



631449

1967-1972 CHEVY TRUCK BOOSTER CONVERSION KIT



INSTALLATION INSTRUCTIONS

1. Remove new booster, bracket assembly and master cylinder from their boxes and inspect the parts.
2. New boosters come with a protective plastic or rubber boot over the front pin area for shipping purposes. **Remove this before the installation.**
3. This kit features a universal booster that has the short pin in the front of the booster. The new cylinder may have a piston adapter to convert it from deep to shallow hole. Install the piston adapter. Use a shallow pocket master cylinder on a power brake booster with the short pin.



Piston Adapter

REMOVING AN OLD MASTER CYLINDER:

4. Perform brake work on a level surface. Chock the wheels, set the emergency brake and put the transmission in Park.
5. Protect painted surfaces from brake fluid and place absorbent materials such as rags under the master cylinder. Since brake fluid is caustic to paint, use a fender cover mat.
6. Spray the master cylinder nuts and fittings with penetrating spray.
7. Mark which lines connect to which port on the master cylinder and which supplies fluid to the front and rear wheels respectively. (If you have the ability to take a digital picture for reference before disassembling the lines from the valve this would be a good time to do so.)
8. Make a note of the brake pedal ride height inside the cab of the vehicle. Use a wooden block to rest the pedal on so you will have a reference when you set it back up. (If you have the ability to take a digital picture for reference before disassembling the lines from the valve this would be a good time to do so.)
9. Use flare wrenches to loosen the master cylinder nuts. On stubborn fittings, sometimes attempting to tighten them before loosening them helps break them free. Be careful with the tube nut hex heads and tubes themselves if you are re-using them.
10. Again, to protect important painted surfaces you might cover the master cylinder with a plastic trash bag and or wrap it with shop rags or towels. Consider removing all of the old brake fluid from master cylinder first.
11. Inside the car, disconnect the master cylinder rod's clevis from the brake pedal swing arm and note which hole it was connected to.



Original Firewall Pattern

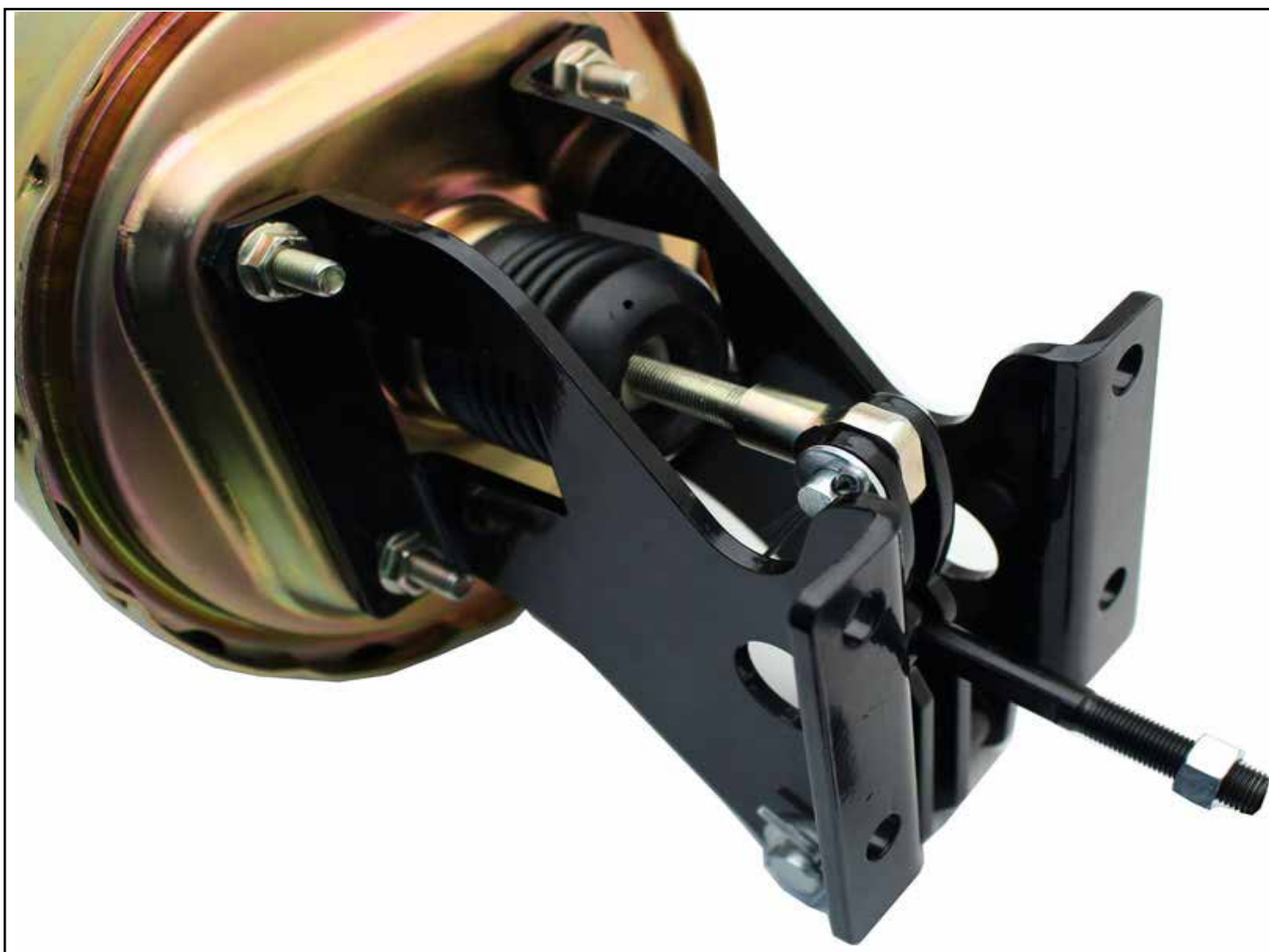
MOUNTING A POWER BOOSTER BRACKET ASSEMBLY TO A MANUAL BRAKE FIREWALL

12. Without the booster attached, mount bracket assembly on the firewall over the two studs that the manual master cylinder was mounted on.
13. If there were already bolt holes in the location, then use those. If needed, mark the location of the two new holes in order to drill new holes.
14. Remove the assembly from the firewall and drill the two new through holes.
15. Mount bracket back onto the firewall & hand tighten the four nuts.



16. Remove the gold swivel from the pedal, set the dowel, washer and cotter pin aside. Install the gold swivel on the threaded rod on the booster.
17. Connect the pedal to the brake pedal swing arm inside the vehicle.
18. Check the brake pedal ride height versus the original manual setup. Use a wood block to set the brake pedal at the position you prefer.
19. Verify the pedal travels freely without binding.
20. Install booster.
21. Do not over tighten nuts.

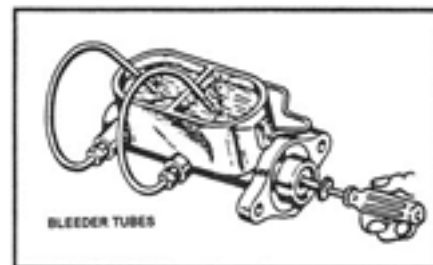




22. Some booster rear rods and front pins are adjustable. Adjust as needed.
23. Attach the booster to the brake pedal assembly & attach the threaded rod to the clevis.
24. Tighten the booster nuts 20-25 ft. lbs.
25. Tighten the bracket nuts 15 ft. lbs.
26. Put the vacuum hose onto check valve.
27. Check the brake light function. You may need to adjust the position of the brake light switch on the pedal arm.
28. Master cylinder bleeding & installation
29. Remove master cylinder lid & set aside the port plugs and the piston adapter.
30. Use compressed air to blow out the reservoirs to avoid contamination.
31. Mount the master cylinder into a vice on a level surface.
32. Add a small amount of fresh brake fluid & when it begins to weep, connect the port plugs on the unused side of the master cylinder on 4 port versions.
33. Install the bleeder hose kit.
34. Fill the master cylinder 1/4" from the top with fresh DOT 3 or 4 brake fluid.

NEVER USE OLD BRAKE FLUID!

36. Use the plastic clip to secure the hoses that return into the reservoir so that the hose ends are below the fluid line. **The hose tips must be submerged under the fluid level.**
37. Using a blunt tool or punch, push the pistons $\frac{3}{4}$ "-1" in with a series of steady strokes to expel air bubbles. This may take several cycles to expel all of the bubbles. Do this until it cannot be compressed more than $\frac{1}{8}$ ", & no air bubbles are visible.
38. Remove the bleeder kit. Install the lid.
39. Wipe off any excess brake fluid
40. Position & place clean shop rags or towels in the engine compartment of the car to protect painted surfaces.
41. If mounting the master on a power brake unit with a short pin, install the piston adapter to make the shallow hole. If using a long pin, no adapter.
42. If you have yet to do so, remove the protective cover from the front of the booster to expose the front pin.
43. Mount the master cylinder on to the booster. Don't drop the adapter.
44. Torque the hex nuts to 20-25ft. lbs.



INSTALL THE PROPORTIONING VALVE AND BRACKET (PROPORTIONING VALVE KITS SOLD SEPARATELY)

45. Be sure to install the correct brake valve for your application. Due to a wide range of applications, a brake proportioning valve is not included in the booster conversion kit.
46. If you already have the kit, attach brake line tube nuts to the master cylinder. Don't use Teflon tape.

BLEEDING ON THE VEHICLE

47. Use a brake screw bleeder wrench to open and close the bleeder screws.
48. Bleed the wheels in this order. Right rear, left rear, right front, left front. (Bleed from farthest from the master cylinder to the closest).
49. Have an assistant pump the pedal 3-5 times and hold the pedal.
50. As you open the bleeder screw, the assistant follows/pushes the brake pedal all the way to the floor. When they reach the floor, you tighten the bleeder screw and the cycle repeats.
51. Bleed each wheel until no air comes out and there is only fluid. Wipe fluid.
52. Be sure to check the fluid level in the master cylinder frequently. Keep the reservoir full of fluid and the lid installed in the process. Remember to protect painted surfaces with rags.
53. You should notice the pedal requiring more effort to depress it as you progress towards the front left wheel.
54. Repeat the bleeding process until the brake pedal is firm and holds.
55. When done, remove the wheel chocks and release the emergency brake.
56. Test brakes slowly in a safe area away from other cars or objects by making a series of stops. Try a 5 mph stop, a 15mph stop, a 30mph stop & a 50 mph stop. Drive safely and responsibly.
57. Stop the car & check brake fluid level.

58. Drive safely to get a "feel" for the braking action of your car.

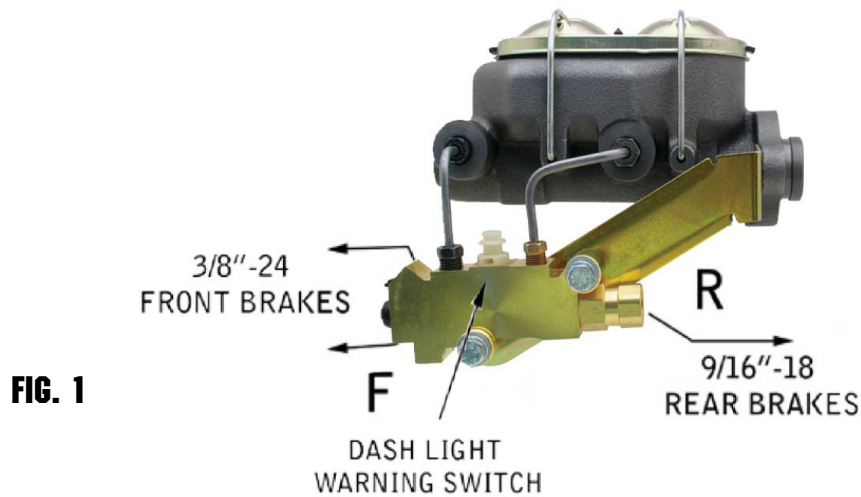


FIG. 1

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 mount-ing 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

This master cylinder is equipped with a piston adapter making them more versatile. This allows the masters to be used for power brake and manual brake applications. When installing a 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.)

