
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Fig. 114 Number 7 Bearing

1 - #7 BEARING
2 - REAR SUN GEAR

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(27) Install rear sun gear and #7 needle bearing (Fig. 115).

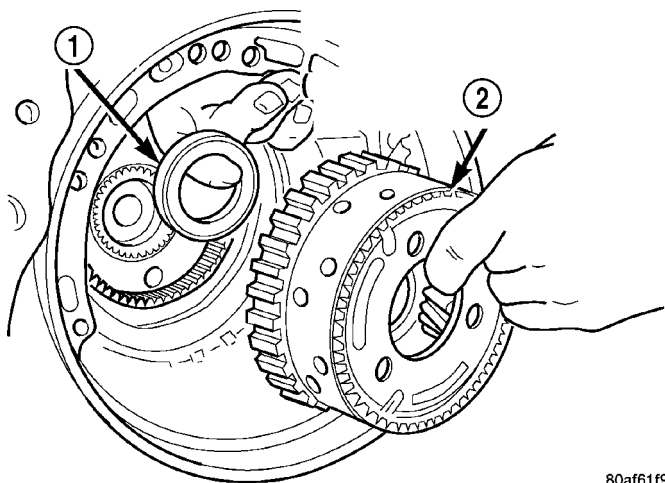


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Fig. 115 Install Rear Sun Gear

- 1 - #7 NEEDLE BEARING
2 - REAR SUN GEAR

(28) Install front carrier/rear annulus assembly and #6 needle bearing (Fig. 116).



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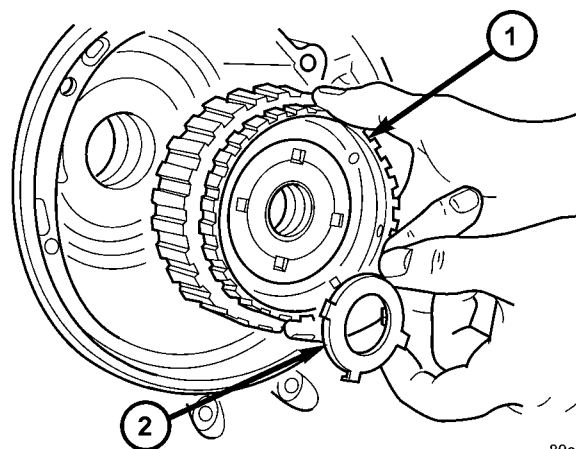
Fig. 116 Install Front Carrier/Rear Annulus

- 1 - #6 NEEDLE BEARING
2 - FRONT CARRIER AND REAR ANNULUS ASSEMBLY (TWIST AND PULL OR PUSH TO REMOVE OR INSTALL).

(29) Install front sun gear assembly and #4 thrust washer (Fig. 117).

(30) **Determine proper #4 thrust plate thickness.**

- Select the thinnest #4 thrust plate thickness.
- Install #4 thrust plate (Fig. 118) using petro-latum to hold into position.



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Fig. 117 Install Front Sun Gear Assembly

- 1 - FRONT SUN GEAR ASSEMBLY
2 - #4 THRUST WASHER (FOUR TABS)

(c) Install input clutch assembly. Ensure the input clutch assembly is completely seated by viewing position through input speed sensor hole. **If the speed sensor tone wheel is not centered in the opening, the input clutches assembly is not seated properly.**

(d) Remove the oil pump o-ring (Fig. 119) and install oil pump and gasket to transmission. Tighten the oil pump bolts to 30 N·m (265 in. lbs.). **Use screw-in dowels or phillips-head screwdrivers to align pump to case. Be sure to reinstall O-ring on oil pump after selecting the proper No. 4 thrust plate.**

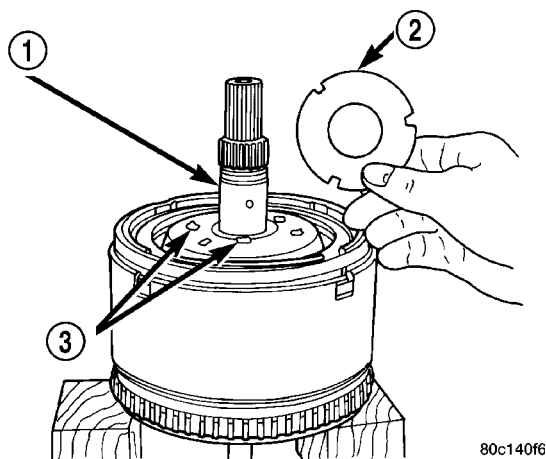
(e) Measure the input shaft end play with the transmission in the vertical position. This will ensure that the measurement will be accurate.

(f) Set up and measure endplay using End Play Set 8266 and Dial Indicator Set C3339 as shown in (Fig. 120).

(g) Measure input shaft end play. **Input shaft end play must be .005 to .025 inch.** For example, if end play reading is 0.055 inch, select No. 4 Thrust Plate which is 0.071 to 0.074 thick. This should provide an input shaft end play reading of 0.020 inch, which is within specifications.

(h) Remove oil pump, gasket, and input clutch assembly to gain access to and install proper #4 thrust plate.

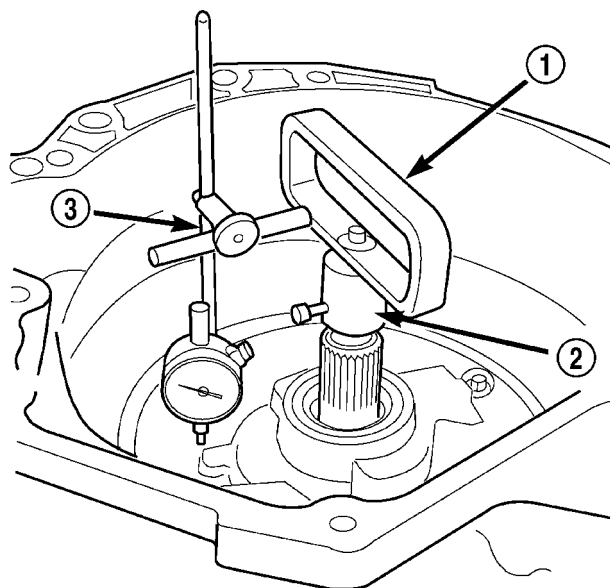
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Fig. 118 Install #4 Thrust Plate

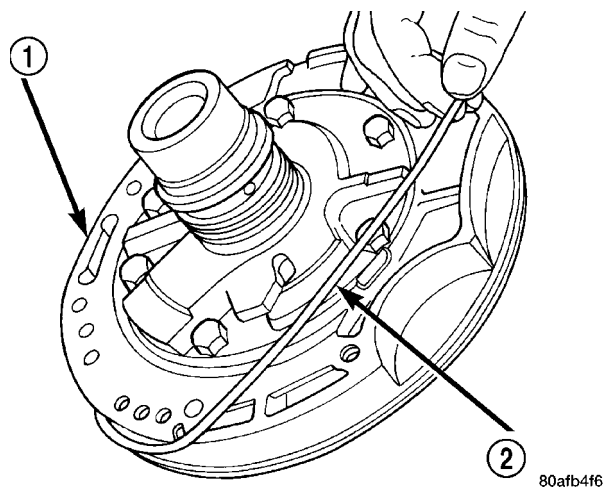
- 1 - OVERDRIVE SHAFT ASSEMBLY
- 2 - #4 THRUST PLATE (SELECT)
- 3 - PETROLATUM FOR RETENTION



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Fig. 120 Measure Input Shaft End Play Using Tool 8266 - Typical

- 1 - TOOL 8266-8
- 2 - TOOL 8266-2
- 3 - TOOL C-3339

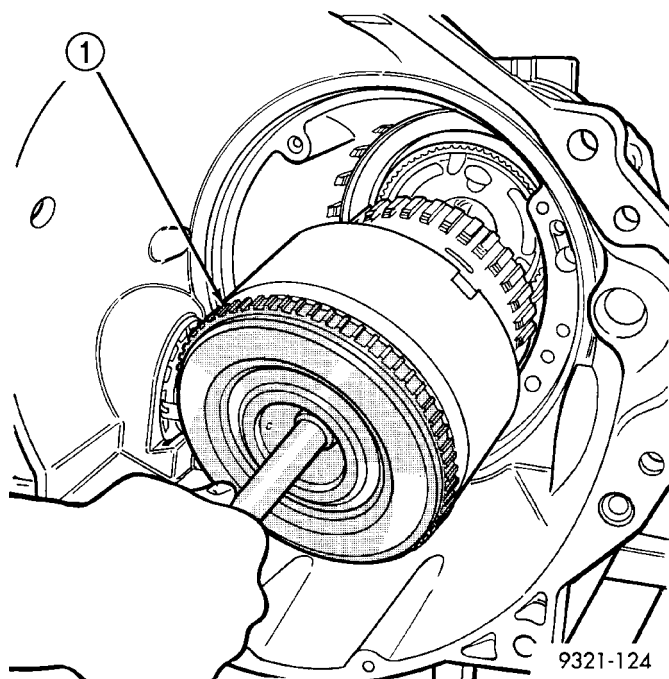


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Fig. 119 Remove Oil Pump O-Ring

- 1 - OIL PUMP ASSEMBLY
- 2 - O-RING

(31) Install input clutch assembly with proper thrust plate (Fig. 121).



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Fig. 121 Install Input Clutch Assembly

- 1 - INPUT CLUTCH ASSEMBLY

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(32) Install #1 caged needle bearing (Fig. 122).

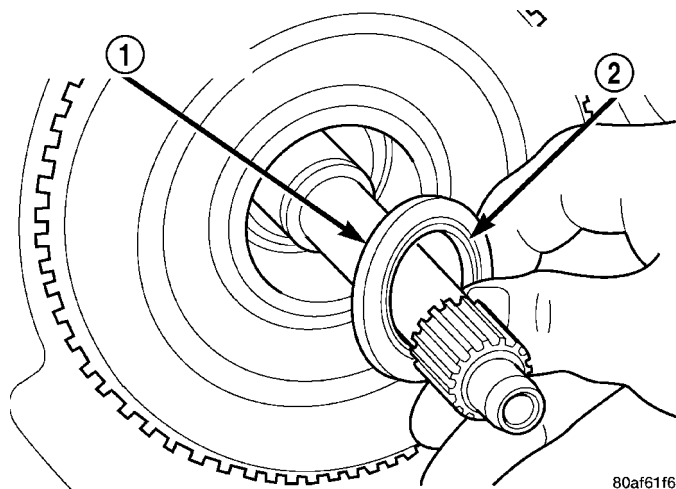


Fig. 122 Install No. 1 Caged Needle Bearing

- 1 - #1 CAGED NEEDLE BEARING
2 - NOTE: TANGED SIDE OUT

(33) Replace cooler by-pass valve if transmission failure has occurred (Fig. 123).

CAUTION: By-pass valve **MUST** be replaced if transmission failure occurs.

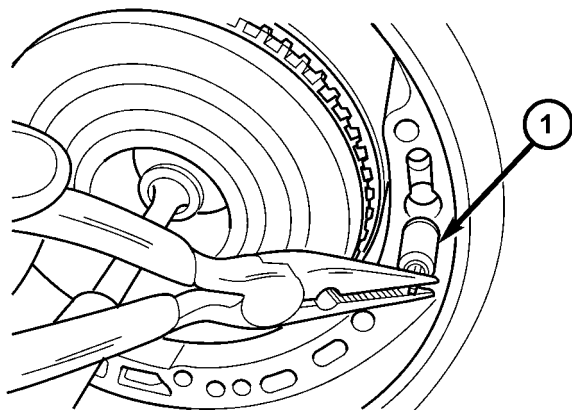


Fig. 123 Install By-Pass Valve

- 1 - BYPASS VALVE

NOTE: To align oil pump, gasket, and case during installation, use threaded dowels or phillips screwdrivers.

(34) Install oil pump gasket (Fig. 124).

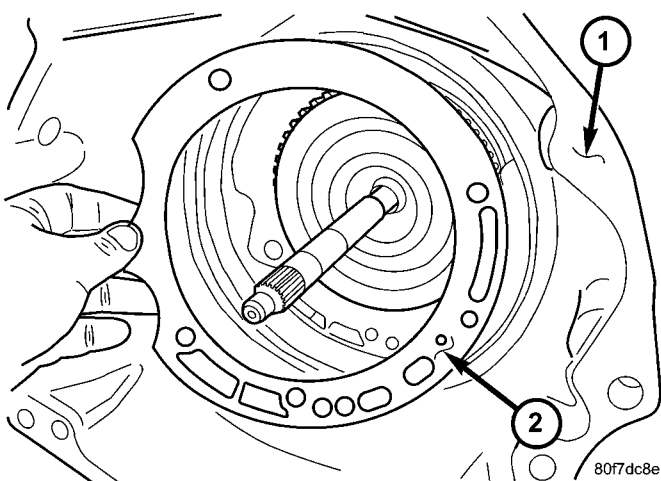


Fig. 124 Install Oil Pump Gasket

- 1 - BELLHOUSING
2 - OIL PUMP GASKET

(35) Install oil pump and torque the new oil pump-to-case bolts to 30 N·m (265 in. lbs.) (Fig. 125). Do not reuse original oil pump bolts.

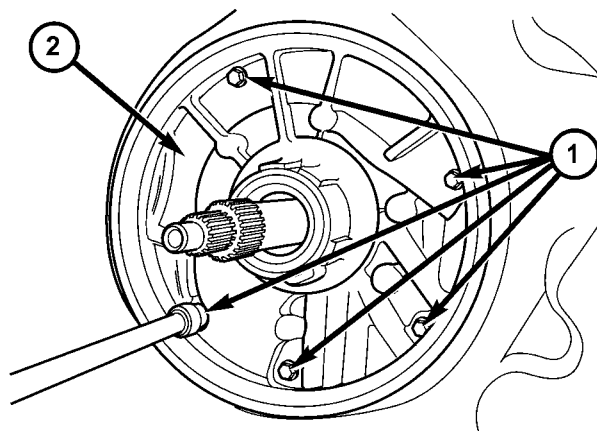


Fig. 125 Install Oil Pump Attaching Bolts

- 1 - BOLTS
2 - OIL PUMP

AUTOMATIC TRANSMISSION - 42RLE (C

(36) Install low/reverse accumulator as shown in (Fig. 126).

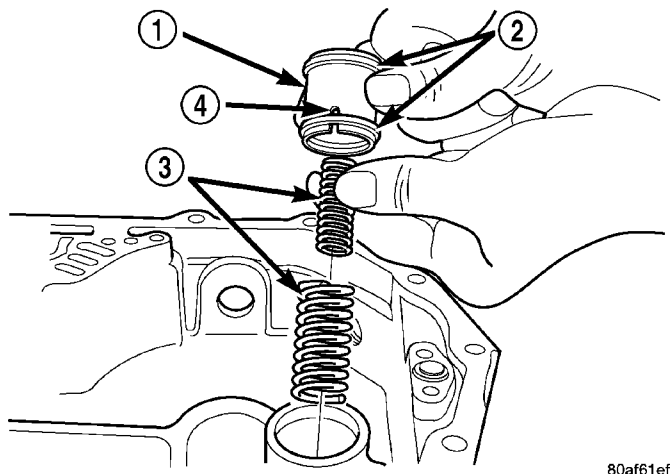


Fig. 126 Low/Reverse Accumulator Components

- 1 - ACCUMULATOR PISTON
- 2 - SEAL RINGS
- 3 - RETURN SPRINGS
- 4 - NOTE NOTCH

(37) Install low/reverse accumulator plug (Fig. 127).

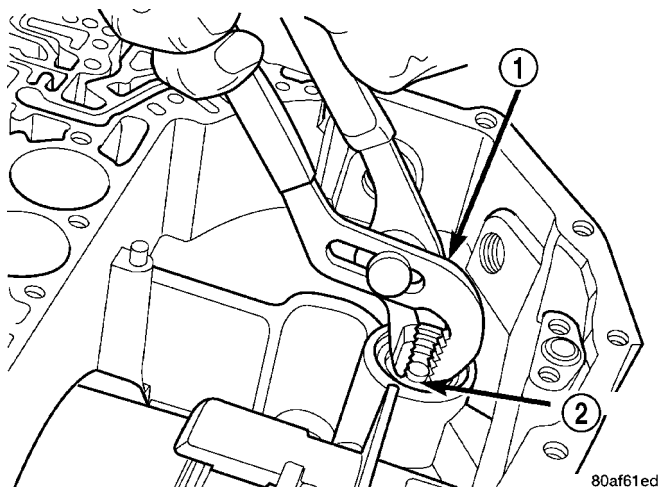


Fig. 127 Install Low/Reverse Accumulator Plug

- 1 - ADJUSTABLE PLIERS
- 2 - PLUG

(38) Install low/reverse accumulator snap ring (Fig. 128).

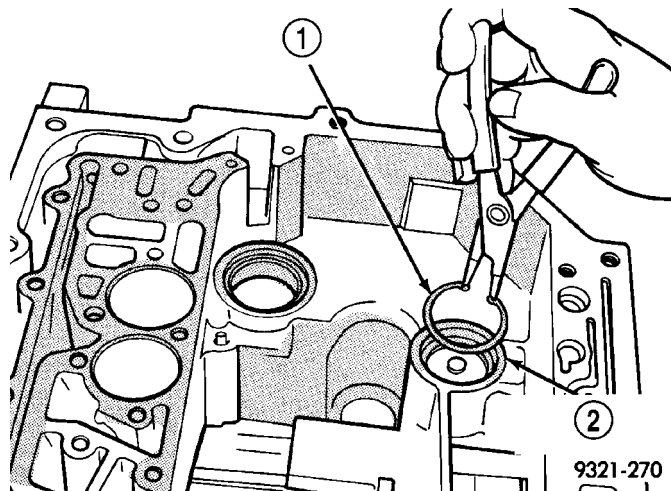


Fig. 128 Install Low/Reverse Accumulator Snap Ring

- 1 - SNAP RING
- 2 - LOW/REVERSE ACCUMULATOR

(39) Install underdrive and overdrive accumulators as shown in (Fig. 129) (Fig. 130) (Fig. 131).

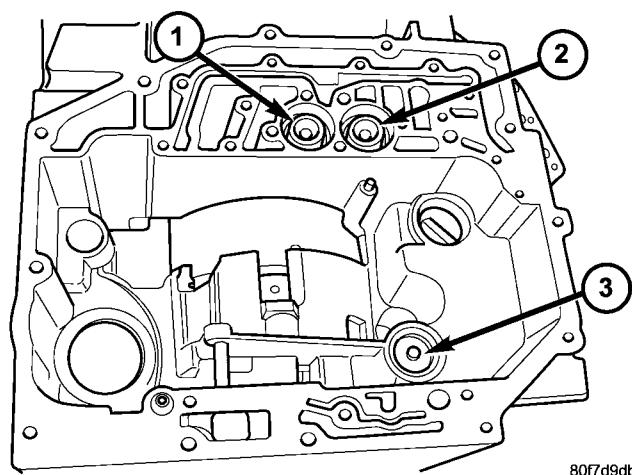
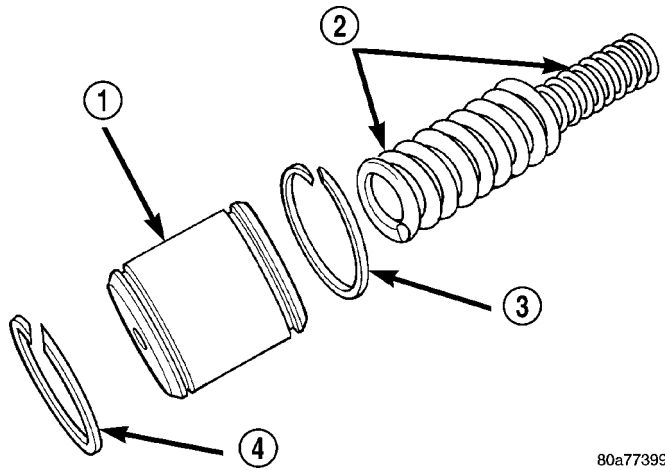


Fig. 129 Accumulator Location

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

CAUTION: Do not handle the valve body by the manual shaft. Damage could result.

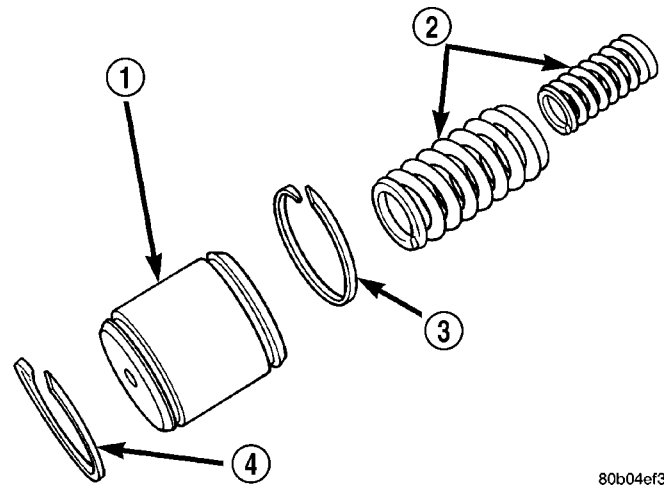
AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])



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Fig. 130 Install Underdrive Accumulator and Springs

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

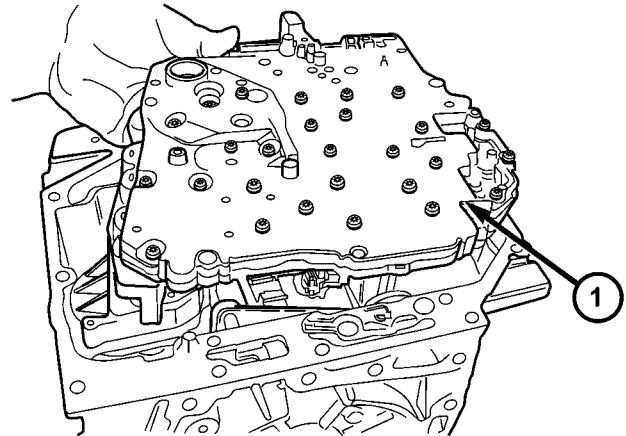


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Fig. 131 Install Overdrive Accumulator and Springs

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

(40) Install valve body into place as shown in (Fig. 132).

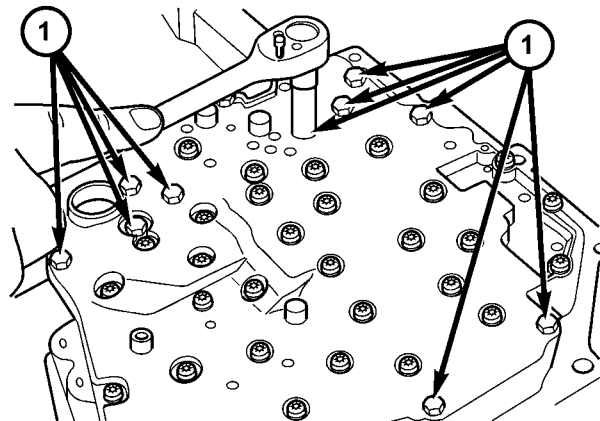


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Fig. 132 Install Valve Body Onto Transmission

- 1 - VALVE BODY

(41) Install seven (7) valve body-to-case bolts (Fig. 133) and torque to 12 N·m (105 in. lbs.).



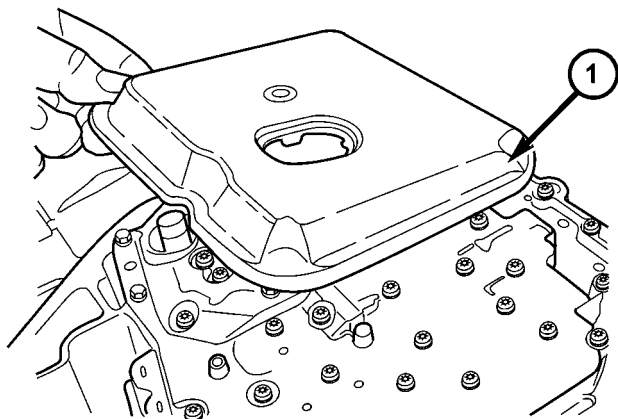
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Fig. 133 Install Valve Body Bolts (7)

- 1 - BOLTS

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(42) Install transmission oil filter (Fig. 134). Tighten the bolts to 5 N·m (45 in. lbs.).

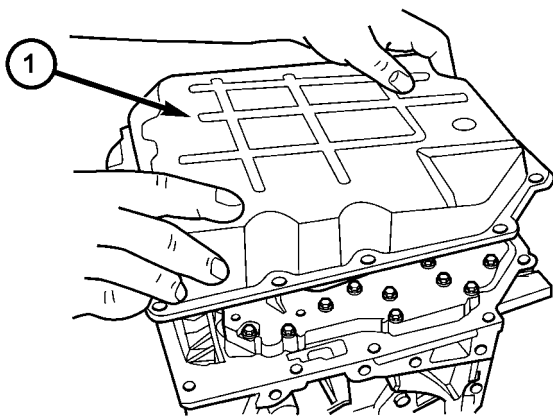


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Fig. 134 Install Transmission Filter

1 - TRANSMISSION FILTER

(43) Install transmission oil pan (Fig. 135) with a bead of Mopar® ATF RTV (MS-GF41). Torque oil pan-to-case bolts to 20 N·m (14.5 ft. lbs.).



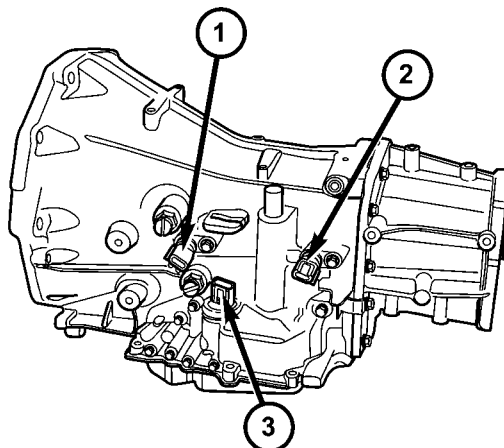
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Fig. 135 Install Transmission Oil Pan

1 - TRANSMISSION OIL PAN

(44) Install both speed sensors into transmission case (Fig. 136). Torque the speed sensor bolts to 9 N·m (80 in. lbs.).

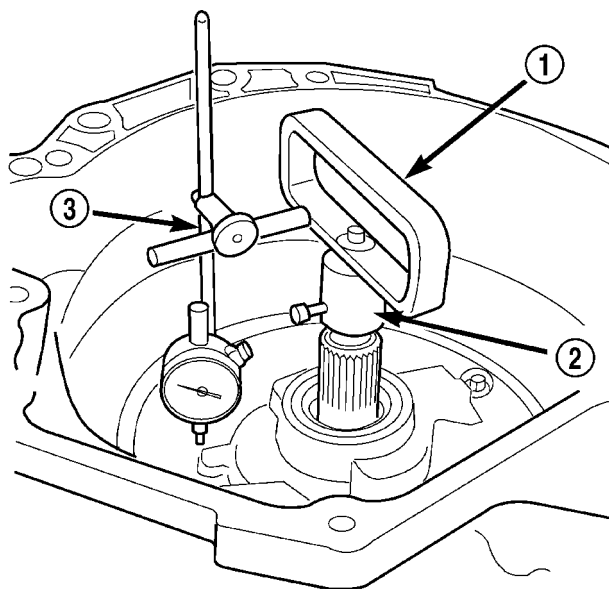
(45) As a final check of the transmission, measure the input shaft end play. This will indicate when a #4 thrust plate change is required. The #4 thrust plate is located behind the overdrive clutch hub. Attach a dial indicator to transmission bell housing with its plunger seated against end of input shaft (Fig. 137). Move input shaft in and out to obtain end play reading. End play specifications are 0.13 to 0.64 mm (0.005 to 0.025 inch). If not within specifications, make the necessary thrust plate adjustment.



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Fig. 136 Input and Output Speed Sensors and Transmission Range Sensor

1 - INPUT SPEED SENSOR
2 - OUTPUT SPEED SENSOR
3 - TRANSMISSION RANGE SENSOR



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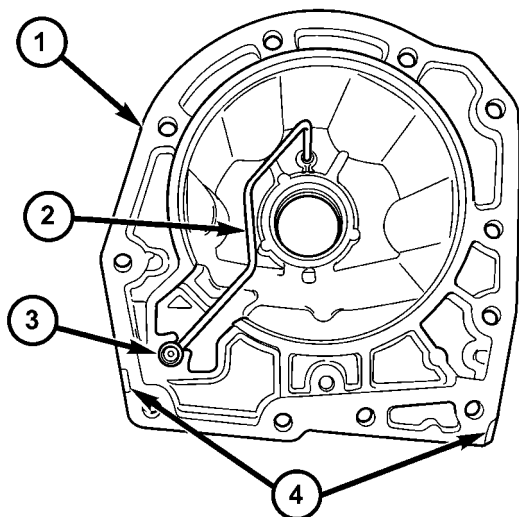
Fig. 137 Measure Input Shaft End Play Using Tool 8266 - Typical

1 - TOOL 8266-8
2 - TOOL 8266-2
3 - TOOL C-3339

(46) Inspect the lube tube grommet (Fig. 138) for damage. If the grommet lip is damaged, it will need to be replaced.

(47) Install the 4X4 stub shaft onto the transmission output shaft.

(48) Place a bead of Mopar® ATF RTV (MS-GF41) on the rear surface of the transmission case for the adapter housing.

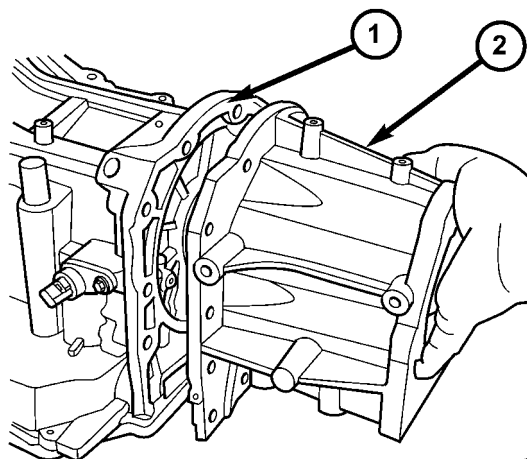
AUTOMATIC TRANSMISSION - 42RLE (C

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Fig. 138 Lube Tube Grommet

- 1 - HOUSING
- 2 - LUBE TUBE
- 3 - GROMMET
- 4 - PRY SLOTS

(49) Install the adapter (Fig. 139) housing onto the transmission case.

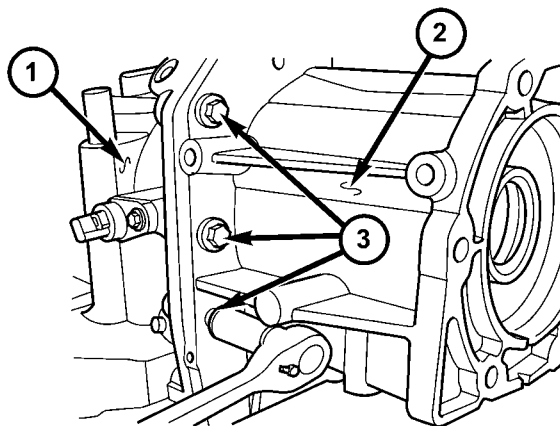


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Fig. 139 Install Adapter Housing

- 1 - TRANSMISSION CASE
- 2 - ADAPTER HOUSING

(50) Install the bolts (Fig. 140) that hold the adapter housing onto the transmission case. Be sure to install any stud bolts to their original locations. Tighten the bolts to 54 N·m (40 ft.lbs.).



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Fig. 140 Install Adapter Housing Bolts

- 1 - TRANSMISSION CASE
- 2 - ADAPTER HOUSING
- 3 - BOLTS

INSTALLATION

(1) Check torque converter hub and hub drive notches for sharp edges burrs, scratches, or nicks. Polish the hub and notches with 320/400 grit paper and crocus cloth if necessary. The hub must be smooth to avoid damaging pump seal at installation.

(2) Lubricate converter drive hub and oil pump seal lip with transmission fluid.

(3) Align converter and oil pump.

(4) Carefully insert converter in oil pump. Then rotate converter back and forth until fully seated in pump gears.

(5) Check converter seating with steel scale and straightedge (Fig. 141). Surface of converter lugs should be 1/2 in. to rear of straightedge when converter is fully seated.

(6) Temporarily secure converter with C-clamp.

(7) Lightly grease crankshaft flange hole.

(8) Position transmission on jack and secure it with safety chains.

AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])

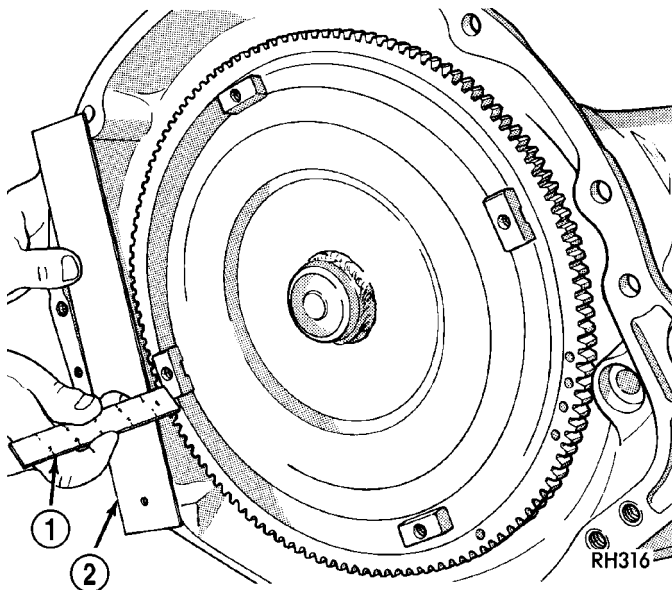


Fig. 141 Checking Converter Seating - Typical

- 1 - SCALE
- 2 - STRAIGHTEDGE

(9) Check condition of converter driveplate. Replace the plate if cracked, distorted or damaged. **Also be sure transmission dowel pins are seated in engine block and protrude far enough to hold transmission in alignment.**

(10) Raise transmission and align converter with drive plate and converter housing with engine block.

(11) Move transmission forward. Then raise, lower or tilt transmission to align converter housing with engine block dowels.

(12) Carefully work transmission forward and over engine block dowels until converter hub is seated in crankshaft.

(13) Install and tighten bolts that attach transmission converter housing to engine block.

CAUTION: Be sure the converter housing is fully seated on the engine block dowels before tightening any bolts.

(14) Install torque converter attaching bolts. Tighten bolts to 88 N·m (65 ft. lbs.).

(15) On 4.0L engine equipped vehicles, install the crankshaft position sensor (Fig. 142).

(16) Install transmission fill tube and seal. Install new fill tube seal in transmission before installation.

(17) Connect transmission cooler lines to transmission.

(18) Install transfer case onto transmission. (Refer to 21 - TRANSMISSION/TRANSFER CASE - INSTALLATION)

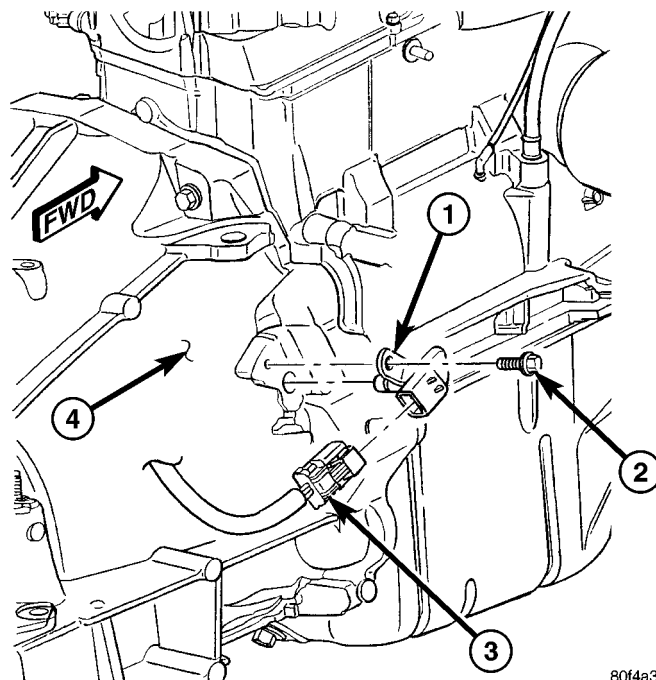


Fig. 142 Crankshaft Position Sensor

- 1 - CRANKSHAFT POSITION SENSOR
- 2 - MOUNTING BOLT
- 3 - ELECTRICAL CONNECTOR
- 4 - TRANSMISSION BELLHOUSING

(19) Install skid plate (Fig. 143) and attach transmission rear support to skid plate. (Refer to 13 - FRAME & BUMPERS/FRAME/TRANSFER CASE SKID PLATE - INSTALLATION)

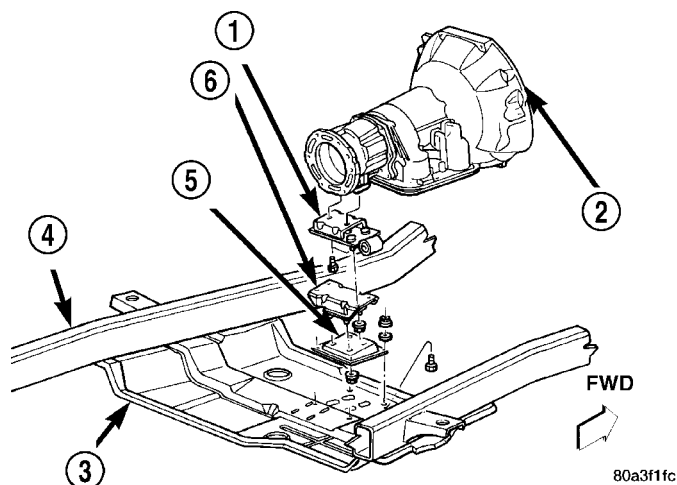
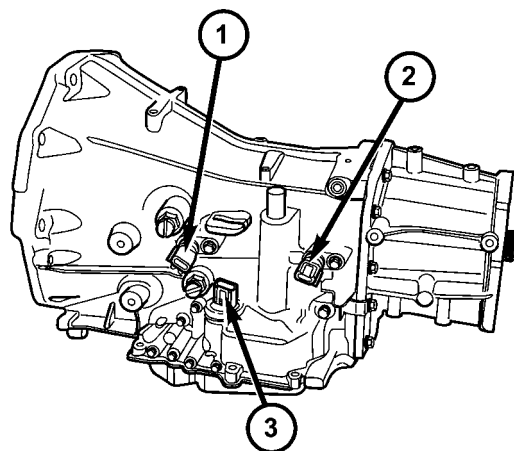


Fig. 143 Transmission Mount - Automatic Transmission

- 1 - TRANSMISSION SUPPORT BRACKET
- 2 - AUTOMATIC TRANSMISSION
- 3 - SKID PLATE
- 4 - FRAME
- 5 - TRANSMISSION MOUNT SUPPORT BRACKET
- 6 - CUSHION

AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])

- (20) Remove engine support fixture.
- (21) Remove transmission jack.
- (22) Connect input and output speed sensor wires (Fig. 144).



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Fig. 144 Input and Output Speed Sensors and Transmission Range Sensor

- 1 - INPUT SPEED SENSOR
- 2 - OUTPUT SPEED SENSOR
- 3 - TRANSMISSION RANGE SENSOR

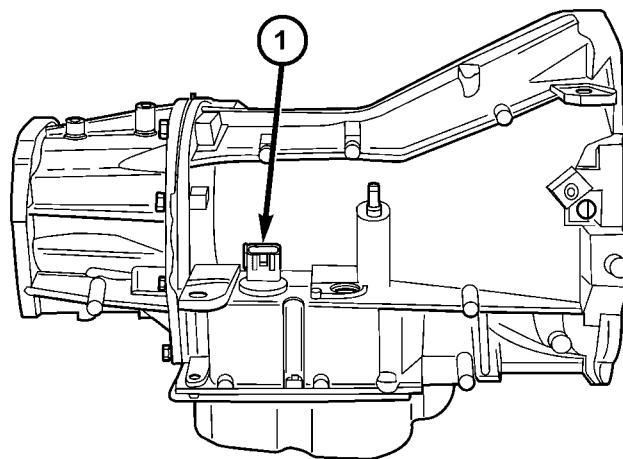
(23) Connect wires to the transmission range sensor (Fig. 144) and the solenoid/pressure switch assembly (Fig. 145).

(24) Install converter housing access cover.

(25) Install exhaust pipes and support brackets, if removed.

(26) Install starter motor (Refer to 8 - ELECTRICAL/STARTING/STARTER MOTOR - INSTALLATION) and cooler line bracket.

(27) Install new plastic retainer grommet on any shift linkage rod or lever that was disconnected.



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Fig. 145 Solenoid/Pressure Switch Assembly

- 1 - SOLENOID/PRESSURE SWITCH ASSEMBLY CONNECTOR

Grommets should not be reused. Use pry tool to remove rod from grommet and cut away old grommet. Use pliers to snap new grommet into lever and to snap rod into grommet at assembly.

(28) Connect gearshift cable.

(29) Connect transfer case shift linkage.

(30) Adjust gearshift linkage, if necessary.

(31) Align and connect propeller shaft(s). (Refer to 3 - DIFFERENTIAL & DRIVELINE/PROPELLER SHAFT/PROPELLER SHAFT - INSTALLATION)

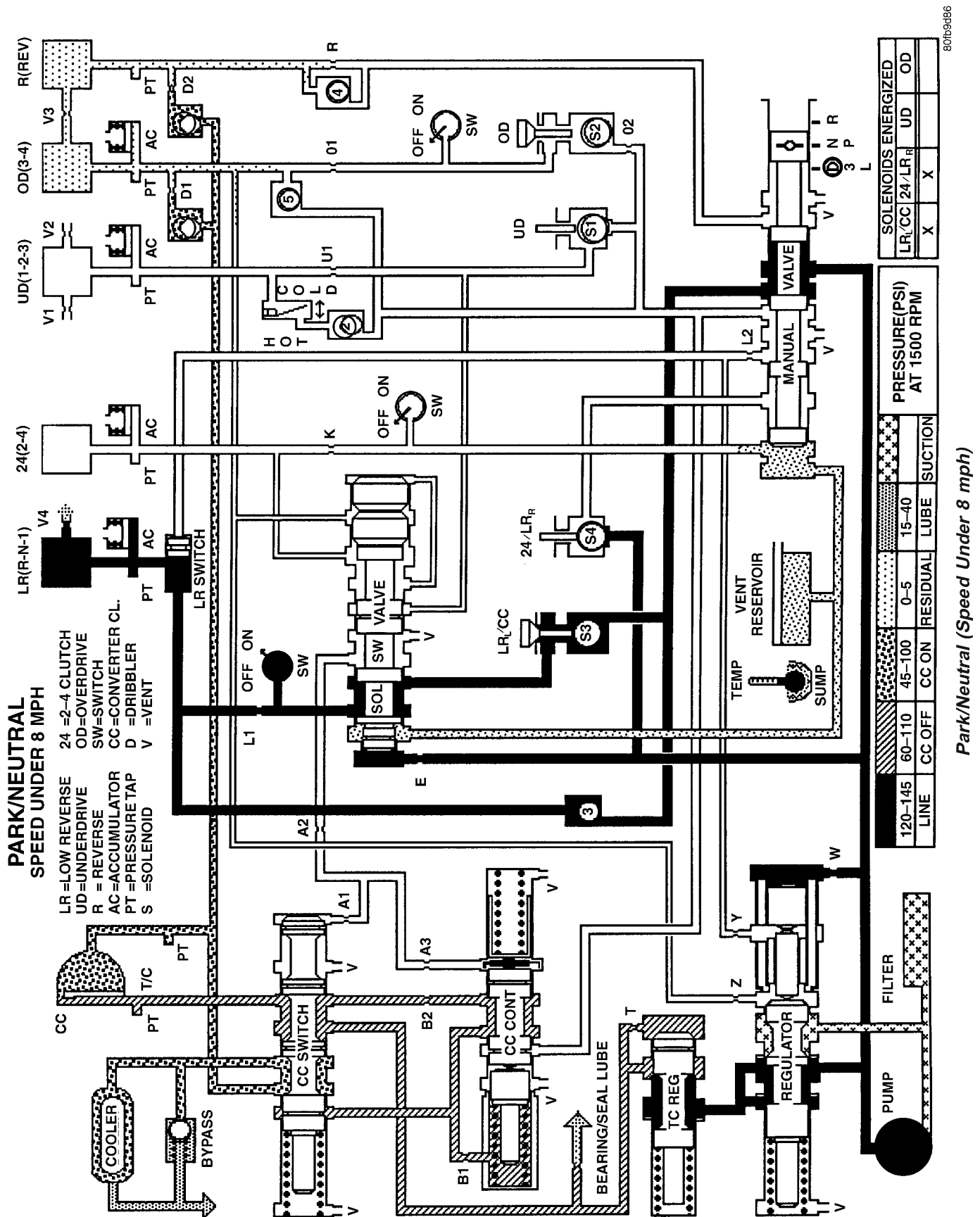
(32) Fill transfer case to bottom edge of fill plug hole.

(33) Lower vehicle and connect battery negative cable.

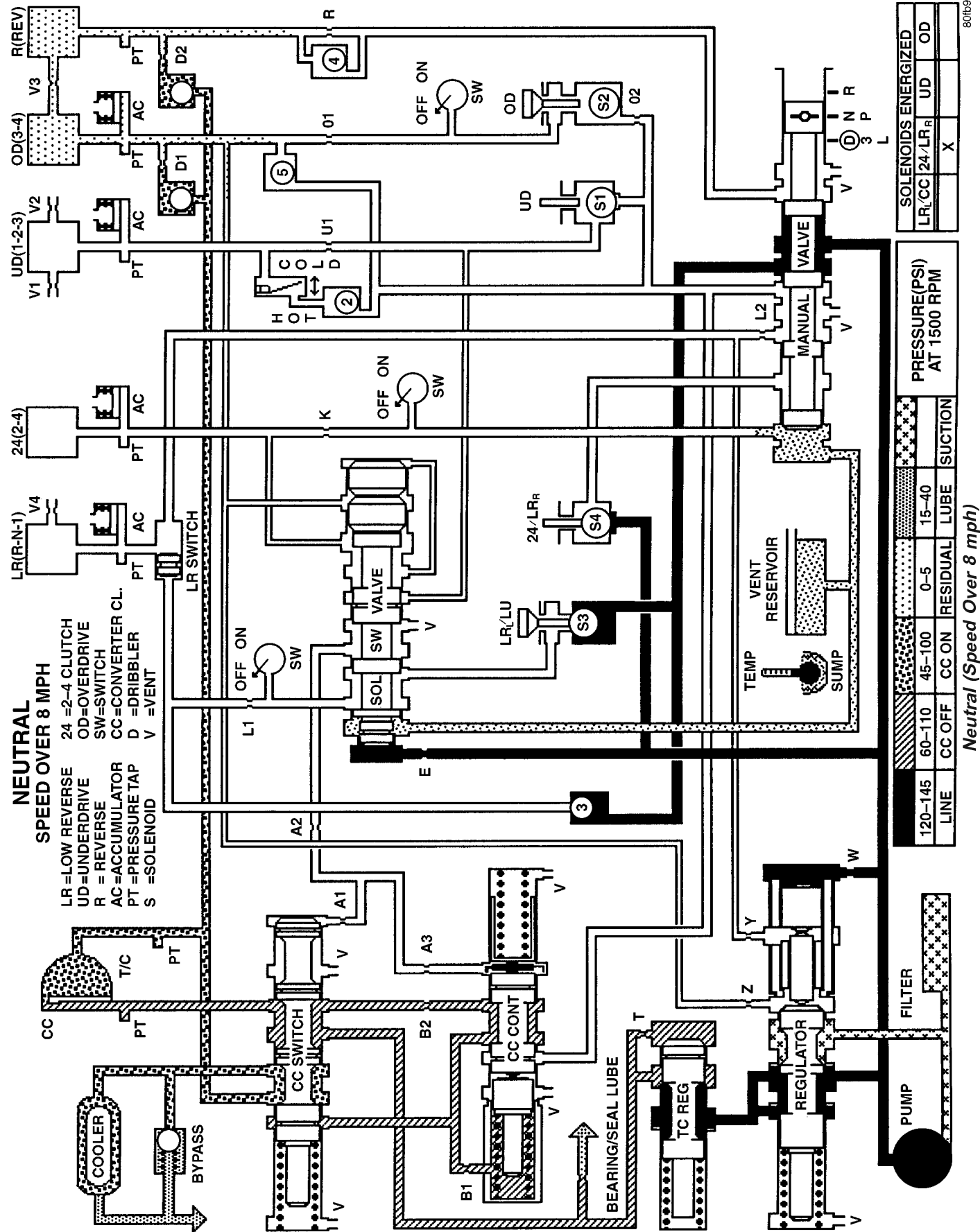
(34) Fill transmission to correct level with Mopar® ATF +4.

AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])

SCHEMATICS AND DIAGRAMS - 42RLE TRANSMISSION



AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])



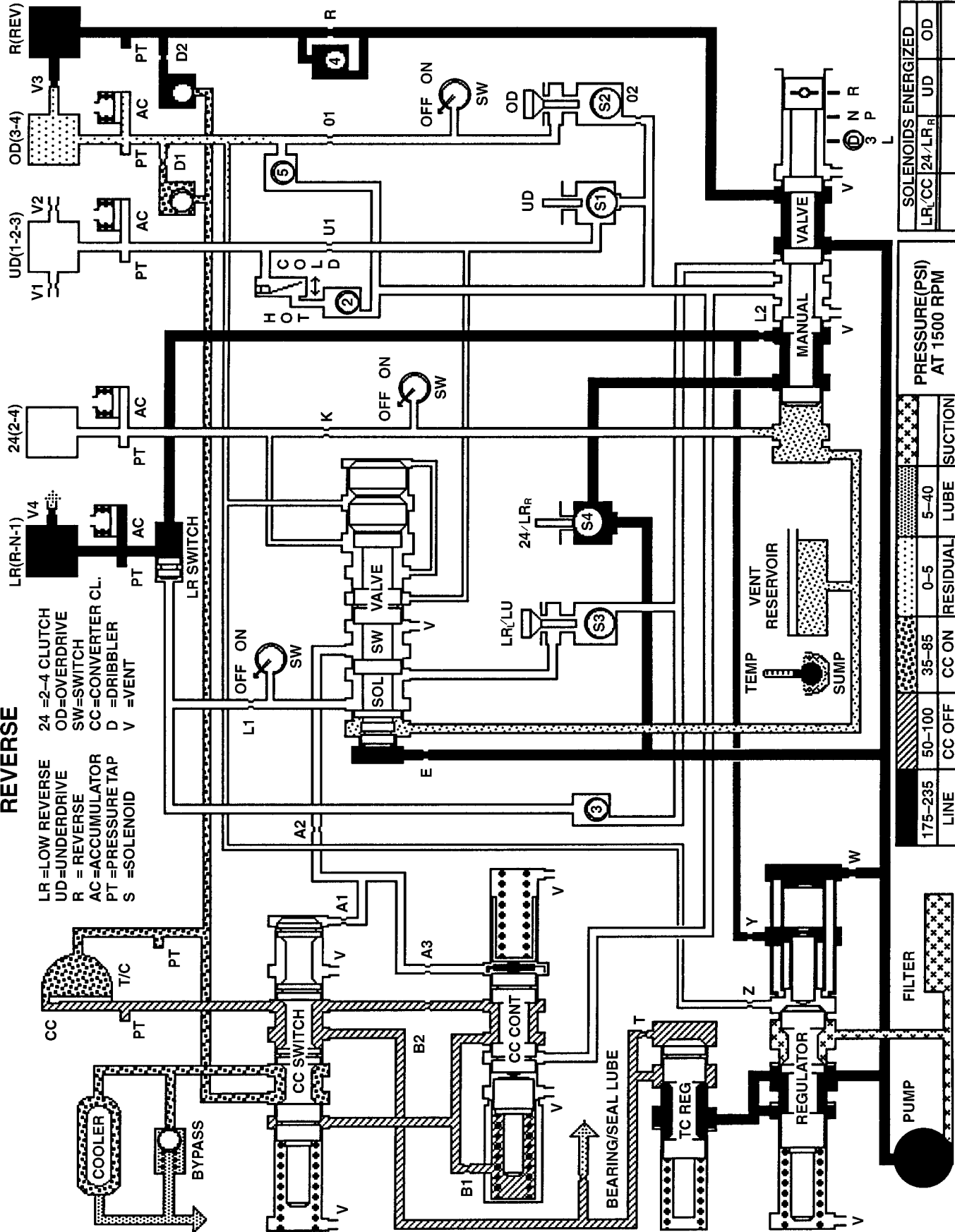
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AUTOMATIC TRANSMISSION - 42RLE (C

REVERSE

LR=LOW REVERSE
UD=UNDERDRIVE
R = REVERSE
AC=ACCUMULATOR
PT =PRESSURE TAP
S =SOLENOID

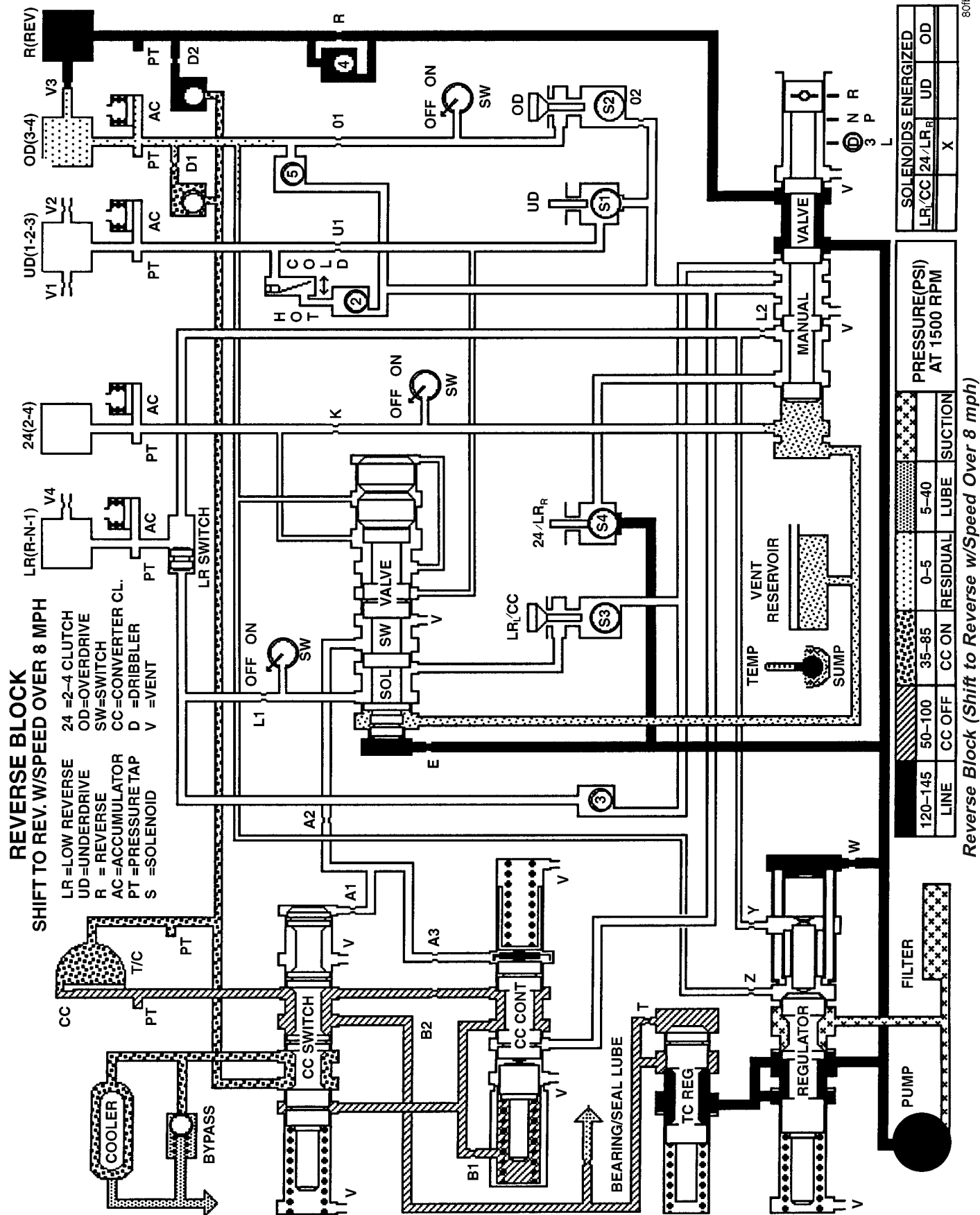
24 =2-4 CLUTCH
OD=OVERDRIVE
SW=SWITCH
CC=CONVERTER CL.
D =DRIBBLER
V =VENT



PRESSURE (PSI) AT 1500 RPM						SOLENOIDS ENERGIZED			
175-235		50-100	35-85	0-5	5-40	LR/CC	24/LR _R	UD	OD
LINE	CC OFF	CC ON	RESIDUAL	LUBE	SUCTION				
	</								

Reverse

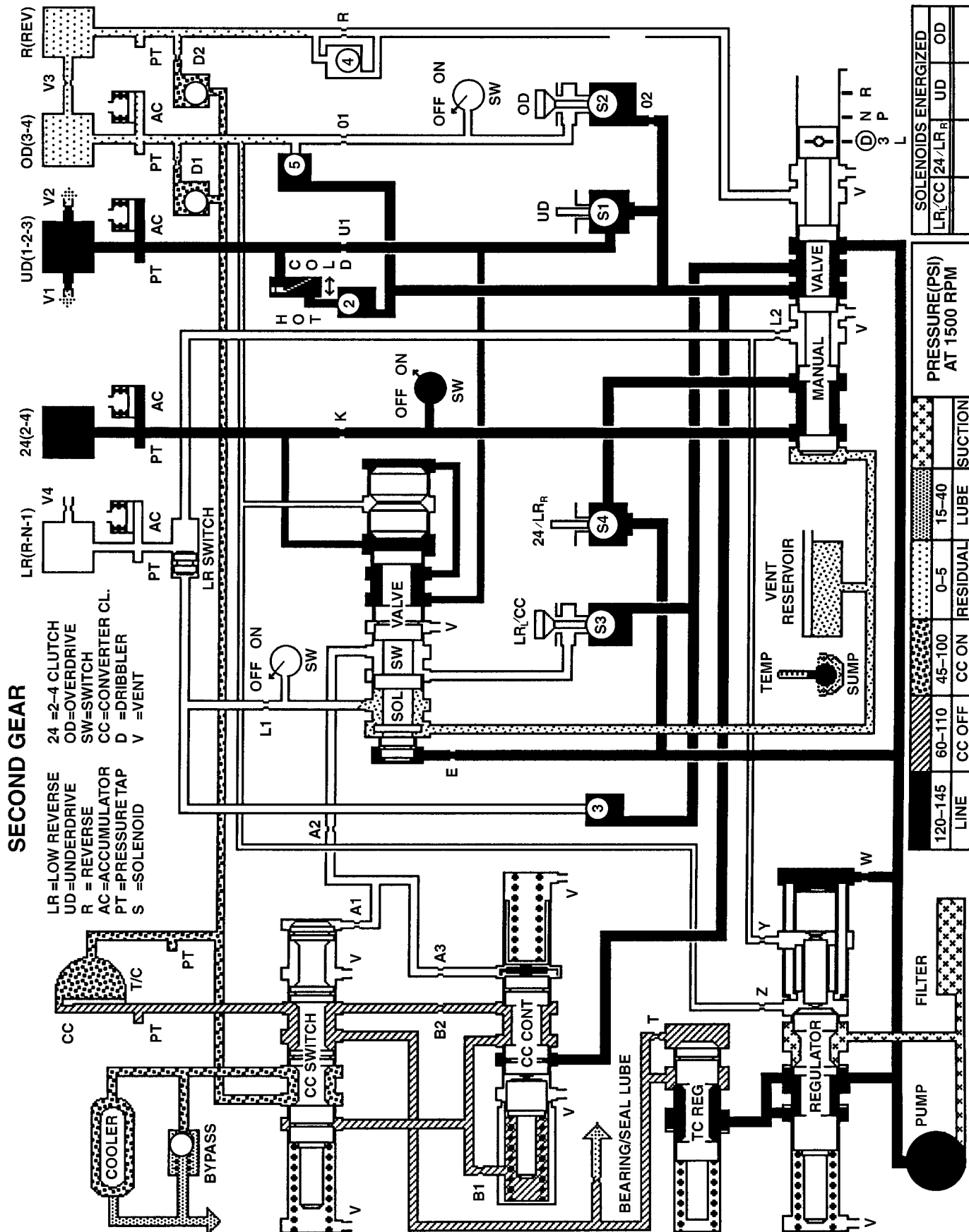
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Reverse Block (Shift to Reverse w/Speed Over 8 mph)

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AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])

[illegible]

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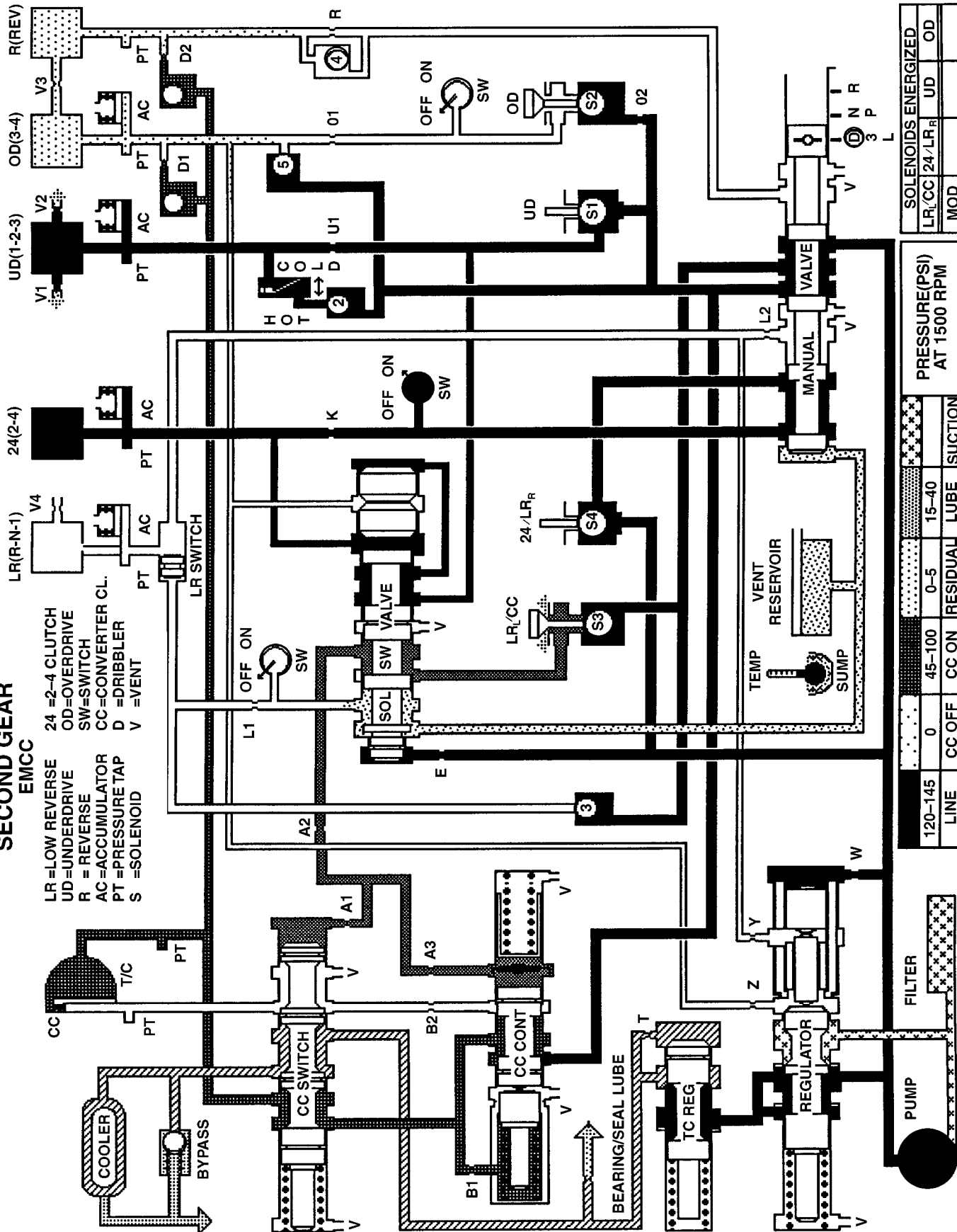
Second Gear

AUTOMATIC TRANSMISSION - 42RLE (C

SECOND GEAR
EMCC

LR=LOW REVERSE
UD=UNDERDRIVE
R = REVERSE
AC=ACCUMULATOR
PT=PRESSURE TAP
S =SOLENOID

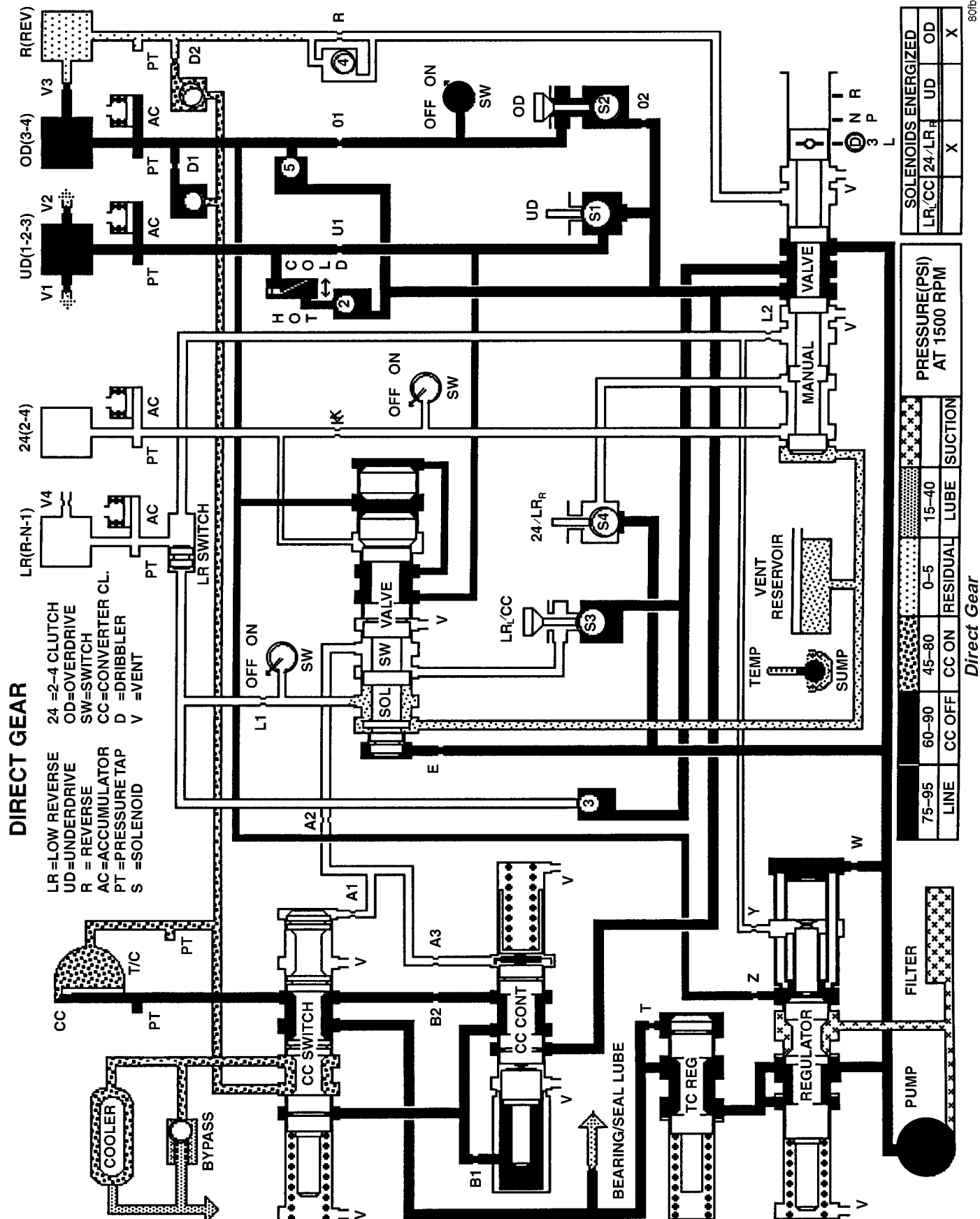
24 =2-4 CLUTCH
OD=OVERDRIVE
SW=SWITCH
CC=CONVERTER CL.
D =DRIBBLER
V =VENT

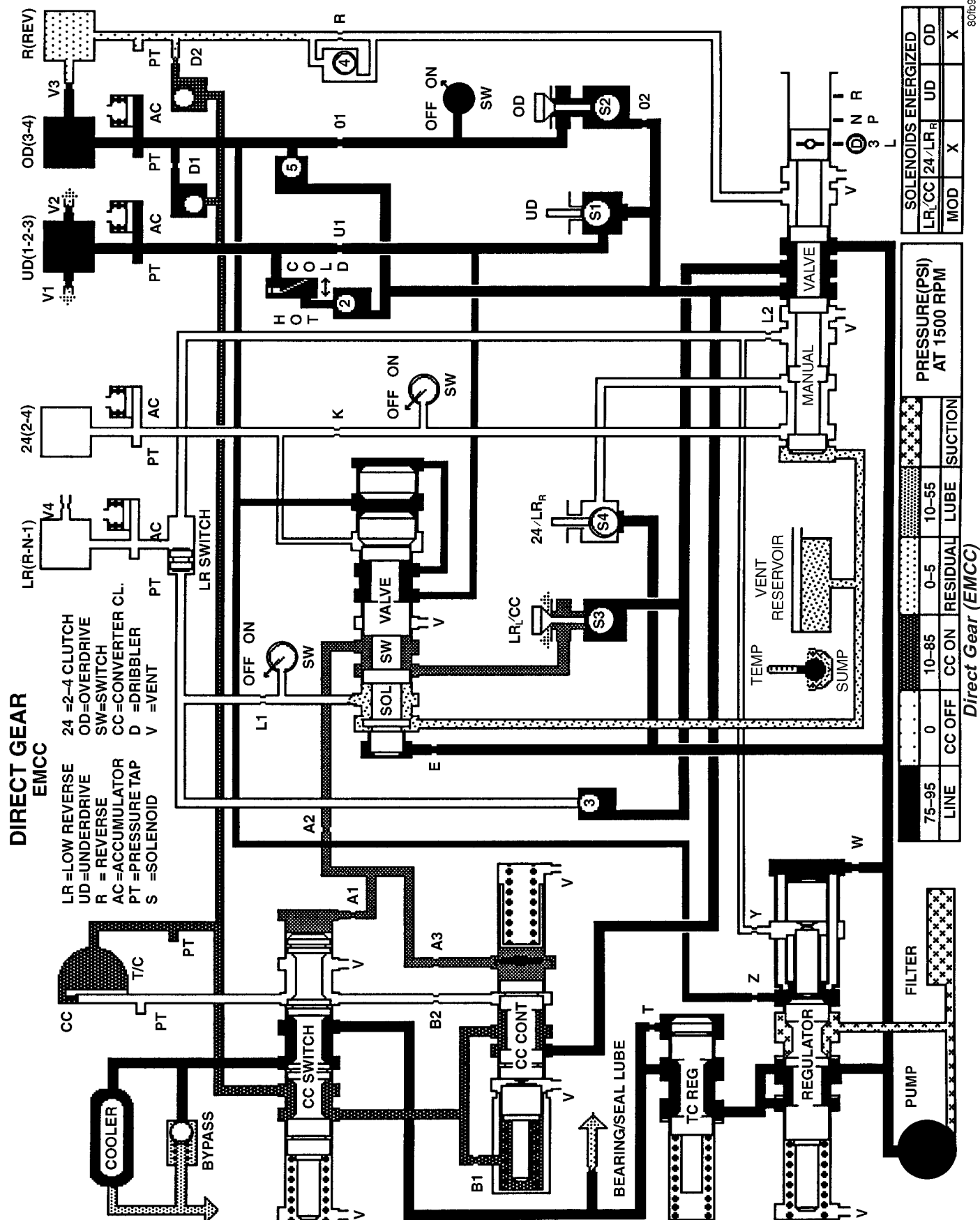


PRESSURE (PSI) AT 1500 RPM					SOLENOIDS ENERGIZED				
LINE	120-145	0	45-100	0-5	15-40	LR/CC		UD	OD
						24/LR _R			
		CC OFF	CC ON	RESIDUAL	LUBE	SUCTION	MOD		

Second Gear (EMCC)

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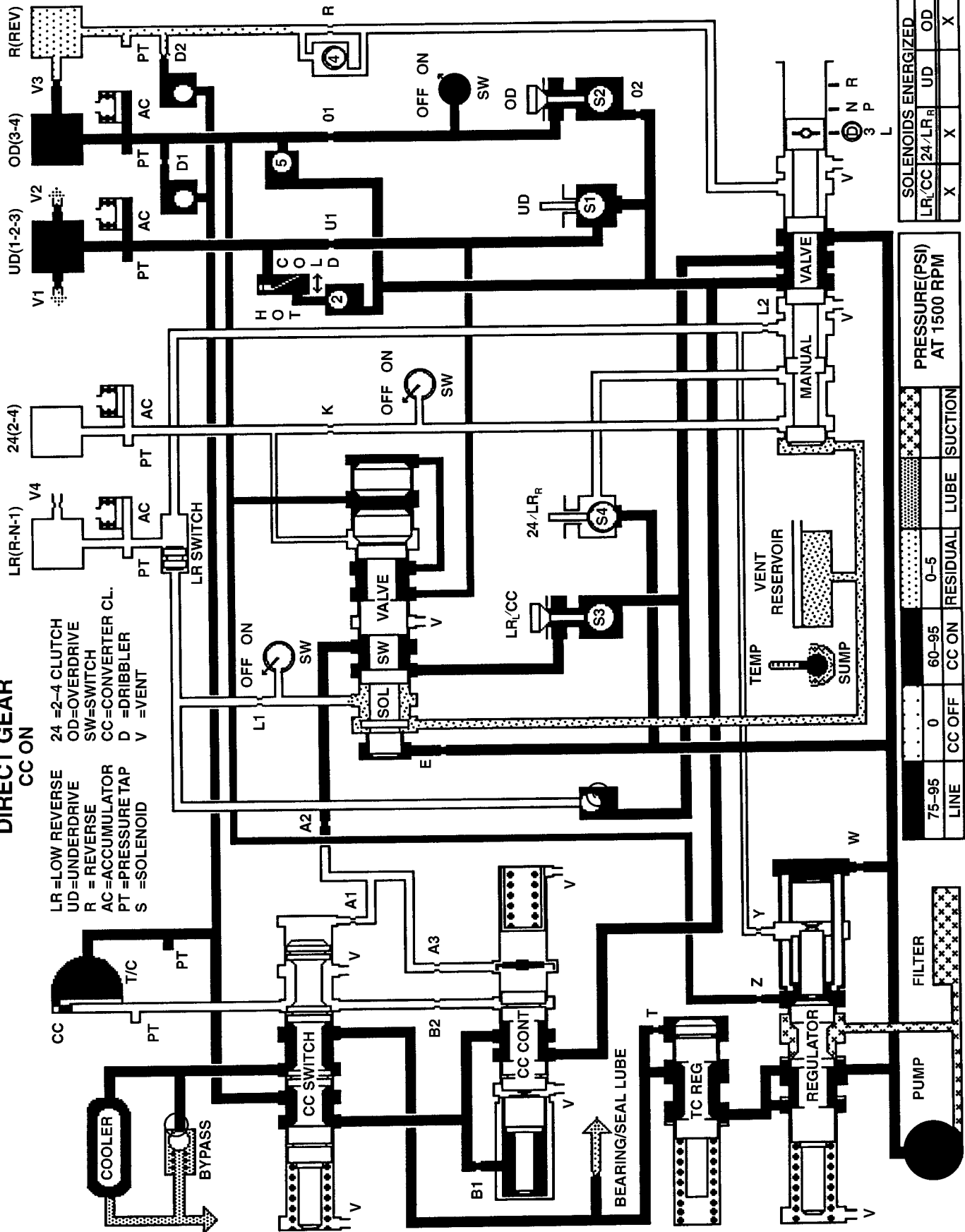


AUTOMATIC TRANSMISSION - 42RLE (C

AUTOMATIC TRANSMISSION - 42RLE (C

**DIRECT GEAR
CC ON**

LR=LOW REVERSE
UD=UNDERDRIVE
R = REVERSE
AC=ACCUMULATOR
S =SOLENOID
24 =2-4 CLUTCH
OD=OVERDRIVE
SW=SWITCH
CC=CONVERTER CL.
D =DRIBBLER
V =VENT



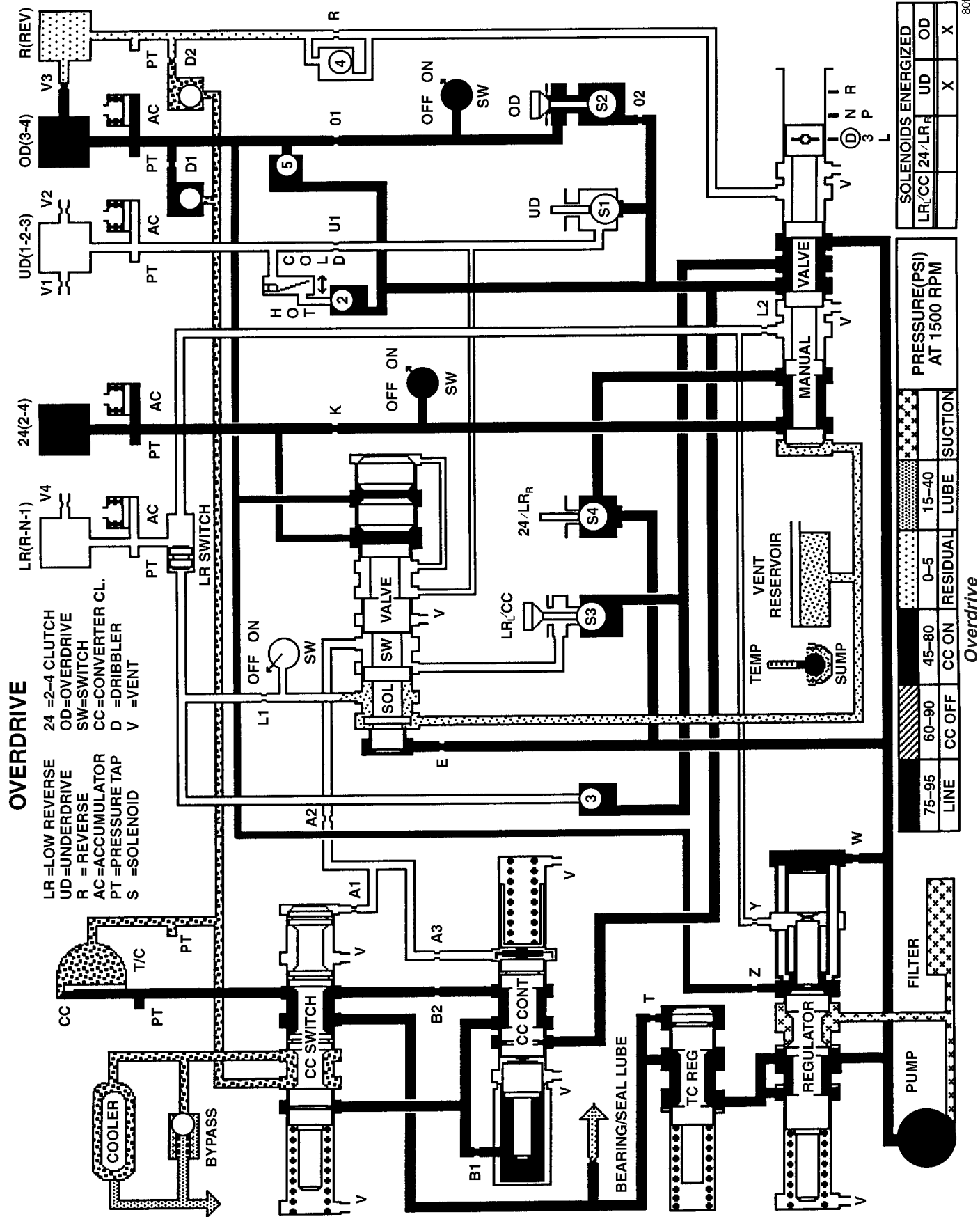
SOLENOIDS ENERGIZED			
LR/CC	24/LR _R	UD	OD
X	X	X	X

PRESSURE (PSI) AT 1500 RPM			
LINE	CC OFF	CC ON	SUCTION
75-95	0	60-95	0-5

Direct Gear (CC On)

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AUTOMATIC TRANSMISSION - 42RLE (C

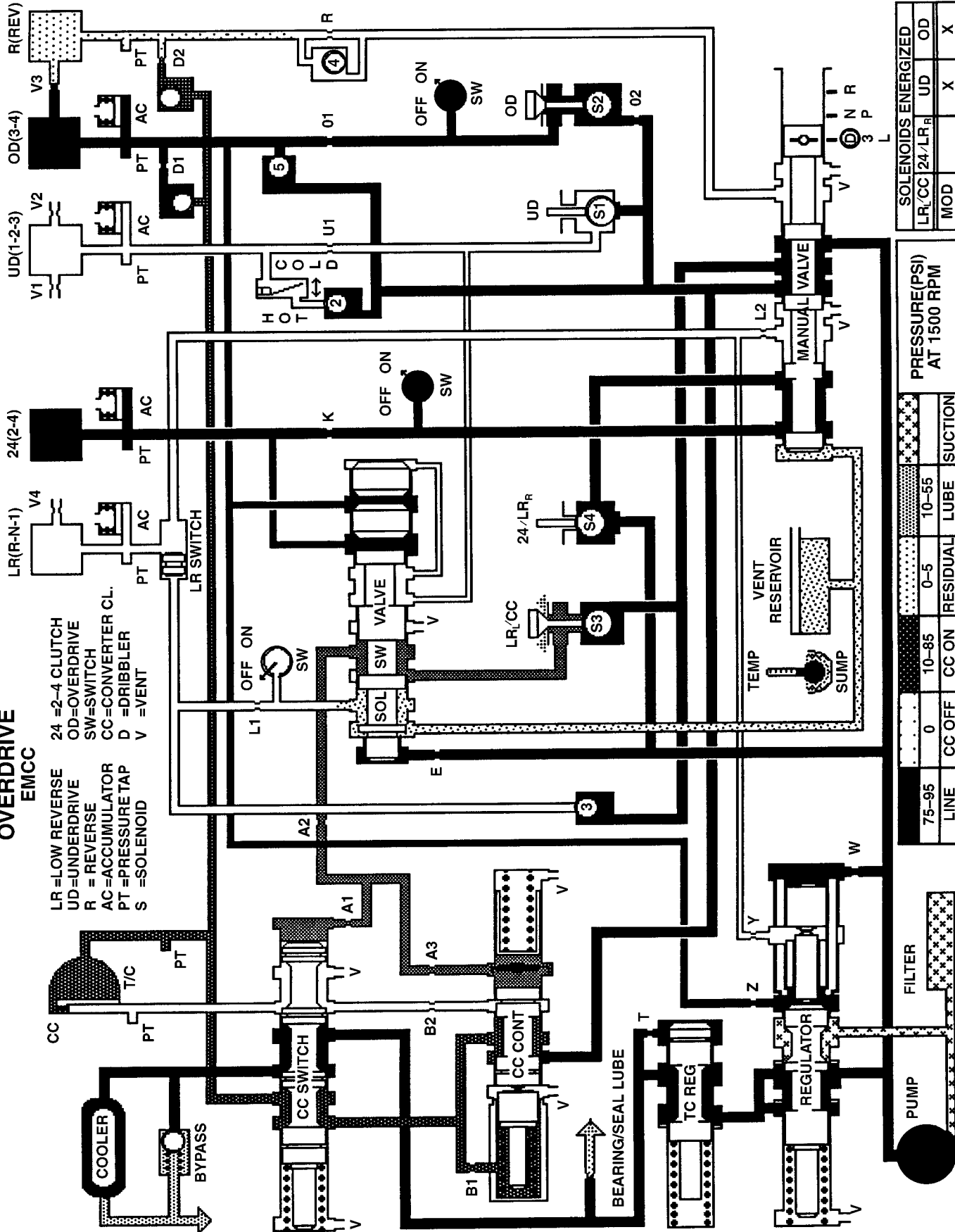


AUTOMATIC TRANSMISSION - 42RLE (C)

OVERDRIVE
EMCC

LR=LOW REVERSE
UD=UNDERDRIVE
R = REVERSE
AC=ACCUMULATOR
PT=PRESSURE TAP
S =SOLENOID

24 =2-4 CLUTCH
OD=OVERDRIVE
SW=SWITCH
CC=CONVERTER CL.
D =DRIFFLER
V =VENT



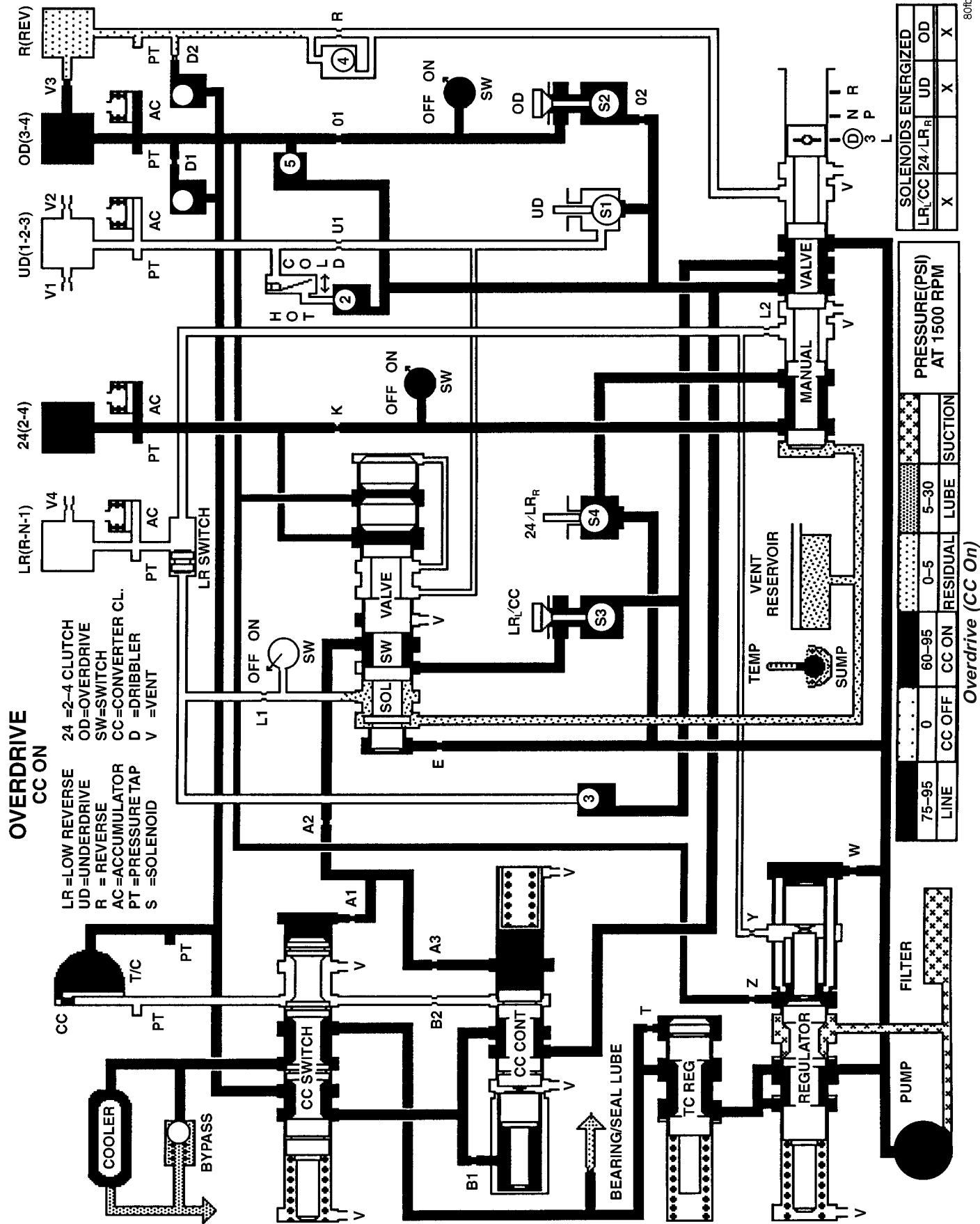
SOLENOIDS ENERGIZED			
LR/CC	24/LR _R	UD	OD
MOD		X	X

PRESSURE (PSI) AT 1500 RPM			
LINE	CC OFF	CC ON	SUCTION
75-95	0	10-85	0-5
			10-55

Overdrive (EMCC)

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AUTOMATIC TRANSMISSION - 42RLE (C



AUTOMATIC TRANSMISSION - 42RLE (C [REDACTED])**SPECIFICATIONS****42RLE AUTOMATIC TRANSMISSION****GENERAL SPECIFICATIONS**

Transmission Type	Four-Speed Automatic, Electronically Controlled, Fully Adaptive, Electronically Modulated Torque Converter
Lubrication Method	Pump (internal - external gear-type)
Cooling Method	Water Heat Exchanger and/or Air-to-Oil Heat Exchanger

GEAR RATIOS

1st Gear	2.84:1
2nd Gear	1.57:1
3rd Gear (Direct)	1.00:1
4th Gear (Overdrive)	0.69:1
Reverse Gear	2.21:1

BEARING PRELOAD (DRAG TORQUE)

Description	Metric	Standard
Output Shaft	0.22-0.903 N·m	1-8 in. lbs.

CLUTCH PACK

Description	Metric	Standard
Low/Reverse Clutch (Select Reaction Plate)	0.84-1.60 mm	0.033-0.063 in.
Two/Four Clutch (No Select)	0.76-2.64 mm	0.030-0.104 in.
Reverse Clutch (Select Snap Ring)	0.89-1.37 mm	0.035-0.054 in.
Overdrive Clutch (No Select)	1.07-3.25 mm	0.042-0.128 in.
Underdrive Clutch (Select Reaction Plate)	0.94-1.50 mm	0.037-0.059 in.

INPUT SHAFT

Description	Metric	Standard
End Play	0.12-0.63 mm	0.005-0.025 in.