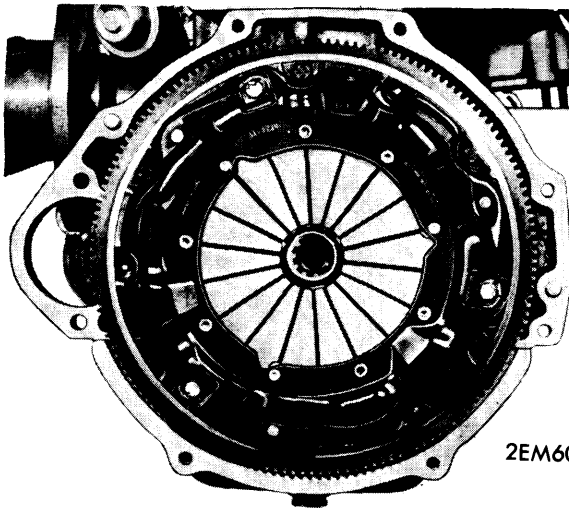


1968-73 VOLVO 140, 164 & 1800 SERIES

Volvo 140 (1968-73)
 Volvo 164 (1969-73)
 Volvo 1800 (1968-73)

DESCRIPTION

Clutch is of the diaphragm spring type. It is available in two different versions, both of which consist of the following components: pressure plate, diaphragm spring, sheet metal casing, clutch release bearing, and bell housing. Clutch is actuated by a cable connecting clutch pedal to release bearing fork.



CLUTCH ASSEMBLY (FRONT VIEW)
 REMOVAL & INSTALLATION

CLUTCH

140 Series – 1) Suitably support engine by suspending or placing jack under oil pan. Remove gearshaft lever and rubber boot. Raise vehicle and suitably support at side rails.

2) Drain transmission. Remove crossmember support. Disconnect front "U" joint, speedometer cable, rear engine mount, exhaust pipe bracket, and back-up light.

NOTE – If equipped with overdrive, disconnect as required.

3) Remove one lower transmission mounting bolt and its opposing upper mounting bolt; install guide dowels. Withdraw remaining bolts and slide transmission out on dowels. Remove upper bolt from starter motor. Remove clutch release bearing. Disconnect wire from release fork. Remove wire sleeve from bracket.

4) Unscrew attaching bolts and remove flywheel housing. Remove bolt attaching fork ball joint. Remove ball and release fork. Remove pressure plate bolts in a criss-cross pattern to prevent warping. Remove pressure plate and clutch disc. To install clutch and transmission, reverse removal procedure.

164 Series – 1) Suitably support engine. Raise vehicle and place jack stands on side rails. Drain transmission. Remove gearshaft lever and rubber boot. Disconnect, in order, the following: upper radiator mount bolts, exhaust manifold nuts, battery leads, throttle shaft, and clutch wire from bell housing.

2) Remove transmission support crossmember. Disconnect exhaust pipe bracket, speedometer cable, and drive shaft. Also disconnect back-up lights and overdrive unit, if equipped.

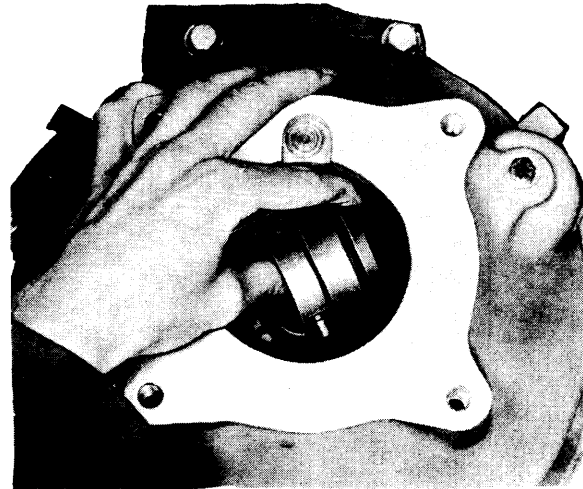
3) Raise suitable transmission jack (SVO 2833) and position correctly (pin in front, M 400 transmission; pin in rear, M 410 transmission). Withdraw transmission-to-engine bolts and remove transmission. Disconnect pressure plate assembly from flywheel and lift from vehicle.

1800 Series – 1) Remove console and gearshift lever. Disconnect battery ground cable. Remove radiator mounting bolts. Raise vehicle and place safety stands in position. Disconnect drive shaft and slide it to rear.

2) After inserting a block of wood between jack and oil pan, support engine. Remove exhaust pipe clamp, speedometer from transmission, and rear engine mounts.

3) Slightly lower engine and disconnect electrical leads from transmission. Remove upper starter motor bolt and withdraw bolts mounting engine to transmission. Lower transmission out bottom of vehicle.

4) Remove clutch release bearing as shown in illustration. Disconnect wire from release fork and loosen wire sleeve from bracket. Remove bell housing.



REMOVING RELEASE BEARING
 (1800 SERIES)

5) Remove ball and release fork. Loosen bolts mounting clutch to flywheel in a criss-cross pattern to avoid any chance of warping. Remove clutch disc and pressure plate. To install clutch and transmission, reverse removal procedure and tighten all bolts to specification.

CLUTCH PEDAL WIRE

Unhook return spring from release bearing fork. Disconnect cable. Unscrew nut and remove wire sleeve from bell housing. Disconnect wire from clutch pedal, unscrew nut for wire sleeve and remove wire. To install, reverse removal procedure.

1968-73 VOLVO 140, 164 & 1800 SERIES (Cont.)

CLUTCH RELEASE BEARING

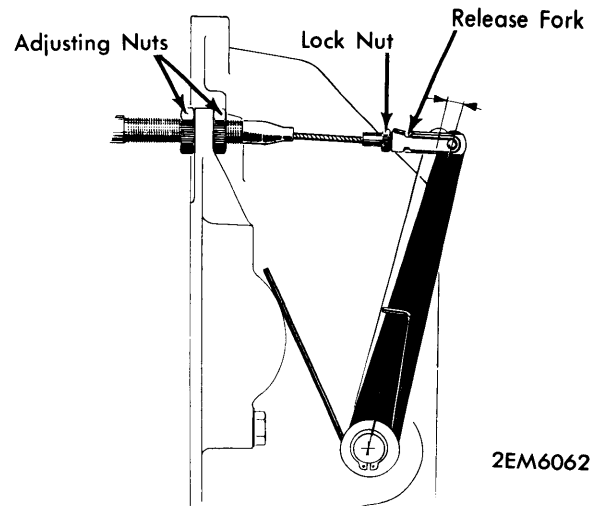
- 1) Remove bolt in release fork, and take out release bearing. Pull out release shaft.
- 2) Drive out old bushings, using suitable drift. Using a press, seat new bushings.

PILOT BEARING

- 1) Remove circlip and, using suitable puller (SVO 4090), remove spring.
- 2) Pack bearing with fresh grease and, using suitable installer (SVO 1426), seat bearing. Install circlip.

ADJUSTMENT**CLUTCH ADJUSTMENT**

Correct clutch pedal play is obtained by adjusting clutch release lever. Adjust screwing fork on clutch wire in or out until .16-.20" (4-5 mm) is achieved. See illustration.

**CLUTCH RELEASE LEVER PLAY**