AMERICAN MOTORS & CHRYSLER CORP.

American Motors
Chrysler Corp.

NOTE – *Clutch manufacturer does not recommend overhaul of these clutches.*

DESCRIPTION

Clutches are single plate dry disc design. Chrysler Corp. uses a 3-finger release system. The 3 pressure plate release levers are preset during manufacture and no attempt should be made to adjust them.

American Motors uses a diaphragm release system. Three clutch cover designs are used. One is a 6-bolt clutch cover, used on 6-cylinder Spirit. The second is a 3-bolt clutch cover, used on 6-cylinder Pacer, AMX and Concord models with 4-speed transmissions. The third is a 6- bolt clutch cover, used on 4-cylinder models with a 4-speed transmission.

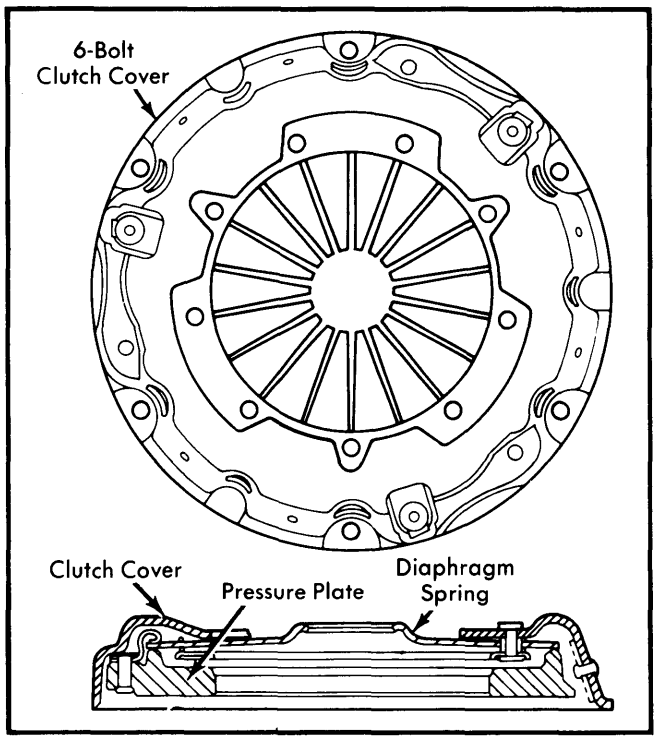

Fig. 1 American Motors 6-Bolt Clutch (6-Cyl. Spirit Models with 4-Speed Transmission)

REMOVAL & INSTALLATION

CLUTCH

American Motors – **1)** On 6-cylinder models remove starter, transmission, throw-out bearing. Disconnect clutch linkage at clutch housing, remove clutch housing.

NOTE – *When removing clutch cover, loosen attaching bolts evenly and in rotation to avoid warping.*

2) Mark clutch cover and flywheel for reassembly reference. Remove clutch cover and driven plate. Remove pilot busing lubricating wick and soak wick in engine oil. To install, reverse removal procedure.

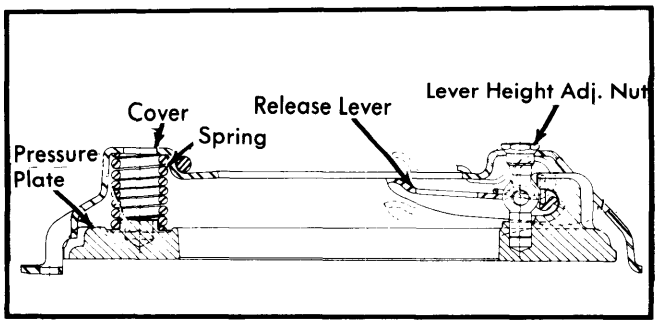

Fig. 2 Cross Sectional View of Chrysler Corp. Clutch

3) On four cylinder models remove starter, propeller shaft and transmission crossmember. Remove inspection plate from front of clutch housing cover.

4) Remove transmission and clutch housing as an assembly. Mark clutch and flywheel for reassembly reference. Remove clutch and disc. To install, reverse removal procedure aligning clutch cover with scribe marks and dowel pins in flywheel.

NOTE – *Loosen clutch cover bolts alternately and evenly to avoid warping clutch cover.*

Chrysler Corp. – Remove transmission, clutch housing pan, release bearing, and linkage. Mark flywheel and clutch cover for reinstallation. Loosen clutch cover attaching bolts evenly and in rotation to prevent warping cover. For installation, reverse removal procedure.

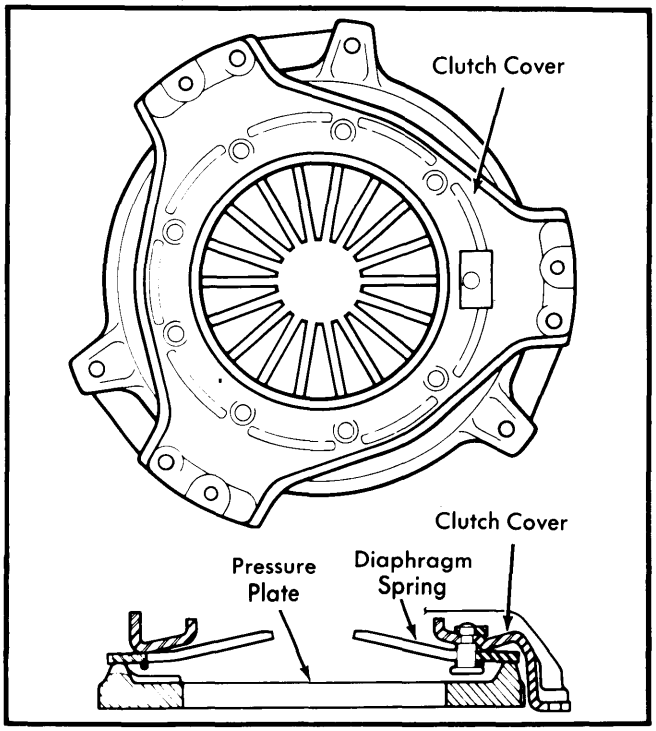

Fig. 3 American Motors 3-Bolt Clutch (6-Cyl. AMX and Concord Models with 4-Speed Transmission)

AMERICAN MOTORS & CHRYSLER CORP. (Cont.)

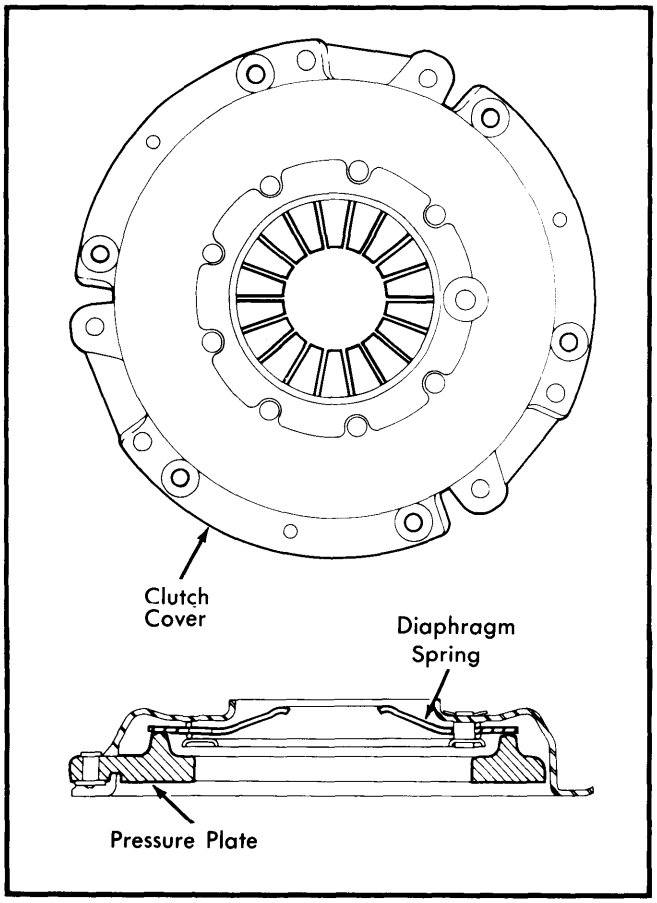

Fig. 4 American Motors 6-Bolt Clutch (All 4-Cyl. with 4-Speed Transmissions)

PILOT BUSHING

American Motors – 1) On 6-cylinder models, fill crankshaft cavity and pilot bushing bore with an all purpose lubricant. Insert clutch aligning tool straight into bushing and tap with brass hammer.

2) Hydraulic pressure will force bushing out of crankshaft. For installation, use suitable driver and install bushing straight into crankshaft until it seats. Lubricate bushing and install lubrication wick.

3) On 4-cylinder models, insert a pilot bearing puller (J-5822) into pilot bearing and remove bearing. To install, lubricate pilot bearing in a suitable grease and install pilot bearing in crankshaft.

4) Position tool with bearing in crankshaft. Tap tool with a hammer to seat bearing in crankshaft.

Chrysler Corp. – Using suitable puller (SP-3631) remove bushing. Before installing new bushing soak it in oil. For installation, use suitable driver; then place small amount of grease in crankshaft cavity, forward of bushing.

ADJUSTMENT

PEDAL ADJUSTMENT

American Motors – 1) On 4-cylinder engines, a hydraulic system is used and needs no adjustment. On 6-cylinder models, lengthen bellcrank-to-throwout rod to reduce free play or shorten bellcrank-to-throwout rod to increase free play.

2) Free play should be $\frac{7}{8}$ - $1\frac{1}{8}$" with $1\frac{1}{8}$" preferred.

Chrysler Corp. – 1) Adjust self-locking nut on clutch fork to provide $\frac{5}{32}$" free movement at fork-to-push rod pin. This will provide correct 1" free play at pedal.

2) On Omni and Horizon models, pull up on clutch cable and rotate sleeve on bottom of cable downward until snug contact is made against grommet. Free play lever should be $\frac{1}{4}$".

TIGHTENING SPECIFICATIONS

Applications	Ft. Lbs.
American Motors	
Clutch Cover Bolts	
4-Cyl.	23
6-Cyl.	28
Clutch Housing-to-Engine Bolts	
4-Cyl.	54
6-Cyl.	
Top	27
Bottom	43
Clutch Housing-to-Transmission Bolts	
4-Cyl.	54
6-Cyl.	55
Starter-to-Clutch Housing Bolts	
4-Cyl.	54
6-Cyl.	18
Flywheel-to-Crankshaft Bolts	
4-Cyl.	65
6-Cyl.	105
Chrysler Corp. (Exc. Omni & Horizon	
Clutch Cover-to-Flywheel Bolts	17
Clutch Fork Pivot Bolts	17
Clutch Housing Pan Bolts	17
Flywheel Bolts	55
Transmission-to-Clutch Housing Bolts	
$\frac{3}{8}$" Bolts	30
$\frac{7}{16}$" Bolts	50
Chrysler Corp. (Omni & Horizon)	
Pressure Plate-to-Crankshaft Bolts	55
Flywheel-to-Pressure Plate Bolts	15