# 1967-1972 CHEVY TRUCK BOOSTER CONVERSION KIT



# **INSTALLATION INSTRUCTIONS**

COMPONENTS SHOWN IN MANUAL MAY BE DIFFERENT THAN YOUR KIT.

INSTALLATION PROCEDURE IS THE SAME REGARDLESS OF BOOSTER SIZE OR MASTER CYLINDER TYPE/FINISH

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

# **INSTALLATION INSTRUCTIONS**

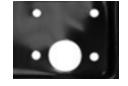
- 1. Remove new booster, bracket assembly and master cylinder from their boxes and inspect the parts.
- 2. New boosters come with a protective plastic or rubber boot over the front pin area for shipping purposes. **Remove this before the installation.**
- 3. This kit features a universal booster that 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 refrence 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 refrence 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.



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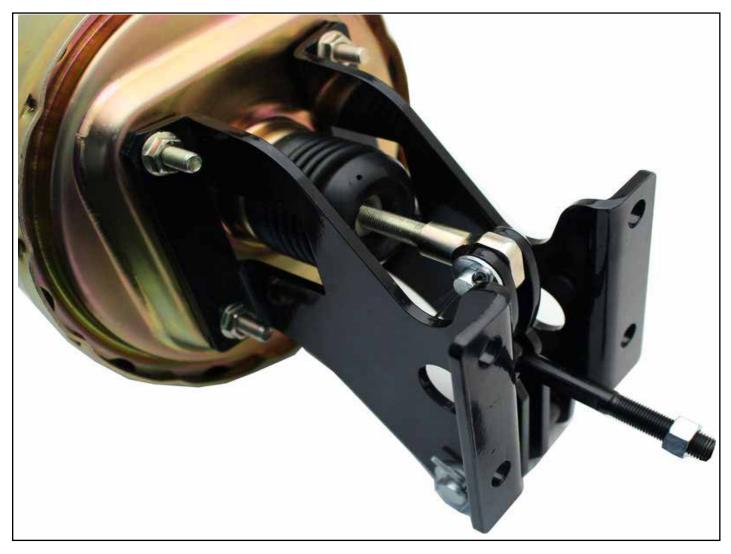
- 16. Remove the gold swivel from the pedal, set the dowel, washer and cotter pin aside. Install the gold swivel on the threaded rod on the booster.
- 17. Connect the pedal to the brake pedal swing arm inside the vehicle.
- 18. Check the brake pedal ride height versus the original manual setup. Use a wood block to set the brake pedal at the position you prefer.
- 19. Verify the pedal travels freely without binding.



## 20. Install booster.

21. You may notice the swivel makes contact with the firewall. If contact occurs, you need to cut the threaded rod on the rear of the booster to allow clearance.





- 22. Remove booster, cut rod down, re-install and test the pedal travel range and for adequate firewall clearance.
- 23. Some booster rear rods and front pins are adjustable. Adjust as needed.
- 24. Attach the booster to the brake pedal assembly & attach the threaded rod to the clevis.
- 25. Tighten the booster nuts 20-25 ft. lbs.
- 26. Tighten the bracket nuts 15 ft. lbs.
- 27. Put the vacuum hose onto check valve.
- 28. Check the brake light function. You may need to adjust the position of the brake light switch on the pedal arm.
- 29. Master cylinder bleeding & installation
- 30. Remove master cylinder lid & set aside the port plugs and the piston adapter.
- 31. Use compressed air to blow out the reservoirs to avoid contamination.
- 32. Mount the master cylinder into a vice on a level surface.
- 33. 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.
- 34. Install the bleeder hose kit.
- 35. 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 <sup>3</sup>/<sub>4</sub>"-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 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 and 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.

