



## 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. After installation and before operating your vehicle, be sure to test the function of the brakes under controlled conditions.

**DO NOT DRIVE WITH UNTESTED BRAKES!**

**FOR TECHNICAL ASSISTANCE CALL:**

**888-533-1199**

**MONDAY - FRIDAY**

**8:00 AM TO 5:00 PM EST**

## IMPORTANT

Take time to read all the literature that came with this kit. Check the provided list of parts against what you received to ensure all parts are present. While this kit was designed to make the process of changing brake parts as simple as possible. **NOTE: WITH SOME KITS IT MAY BE NECESSARY TO MAKE MINOR CHANGES TO YOUR CAR!**

**READ ALL WARRANTY DISCLAIMERS AND RETURN POLICIES INCLUDED IN THIS KIT PRIOR TO INSTALLATION!**

**MASTER POWER BRAKES**

**110 CROSSLAKE PARK RD. MOORESVILLE, N.C. 28117**

**[www.mpbrakes.com](http://www.mpbrakes.com)**

# BM1703

## Booster & Master Parts List



### Parts included in the box:

1. (1) Booster and master unit with bracket.
2. (1) Vacuum hose kit.
3. (1) Set of instructions.

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# BM1703

## Installation Instructions

### WARNING:

Installation of any component or kit should only be performed by persons experienced in the installation and proper operation of brake systems. It is also the responsibility of the person installing any brake component or kit to determine the suitability of the component or kit for that particular application.

### NOTE:

Before operating the vehicle after installation test the function of the brakes under controlled conditions. Make several stops in a safe area from low speed and gradually work up to normal speeds. **DO NOT DRIVE WITH UNTESTED BRAKES!**  
Always utilize safety restraints when operating the vehicle.

### STEP 1:

1. Check to be sure that your kit has all the necessary parts needed to complete this project! (Use the supplied parts list as a check list.)

### STEP 2:

Remove the following components from your car:

**Tech tip:** Prior to disassembly spray the nuts and bolts that you will be removing with a penetrant. (Also disconnect the battery to eliminate the risk of draining the battery or an electrical short.)

1. Disconnect the brake lines to the master cylinder.
2. Next, remove the push rod from the brake pedal.
3. Then remove the old manual master or the original booster. Leave the four studs that are extending out of the firewall, the new booster will mount to them.

### STEP 3:

Things to prepare before assembly of the new booster & master kit.

1. Remove the new master cylinder from the booster assembly.
2. Bench bleed the new master cylinder to remove all the air. If all the air is removed from the master, then it will be difficult to push the piston in.

#### How to bench bleed:

Remove the master from the booster and place in a vice. (Be sure to clamp onto the mounting ear and not the cylinder.)

Install the proper size plugs in the outlet ports of the master.

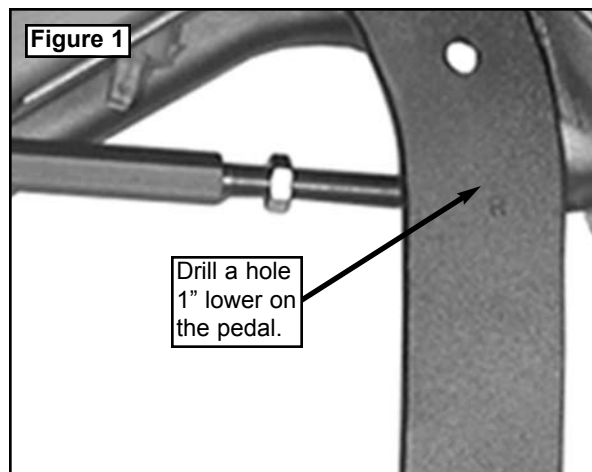
Fill the master cylinder to the full line with brake fluid.

Use a rounded end rod or a phillips head screw driver and push the piston in repeatedly until no bubbles are visible.

**NOTE: This may take a minute or two of continuous pumping!**

### STEP 3: (Cont.)

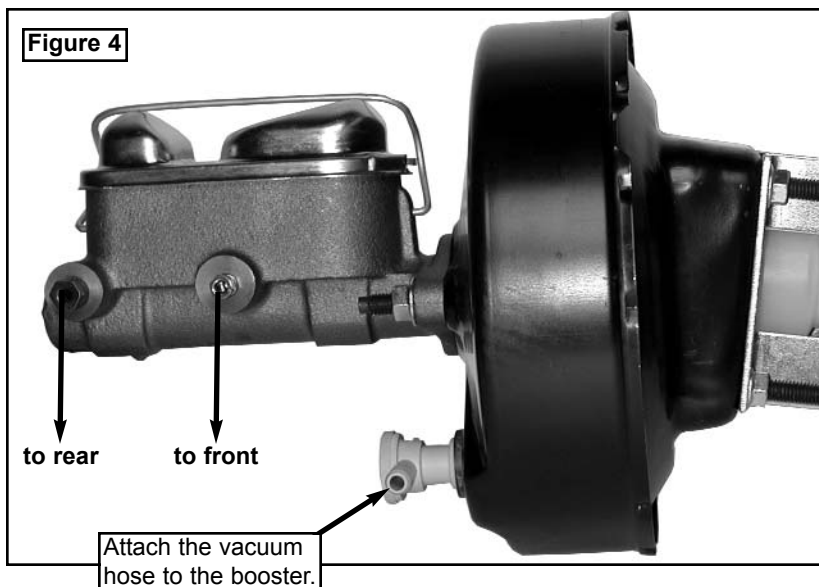
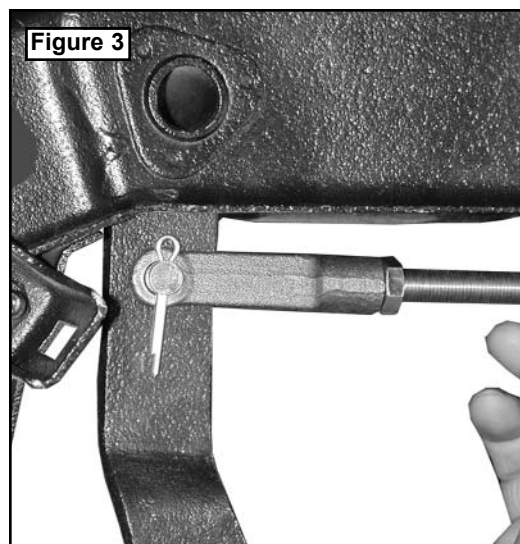
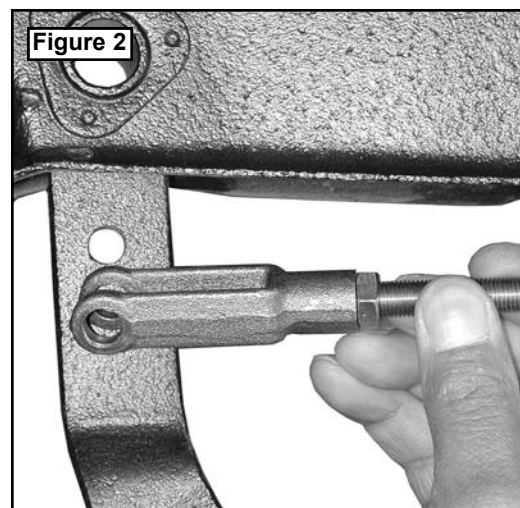
4. If the vehicle was a manual brake system you will need to drill a 3/8" hole 1" lower than the original hole on the pedal. **(If the vehicle was originally power brakes then you will attach the clevis to the pedal in the same location!)** If the brake pedal has two holes you will use the lower hole for the booster push rod attachment.



### STEP 4:

#### Installation of booster & master components:

1. At this point, you are going to temporarily fit the booster to the firewall to set the correct pedal rod adjustment. First, mount the new power booster with bracket to the firewall by attaching it to mounting studs, where the old master or power booster was originally located. Then, only snug the original nuts and lock washers. Make sure, as you mount the booster, the clevis does not go over the pedal. It must be sitting to the side of the pedal. **(Figure 1)**
2. Align the holes in the clevis to the hole in the pedal. **(The clevis should be at the side of the pedal as shown in Figure 2.)** You must approximate the distance as close as possible. **Adjust the push rod to allow the pedal to be a 1/4" away from the pedal stop!**
3. Now you must loosen the nuts holding the booster to the firewall and back the booster off so you can attach the clevis in the correct position. **(Figure 3)**
4. After clevis is attached, tighten the booster to the firewall.
5. Mount the master cylinder to the booster. **(Make sure that the master was properly bled.) (Figure 4)**
6. Connect the vacuum fitting and the hose to either the intake manifold or the rear of the carburetor. Make sure that the vacuum source on the carburetor is manifold and not timed vacuum. **Note: The engine must provide a minimum of 18" of vacuum for the booster to work effectively.** Then attach the vacuum hose to the booster.



## STEP 4: (Cont.)

7. Attach the brake lines to the master. **If your brake kit came with a combination valve then it is important that you remove any factory installed valves from the system. Failure to do this could result in a nonfunctional brake system.** Then install the combination valve. **(Figure 5)**

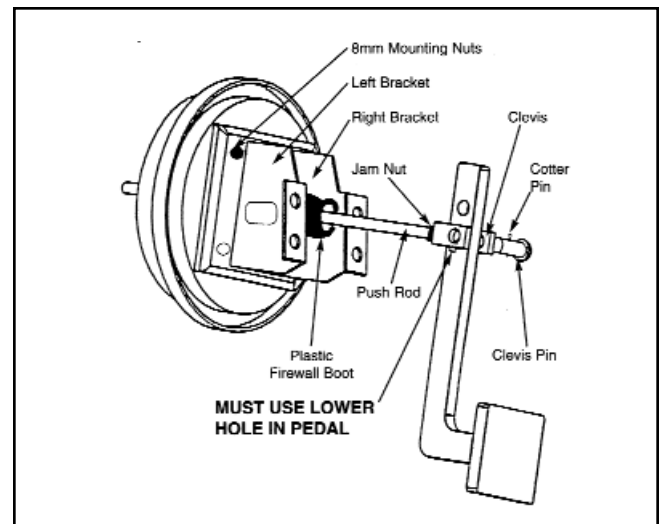
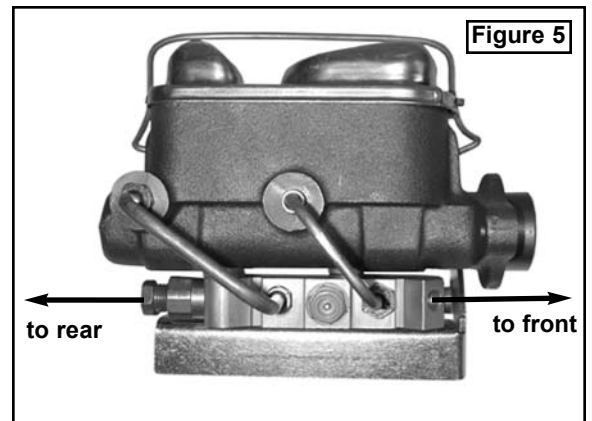
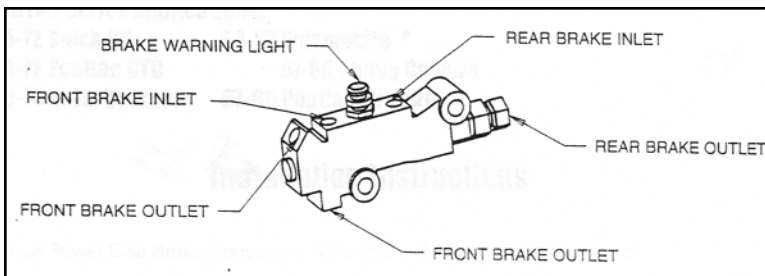
8. On vehicles which had a single outlet master cylinder you will need to install a new hard line from the proportioning valve outlet to a T-fitting and then on to the rear wheels. There are two outlets for the front wheel on the combination valve. You have the option of running a line from each wheel to each outlet or running both lines to a T-fitting and then into one of the front outlets. **(In this scenario, you will have to plug the unused outlet.)** Either way is acceptable and neither routing has improved braking performance over the other. **(Be sure to keep all lines away from exhaust, steering or other things that could harm them.)**

9. When the valve is plumbed correctly and all hard lines are attached, bleed the entire system.

10. If you are not using a combination valve, or you have four wheel drum brakes, you will need to run one line from the master cylinder to the front and one to the rear. The outlet closest to the booster will feed the front brakes. **(Figure 6)** We recommend that you use a 10lb residual valve on both the front and rear drum brakes to provide a firmer pedal feel.

11. Reconnect the battery and start the engine. Test the brakes. If the pedal goes to the floor or is very spongy then bleed the system once again.

12. Test drive the car in a safe location before driving.



**Master Power Brakes 888-533-1199**