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. Two types of clutch release mechanisms are used. Chrysler Corp. uses a three finger release system. Centrifugal rollers are used on some Chrysler Corp. models for increased clutch pressure at high speed.

American Motors uses a diaphragm release system. Three clutch cover designs are used. One is a six bolt clutch cover and is used on six cylinder Spirit model with three or four speed transmission. The second is a three bolt clutch cover and is used on six cylinder Pacer and Concord models and eight cylinder AMX model with four speed transmissions. The third is a six bolt clutch cover and is used on four cylinder models with a four speed transmission.

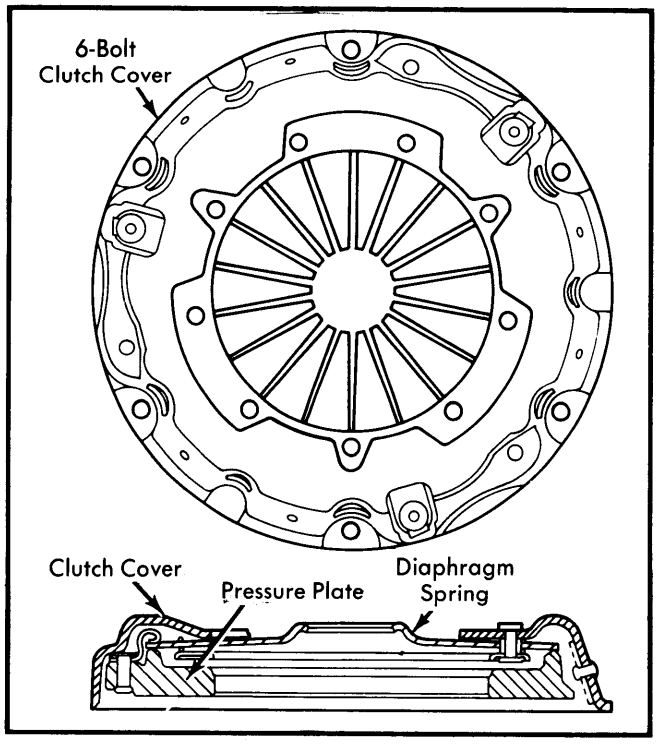

Fig. 1 American Motors 6-Bolt Clutch (6-Cyl. Spirit with 3 or 4-Speed Transmission)

REMOVAL & INSTALLATION

CLUTCH

American Motors – 1) On six and eight 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.

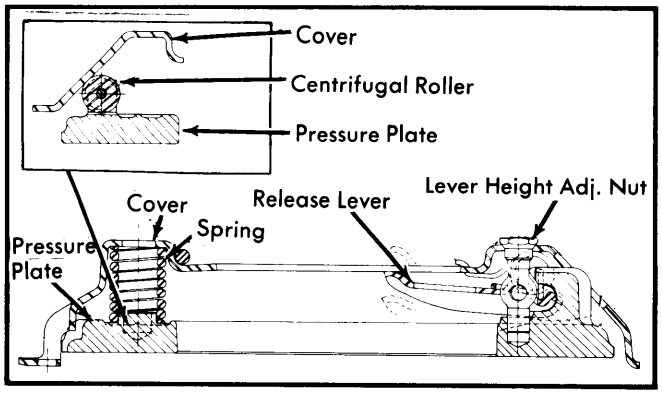

Fig. 2 Cross Sectional View of Chrysler Corp. Clutch

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.

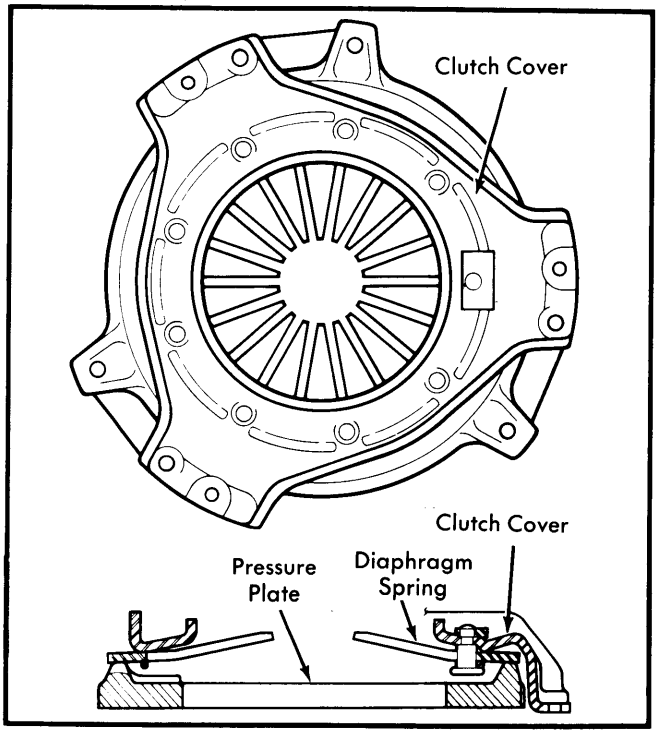

Fig. 3 American Motors 3-Bolt Clutch (6-Cyl. Pacer & Concord & 8-Cyl. AMX With 4-Speed Transmission)

AMERICAN MOTORS & CHRYSLER CORP. (Cont.)

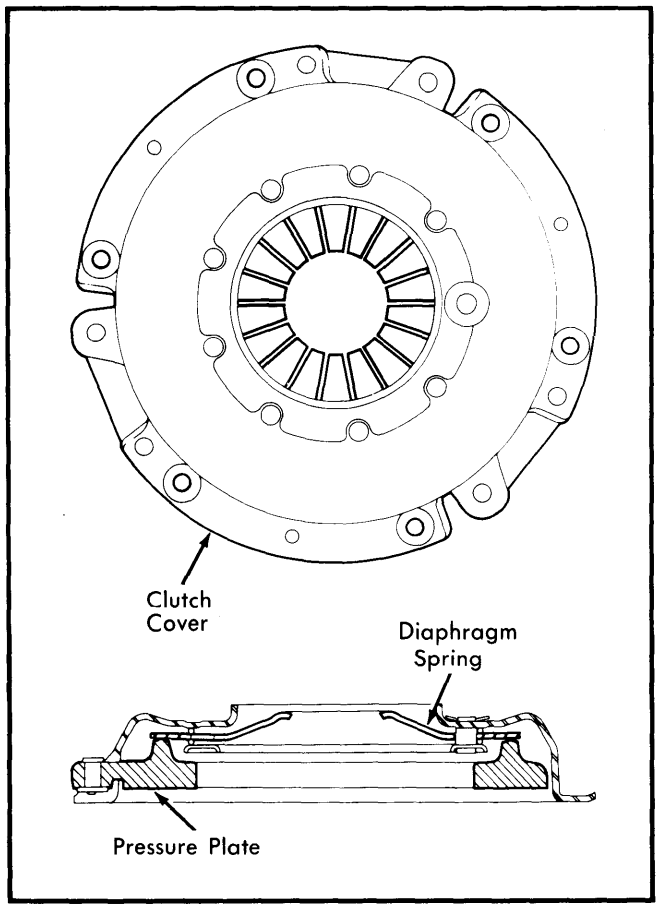

Fig. 4 American Motors 6-Bolt Clutch (All 4-Cyl. with 4-Speed Transmissions)

PILOT BUSHING

American Motors – 1) On six and eight cylinder models, fill crankshaft cavity and pilot bushing bore with an all purpose lubricant. Insert clutch aligning tool straight into bushing, tap with a 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 four cylinder models, insert a pilot bearing puller (J-26833) into pilot bearing and remove bearing. To install, lubricate pilot bearing in a suitable chassis grease and install on an installer tool (J-26904).

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) Adjust pedal free play by changing the length of throw-out lever-to-bellcrank rod on six and eight cylinder models or clutch cable length on four cylinder models.

2) On six and eight cylinder models lengthen rod to reduce free play. On four cylinder models loosen lock nut at transmission end of cable.

3) Pull cable toward front of vehicle until free movement of clutch lever is eliminated. Tighten adjusting nut until tabs of adjusting nut hit clutch housing cover.

4) Release cable and tighten adjusting nut until tabs align with slots of housing cover. Tighten lock nut and check pedal free play.

5) Free play should be $\frac{7}{8}$-$1\frac{1}{8}$" with $1\frac{1}{8}$" preferred on six and eight cylinders models or $\frac{1}{2}$-1" with $\frac{5}{8}$" preferred on four cylinder models.

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

Application	Ft.Lbs.
American Motors	
Clutch Cover Bolts	
4 Cyl.	23
6 & 8 Cyl.	28
Clutch Housing-to-Engine Bolts	
4 Cyl.	54
6 & 8 Cyl.	
Top	27
Bottom	43
Clutch Housing-to-Transmission Bolts	55
Clutch Housing-to-Engine Dowel Bolts	
6 & 8 Cyl.	26
Starter-to-Clutch Housing Bolts	
4 Cyl.	54
6 & 8 Cyl.	18
Flywheel-to-Crankshaft Bolts	
4 Cyl.	65
6 & 8 Cyl.	105
Chrysler Corp.	
Clutch Cover-to-Flywheel Bolts	17
Clutch Fork Pivot Bolts	17
Clutch Housing Pan Bolts	17
Flywheel Bolts	55
Transmission-to-Clutch Housing Bolts	50
Clutch Housing-to-Engine Bolts	
$\frac{3}{8}$" Bolts	30
$\frac{7}{16}$" Bolts	50
Onmi & Horizon	
Pressure Plate-to-Crankshaft Bolts	55
Flywheel-to-Pressure Plate Bolts	15