

## SUBARU

## Subaru

## DESCRIPTION

Clutch is a diaphragm spring, single dry disc type, with mechanical actuation through a clutch cable. Release bearing is a sealed unit and requires no lubrication.

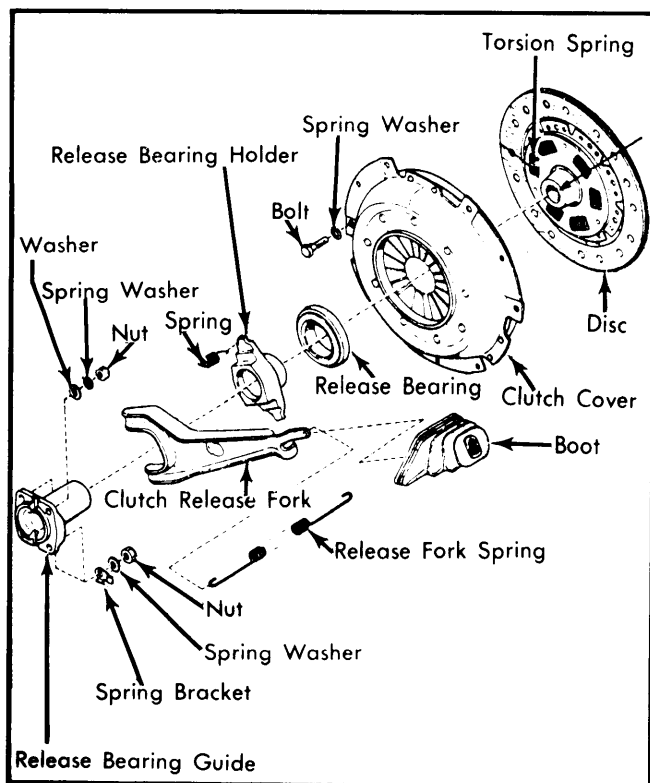


Fig. 1 Exploded View of Clutch Assembly

## REMOVAL &amp; INSTALLATION

## CLUTCH ASSEMBLY

**Removal** — 1) Disconnect battery and remove spare tire and air cleaner. Remove transmission stabilizer bar and disconnect wiring from starter and back-up light switch. Remove starter. Remove clutch return spring and loosen clutch release fork. Loosen adjusting nut and remove cable from lever.

2) Disconnect speedometer cable from transmission. Remove shift lever knob and console. Remove shift lever boot, loosen rod clamping nut and remove lever from rod. Raise and support front of vehicle. Disconnect exhaust pipe from manifold (sedan), or disconnect exhaust manifold from engine (coupe).

3) Remove nuts and bolts attaching transmission to engine. Loosen clamps and brace on gear shift rod, pull assembly rearward, and drive spring pin from hole. Disconnect gear shift from transmission and leave it attached to body. Remove axle shaft spring pin using a hammer and pin remover.

4) Remove nut, washer and bushing connecting stabilizer to transverse link. Place a jack under transmission and loosen bolts of hand brake cable mounting bracket. Remove bracket from crossmember. Loosen stabilizer bracket-to-rear crossmember bolts and pull stabilizer out of transverse link.

5) Loosen lock nut holding transverse link to crossmember and pull link to rear, out of crossmember. A lever may be used to ease removal. Pull axle shafts from transmission by pushing struts outward. Pull transmission out to rear.

6) **NOTE** — Engine is tilted forward when transmission is removed. To aid in removal, a stop may be provided at front of engine. Remove bolts attaching clutch assembly to flywheel and remove clutch pressure plate and disc.

**Installation** — To install, reverse removal procedure and note the following: Use a suitable aligning tool (399740100) to center clutch disc on flywheel. When installing pressure plate, make sure residual balance marks are placed at least 120° from each other. After installing transmission, adjust clutch cable.

## CLUTCH RELEASE BEARING &amp; HOLDER

**Removal** — 1) Remove transmission from engine.

2) Disconnect return springs from release bearing holder.

3) Remove release bearing and holder from bearing guide.

4) Remove clutch release fork and fork seal.

**Disassembly, Release Bearing** — 1) Fit bearing to suitable press (899754112).

2) Apply enough pressure to force guide off of bearing.

**Inspection** — 1) Rotate bearing with pressure against thrust side to make sure of smooth operation.

2) Check bearing holder surface where it contacts fork. There should be no evidence of wear or damage.

3) Do not wash bearing in solvent. Bearing is sealed and prelubricated.

4) Check release fork for wear at fork pivot and guide flange.

**Reassembly** — Reverse disassembly procedure.

**NOTE** — Before beginning installation, lubricate following locations with multipurpose grease:

- Inner release bearing sleeve groove.
- Fork, fork ball pin, and guide contact surfaces.
- Transmission input shaft.

**Installation** — 1) Fit release fork seal.

2) Insert release fork.

3) Slide on release bearing holder and hook 2 return springs.

4) Refit transmission.

5) Check clutch release bearing fork free play.

## PILOT BEARING

**Removal** — 1) Remove transmission.

2) Remove pressure plate and clutch disc.

3) Remove oil seal and pilot bearing seated in crankshaft.

## SUBARU (Cont.)

- Inspection** – 1) Check bearing fit in crankshaft.
- 2) Check inner surface of pilot bearing for wear. Replace bearing if excessively worn.
- 3) If pilot bushing is worn, also check transmission input shaft for wear.

- Installation** – 1) Thoroughly clean bearing location in crankshaft.
- 2) Use an aluminum rod and plastic mallet to seat bearing in crankshaft.
- 3) Insert oil seal in crankshaft.
- 4) Install clutch and pressure plate.
- 5) Install transmission.

### ADJUSTMENT

#### CLUTCH FREE PLAY

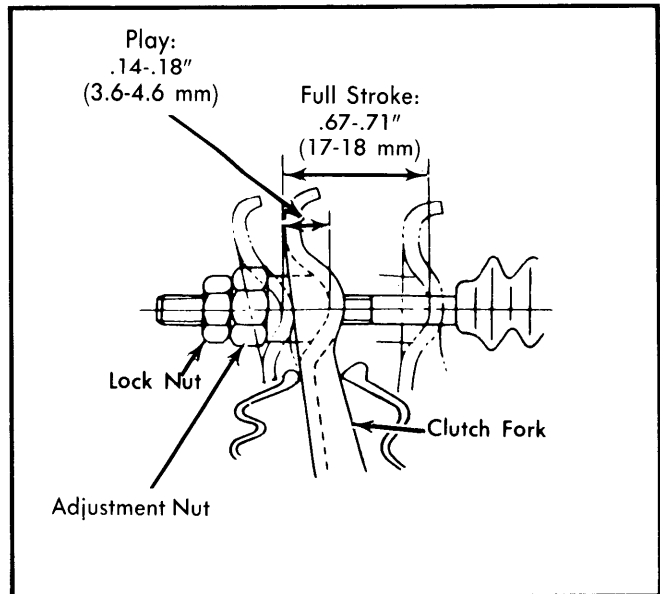
- 1) Remove release fork spring.
- 2) Loosen lock nut.
- 3) Rotate adjustment nut to obtain .14-.18" (3.6-4.6 mm) play measured at fork end (center of adjustment nut).

*NOTE* – When adjustment is correct pedal free play will be approximately .94-1.18" (24-30 mm).

- 4) Tighten lock nut.

#### Clutch Adjustment Specifications

Application	Specifications
Clutch Pedal Stroke .....	5.04-5.43" (128-138 mm)
Release Fork Stroke .....	.67-.71" (17-18 mm)
Clutch Release Fork Free Play .....	.14-.18" (3.6-4.6 mm)
Pedal Free Play .....	.94-1.18" (24-30 mm)



**Fig. 2 Clutch Cable Adjustment Locations and Specifications**

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Clutch Cover-to-Flywheel Bolts	
Four Wheel Drive Models.....	11.6 (1.6)
All Others.....	7-9 (.97-1.2)
Transverse Link-to-	
Front Crossmember.....	72-87 (9.9-12.0)
Stabilizer-to-Transverse Link .....	72-87 (9.9-12.0)
Stabilizer Bracket-to-	
Rear Crossmember .....	22-33 (3.0-4.7)
Engine Mounts.....	15-22 (2.0-3.0)
Transmission Stabilizer Bar .....	5-9 (.69-1.2)