

ON-VEHICLE SERVICE

VALVE BODY ASSEMBLY

NOTE: If valve body replacement is necessary, see FORD MOTOR CO. TSB No. 95-2-8.

Removal

1. Raise and support vehicle. Loosen oil pan retaining bolts and allow transmission fluid to drain. Remove oil pan and gasket. Discard gasket. Remove transmission oil filter. Disconnect all solenoid and sensor harness connectors.
2. Remove manual lever detent spring. Remove EPC solenoid bracket. Remove valve body bolts. Note position lengths of bolts for reassembly reference. Remove valve body and gasket from transmission.

Installation

1. Using 2 alignment bolts as guides, position valve body (with new gasket) in case. Ensure check balls are in proper locations. Loosely install remaining valve body bolts. Install EPC solenoid bracket. Install manual valve detent spring.
2. Tighten valve body bolts to specification. See **TORQUE SPECIFICATIONS** . Connect all solenoid and sensor harness connectors. Install filter and grommet. Install pan gasket and oil pan. To complete installation, reverse removal procedure. Refill with fluid.

TRANSMISSION RANGE (TR) SENSOR

Removal

Raise and support vehicle. Disconnect linkage and electrical connector from sensor. Remove bolts and TR sensor from case.

Installation

1. Install TR sensor and 2 shims onto manual control lever shaft. Install bolts but **DO NOT** tighten. Place TR sensor in Neutral position (2 detent positions back from Park).
2. Insert Transmission Range Sensor Alignment tool (T93P-70010-A) into slots. See **Fig. 3** . Align the three slots on TR sensor with tabs on adjuster. Tighten bolts to specification. See **TORQUE SPECIFICATIONS** .

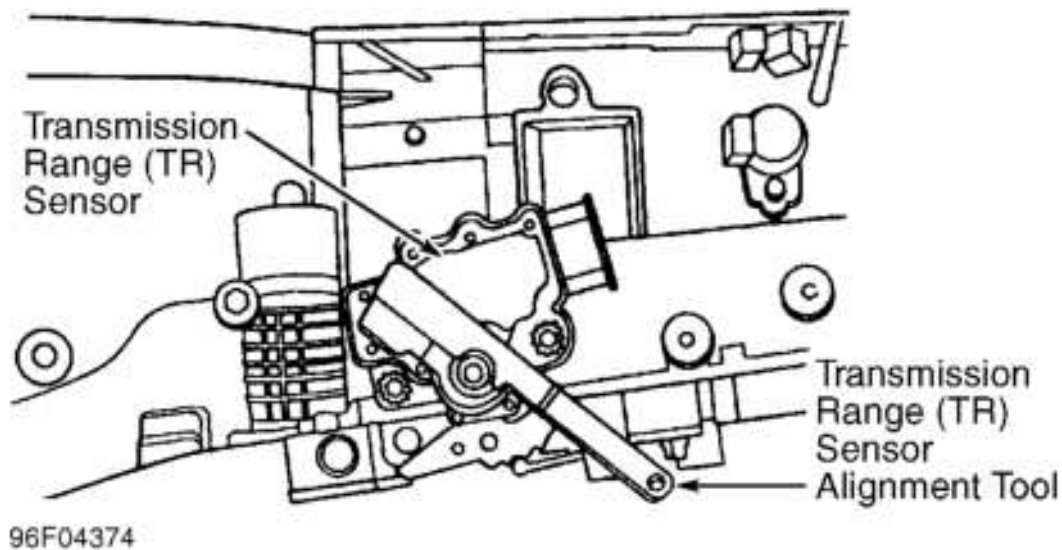


Fig. 3: Adjusting Transmission Range (TR) Sensor
 Courtesy of FORD MOTOR CO.

OVERDRIVE SERVO ASSEMBLY

Removal

Remove valve body, see **VALVE BODY ASSEMBLY** . Locate overdrive servo. See **Fig. 4** . Using Servo Piston Remover/Replacer (T92P-70023-A), depress overdrive servo piston and remove retaining ring. See **Fig. 5** . Remove piston assembly and spring.

Installation

1. Ensure .020" (.51 mm) overdrive servo bleed hole clear. Using ATF, lubricate overdrive servo pocket in transmission case. Assemble spring to piston. Install assembly into case pocket. Ensure servo rod contacts overdrive band apply pocket.
2. Using remover/replacer, depress piston and install retaining ring. See **Fig. 5** . Install valve body. To complete installation, reverse removal procedure.

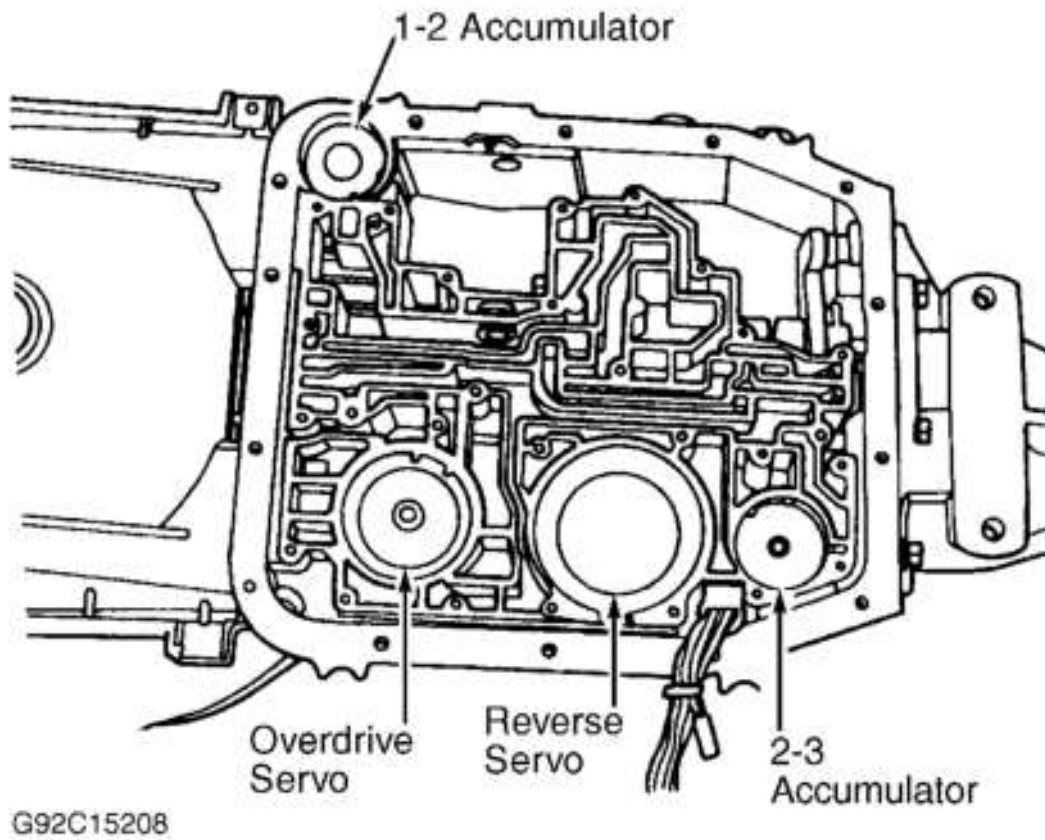


Fig. 4: Identifying Accumulator & Servo Locations
Courtesy of FORD MOTOR CO.

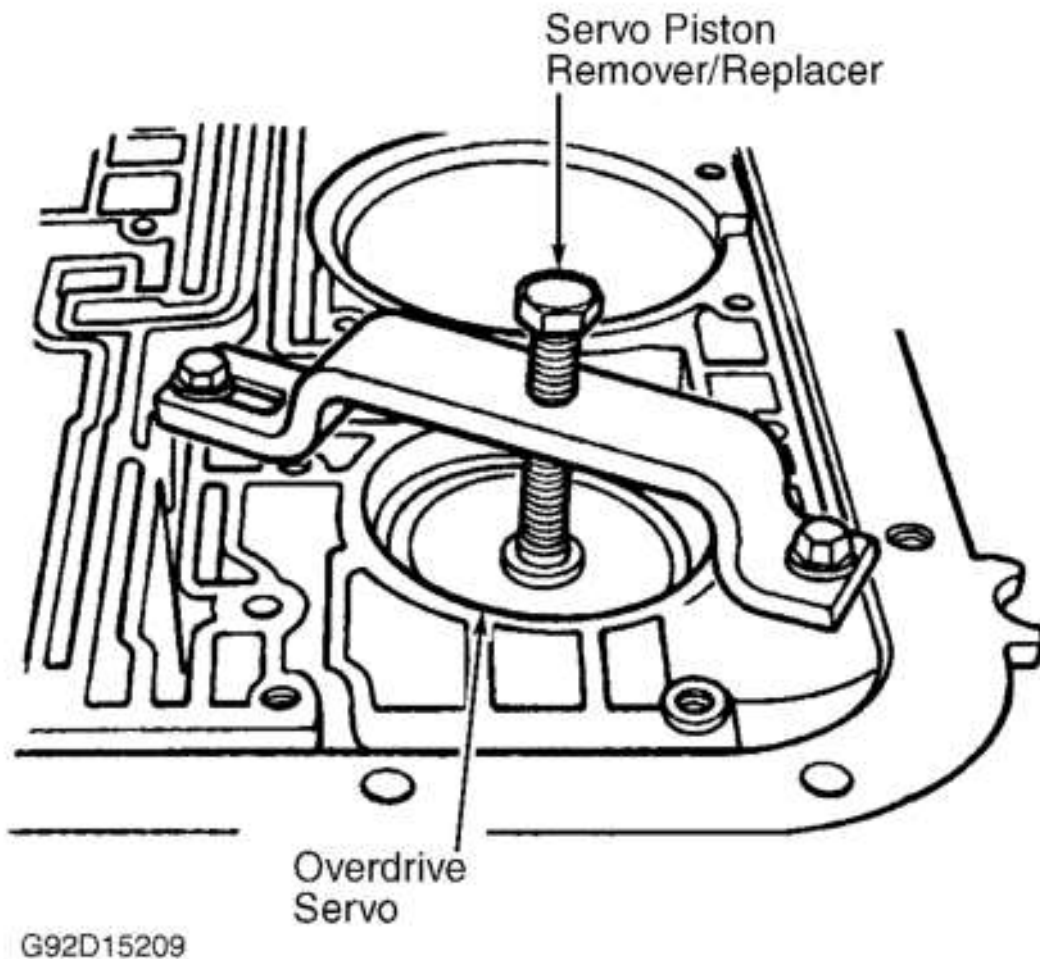


Fig. 5: Removing & Replacing Overdrive Servo
 Courtesy of FORD MOTOR CO.

REVERSE SERVO ASSEMBLY

Removal

Remove valve body, see VALVE BODY ASSEMBLY . Locate reverse servo. See Fig. 4 . Using Remover/Replacer (T92P-70023-A), depress reverse servo piston cover and remove retaining snap ring and cover. Remove piston and spring from case.

Installation

To install, reverse removal procedure. Ensure servo piston is installed with the same length rod as was removed.

1-2 & 2-3 ACCUMULATOR PISTON

NOTE: Note location and number of springs during removal for reassembly

reference.

Removal

1. Remove valve body, see **VALVE BODY ASSEMBLY** . Locate 1-2 or 2-3 accumulator. See **Fig. 5** . Using Remover/Replacer (T92P-70023-A), depress piston cover and remove retaining snap ring and cover or remove spring cover.
2. Remove spring(s) and related components. Remove accumulator piston (reverse snap ring pliers can be used, if necessary). Remove accumulator seals from piston.

Installation

To install, reverse removal procedure. Using ATF, lubricate piston seals and piston pocket in case prior to installation.

EXTENSION HOUSING BUSHING & REAR OIL SEAL

Removal

1. Raise vehicle on hoist. Mark drive shaft yoke and axle companion flange for reassembly reference. Disconnect drive shaft from transmission. Remove oil seal using Puller (T74P-77248-A).
2. Remove bushing using Puller (T77L-7697-A), taking care not to damage output shaft splines.

Installation

Install new bushing into extension housing using Driver (T80L-77034-A). Install new seal into housing using appropriate seal installer. Coat inside diameter of rubber portion of seal and yoke splines with lubricant. Install drive shaft.

EXTENSION HOUSING

Removal

1. Raise and support vehicle. Remove exhaust system components as necessary for access. Drain transmission fluid. Mark drive shaft yoke and axle companion flange for reassembly reference. Remove drive shaft. Disconnect and remove Vehicle Speed Sensor (VSS) from extension housing.
2. Remove engine rear support-to-extension housing retaining bolts. Raise transmission just enough to remove weight from rear support. Remove rear support-to-crossmember retaining bolts. Remove crossmember-to-frame side support bolts and remove rear support.
3. Lower transmission and remove extension housing retaining bolts. Slide housing off output shaft. Remove and discard extension housing-to-case gasket.

Installation

Clean mating surface on transmission and extension housing. Position new gasket on transmission. Slide extension housing into place. Install bolts and tighten to specification. Refer to **TORQUE SPECIFICATIONS** . To complete installation, reverse removal procedure.