

# ON-VEHICLE SERVICE

## VALVE BODY

### Removal

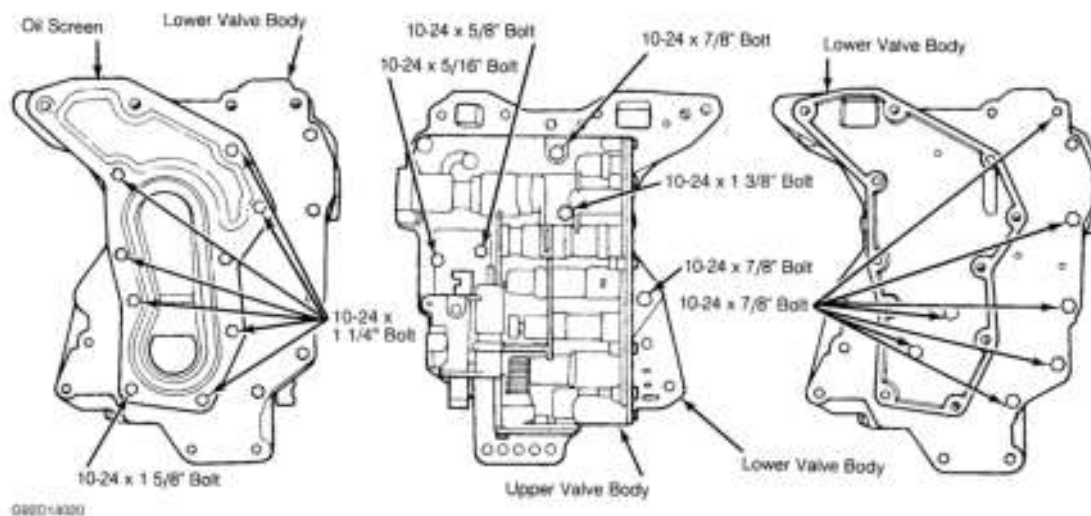
1. Loosen oil pan retaining bolts. Tap pan to break gasket loose, allowing fluid to drain. Remove oil pan and gasket. Remove and discard Nylon shipping plug from filler tube hole.

**NOTE:** Nylon plug is used to retain fluid in transmission during shipment and should be discarded when oil pan is removed.

2. Remove valve body retaining bolts and lower valve body from transmission case. For valve body repairs, see VALVE BODY under COMPONENT DISASSEMBLY & REASSEMBLY.

### Installation

Position valve body on case, ensuring selector and downshift levers are engaged. Install and tighten valve body retaining bolts to specification. See TORQUE SPECIFICATIONS. See Fig. 2. Install oil pan with NEW gasket, and tighten bolts evenly to specification.



**Fig. 2: Identifying Valve Body Bolt Locations**

Courtesy of FORD MOTOR CO.

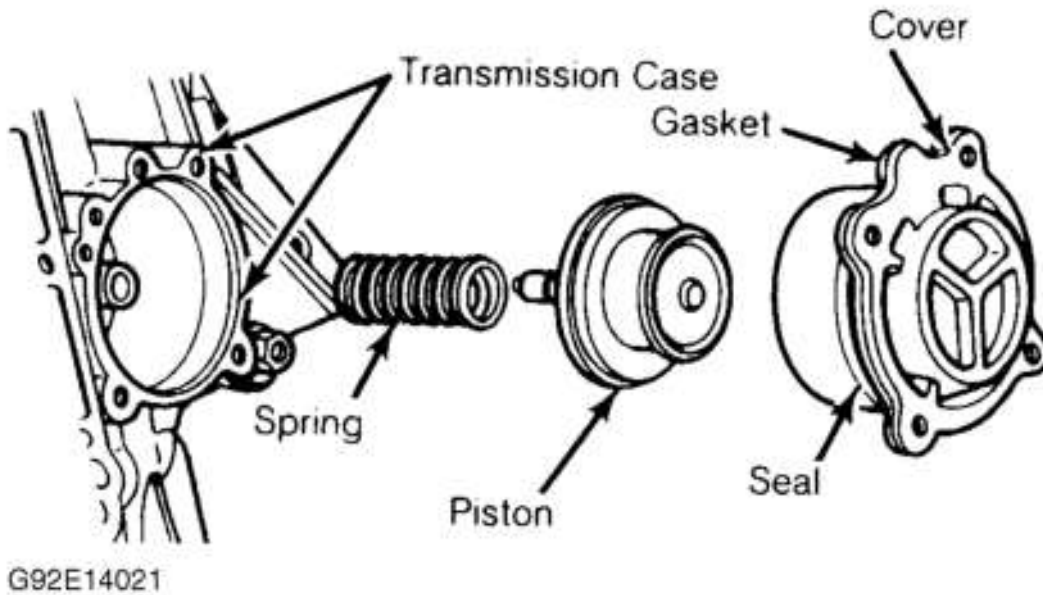
## INTERMEDIATE SERVO

### Removal

Remove engine rear support-to-crossmember bolt. Remove crossmember-to-frame retaining bolts and remove crossmember. Disconnect muffler Inlet pipe from exhaust manifolds and allow pipe to hang. Place a drain pan under servo and remove cover retaining bolts. Remove cover, piston, spring and gasket. See Fig. 3.

**NOTE:** As piston is being removed, screw in intermediate band adjustment screw.

This keeps tension on band, keeping struts properly engaged in band end notches as piston is removed.



**Fig. 3: Exploded View Of Intermediate Servo**  
Courtesy of FORD MOTOR CO.

### Seal Replacement

1. Apply air pressure to port in servo cover, and remove piston and rod. Remove seal from cover. Replace complete piston and rod assembly if piston or piston sealing lips are damaged.
2. Dip NEW seal in transmission fluid and install on cover. Coat NEW gasket with petroleum jelly and install on cover. Dip piston in transmission fluid and install in cover.

### Installation

To install, reverse removal procedure. Install service identification tag and back off band adjusting screw as servo cover bolts are being tightened.

### Intermediate Band Adjustment

Tighten intermediate band adjustment screw to specification. See **TORQUE SPECIFICATIONS**. Back off screw 1 1/2 turns. Hold adjustment screw in this position and tighten lock nut to specification. Refill transmission to correct fluid level.

## EXTENSION HOUSING SEAL & BUSHING

### Removal

Remove propeller shaft. Pry out seal. Using Extension Housing Bushing Remover (T77L-7697-D), remove bushing from extension housing. Ensure seal is not damaged.

## Installation

1. Using Extension Housing Bushing Replacer (T77L-7697-C), install bushing into extension housing. Before installing a new seal, inspect sealing surface of propeller shaft yoke for wear or damage. If scores or grooves are found, replace yoke.
2. Using Seal Driver (T61L-7657-B), install seal in extension housing. Ensure seal is fully seated in bore. Coat inside of seal and yoke splines with wheel bearing grease, and install propeller shaft.

## EXTENSION HOUSING & GOVERNOR

### Removal

1. Remove propeller shaft. Remove transfer case (if equipped). See appropriate TRANSFER CASE article in TRANSFER CASES section. See menu below. Remove speedometer cable. Remove rear engine support-to-extension housing bolts. Raise transmission with jack to take weight off support. Remove support from crossmember.
  - Borg-Warner 1345, see **TRANSFER CASE - BORG-WARNER 1345**
  - 1350 & 1356, see **TRANSFER CASE - BORG-WARNER 1350 & 1356**
2. Place drain pan under rear of transmission. Remove extension housing-to-case bolts. Slide housing off output shaft. Remove governor body-to-oil collector flange bolts. Separate governor from flange. For governor repairs, see **GOVERNOR** under COMPONENT DISASSEMBLY & REASSEMBLY.

### Installation

To install, reverse removal procedure. Tighten all nuts and bolts to specification. See **TORQUE SPECIFICATIONS**. Ensure all mating surfaces are clean. Refill transmission to correct fluid level.

## OIL COOLER FLUSHING

Contaminates **MUST** be removed from oil cooler before transmission is put back into service. Replace cooler supply tubes if leaking. Thoroughly flush oil cooler and lines if a major service or transaxle removal has occurred. Use a mechanically agitated cleaner such as Rotunda (014-00028).

## TORQUE CONVERTER FLUSHING

Whenever transmission has been disassembled to replace worn or damaged parts or because valve body sticks due to foreign material, converter must be cleaned using a mechanically agitated cleaner, such as Rotunda (014-00028). Under no conditions should converter be cleaned by hand agitation using solvent.