

## Ford Model A Master Cylinder Mount Kit Installation

Warning: Improper installation may result in serious injury or death.

You must have an appropriate level of automotive technical skill in order to properly install brake components. If you do not have an appropriate level of skill, you will need to seek the support of a skilled automotive technician.

This kit is intended to be installed into a stock Model A in order to provide the mounting of a hydraulic master cylinder when changing to a hydraulic brake system.

This kit is designed to be installed without permanently changing the stock parts of the Model A. It can be completely removed and the stock parts re-installed to return to the stock mechanical drum brakes.

Some of the standard procedures can be found in the book "Model A Ford Mechanics Handbook, Vol 1" by Les Andrews. This is a popular resource for general mechanics for the Model A, but not the only one.

Properly support the car with the wheels off the ground using appropriate jack stands or other supports. You must have enough clearance under the car to be able to remove the original service brake cross-shaft, drill holes in the crossmember and install the master cylinder bracket.

The Stock Model A parking brake cross-shaft and actuator rods will be reused for the parking brake if you are installing the Model A Disc Brake kit.

### **Included in the Master Cylinder Kit:**

Mounting Plate

Lever Plates

Pivot Spherical Rod Ends

Master Cylinder Pushrod

Crossmember Connector Plate

Clevis Pin

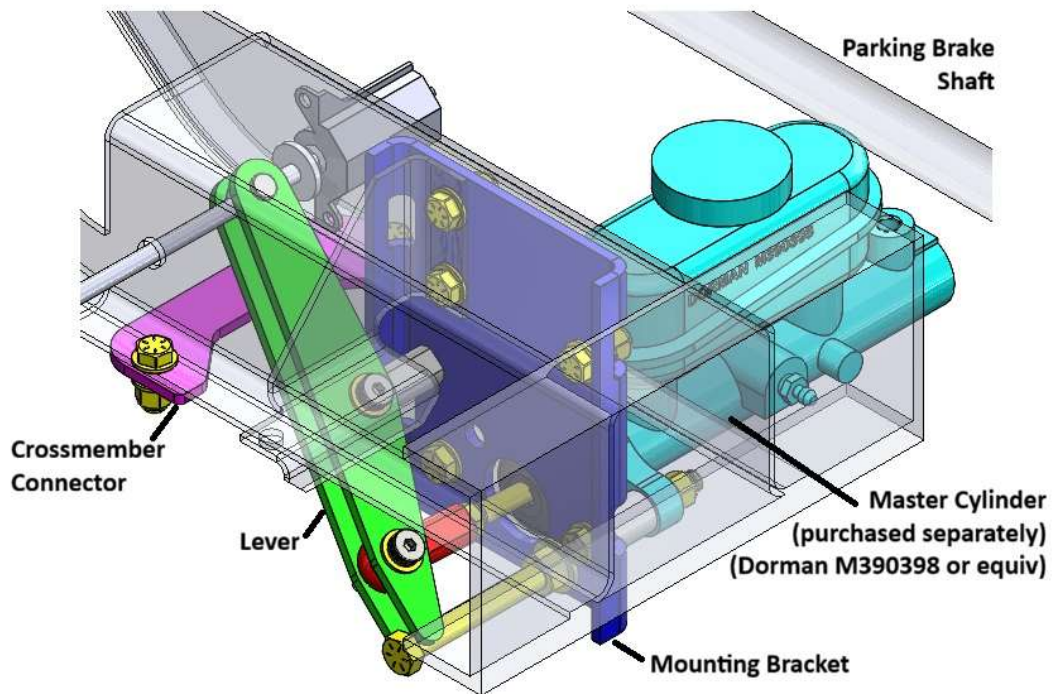
Master Cylinder Mounting Bolts

Lever Anti-rotation Bolt

Bracket Mounting Bolts

Pivot Point Shoulder Screws

Master Cylinder Boot



### Master Cylinder Mounting Kit

**Must be purchased separately:**

Master cylinder (Dorman M390398 or equivalent is a choice: 1 1/16" bore, tandem)

Appropriate brake hoses to attach to the brake calipers, brackets for brake hoses/tubing.

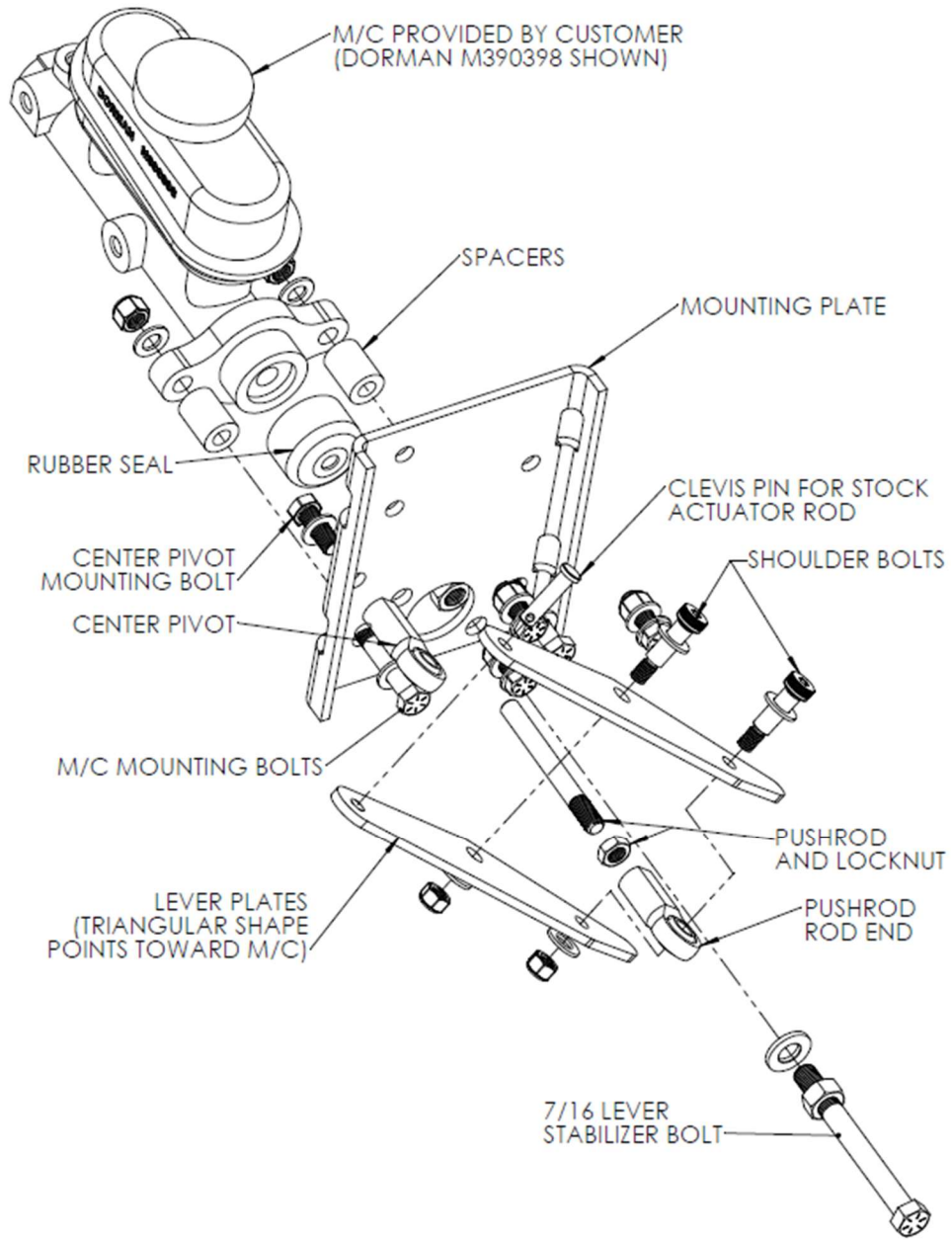
### **Installation:**

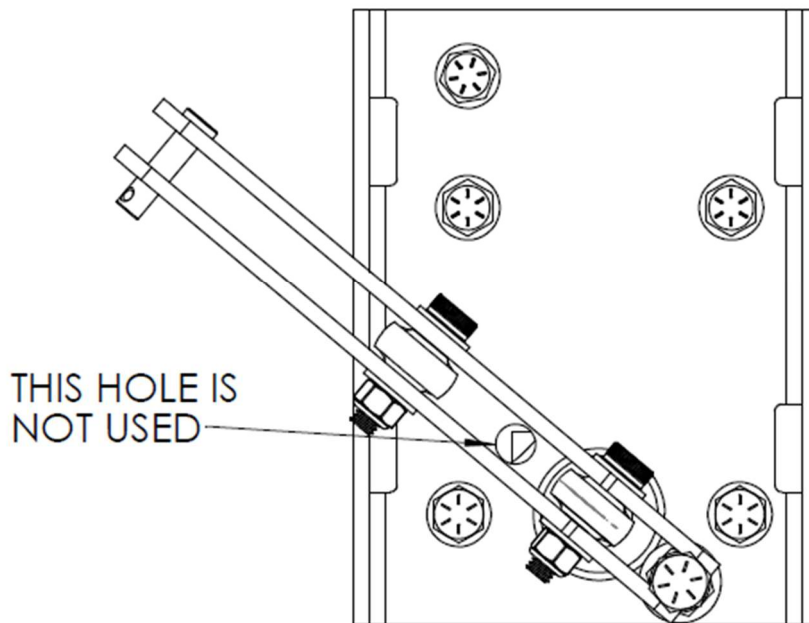
1. Remove the stock service brake cross-shaft, pivot bearings and brake light switch. The service brake actuation rods will also be removed since you are switching to hydraulic brakes. Retain the rod that the brake pedal actuates.
2. Use the template or measure for the location of the holes to be drilled through the rear face of the crossmember. Align the template with the existing hole for the stock brake light switch and make the line at the bottom of the template parallel to the flange of the crossmember. Tape or clamp the template in this location and transfer the locations of the hole to be drilled onto the crossmember face. (a center punch or small diameter drill bit works well) Be sure that the marks are visible since the crossmember is usually dirty and the paint is usually chipped.
3. Drill the holes through the rear face of the crossmember. These will need to be a minimum of 3/8" diameter and can be as large as 7/16" diameter. Take care to keep the drill bit from wandering away from the marks as this will make it difficult to install the mounting bolts.

The lever, pivots and anti-rotation bolts and even the master cylinder may be installed on the bench or under the car after the Mounting Plate is installed.

### **Mounting Plate Assembly**

1. Attach the center Pivot Spherical Rod End to the Mounting Plate. Do not tighten yet.
2. Assemble the Lever Plates to the Center Pivot Spherical Rod End with a Shoulder Screw and two (2) washers.
3. Assemble the Pushrod Pivot Spherical Rod End to the end of the levers with a Shoulder Screw and two (2) washers.
4. Thread the Jam Nut onto the Pushrod and thread this combination into the Pushrod Pivot Spherical Rod End. Place the Pushrod through the large hole in the Mounting Plate.
5. If the master cylinder is already attached, push the pushrod through the Master Cylinder Boot and into the master cylinder piston.
6. Install the Anti-rotation Bolt through the two Lever Plates and through the Mounting Plate. Install the nuts and tighten. The Anti-rotation Bolt prevents the lever from tilting out of plane when force is applied to the brakes.
7. Tighten the bolt attaching the Center Pivot Spherical Rod End. The lever assembly will now be aligned with the master cylinder ie. the proper angle set.





### Mounting Plate Installation

1. Attach the Mounting Plate to the crossmember using the 3/8" X 1" bolts.
2. The stock actuator rod coming from the brake pedal is connected using the clevis pin through the Lever Plates. It will be necessary to adjust the length of the stock actuator rod. Adjust the length so that the pushrod has  $1/16" \pm 1/32"$  of play before bottoming out against the master cylinder piston. (do not actuate the master cylinder piston during this adjustment)

### Crossmember Connector Installation

This connector MUST be installed to avoid excessive brake pedal travel.

Align the Connector with the existing battery box mounting bolt toward the front of the crossmember.

Adjust the Connector to be close to perpendicular to the crossmember without interfering with the Lever Assy for the master cylinder.

March 2026

Mark the location of the rear hole of the Connector onto the bottom surface of the crossmember and drill.

Install the bolts at either end of the Connector and tighten.

