

631052/631053 POWER BOOSTER UNIT





INSTALLATION INSTRUCTIONS

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

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!

Take the 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 WITH SOME KITS IT MAY BE NECESSARY TO MAKE MINOR CHANGES TO YOUR CAR!

This kit is an aftermarket solution. It is not intended to be a direct installation or OEM replacement. Due to changes in production in certain years, your car may require modifications beyond these instructions for this kit to install properly.

THIS KIT CONTAINS

1	9" dual-diaphragm brake booster

1 Master cylinder

INSTALLATION

This section covers a manual brake to power brake conversion. *If you are replacing an existing power brake system skip steps 7-10.* For safety, always work on a level surface with the vehicle in "Park" and the wheels. You may also want to place protective material below the master cylinder to avoid damaging painted surfaces with brake fluid.

- 1. Disconnect the original master cylinder lines from the proportioning valve.
- 2. Remove the master cylinder from the firewall by loosening the two mounting nuts and then pulling the master cylinder away from the firewall. Re-install the nuts.
- 3. Using a wooden block, shim up the brake pedal to mark it's original height.

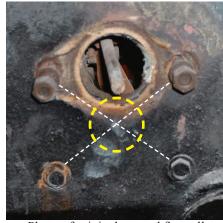


Photo of original manual firewall

FIGURE 1

MAKE TWO LINES CROSSING DIAGONALLY FROM STUD TO STUD. THE CENTER OF THESE LINES IS WHERE YOU WILL NEED TO DRILL THE 2 1/4" HOLE FOR THE BRAKE BOOSTER TO PASS THROUGH THE FIREWALL.

4. Remove the two studs that held the original master cylinder to the firewall. We suggest positioning



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- the old nuts at the end of the studs and lightly tapping on them with a hammer to loosen them.
- 5. Remove the two bottom mounting bolts that hold the pedal support bracket in place.
- 6. Remove the manual push rod and clevis from the brake arm. Carefully separate the clevis from the rod. Attach the old clevis to your new booster.
- 7. You will now begin the firewall modification. The new booster will mount through the existing holes in the firewall that were used for mounting the old master cylinder and the pedal support bracket. You will need to slightly enlarge the holes with a 27/64 drill bit to enable the booster studs to pass through these holes (**Figure 1**).
- 8. Using a ruler and marker, draw two diagonal lines from the mounting holes (from upper left hole to lower right, and from upper right hole to lower left). Now check the center of this "X" against the center of the existing master cylinder hole by drawing a line from center of the existing hole and seeing if it passes through the center of the "X". If it does then you have a true center to use to drill the new hole. (Figure 1)
- 9. Using a 2 1/4" hole saw with a centering bit, carefully drill the new hole for the power booster. Once this hole is drilled use a round file or sandpaper to de-burr and smooth the edge of the new hole.
- 10. At this point you may want to fashion a new gasket from foam or engine gasket material which will cover the old master cylinder hole to cut down on engine noise and dust from the engine compartment. Others have fabricated a plate out of sheet metal to cover the hole and reinforce the firewall before adding a gasket. Use whatever solution works best for your situation.
- 11. Mount booster through the firewall holes and onto bracket. Connect clevis to the pedal. Remove the wooden block and check for correct pedal travel. It may be necessary to relocate the attaching point for the clevis. On power brakes this attachment point is often 1" lower on the pedal arm (Figure 2)
- 12. Bench bleed the new master cylinder using the included bleeder kit & instructions.
- 13. Install the new master onto the booster. If it has a shallow hole use the shorter booster pin. If it is a deep hole use the longer pin. For you convenience we have included both of these pins in this kit.
- 14. Connect the hydraulic lines as required. We recommend using new lines to connect the prop valve, but you may use the old lines at your discretion. However the old may require adaptors in order to reuse them with the new master cylinder.
- 15. Connect the vacuum hose from the booster check valve to a vacuum source. Good sources can be found at either the back of the carburetor or the intake manifold. Your engine will need to produce 16-19 inches of vacuum for the booster to operate properly. If your engine does not produce this, an electric vacuum motor will be required.

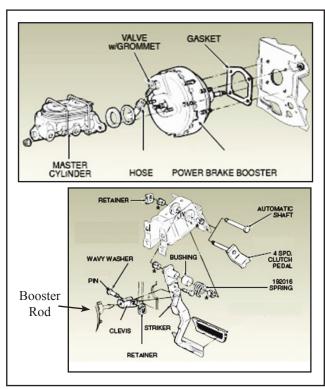


FIGURE 2

16. Test the brakes in a controlled environment. At this time also test for proper rear brake light operation.

