

VOLVO

DL
GL
GLT

GLE
Bertone
Diesel

DESCRIPTION

Clutch is single dry disc type using a diaphragm spring type pressure plate. GLE and Bertone models use a hydraulically operated 9" (228.6 mm) clutch, while all other models use a cable controlled 8.12" (206 mm) clutch.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

Removal — 1) Disconnect battery ground cable and back-up light wiring harness connector. Working from under vehicle, disconnect gear shift lever from gear shift rod. On GLE and Bertone, unbolt clutch slave cylinder from housing and disconnect from release arm. On all other models, unhook clutch fork spring and separate cable from housing.

2) Separate shift boot from carpet. Using a 4 mm Allen wrench, remove reverse gear detent fork. Remove lock ring with snap ring pliers and lift out gearshift lever. Remove front exhaust pipe bracket and position a support under engine.

3) Remove crossmember at rear of transmission. Index mark propeller shaft and disconnect from transmission. Disconnect speedometer cable from transmission. Lower rear end of engine and remove all except top right clutch housing bolts. Remove front starter bracket and free starter from clutch housing.

4) Install transmission jack and remove last clutch housing bolt. Pull transmission to rear and turn to clear propeller shaft tunnel. Lower transmission clear of vehicle. Loosen pressure plate bolts gradually in a diagonal pattern and remove clutch assembly.

Installation — To install transmission and clutch assembly, reverse removal procedure and note the following: Install clutch disc with long side of hub to rear using alignment tool (999 5111 or equivalent). Install pressure plate and tighten bolts gradually in a criss-cross pattern. Adjust clutch pedal play on all models except GLE and Bertone.

NOTE — GLE and Bertone pressure plates have raised fingers and use a 1.43" (37 mm) long release bearing. Remaining model pressure plate fingers are straight and require the use of a 1.68" (43 mm) long release bearing. Pressure plates and bearings must never be mixed.

CLUTCH CABLE

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.

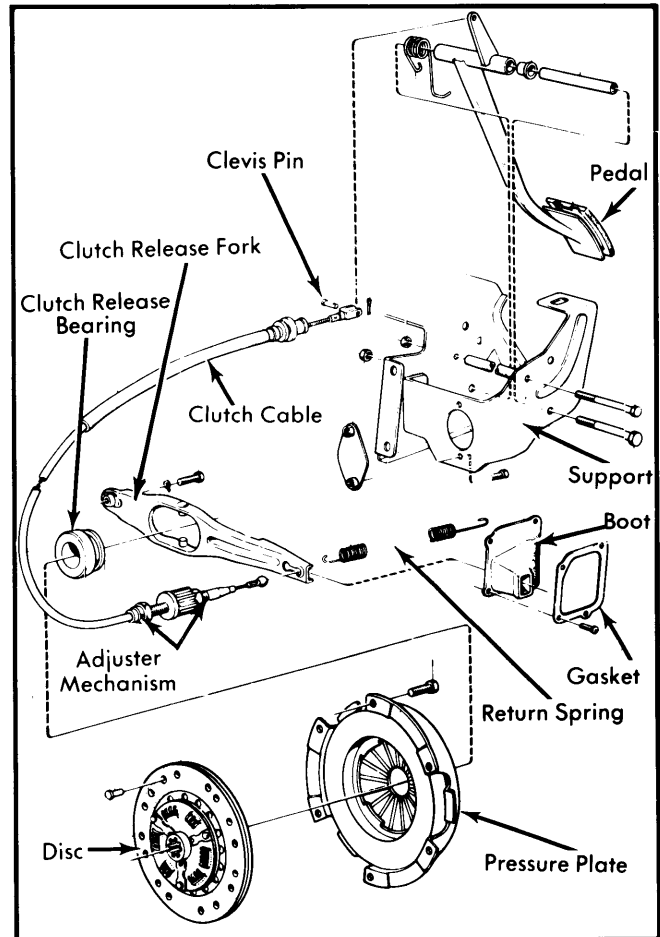


Fig. 1 Volvo Mechanical Linkage Clutch System

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.

ADJUSTMENT

CLUTCH FREE PLAY (EXCEPT GLE & BERTONE)

Using adjustment mechanism attached to clutch housing, set free play. Adjustment is correct when approximately .12" (3 mm) clutch fork free play is obtained.