VOLVO

240
260

DESCRIPTION

Clutch is diaphragm spring type. Clutch assembly consists of the following components:

- Pressure plate
- Diaphragm spring
- Sheet metal clutch housing
- Clutch disc
- Clutch release bearing

Clutch actuation is mechanical on 240 series and hydraulic on 260 series. On 240, a cable provides linkage between clutch pedal and release fork. On 260 models, linkage on clutch pedal actuates clutch master cylinder which in turn supplies hydraulic pressure to clutch slave cylinder. Clutch release fork is actuated by slave cylinder piston and pin.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

Removal, M45 & M46 Transmission – 1) Disconnect battery ground cable. Pull back-up light wiring harness connector. Working from under vehicle, disconnect gear shift lever from gear shift rod.

2) Separate gear shift boot from carpet. Using a 4 mm Allen wrench, remove reverse gear detent fork. With snap ring pliers, remove lock ring and pull up lever. Unhook clutch fork return spring and separate cable from housing.

3) Remove bolts at clutch housing and nut at exhaust pipe, then remove front exhaust pipe bracket. Position a support under engine. Remove transmission crossmember. Index mark and disconnect drive shaft. Separate speedometer cable from transmission.

4) Slightly lower rear of engine and take out all clutch housing bolts except top right. Remove front starter bracket and remove starter. Install transmission jack and remove last clutch housing bolt. Pull transmission to rear, turning to free shaft tunnel and remove transmission. Remove upper starter mounting bolt. Remove clutch mounting bolts evenly in a diagonal pattern to prevent warping. Remove clutch and separate clutch disc.

Installation – To install transmission and clutch assembly, reverse removal procedure and note the following: Insert clutch plate with long side of hub facing backward. Use aligning tool (2484 or equivalent) to center clutch assembly. Tighten clutch mounting bolts in a criss-cross pattern. Adjust clutch pedal free play.

NOTE – *Two different types of pressure plates and release bearings are used in 240 and 260 models. The 240 plate fingers are straight, requiring a longer 1 11/16" (43 mm) throwout bearing. The 260 pressure plate fingers are raised at the center by approximately 9/32" (7 mm), requiring use of a shorter 1 7/16" (36.5 mm) release bearing. Pressure plates and release bearings must never be mixed.*

CLUTCH CABLE (240 Series)

Removal – Remove return spring and disconnect clutch cable at clutch fork; extract cable. Remove cover panel under instrument cluster. Remove clevis pin at upper end of cable. Separate clutch fork adjustment mechanism from clutch housing, if necessary. Force cable out of rubber grommet located in firewall.

Installation – Insert new cable into rubber grommet, feed it through cable guide and attach at upper end with clevis pin. Position adjustment mechanism into clutch housing. Attach cable to clutch fork, then refit return spring.

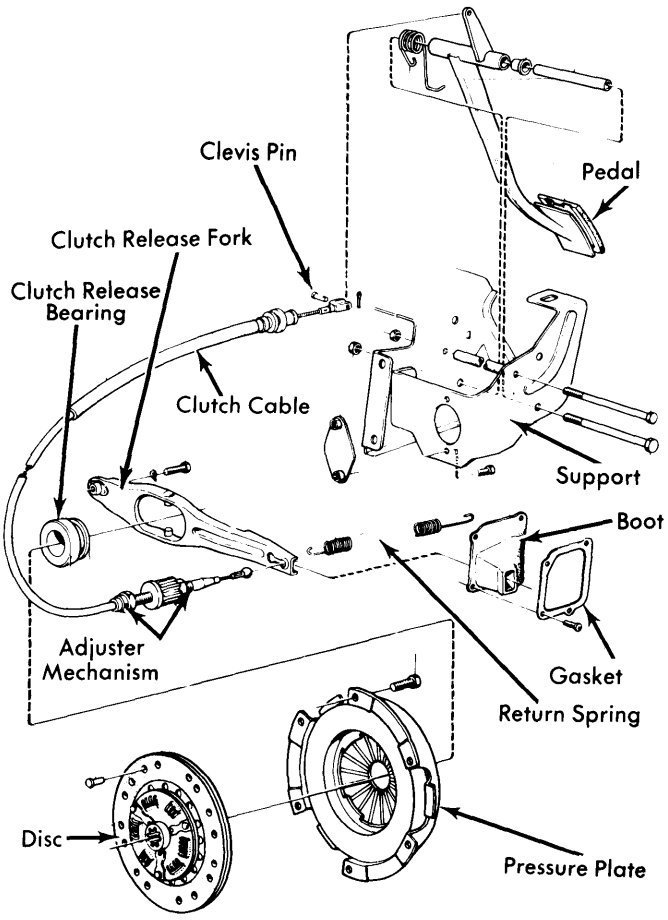

Fig. 1 Exploded View of Clutch System (240 Mechanical Linkage Shown)

HYDRAULIC CLUTCH ACTUATION

Manufacturer does not provide maintenance instructions for hydraulically operated clutch linkage. There should be no free play in this type linkage.

PILOT BEARING

Remove retaining clip and remove bearing using puller (SVO 4090). Pack bearing with heat resistant grease and install into crankshaft using a driver. Install retaining clip.

VOLVO (Cont.)

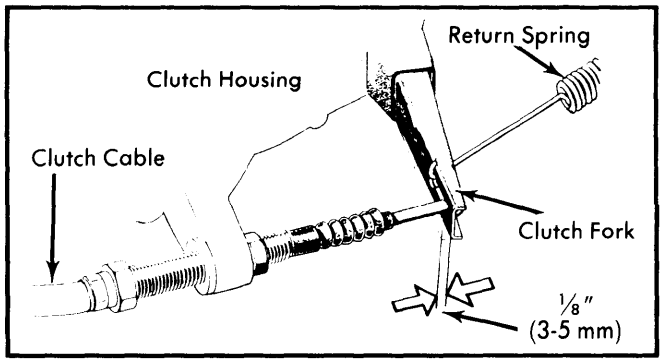

Fig. 2 Measuring Clutch Fork Free Play (240 with Mechanical Linkage Shown)

ADJUSTMENT

CLUTCH FREE PLAY (240)

Using adjustment mechanism attached to clutch housing, set free play. Adjustment is correct when approximately 1/8" (3-5 mm) clutch fork free play is obtained.

TIGHTENING SPECIFICATIONS

Application	Ft.Lbs. (mkg)
Bell Housing Bolts	25-35 (3.5-4.8)
Output Shaft Flange Nuts	67-88 (9.2-12.2)
Gearshift Assembly	15-18 (2.0-2.5)