

TRANSMISSION DISASSEMBLY

NOTE: Exploded views of internal parts, thrust washer and needle bearing locations can be found in Fig. 30-Fig. 33 .

1. Remove input shaft. Mount transmission in a holding fixture. Thoroughly clean solenoid body connector area to avoid contamination. Remove oil pan and gasket. Remove filter and "O" ring assembly. DO NOT damage aluminum pump bore.
2. Remove accumulator body and valve body retaining bolts. Note bolts positions for reassembly. DO NOT remove center 2 bolts. See Fig. 4. This keeps upper and lower valve body together during disassembly. Remove solenoid body Torx retaining bolts and one nut.
3. Push up on solenoid body connector while removing solenoid body. Remove solenoid screen, by rotating and pulling out. Remove reinforcing plate. EPC ball is spring loaded under separator plate. Remove separator plate and two gaskets. Remove intermediate accumulator regulator filter and spring. See Fig. 5. Remove EPC ball and blow off spring. Discard gasket.
4. Remove one steel and 9 rubber check balls. DO NOT damage rubber check balls. See Fig. 7. Remove servo snap ring, retaining plate, piston and rod assembly and servo spring. Remove 3 feed bolts and discard.
5. Rotate transmission so bellhousing is facing upward. Remove 9 pump retaining bolts. Discard washers. Using a slide hammer, remove pump, gasket and pump support thrust washer. Lift out coast clutch assembly. Remove needle bearing assembly between front pump and sun gear.
6. Remove large snap ring. Remove overdrive pressure plate and clutch pack. Tag for reassembly. Remove overdrive ring gear, center shaft assembly and needle bearing assembly.
7. Install Clutch Spring Compressor (T89T-70010-F) into case. Tighten center bolts to 65 INCH lbs. (7 N.m). Remove large snap ring. Remove compressor tool. Remove Intermediate-overdrive cylinder assembly. Remove Intermediate return spring, center support and center support thrust washer.
8. Remove Intermediate pressure plate and clutch plates. Tag clutch plates for reassembly. Remove intermediate band. Using Clutch Remover/Installer (T89T-70010-E), remove direct clutch, forward clutch and shell. Hooks on crossbar MUST BE rotated into notches on input shell.
9. Using large screwdriver, remove reverse planet assembly snap ring. Remove reverse planetary assembly and 2 planetary carrier thrust washers. Remove and discard output shaft snap ring.
10. Remove ring gear, hub assembly and needle bearing assembly. Remove reverse hub and one-way clutch assembly. Using large screwdriver, remove reverse clutch snap ring. Remove reverse pressure plate and clutch pack, tag for reassembly.
11. Rotate transmission so pan surface faces up. Remove 9 extension housing bolts. Remove wiring bracket, extension housing and gasket. Discard gasket.
12. Remove output shaft, park gear and output shaft thrust washer. Remove 5 retaining bolts from low-reverse one way clutch inner race. Remove reverse clutch return spring assembly and inner race.

NOTE: Reinstall reverse clutch pressure plate and snap ring to restrain reverse clutch piston during removal.

13. Using shop air in reverse clutch feed port, blow out reverse clutch piston against pressure plate. Remove snap ring, reverse clutch pressure plate and piston from case.
14. Rotate transmission so pan surface faces downward. Remove parking pawl return spring, pin and parking pawl from case. Remove parking rod guide plate. Remove Torx head bolt (40A) and parking pawl abutment.

15. Using side cutters or remover tool, remove manual lever roll-pin from case. Remove inner detent lever nut, while holding lever with crescent wrench. Remove inner detent lever and parking pawl actuating rod assembly from manual lever.
16. Remove lever position sensor and manual lever. Remove manual valve detent spring. Using slide hammer, remove manual lever seal. If required, remove stud tube, using channel lock pliers.