1965-74 JEEP

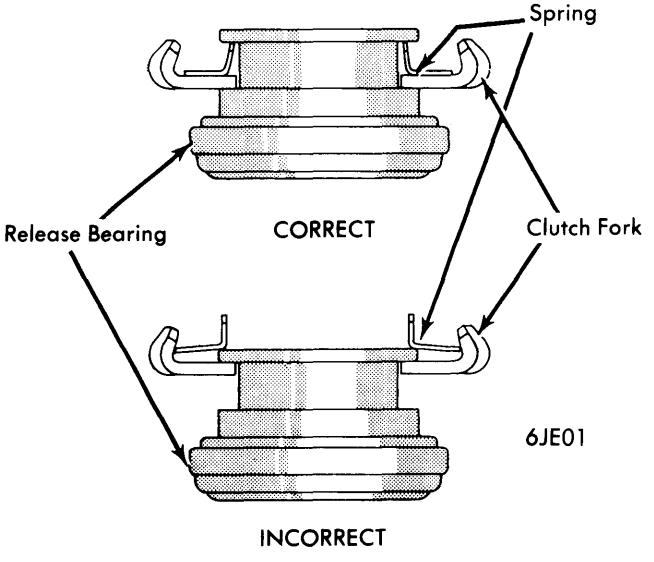
DESCRIPTION

Four types of clutches are used in Jeep vehicles, Auburn, Borg & Beck, Rockwell and Diaphragm Spring. All four types are removed, installed, and adjusted in a similar manner. Clutch actuation is accomplished by either hydraulic, cable type, or solid rod type linkage. Adjustment of clutch linkage differs slightly with type of linkage used.

REMOVAL & INSTALLATION

CLUTCH

Removal & Installation – Raise and support vehicle under frame, and remove transmission. *See Jeep Manual Transmission Removal in this Section.* Disconnect clutch return spring at clutch release fork, and remove clutch fork push rod. Remove clutch housing from vehicle, and remove release fork and bearing from housing. Mark clutch cover assembly and flywheel for reassembly reference, and slowly loosen clutch cover attaching bolts evenly and alternately until all spring tension is relieved. Remove clutch cover attaching bolts, and remove clutch cover assembly and clutch disc from vehicle. To install, reverse removal procedure, making sure that hole in pilot bearing and clutch hub are aligned. Tighten all bolts alternately and evenly to prevent distortion of clutch cover. *NOTE – On models equipped with Diaphragm Spring clutches, be sure clutch release bearing is correctly installed on clutch fork.*



RELEASE BEARING INSTALLATION (DIAPHRAGM SPRING CLUTCH)

CLUTCH MASTER CYLINDER

Removal & Installation – Remove clutch pedal return spring, and disconnect clutch master cylinder push rod at clutch pedal. Disconnect master cylinder-to-slave cylinder hydraulic line at master cylinder, and remove master cylinder attaching bolts. Remove master cylinder from vehicle, remove cap from cylinder and drain fluid. To install, reverse removal procedure, and bleed system. *See Hydraulic System Bleeding.*

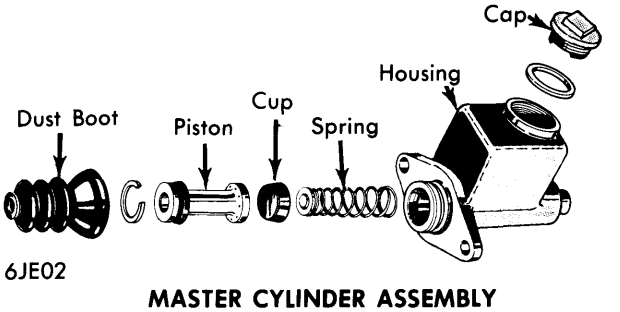
CLUTCH SLAVE CYLINDER

Removal & Installation – Clean outside of cylinder thoroughly and disconnect hydraulic line at slave cylinder. Remove bolts attaching slave cylinder to clutch housing, and remove cylinder from vehicle. To install, reverse removal procedure, and bleed system. *See Hydraulic System Bleeding.*

OVERHAUL

CLUTCH MASTER CYLINDER

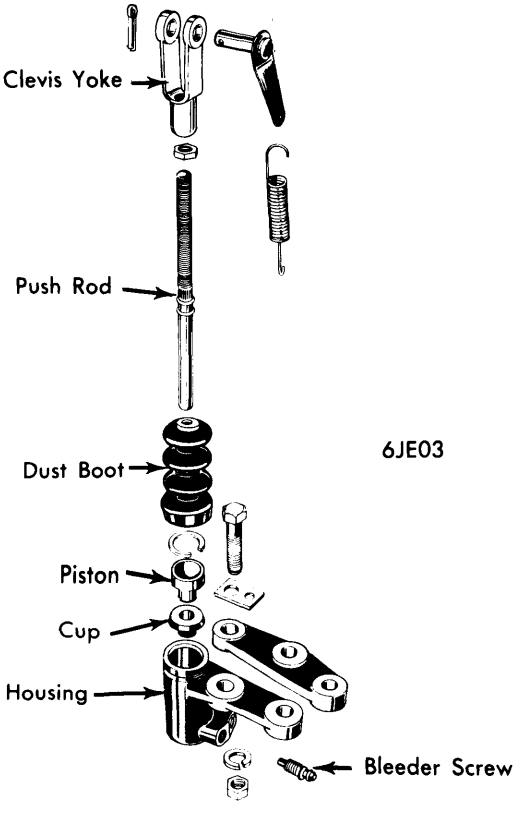
Disassembly & Reassembly – With master cylinder removed from vehicle, remove dust boot, and retaining ring from end of cylinder. Remove piston, cups, and spring from cylinder bore, and inspect cylinder for damage. If excessive scoring or pitting is apparent, replace cylinder. To reassemble, reverse disassembly procedure, using new rubber parts.



MASTER CYLINDER ASSEMBLY

CLUTCH SLAVE CYLINDER

Disassembly & Reassembly – With slave cylinder removed from vehicle, remove dust boot and retaining ring from end of cylinder. Remove piston, and cup from cylinder bore. Inspect



SLAVE CYLINDER ASSEMBLY

1965-74 JEEP (Cont.)

cylinder bore for damage. If excessive scoring or pitting is apparent, replace cylinder. To reassemble, reverse disassembly procedure, using new rubber parts.

ADJUSTMENT

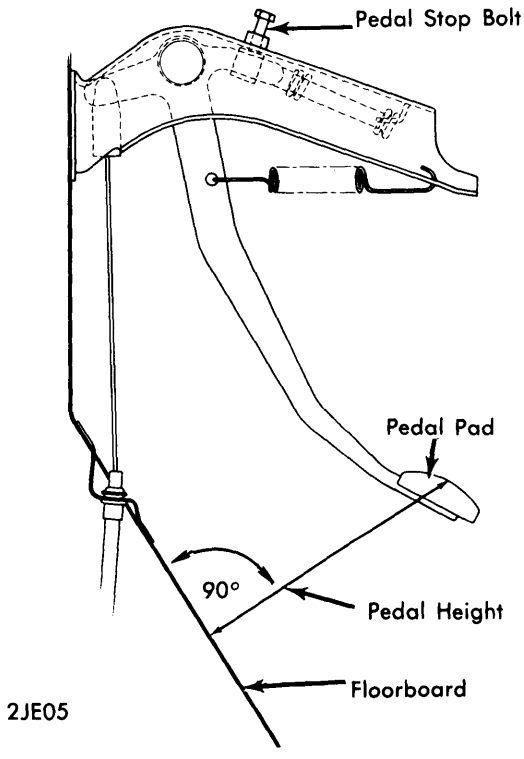
CLUTCH LINKAGE

Pedal Height (1965-70) – Adjust clutch pedal stop bolt, mounted in pedal support bracket, to obtain a definite overcenter pedal position.

Pedal Height (1971-72) – Adjust clutch pedal stop bolt, mounted in pedal support bracket, to obtain correct pedal height.

Clutch Pedal Height

Application	Height
1971	7"
1972	
"CJ", "DJ" Models	8"
All Other Models	8⅜"



CLUTCH PEDAL HEIGHT

Pedal Height (1973-74) – No provision is made for adjusting pedal height on these models.

Free Travel (Mechanical Linkage) – Shorten or lengthen clutch fork push rod as necessary to obtain correct clutch pedal free travel.

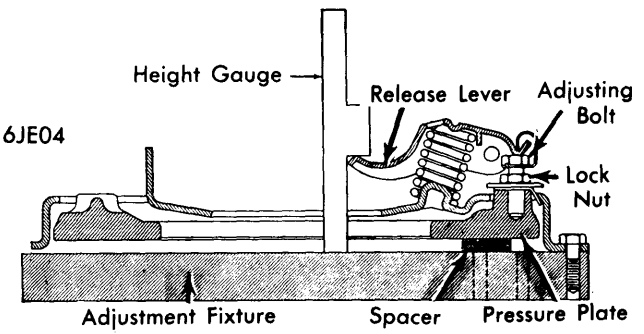
Free Travel

Application	Travel
1965-70	1½"
1971-74	¾"

Free Travel (Hydraulic Linkage) – Adjust stop bolt in clutch pedal support to obtain zero lash between master cylinder piston and clutch pedal push rod. Disconnect clutch fork return spring at fork, and hold slave cylinder push rod firmly against seat in piston. Hold clutch fork so that clutch release bearing just contacts release levers of clutch. Adjust push rod clevis yoke until yoke-to-fork attaching pin can just be inserted, then back off yoke 1½ turns (¾ turns after 1970). Tighten clevis yoke lock nut and install pin.

CLUTCH LEVER HEIGHT

All Models – Except Diaphragm Spring Type – (1965-71) – Place proper spacer on flat clutch adjusting fixture, and install clutch cover assembly onto fixture, over spacer. Measure clutch lever height from surface of fixture to end of lever. To adjust height, remove clutch lever clips, and turn adjusting bolt to obtain proper lever height.



ADJUSTING RELEASE LEVERS (1965-71)

Clutch Lever Height

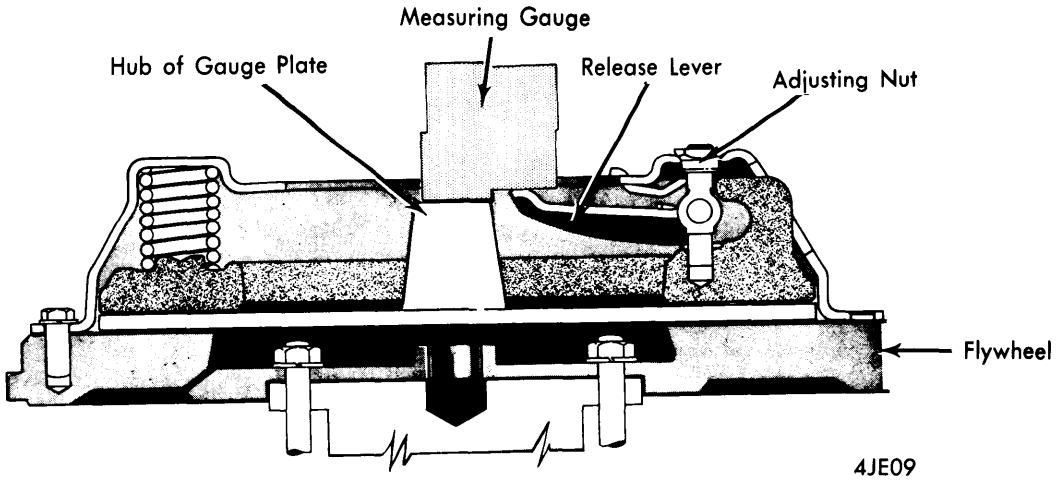
Application	Spacer	Height
Auburn Type Clutch		
8½" Diameter	.310"	1 5/16"
10" Diameter	.285"	2"
10½" Diameter	.285"	2"
Rockwell Type Clutch		
8½" Diameter	.305"	1 5/16"
9¼" Diameter	.285"	1 5/16"
Borg & Beck Type Clutch		
10" Diameter	.285"	1 5/16"
10½" Diameter		
All (1965-68)	.285"	1 5/16"
6 Cyl. (1969-71)	.305"	1 5/16"
8 Cyl. (1969-71)	.295"	2"

All Models – Except Diaphragm Spring Type – (1972-74) – Place suitable gauge plate (J-1048) on flywheel, in position normally occupied by clutch disc. Install clutch cover over gauge plate, with release levers over machined lands of gauge plate. Depress release levers several times to fully seat levers in operating position. Measure distance from hub of gauge plate to end of release lever. To adjust, turn adjusting nut until lever is at proper height, then stake adjusting nut using a dull punch.

Clutch Lever Height

Application	Height
10½" Diameter	3/32-7/64"
11" Diameter	3/16"

1965-74 JEEP (Cont.)



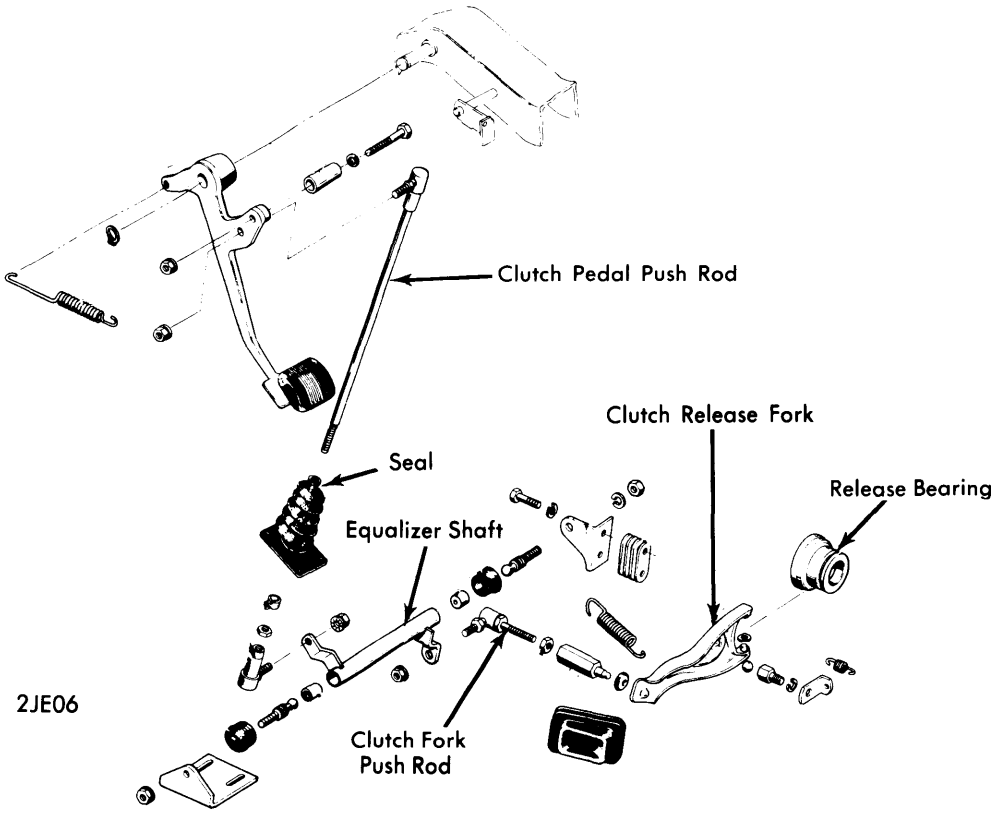
ADJUSTING RELEASE LEVERS (1972-74)

HYDRAULIC SYSTEM BLEEDING

Fill clutch master cylinder with clean hydraulic brake fluid. Pump clutch pedal four or five times, and hold pedal at bottom of last stroke. Open bleeder screw on slave cylinder ½ turn until fluid and air stop flowing from screw. Close bleeder, then release pedal. Repeat procedure until all air is removed from system.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Clutch Cover-to-Flywheel Bolts	40
Clutch Housing-to-Engine Block Bolt	35-45
Clutch Release Fork Pivot Bolt	35
Transmission-to-Clutch Housing Bolt	55



SOLID ROD TYPE LINKAGE (TYPICAL)