



SILVER SPORT

Transmissions



FTE Style Bearing



RAM Style Bearing

GM C10 TRUCK

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 GM C10 Truck for both the factory manual and factory automatic applications.

Refer to **MAG-00402 (FTE style) or MAG-00403 (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

KIT CONTENTS

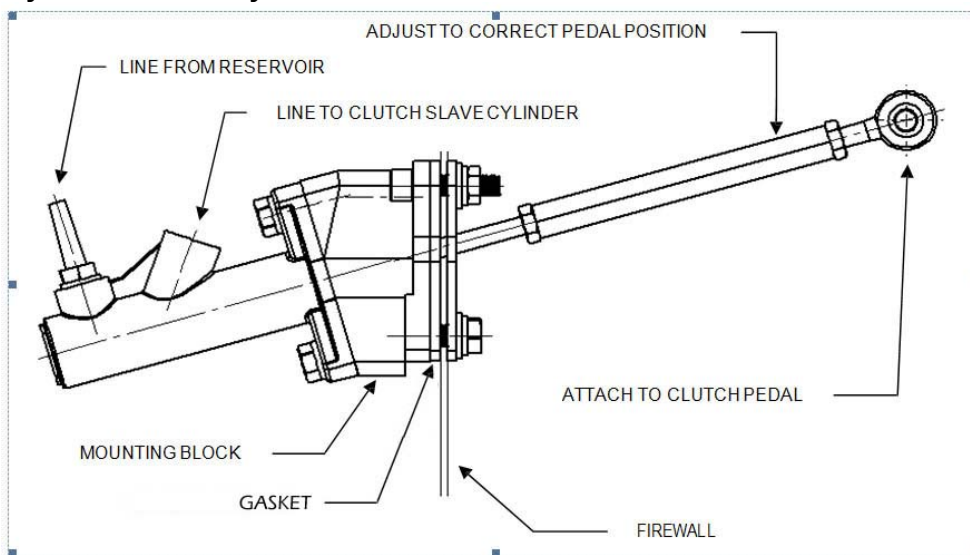
Please confirm that all parts have been received. The parts contained in your Master Cylinder kit will include:

- hydraulic mount, gasket, and hardware
- fluid reservoir, mount bracket, hose, and fittings
- rod end, attachment hardware
- master cylinder
- braided steel hose with bleeder
- bellhousing boot, 4 spd clutch linkage hole cover



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

1. Install 4 spd clutch linkage cover over the original firewall hole.
2. The master cylinder mount block will be located using existing holes in the firewall (See Fig. 3-1). Remove clutch pedal and shaft assembly for working access to firewall.
3. For locating the three holes and the center hole, cut out the template from the last page of these instructions and tape to the firewall using existing holes A and B (See Fig. 3-2).

NOTE: If there is no weld nut at hole B, then locate the template at hole A, keeping the top edge horizontal, and locate hole C in center of rib. Mark and drill 0.34" dia hole B.

4. Mark location of hole C. Drill 0.34" dia hole C thru rib and thru the sheet metal screw hole A on steering column flange. Cut 1-1/4" dia center hole thru firewall and deburr.
5. See Fig. 4-1 for interior view of completed holes and Fig. 4-2 for engine side view.
6. Assemble mount block gasket to mount block, then insert the master cylinder and mount block assembly to the firewall.
7. From the engine compartment, assemble 5/16"-18 bolts through the assembly and firewall. Install flat washers, lock washers, and nuts. Align master cylinder, then tighten nuts to 15 ft.-lbs.
8. Assemble the 90° end of the braided steel line to master cylinder port closest to firewall.
9. Assemble barb fitting to master cylinder at port located furthest from firewall.
See Fig.5-2.

Use caution not to over tighten and break fittings.

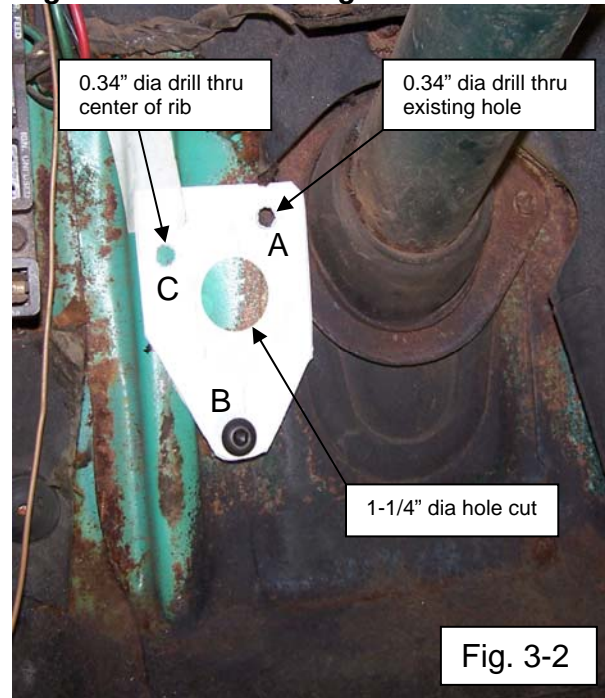
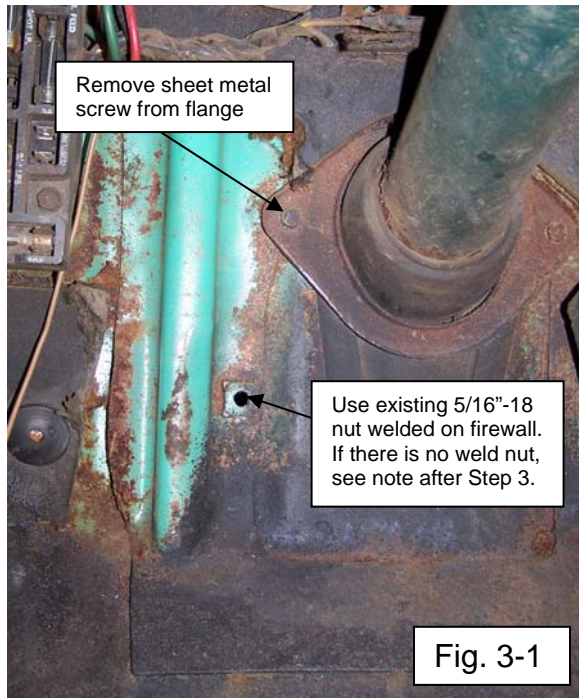




Fig. 4-1

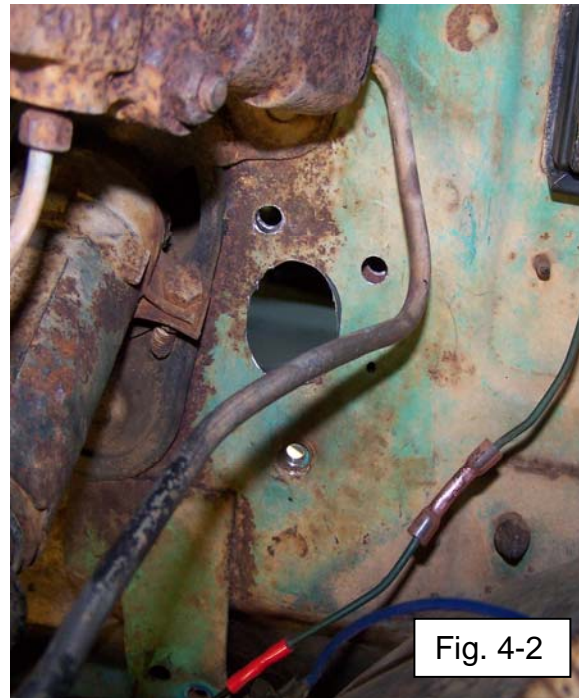


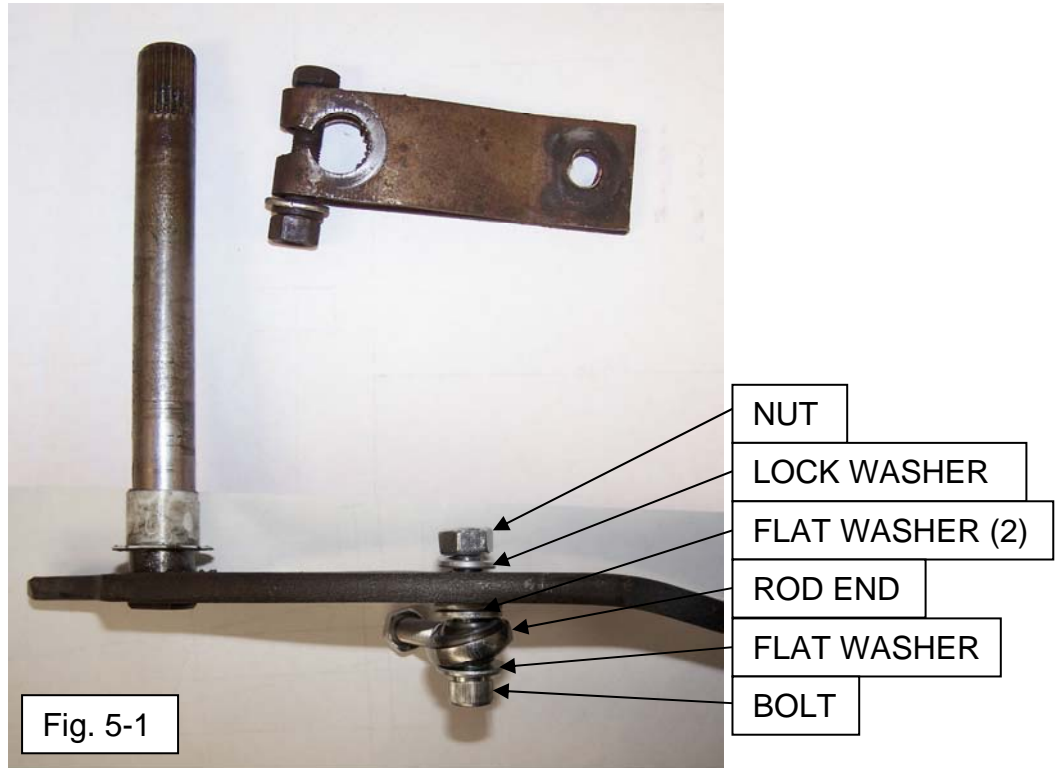
Fig. 4-2

PEDAL ATTACHMENT

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. Drill 0.34" dia hole thru clutch pedal arm located on 3.5" radius from center of the clutch pedal shaft centered on pedal section width. See page 7 for drawing.
2. Re-install clutch pedal and shaft including use of splined clamp 4 spd linkage arm on end of shaft.
3. Assemble 5/16-18" x 1-1/2" bolt with one (1) flat washer through rod end on master cylinder pushrod. Add two (2) additional flat washers, then install bolt with washers thru left side of pedal arm hole. Install lock washer and nut finger tight. See Fig. 5-1.
4. Adjust rod end position to achieve proper pedal height with master cylinder pushrod **EXTENDED ALL THE WAY OUT**. 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. The master cylinder will not tolerate a side load, and will wear out very quickly if the pushrod is going in at an angle. **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.

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.
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

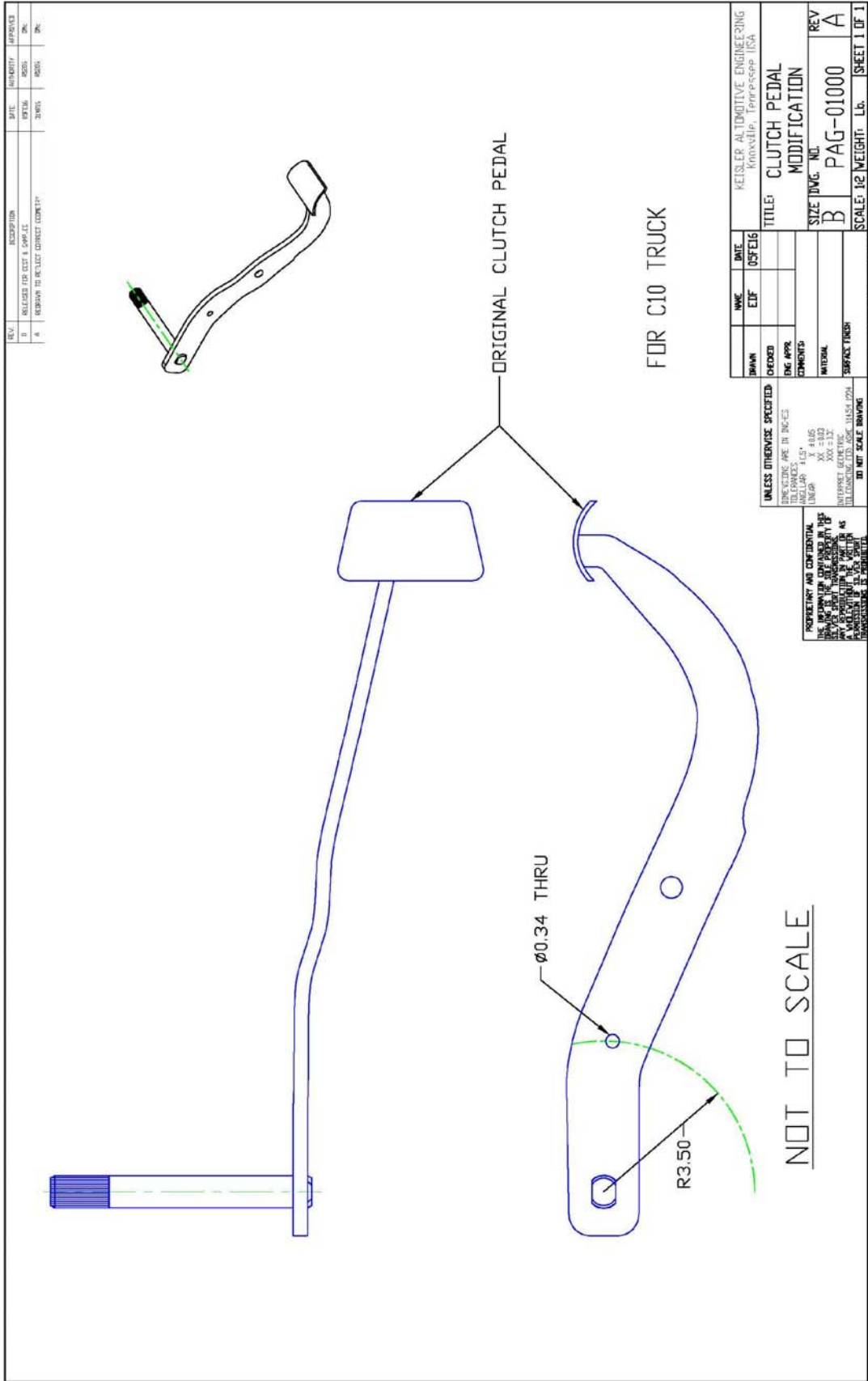
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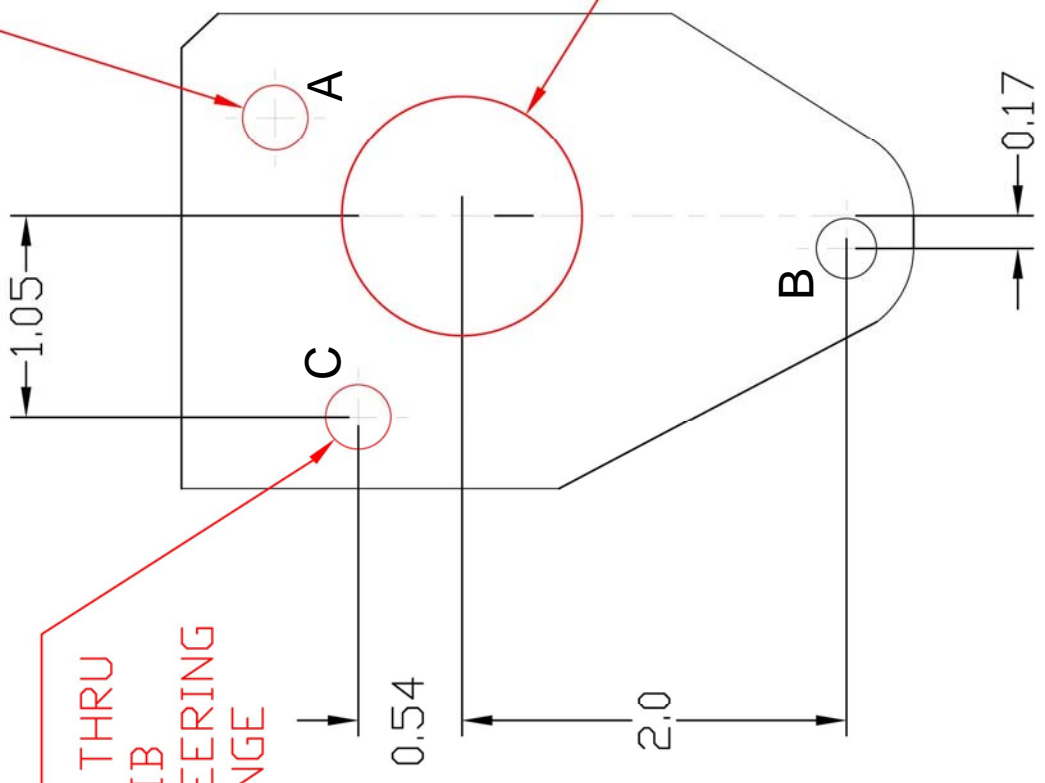
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**ENJOY YOUR SILVER SPORT
TRANSMISSION SYSTEM!**



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Ø0.34 DRILL THRU
SHT METAL SCREW
HOLE ON STEERING
COLUMN FLANGE



Ø0.34
DRILL HOLE THRU
FIREWALL RIB
LEFT OF STEERING
COLUMN FLANGE

Ø1.25 CUT HOLE
THRU FIREWALL

CUTTING TEMPLATE TMG-004100 rev0