

1963-73 JAGUAR

XK-E (1963-71)
 XK-E V12 (1971-73)
 3.8 Liter Sedan Mark II (1963-66)
 3.8 Liter Sedan "S" (1963-66)
 3.8 Liter Sedan Mark X (1963-64)
 4.2 Liter Sedan Mark X (1965-66)
 420 & 420G Sedan (1967)
 XJ Sedan (1969-73)

DESCRIPTION

Clutch is a dry, single disc type. Early models utilized a coil spring type clutch while later models employed a diaphragm spring type. Clutch is hydraulically engaged or disengaged. A graphite type clutch release bearing is also used.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

NOTE — Engine must be removed to remove transmission. See appropriate story in ENGINE Section.

- 1) With engine removed, separate engine from clutch housing. Remove flywheel inspection cover, remove starter and clutch housing.
- 2) Mark position of clutch assembly on flywheel. Remove bolts alternately in a crisscross pattern and remove clutch assembly. Inspect flywheel face for scoring.
- 3) To install, reverse removal procedure. Align marks made during removal. Adjust slave cylinder push rod. See *Clutch Fork Freeplay*.

CLUTCH MASTER CYLINDER

- 1) Disconnect inlet line if equipped with remote reservoir. Disconnect line to slave cylinder. Some "E" Type models will require removing air cleaner and battery.
- 2) Disconnect master cylinder push rod from pedal. Remove master cylinder. To install, reverse removal procedure. Bleed hydraulic system. See *Hydraulic System Bleeding*.

CLUTCH SLAVE CYLINDER

- 1) Disconnect line from master cylinder and pull rubber boot off. Remove bolts securing slave cylinder to clutch housing.
- 2) Remove slave cylinder, leaving push rod in place. To install, reverse removal procedure. Bleed hydraulic system. See *Hydraulic System Bleeding*.

CLUTCH RELEASE BEARING

Release bearing is graphite type. Check face for wear or scoring and replace as necessary.

OVERHAUL

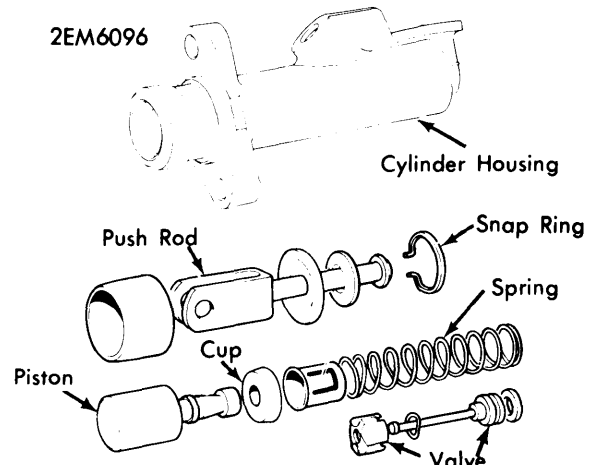
CLUTCH MASTER CYLINDER

Models With Remote Reservoir — 1) Remove master cylinder as previously outlined. Pull boot off of body and remove snap ring.

2) Remove push rod with rubber boot and washer. Apply compressed air at a low pressure to inlet port and remove piston. Remove spring from piston.

3) Remove and discard all cups. Wash all components in denatured alcohol. Replace master cylinder or piston if signs of wear or scoring are evident.

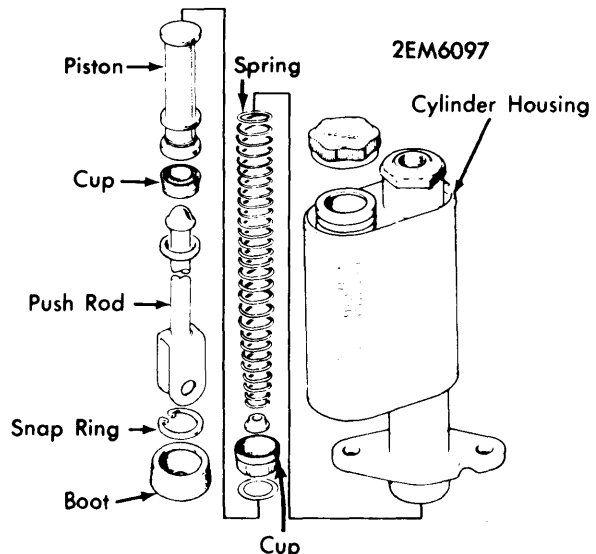
4) Inspect spring for signs of distortion. To assemble, reverse disassembly procedure. Replace all cups and coat all components in brake fluid before assembling.

MASTER CYLINDER COMPONENTS
(REMOTE RESERVOIR)

Models With Integral Reservoir — 1) Remove master cylinder as previously outlined. Remove rubber boot by pulling off of master cylinder and push rod.

2) Push in on push rod and remove snap ring. Withdraw push rod, piston, piston washer, main cup and spring. Remove secondary cup from piston.

3) Thoroughly clean and inspect all components for wear or scoring. To assemble, reverse disassembly procedure. Make sure snap ring is correctly seated in cylinder.

MASTER CYLINDER COMPONENTS
(INTEGRAL RESERVOIR)

1963-73 JAGUAR (Cont.)

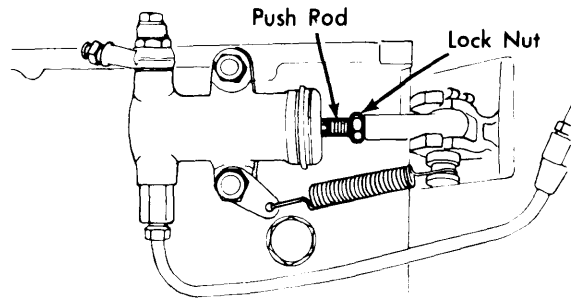
4) Fill master cylinder to within half an inch of top and install cap. Push in push rod and let it return unassisted. After pushing in two or three times, fluid should flow from outlet.

CLUTCH SLAVE CYLINDER

1) Remove slave cylinder as previously outlined. Remove snap ring and apply compressed air at a low pressure to inlet port hole to remove piston, cup, cup filler and spring.

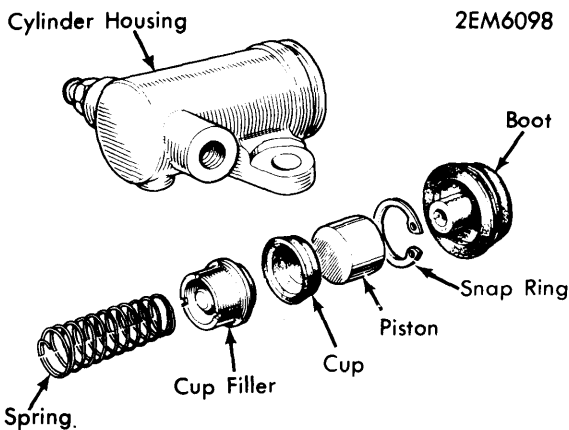
2) Clean all components in denatured alcohol. Replace cylinder or piston if wear or scoring is evident. Inspect spring for wear or distortion.

3) To assemble, reverse disassembly procedure. Coat all components with Girling rubber grease and replace cups.



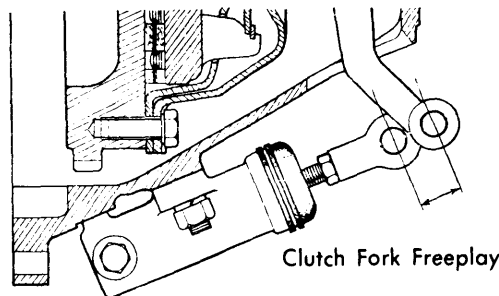
2EM6099

SLAVE CYLINDER ADJUSTMENT COMPONENTS (EXC. 420)



SLAVE CYLINDER COMPONENTS

ADJUSTMENT



2EM6100

SLAVE CYLINDER ADJUSTMENT COMPONENTS (420)

Clutch Fork Free Play

Application	Free Play
XK-E Series (Exc. 3.2 Liter).....	1/8" (3.1 mm)
3.8 Liter Sedan Mark II	3/4" (19 mm)
420 Sedan	3/4" (19 mm)
All Others	1/16" (1.6 mm)

CLUTCH FORK FREE PLAY

All Models Exc. 420 Sedan – Loosen lock nut on slave cylinder push rod. Turn push rod in or out until specified free play is obtained.

420 Sedan – Remove pin securing push rod to clutch fork and loosen push rod lock nut. Push clutch fork away from push rod until release bearing contacts clutch. With push fork pushed to end of travel, adjust push rod until specified distance is obtained between centers of pin holes in push rod and clutch fork.

HYDRAULIC SYSTEM BLEEDING

1) Make sure master cylinder reservoir is full and attach a rubber tube to bleeder plug on slave cylinder. Insert other end of tube in a container half full of brake fluid.

2) Back out bleeder plug one full turn. Depress clutch pedal slowly and tighten bleeder plug before pedal reaches bottom of stroke.

3) Repeat procedure until air bubbles are no longer seen in container. Make sure reservoir remains full during operation.