

# GM / FORD MASTER CYLINDER KITS



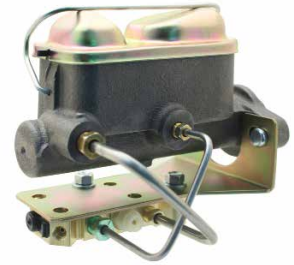
**GM LEFT MOUNT**

**MCK111LM / MCK111DLM CAST IRON**  
**MCK112LM / MCK112DLM ALUMINUM**  
**MCK113LM / MCK113DLM CHROME**  
**MCK114LM / MCK114DLM CHROME**



**GM BOTTOM MOUNT**

**MCK111BM / MCK111DBM CAST IRON**  
**MCK112BM / MCK112DBM ALUMINUM**  
**MCK113BM / MCK113DBM CHROME**  
**MCK114BM / MCK114DBM CHROME**

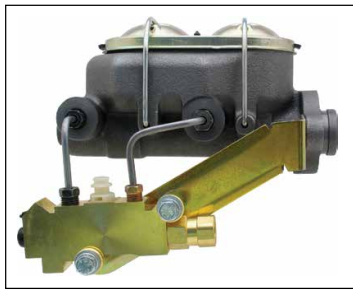


**FORD STYLE BOTTOM MOUNT**

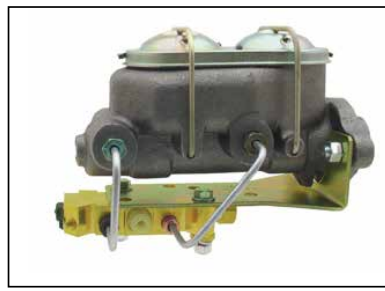
**MCK7161 / MCK7161D**

## INSTALLATION INSTRUCTIONS

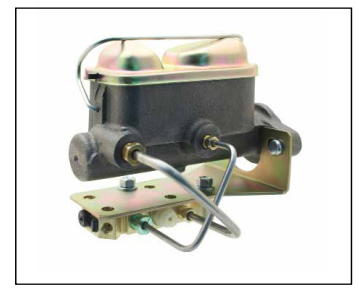
**NOTE: ALWAYS REFER TO THE VEHICLE OWNER'S MANUAL FOR CORRECT TORQUE SPECIFICATIONS WHEN INSTALLING KIT.**



**FIG. 1**



**FIG. 2**



**FIG. 3**

### **INSTALLING PROPORTIONING VALVE KIT (LEFT MOUNT AS SHOWN FIG.1)**

- Verify that you have the following: 1 valve, 2 lines, 1 bracket, 1 harness connector, 1 bag that contains 2 bolts, 4 washers and 2 nuts (bottom mount only)
- Place the valve on your work bench and position the valve as shown with the large hex nut end towards your right.
- Position the bracket behind the valve and line up the bolt holes.
- Next locate the small bag with the bolts and washers.
- Pick up both bolts and place a lock washer and then a flat washer onto each.
- Insert the bolt through the valve into the bracket. Hand tighten it.
- Install and hand tighten the second bolt with its' washers into the valve and bracket.
- Next hand tighten the brake lines as shown.
- The next step can be done with the master cylinder either on or off of the brake booster or firewall.
- As a unit position the valve and bracket assembly up to the ports of the master cylinder.
- Hand tighten each line (Do Not Use Teflon tape) as you place the brackets on to their mounting studs which are in front of the master cylinder mounting ears.
- Use a flare nut or box end wrench to tighten the tube nuts on the brake lines.
- Place the mounting nut onto the studs which the proportioning valve mounts. Tighten it down.
- Connect the dash warning light connector to the factory harness.

#### **TECH TIP**

Several MBM master cylinders are equipped with a piston adapter making them more versatile. This allows MBM masters to be used for power brake and manual brake applications. When installing a MBM master on power brakes, insert the piston adapter with the concave pocket facing the booster pin. On manual brake applications remove the piston adapter. (If the booster being used has a long front pin, remove the piston adapter.)



All braking systems with a master cylinder mounted under floor require residual valves. Residual line pressure maintains pressure on wheel cylinder pistons. When the pedal is released the retracting master cylinder piston creates a pressure drop in the lines. If pressure were to drop low enough air can be drawn into the system. Residual pressure prevents this from happening. The residual pressure gives a faster pedal response time when the brakes are applied.

**\*\* Do not use residual valves in conjunction with master cylinders with internal residual valves.**  
**Use 10 lb. (RPV10) residual valves drum brakes.**  
**Use 2 lb. (RPV2) residual valves for disc brakes.**



## INSTALLING PROPORTIONING VALVE KIT (BOTTOM MOUNT AS SHOWN FIG. 2-3)

Verify that you have the following: 1 valve, 2 lines, 1 bracket, 1 harness connector, 1 bag that contains 2 bolts, 4 washers and 2 nuts (bottom mount only)

- Place the valve on its' edge with the white switch facing you on your work bench and position the valve as shown with the large hex nut end towards your right.
- Place the bracket and valve in the position shown.
- Position the bracket on top of the valve and line up the bolt holes.
- Next locate the small bag with the bolts and washers, and empty the parts onto the work bench.
- Pick up both bolts and place a lock washer and then a flat washer onto each.
- Be sure to have the bracket and valve in a position that allows you to insert the bolts through the valve and through the bracket.
- Push each bolt through the valve and bracket and secure the hex nuts. Hand tighten.
- Locate the brake lines.
- Identify which line will connect to which port on your master cylinder.
- If you have a dual bail wire master cylinder, the lines will mount side by side.
- If you have a single bail wire master cylinder, they cross in an X pattern. **FIG. 3**
- Next hand tighten the brake lines as shown onto the valve.
- The next step can be done with the master cylinder either on or off of the brake booster or firewall.
- As a unit position the valve and bracket assembly up to the ports of the master cylinder.
- Hand tighten each line (Do Not Use Teflon tape) as you place the brackets on to their mounting studs which are in front of the master cylinder mounting ears.
- Use a flare nut or box end wrench to tighten the tube nuts on the brake lines.
- Once satisfied with the brake line positions, finish tightening the valve's brackets bolts and nuts.
- Place the mounting nuts onto the studs which the proportioning valve bracket mounts & tighten it down.
- Connect the dash warning light connector to the factory harness.

### PROPORTIONING VALVE LINE ROUTING

