

UNIVERSAL MASTER CYLINDER KIT & ADJUSTABLE VALVE



LEFT MOUNT
MCK-GM-79L



MCK-GM-79BR

INSTALLATION INSTRUCTIONS

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



FIG. 1



FIG. 2

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.
- 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

Markings on the block are:

FI= Front IN
FO=Front OUT
RI=Rear IN
RO=Rear OUT

ADJUSTABLE PROPORTIONING VALVE INSTRUCTIONS



WARNING

Proper operation of your brakes is essential for your safety and the safety of others. Any brake service should be performed ONLY by persons experienced in the installation and proper operation of brake systems. It is the responsibility of the person installing any brake component or kit to determine the suitability of the component or kit for the particular application. DO NOT DRIVE WITH UNTESTED BRAKES!

Markings on the block are:

FI= Front IN
FO=Front OUT
RI=Rear IN
RO=Rear OUT

FITTINGS

The 3/8-24 supplied tube nuts are intended to be flared onto 3/16" brake line. If you have 1/4" rear brake lines, use the adapter included in the kit. One front outlet can be plugged if needed.

ADJUSTING PRESSURE BETWEEN THE FRONT AND REAR BRAKES

1. After installing valve you will need to bleed your brake system.
2. If the master cylinder is new or was dry at any time, please refer to the instructions that came with the master cylinder and bench bleed the unit.
3. Bleed the system by bleeding the caliper or drum cylinder at each when until you see no air bubbles. Start with the wheel furthest from the master cylinder and work your way to the front of the car.
4. Once complete, you should have consistent pedal pressure.
5. Double check your fittings for leaks.

ADJUSTING PRESSURE BETWEEN THE FRONT AND REAR BRAKES

1. Start with the valve in full open position by turning the knob counter clockwise as far as it will go.
2. Make several stops from 30 M.P.H. If the rear brakes lock up before the front decrease the rear pressure by turning it counter-clockwise one full rotation at a time.
3. Retest by making several stops at 30 M.P.H. and repeat step 2 until you reach the correct balance between the front and rear brakes.
4. Test again at 50 M.P.H. and make any more adjustments as necessary.