

## SILVER SPORT Transmissions

### 1962 – 1964 FORD GALAXIE

# CLUTCH PEDAL ACTUATOR ASM INSTALLATION MANUAL

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#### **SYSTEM DESCRIPTION:**

These instructions cover ONLY the installation of hydraulic master cylinder assembly and mount for the 1962-1964 FORD GALAXIE for both the factory manual and factory automatic applications.

Refer to MAM-00201 (FTE style) or MAM-00202 (RAM style) HYDRAULIC KIT INSTRUCTIONS FOR TKO, T56, MAGNUM, AND LGT700 for complete instructions on installation of the hydraulic concentric slave cylinder (CSC) and hydraulic release system

#### **KIT CONTENTS**

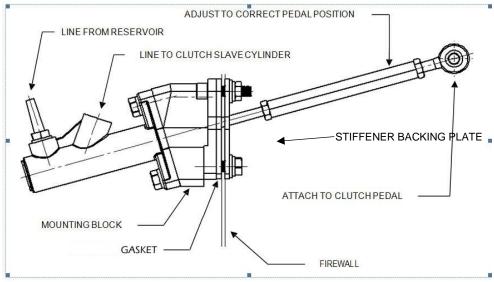
Please confirm that all parts have been received. The parts contained in your Master Cylinder kit will include:

- hydraulic mount, gasket, and hardware
- fluid reservoir, mount bracket, hose, and fittings
- rod end, attachment hardware
- master cylinder
- braided steel hose with bleeder
- bellhousing bracket, firewall stiffener bracket
- pedal hardware

If the hydraulic kit was ordered at the same time As the transmission, then your CSC will already be mounted on the front of the transmission.



#### **Typical Master Cylinder Assembly:**



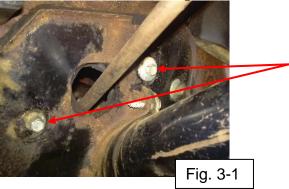
#### **DISASSEMBLY**

Remove original clutch linkages, transmission and bellhousing components:

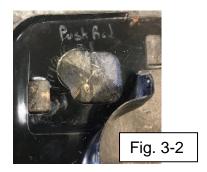
- Fork push rod, clutch pedal push rod assembly
- Z-bar retaining clip, Z-bar, ball stud and bracket assembly
- Fork boot
- Transmission and bellhousing
- Throw-out bearing, clutch fork and fork pivot

#### **Master Cylinder Mounting**

1. Locate the steering column firewall plate under the dash. Remove the two screws shown in Figure 3-1.



- 2. Drill out these 2 holes with a 5/16 drill bit. You may have to find a long 5/16 drill bit to avoid taking the steering column out. Another option is to use a quick change bit extension and a drill bit with a quick change shank.
- 3. Align the supplied backing plate with the two holes to mark the location of the hole for the master cylinder push rod to pass through. This will be to the left of where the clutch rod went through, looking from inside the car. Then enlarge the hole in the steering column firewall plate and the firewall. See Figure 3-2.



- 4. Mock the backing plate up using the supplied 5/16 bolts, you may need to clearance around the steering column to get the bracket to fit properly. Once you have the bracket and two bolts lined up, drill the third 5/16 mounting hole.
- 5. From the engine compartment, install 5/16"-18 x1.75 Lg SHCS through the mount block assembly, the gasket, the firewall, the steering column firewall plate, and thru the stiffener plate mounted on interior side. Install flat washers, lock washers, and nuts to the SHCS. Tighten nuts to 15 ft.-lbs.
- 6. If not already installed, install the master cylinder to the mount block assembly with the clevis installed. Note: The master push rod should have at least 1-1.5 times the diameter of the rod thread engagement in the clevis. Any less could cause the rod to be damaged. Tighten the jam nut on the clevis.
- 7. Install the lever to the clevis on the support bracket and the clevis on the master.
- 8. In the top hole of the lever install the female rod end on the passenger side of the lever using the 5/16 shoulder bolt and nut.
- 9. If not already attached install the male rod end into the female rod end. The rod end should have 1-1.5 times the diameter of the rod engagement.
- 10. Attach the male rod end to the pedal (passenger side) with the 5/16 shoulder bolt, the pedal adaptor (flange on drivers side) and the nut.
- 11. Adjust rod end position to achieve proper pedal height with master cylinder pushrod <u>EXTENDED ALL THE WAY OUT</u>. Align the pedal bracket with clutch pedal and position with tab against front edge of pedal.
- 12. If the master cylinder is not fully extended when the pedal is at rest, the master cylinder can be difficult to bleed **and can overextend the**CSC and cause it to fail. Make sure the pushrod does not contact the firewall or mount block at any point during its travel.
- 13. Assemble the 90° end of the braided steel pressure line to master cylinder port closest to firewall.

14. Assemble barb fitting for the rubber reservoir line to master cylinder at port located furthest from firewall. (See Fig.5-1).



Use caution not to over tighten and break fittings. DO NOT depress the pedal any more than necessary before fluid is added to the system.

#### **FLUID RESERVOIR MOUNTING**

- 1. Remove the studs or nuts on the left hand (driver) side of the brake master cylinder.
- Place reservoir bracket over the two holes or studs in the brake master cylinder, replace the original studs or nuts and tighten completely. Alternatively, the reservoir may be attached directly to firewall or cabin sidewall.
- 3. Assemble reservoir to the bracket using hardware supplied (part # CAA-PACK A).

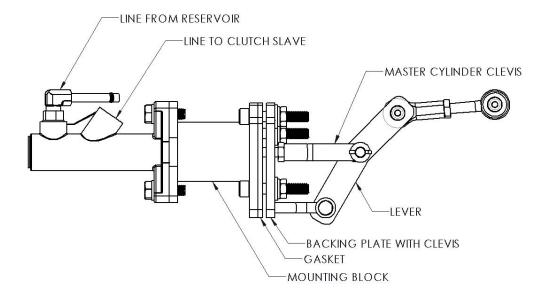
#### **HYDRAULIC LOW PRESSURE HOSE MOUNTING**

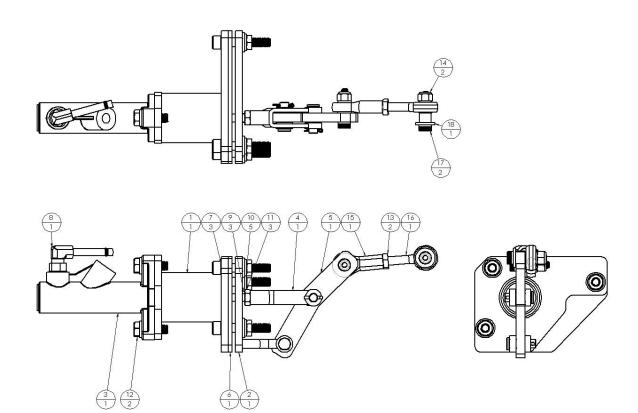
- Run the rubber supply hose from the bottom of the reservoir nipple to the barb fitting in the clutch master cylinder, and determine the exact length for the supply hose. The hose should be neither tight nor excessively loose, and should clear all moving steering gear and exhaust components. Take care to prevent foreign debris from entering hose.
- 2. Cut the line to desired length, ensure that no foreign matter is in the hose. Then, loosely assemble hose clamps.
- 3. Install hose to the master cylinder, then to the reservoir. When installing hose to the reservoir, hold the top of the reservoir to prevent overloading and damaging the mounting ears.

#### **HYDRAULIC HIGH PRESSURE HOSE MOUNTING**

- 1. After bolting the transmission/bellhousing unit to the engine, attach the remaining end of the braided steel line to the clutch master cylinder and tighten. Use caution not to over tighten and break the fitting.
- 2. Final tighten all transmission mounting bolts (4 pcs).
- Inspect the supply line inside bellhousing and confirm the hoses have ample clearance to the rotating clutch plate. It is extremely important that the hydraulic clutch hose **DOES NOT** come into contact with the clutch plate, as serious damage could result.

#### FIGURE 6-1





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CAF-00701_rev0	MOUNT BLOCK ASSEMBLY	1
2	CAF-00704_rev0	STIFFENER PLATE	1
3	CAA-260089	MASTER CYLINDER	1
4	HWAP-6071K13	5/16" CLEVIS ROD END	1
5	CAF-00706_rev0	LEVER	1
6	CAF-00707_rev0	GASKET	1
7	TRAP-91251A589	5/16"-18 SHCS 2"	3
8	CAAP-4601NW04	90° 1/4" BARB FITTING	1
9	HWAP-33080	5/16" FLAT WASHER	3
10	HWAP-33620	5/16" LOCK WASHER	5
11	36304	5/16" HEX NUT	3
12	92865A583	5/16"-18X1"HEX BOLT	2
13	94846A510	5/16"-24 JAM NUT	2
14	HWAP-37018	1/4"-20 LOCKNUT	2
15	60645K331	5/16"-24 FEMALE HEIM JOINT	1
16	HWAP-6072K63	5/16"-24 MALE HEIM JOINT	1
17	91259A581	5/16"-3/4 SHOULDER SCREW	2
18	PAF-00201_rev0	FORD PEDAL BUSHING	1