

ARROW, CHALLENGER, COLT & SAPPORO

Arrow
Challenger
Colt
Sapporo

DESCRIPTION

Clutch is a diaphragm spring, single disc type. Operation is controlled mechanically by a cable. Clutch release bearing is sealed and permanently lubricated.

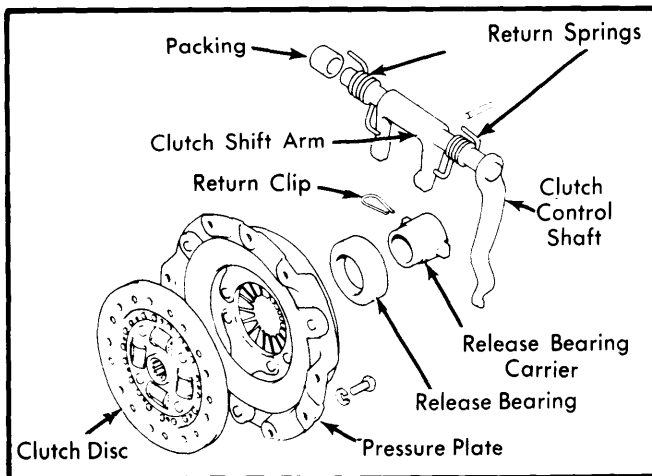


Fig. 1 Exploded View of Clutch Assembly

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

1) With battery disconnected, air cleaners removed and battery cables disconnected from starter, remove starter. Remove two bolts from top of transmission.

2) Inside vehicle, remove dust cover retaining plate and four bolts securing gearshift lever assembly to vehicle. **NOTE** — Lever should be in 2nd gear on 4-speed transmission models and in 1st gear on 5-speed transmission models.

3) With car raised and supported on jack stands, drain transmission fluid. Remove speedometer cable and electrical leads from transmission, then remove bolts from rear of propeller shaft and remove shaft from transmission.

4) Disconnect exhaust system from brackets, then disconnect clutch cables. With transmission supported by a jack, remove insulators from crossmembers by removing attaching bolts.

NOTE — Jack should be placed under transmission oil pan, making sure support area is as wide as possible.

5) Remove each crossmember from frame by pulling off sideways. Remove clutch inspection cover, then remove remaining transmission to engine attaching bolts. Pull transmission to rear and remove from vehicle. **NOTE** — Use care not to twist front end of main drive gear.

6) Insert a suitable clutch centering tool (MD998017) into center of clutch to prevent clutch disc from falling. Loosen

clutch attaching bolts alternately and evenly until pressure plate can be removed. Remove pressure plate and clutch disc.

7) To install, reverse removal procedure and note the following: Use a suitable clutch centering tool (MD998017) to center clutch disc on flywheel. Adjust clutch cable and clutch pedal.

CLUTCH CABLE

Removal — Loosen cable adjusting wheel inside engine compartment, then loosen clutch pedal lock nut. Remove clutch cable from pedal lever, then remove cable from clutch shift lever and remove.

Installation — To install clutch cable, reverse the removal procedure and note following: Apply engine oil as necessary to install cable. Some models are equipped with insulating pads. Fit pads where cable routes near intake manifold and at rear side of engine mount.

CLUTCH RELEASE BEARING & SHIFT ARM

Removal — With transmission removed, remove return clip on transmission side, then slide off release bearing carrier and release bearing. Using a $\frac{3}{16}$ " punch, remove shift arm spring pin and control lever assembly, then remove the shift arm and return springs.

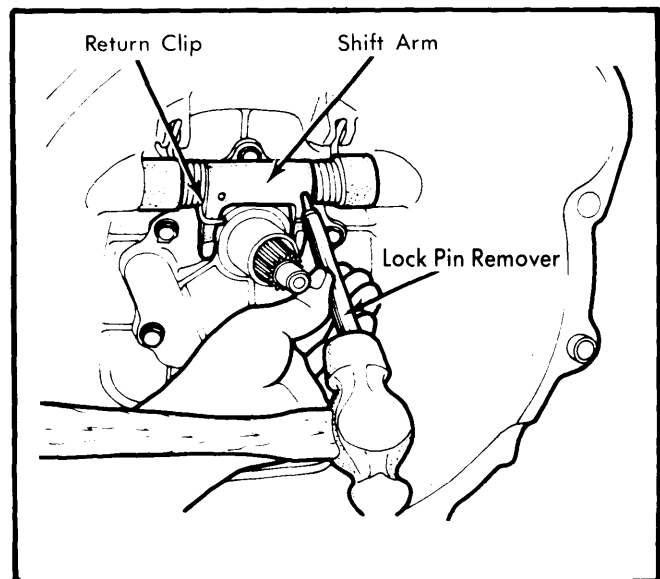


Fig. 2 Using a $\frac{3}{16}$ " Punch to Remove Shift Arm Spring Pin

Installation — 1) Insert lever and shaft into transmission case from left side.

- 2) Install onto shaft:
- Shift arm
 - 2 felt packings
 - Return springs

3) Apply grease to inside of bushing. Oil seal lips.

4) Oil felt packings.

Clutches

ARROW, CHALLENGER, COLT & SAPPORO (Cont.)

5) Drive in 2 shift arm springs pins. Face spring pin slots UP. See Fig. 2.

ADJUSTMENT

PEDAL HEIGHT ADJUSTMENT

Rotate clutch pedal adjusting bolt (at top of clutch pedal) so that height is as indicated in table. Height is measured between toe board and top of clutch pedal pad.

Clutch Pedal Height	
Application	Height In. (mm)
1600 cc & 2000 cc	6.8 (175)
2600 cc	7.2 (185)

NOTE — With clutch pedal and cable properly adjusted, clutch pedal travel should be 5.5" (140 mm) on 1600 cc and 2000 cc models, or 5.7" (150 mm) on 2600 cc models.

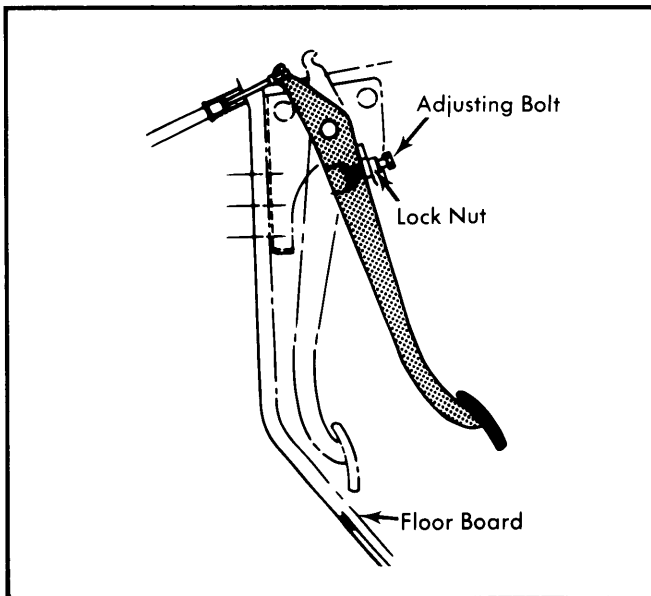


Fig. 3 Clutch Pedal Adjustment Procedure

CABLE ADJUSTMENT

Pull outer cable out toward engine compartment. Rotate cable adjusting nut until specified clearance is obtained between nut and holder (1600 cc & 2000 cc) or between nut and insulator (2600 cc)

Clutch Cable Adjustment	
Application	Clearance In. (mm)
1600 cc20-.24 (5-6)
2000 cc14-.18 (3.5-4.5)
2600 cc12-.16 (3-4)

NOTE — With clutch cable properly adjusted, clutch pedal free play should be .8-1.2" (20-30 mm) for Arrow and Colt (except Colt Station Wagon) or .4-.6" (10-15 mm) for all other models.

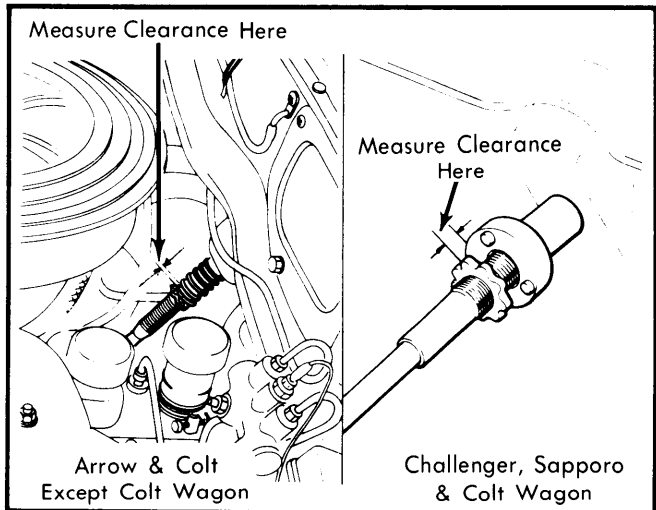


Fig. 4 Clutch Cable Adjustment Points

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs. (mkg)
Transmission-to-Engine	22-30 (3.0-4.15)
Transmission-to-Engine Flange Bolts	32-39 (4.4-5.4)
Starter Bolts	16-23 (2.2-3.2)