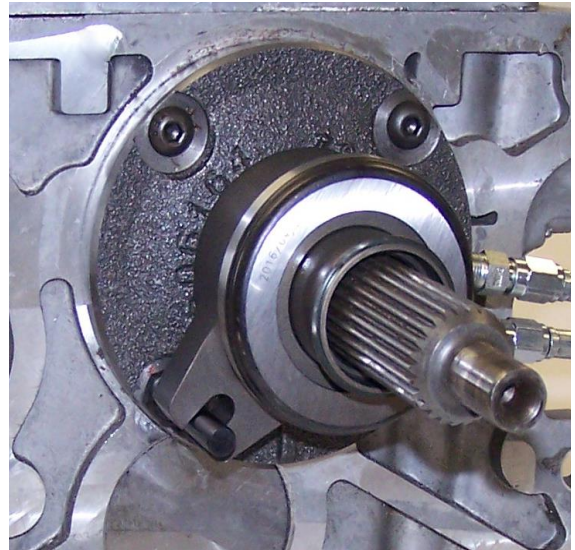




SILVER SPORT *Transmissions*



FTE Style Bearing



RAM Style Bearing

FORD F-100 TRUCK 1967-79

HYDRAULIC MOUNT INSTALLATION INSTRUCTIONS

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SYSTEM DESCRIPTION:

These instructions cover ONLY the installation of hydraulic master cylinder assembly and mount for the FORD F-100 Truck for both the factory manual and factory automatic applications.

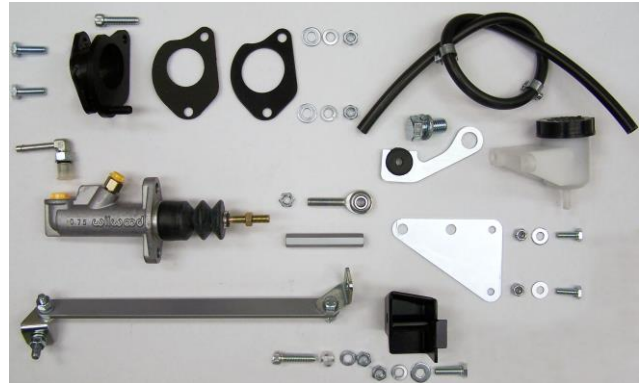
**Refer to MAM-00201 (FTE style) or MAM-00202 (RAM style) HYDRAULIC KIT
INSTRUCTIONS FOR GM TKO, T56, MAGNUM, AND LGT700 for complete instructions on
installation of the hydraulic concentric slave cylinder (CSC) and hydraulic release system**

KIT CONTENTS

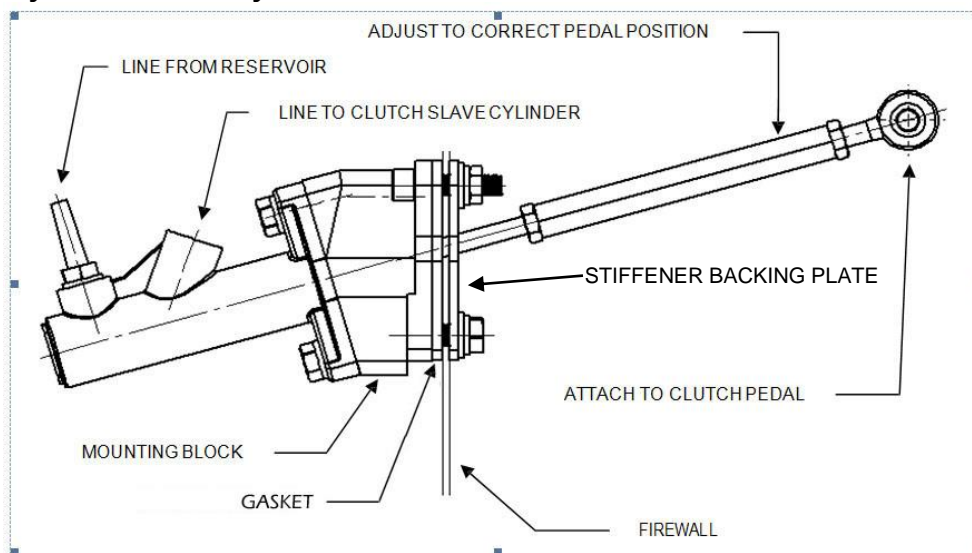
Please confirm that all parts have been received. The parts contained in your Master Cylinder kit will include:

- 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 bracket and 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
- Clutch pedal (must be modified for SST hydraulic system)

Master Cylinder Mounting 1967-1979

1. Cut master cylinder mount template from TMF-12000. Be sure to cut out the correct year there is one for 1967-72 and one for 1973-79. Position template next to steering column as shown in Fig. 3-1 and tape to floor.



2. Mark the location for the bolt holes and the center hole. Cut and deburr the holes. Reinstall firewall cover if removed in step 1.
3. Assemble mount block gasket to mount block, then insert the master cylinder and mount block assembly to the engine side of firewall.

4. From the engine compartment, install 5/16"-18 x1.25 Lg SHCS through the mount block assembly, the firewall and thru the stiffener plate mounted on interior side. Install flat washers, lock washers, and nuts to both the SHCS and the mount block stud. Tighten nuts to 15 ft.-lbs.
5. Assemble the 90° end of the braided steel pressure line to master cylinder port closest to firewall.
6. Assemble barb fitting for the rubber reservoir line to master cylinder at port located furthest from firewall. (See Fig.4-1).

Use caution not to over tighten and break fittings.



PEDAL ATTACHMENT 1967-1972

NOTE: If you are changing from a three (3) finger style pressure plate to a diaphragm style pressure plate you should also remove the clutch pedal over center spring, if so equipped. Failure to remove the over center spring could result in the spring holding the clutch pedal down during normal operation. The over center spring will also tend to hold the pedal down while performing the bleeding operation, until the system is bled enough to return the pedal. An over center spring is not recommended for use with a diaphragm-style pressure plate, and the hydraulic system is not compatible with some three-finger style clutches. We strongly recommend a diaphragm-style pressure plate.

1. Assemble 2" extension rod to master cylinder pushrod. Install 5/16-18 jam nut on rod end and assemble into extension rod.
2. Using the template provided (TMF-00600), drill new 5/16" hole in the clutch pedal at the specified location. The clutch pedal will have to be removed to do this.
3. Before reinstallation of the clutch pedal attach the aluminum spacer to the pedal using the 5/16-18" x 1" socket head bolt provided with kit. Torque to 13 ft-lbs.
4. Assemble 5/16-18" x 1" bolt provided with kit through rod end on master cylinder pushrod. Torque to 13 ft-lbs.
5. Adjust rod end position to achieve proper pedal height with master cylinder pushrod **EXTENDED ALL THE WAY OUT**. Align the pedal bracket with clutch pedal and position with tab against front edge of pedal.
6. 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 travels in and out of the master cylinder in a straight line and does not contact the firewall or mount block at any point during its travel.
7. **Make sure the pushrod is straight in line with the master cylinder!** When desired pedal height is achieved, tighten locknuts on pushrod. Tighten nut on clutch pedal arm rod end bolt to 6 ft.-lbs.
8. The kit includes a firewall stiffener bracket to reduce deflection when pedal is pressed. Install angle brackets to both ends of bracket with 5/16-18 x 1" hex head bolts, flat washers, lock washers, and nuts. (Use flat washer on slotted holes)
9. Attach lower end of bracket assembly angle to the left stud of the master cylinder mount. Attach upper end of bracket assembly angle to dash. See Fig.6-2.

DO NOT depress the pedal any more than necessary before fluid is added to the system.



Fig. 6-1

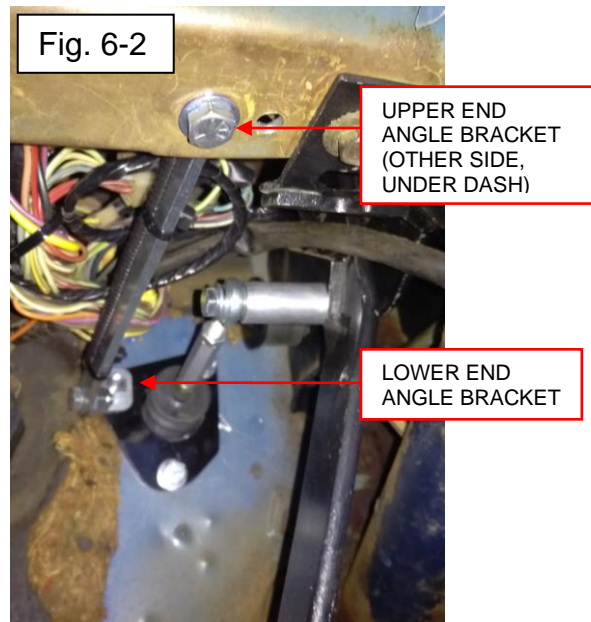


Fig. 6-2

UPPER END
ANGLE BRACKET
(OTHER SIDE,
UNDER DASH)

LOWER END
ANGLE BRACKET

PEDAL ATTACHMENT 1973-1979

NOTE: If you are changing from a three (3) finger style pressure plate to a diaphragm style pressure plate you should also remove the clutch pedal over center spring, if so equipped. Failure to remove the over center spring could result in the spring holding the clutch pedal down during normal operation. The over center spring will also tend to hold the pedal down while performing the bleeding operation, until the system is bled enough to return the pedal. An over center spring is not recommended for use with a diaphragm-style pressure plate, and the hydraulic system is not compatible with some three-finger style clutches. We strongly recommend a diaphragm-style pressure plate.

1. Assemble extension rod to master cylinder pushrod. Install 5/16-18 jam nut on rod end and assemble into extension rod.
2. Assemble 5/16-18" x 1-1/2" socket head bolt provided with kit through rod end on master cylinder pushrod. Add 1/2" aluminum spacer, then install bolt thru left (driver) side of the pedal bracket and install flat washer, locker washer, and nut finger tight. See Fig. 8-1.
3. The master cylinder will not tolerate a side load, and will wear out very quickly if the pushrod is operating at an angle. **Make sure the pushrod is straight in line with the master cylinder!**
4. Adjust rod end position to achieve proper pedal height with master cylinder pushrod **EXTENDED ALL THE WAY OUT**. Align the pedal bracket with clutch pedal and position with tab against front edge of pedal.
5. Using the pedal bracket as a template, mark location for pedal attachment hole. Drill 0.32" dia hole thru clutch pedal arm.
6. Attach pedal bracket to pedal with 5/16-18 x 1" hex head bolt, flat washer, lockwasher, and nut. Tighten both pedal bracket attachment nuts.
7. 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 travels in and out of the master cylinder in a straight line and does not contact the firewall or mount block at any point during its travel.
8. **Make sure the pushrod is straight in line with the master cylinder!** When desired pedal height is achieved, tighten locknuts on pushrod. Tighten nut on clutch pedal arm rod end bolt to 6 ft.-lbs.
9. The kit includes a firewall stiffener bracket to reduce deflection when pedal is pressed. Install angle brackets to both ends of bracket with 5/16-18 x 1" hex head bolts, flat washers, lock washers, and nuts. (Use flat washer on slotted holes)
10. Attach lower end of bracket assembly angle to the lower stud of the master cylinder mount. Attach upper end of bracket assembly angle to dash. See Fig.8-2.

DO NOT depress the pedal any more than necessary before fluid is added to the system.

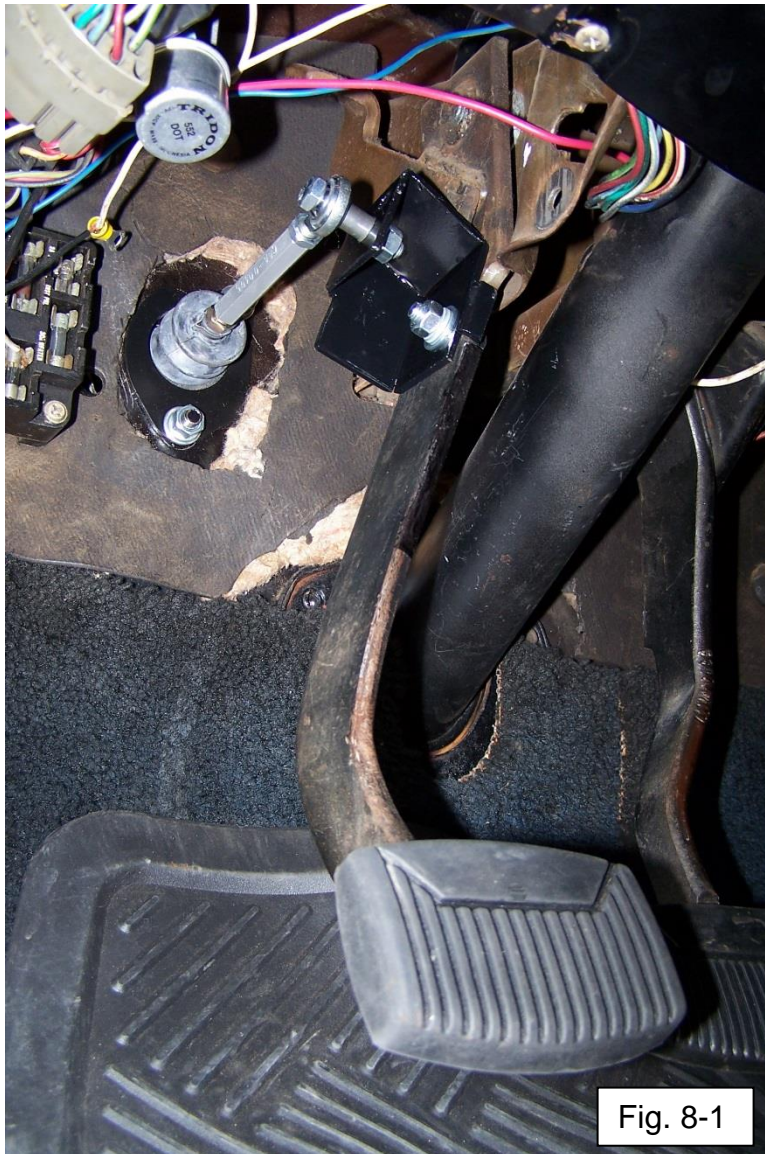
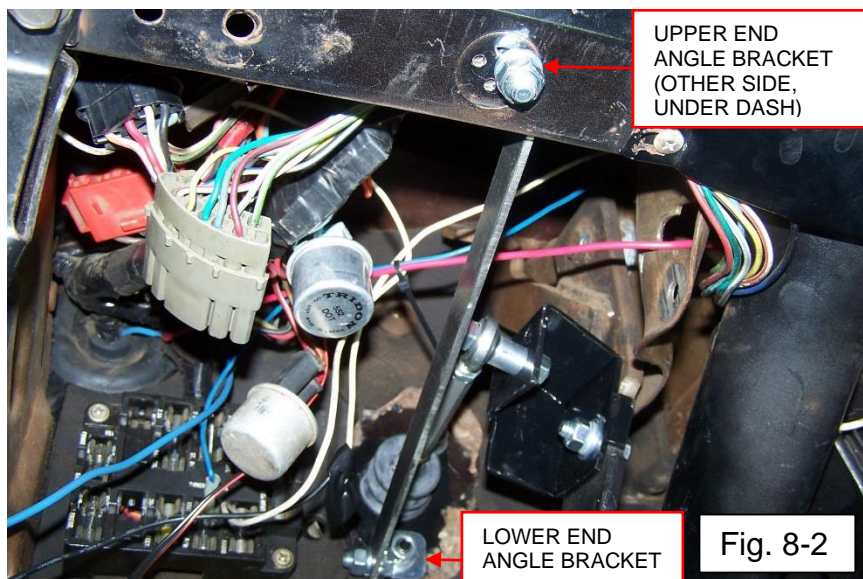


Fig. 8-1



UPPER END ANGLE BRACKET (OTHER SIDE, UNDER DASH)

LOWER END ANGLE BRACKET

Fig. 8-2

FLUID RESERVOIR MOUNTING

1. Remove the studs or nuts on the left hand (driver) side of the brake master cylinder.
2. 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

1. 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).
3. 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.

SYSTEM SPECIFICATIONS

Master cylinder: Bore = 0.750"
Stroke = 1.400"

CSC: Stroke = 0.910" total
available travel

CONTACT INFORMATION

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**ENJOY YOUR SILVER SPORT
TRANSMISSION SYSTEM!**