

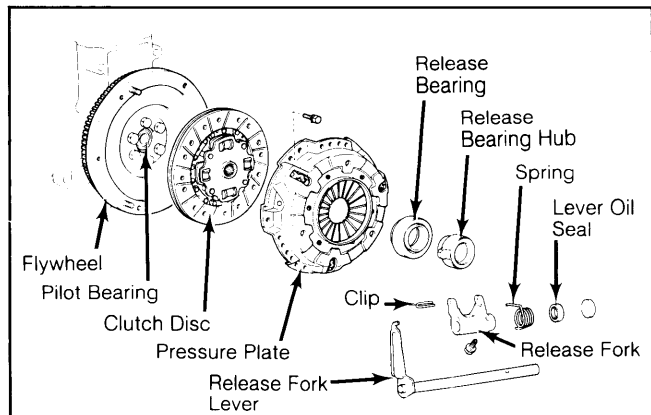
Clutches

TOYOTA TERCEL

DESCRIPTION

Clutch is single dry disc using diaphragm spring type pressure plate. Actuation is mechanical, using an adjustable cable connected to clutch pedal and release fork. A permanently lubricated release bearing is used.

Fig. 1: Exploded View of Clutch Components



REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

NOTE: Engine must be removed to replace clutch assembly.

Removal

1) Disconnect battery ground. Remove hood and air cleaner. Remove battery and battery carrier. Wrap drive shaft boots with shop towels. Drain cooling system and remove hoses and oil cooler lines (if so equipped).

2) Remove fan shroud and radiator. If vehicle has A/C, remove condenser fan, drive belts and compressor mounting bolts. Lay compressor to one side without disconnecting hoses. On all vehicles, disconnect bond cable from engine block.

3) Disconnect ignition coil cable and all engine-to-chassis electrical connections at engine. Disconnect carburetor linkage, fuel lines and heater hoses. Remove upper engine-to-transaxle bolts.

4) Remove exhaust front pipe by removing flange nut, removing bolts from the front of catalyast and removing clamp at the side of transaxle. Disconnect clutch pedal tension spring and release cable.

5) Remove the left stiffener plate and remove the right stiffener plate underside bolts. Remove engine shock absorber underside set bolt. Remove engine mount set bolts.

6) Place a jack under transaxle with wood block to prevent damage. Attach hoist to engine hangers, and with hoist supporting engine, remove lower transaxle attaching bolts while holding starter.

7) Remove engine from transaxle and support clutch housing with a cable slung from a bar at rear of engine compartment. Loosen pressure plate bolts one turn at a time until spring pressure is released, then remove pressure plate and disc.

Installation

1) Use aligning tool (SST 09301-36010) and assemble disc and pressure plate to flywheel. Finger

tighten mounting bolts initially, then tighten bolts in a triangular pattern, one turn at a time to final torque of 11-15 ft. lbs. (15-20 N.m).

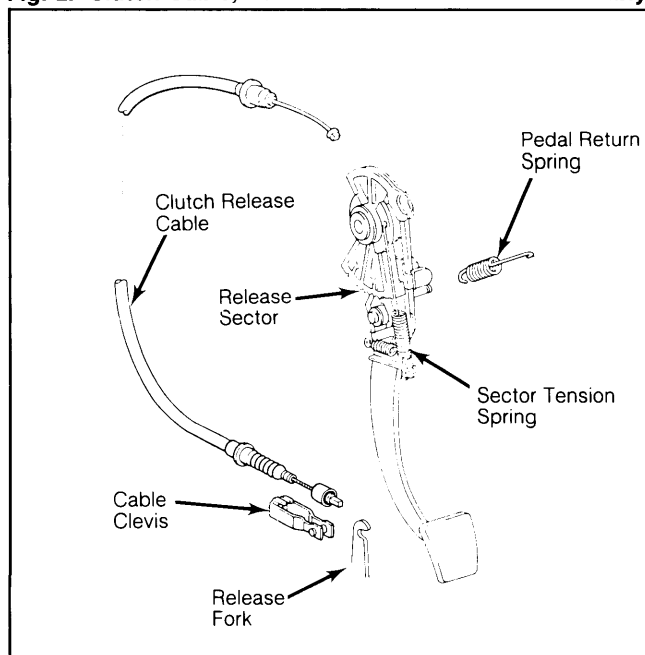
2) Apply Molybdenum DiSulphide grease to the following contact points: release fork and hub, hub and lever, hub and oil seal, and hub and bushing. Apply grease to inside of bearing and inside of clutch disc splines. To complete installation, reverse removal procedure.

CLUTCH CABLE

Removal & Installation

1) Disconnect clutch pedal sector tension spring (vertical) from pedal side. Disconnect clutch release cable end from release fork lever. Turn the release sector toward the front and disconnect the clutch release cable end from the release sector.

Fig. 2: Clutch Cable, Pedal and Release Sector Assembly



At least 6 notches must remain on sector.

2) Remove clutch release cable and remove clevis from the release cable. To install, install cable clevis to the clutch release cable. Run the cable through hole in floor. Turn the release sector and connect the inner release cable end to the groove of the release sector.

3) Connect cable end to release fork lever. Connect pedal tension spring. Check pedal free play. Check clutch release sector and pawl position. There must be at least 6 notches remaining on the release sector. If there are less, replace clutch disc. See Fig. 2.

CLUTCH RELEASE BEARING

Removal

With engine removed from vehicle, remove retaining clips from bearing collar and clutch fork. Slide assembly from transmission. If bearing does not rotate smoothly, press off collar with driver (09315-00010).

Installation

Use press and driver to install new bearing on sleeve. Lightly grease inner groove of bearing collar and all contact surfaces and reverse removal procedures.

TOYOTA TERCEL (Cont.)

PILOT BEARING

Removal & Installation

If pilot bearing is worn or damaged, pull from crankshaft with puller (09303-35010). Coat new bearing with multi-purpose grease and drive into crankshaft with installer (090304-12012).

ADJUSTMENTS

PEDAL HEIGHT

Measure distance from floor panel to upper surface of clutch pedal. Adjust pedal stopper bolt to give 6.65" (169.0 mm) pedal height.

CLUTCH PEDAL FREE PLAY

With release bearing contacting pressure plate, pedal play should be .08-1.10" (2.0-28.0 mm). To adjust, pull slightly on release cable and turn adjusting nut. Ensure that adjusting nut protrusion and cable holder inner notch are aligned, then depress pedal several times and recheck pedal play.