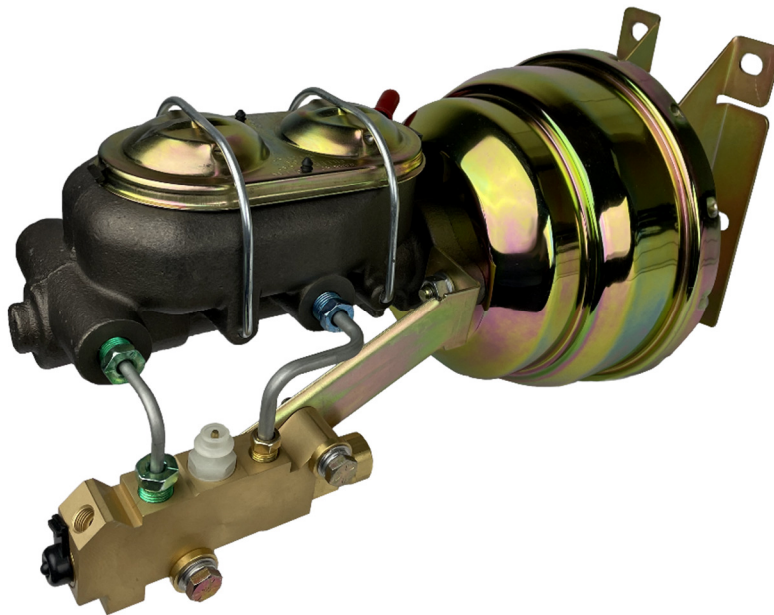




Installation Instructions

Power Brake Conversion Kits

Applications: 73-91 GM C/K Trucks



Thank you for choosing Leed Brakes for your automotive product needs. Before you begin your installation please inspect all parts and review the installation instructions. If you have any missing or damaged parts or if you have any questions regarding the fitment of this kit on your specific vehicle please contact our customer service team at (716) 852-2139 before beginning your installation.

Tools required for a safe and smooth installation:

Proper Jack & Jack Stands, Tube Wrenches, Standard Socket Set, Standard Wrench Set, Lug Wrench, Pliers, Mallet, Brake Fluid, Brake Cleaner.

Master Cylinder Removal:

1. Safely raise the vehicle off the ground until the wheels are clear and spin freely. Support the vehicle using the appropriate Jack Stands and remove the front wheels.
2. Measure the height of the brake pedal from the floor of the truck so the new pushrod can be adjusted to place the brake pedal in its original position.
3. Before removing the master cylinder it's a good idea to cover painted surfaces with plastic sheeting and or cloths to catch any brake fluid. ***Be very careful not spill any brake fluid on any painted surfaces as it will damage your paint.***
4. From under the dash disconnect the pushrod from the pedal assembly. It may be necessary to remove the metal plate that triggers the brake light switch in order to remove the pushrod.
5. Disconnect the brake line(s) from your master cylinder. Remove the retaining hardware and remove the master cylinder and or power booster from the firewall. This assembly will also include the pushrod that was previously disconnected from the pedal.

Power Booster Installation:

1. If the truck was originally equipped with power brakes, remove the pushrod end from the original booster and install it onto the new booster using the coupling nut, double ended stud and jamb nut supplied. **Photo 1 & 2**
2. If the truck was originally manual brakes install the longer threaded rod, coupling nut, jamb nuts and pushrod end supplied on to the new brake booster. **Photo 3**
3. The new brake booster is shipped with the mounting brackets already installed. The booster will be installed with the **check valve positioned** up and towards the engine.
4. If your truck had factory power brakes the plastic boot from the back of the factory booster can be reused by trimming ¼" from the booster side of the boot. You will need to remove the supplied rubber boot and install the plastic boot in its place. **Photo 4**
5. If your truck had factory manual brakes, place the open end of the second rubber boot supplied onto the end of the boot on the new booster to cover the pushrod hole in the firewall.
6. Secure power booster to firewall using the original mounting studs and nuts. These bolts may be difficult to tighten with the limited space available. All 4 bolts can be accessed using a standard wrench. If the truck already had power brakes connect the original vacuum line to the new booster. For manual brake trucks you will need to tap into a source of full manifold vacuum. For the booster to function correctly it requires a minimum of 16" of vacuum at idle.
7. From under the dash **adjust the pushrod** to meet the pedal in its original position using the measurement taken earlier for reference. On factory power brake trucks, the pushrod will connect to the pedal in the same position as the factory booster did. On manual brake trucks

the pushrod will connect to the lower hole on the brake pedal. Once connected the pushrod should pass straight into the back of the power booster. It should not be at an extreme upward or downward angle. The pushrod must also pass through the fire wall without contacting the sheet metal of the fire wall or the pedal support bracket.

8. Once the pushrod has met the desired length, secure the **locking nut** to the pushrod. Make sure the pedal has at least a ½" of free play and is not jammed tight against the pedal stop as this can cause the brakes to drag.
9. Install original pushrod locking mechanism to secure the pushrod to the pedal. Reinstall the brake light switch plate onto the pedal if it was removed earlier.
10. Check the adjustment on the brake light switch to ensure the taillights cycle on and off correctly as the pedal is applied and released.
11. If you are planning to reuse your original master cylinder the cast iron style master cylinders will fit the new booster, but factory aluminum master cylinders will not bolt up correctly. If your factory master cylinder has a deep hole in the piston it will be necessary to use the bullet spacer provided to work with the short pushrod in the new booster.
12. If you purchased a kit with a master cylinder it will be necessary to reverse the brake line connections compared to your original master cylinder. The line that was connected to the front bowl of the original master cylinder will be connected to the rear bowl of the new master cylinder and vice versa.
13. We recommend dry fitting the master cylinder prior to bench bleed so you can route all your brake lines. This will make the final installation much easier and minimize the risk of getting brake fluid onto a painted surface.

Master Cylinder Bench Bleeding

1. Before you install your master cylinder for the final time you must **bench bleed** it in a vice off of the vehicle using the **bench bleeder kit** provided.
2. To Bench Bleed
 - a. Place your master cylinder in a **vice** by the mounting ears.
 - b. Attach a clear plastic hose to the short end of each of the plastic nozzles provided.
 - c. Clip the plastic bridge onto the partition wall of the master cylinder and insert each plastic tube into the holes insuring the end of the tube will be fully submerged in the brake fluid.
 - d. Press the tapered end of the nozzles firmly into the master cylinder ports with a twisting motion.
 - e. Fill the reservoir with new clean brake fluid (DOT 3 or DOT 4 Recommended).
 - f. Using a large Phillips head screwdriver push the piston in, then release using full strokes.
This MUST be done until ALL air has disappeared from the clear plastic hoses.

CAUTION- MASTER CYLINDER WILL NOT BLEED PROPERLY IF HOSES ARE NOT FULLY SUBMERGED IN BRAKE FLUID UNTIL THE BLEEDING PROCESS IS COMPLETE

Master Cylinder Install:

1. Remove the master cylinder from the vice and install on the power booster, secure with the supplied hardware. ***Be very careful not spill any brake fluid on any painted surfaces as it will damage your paint.***
2. Carefully remove the bleeder kit nozzles and install the brake lines in the appropriate ports.
3. Secure all brake lines and check for leaks.

Bleeding the vehicles braking system:

We recommend that the brake system is bled using a gravity bleed method. While there are many ways to bleed a system this way is less likely to introduce air in the system causing a spongy pedal. Whenever bleeding your system you must keep an eye on your fluid level. If your master runs dry you will have to bench bleed the master again.

1. Remove the cap from the master cylinder.
2. Starting at the right rear wheel cylinder or caliper attach a clear hose to the bleeder with the other end in a clear container.
3. Open the bleeder and observe the fluid flow. It may take a couple of minutes for the fluid to flow with a new system. Once the fluid begins to flow let it drip until you do not see any air.
4. Move to the left rear wheel, repeat step 3.
5. Move to the right front wheel, repeat step 3.
6. Move to the left front wheel, repeat step 3.
7. Repeat steps 2 thru 6 once more.
8. Install the lid on the master cylinder.
9. Pump the brake pedal until you achieve a firm pedal.
10. Remove lid on master cylinder & check fluid level
11. Repeat steps 2 thru 6 to insure all air has been removed.

Once you feel you have successfully removed all air from your brake system check all fittings and lines for leaks and verify all fasteners are tight. Install your wheels, and spin them to insure they still spin freely making sure the caliper doesn't interfere with the wheel and your brakes are not dragging or locked up.

You may now take your vehicle for a test drive in a safe area. We recommend that you drive the vehicle with light to medium application of the brakes for the first 150-200 miles. This will allow your brake pads to properly seat to your rotors to insure optimal braking performance.

If you have any questions please call our tech line at (716) 852-2139

Thank you for purchasing from Leed Brakes we hope you have had an enjoyable experience.

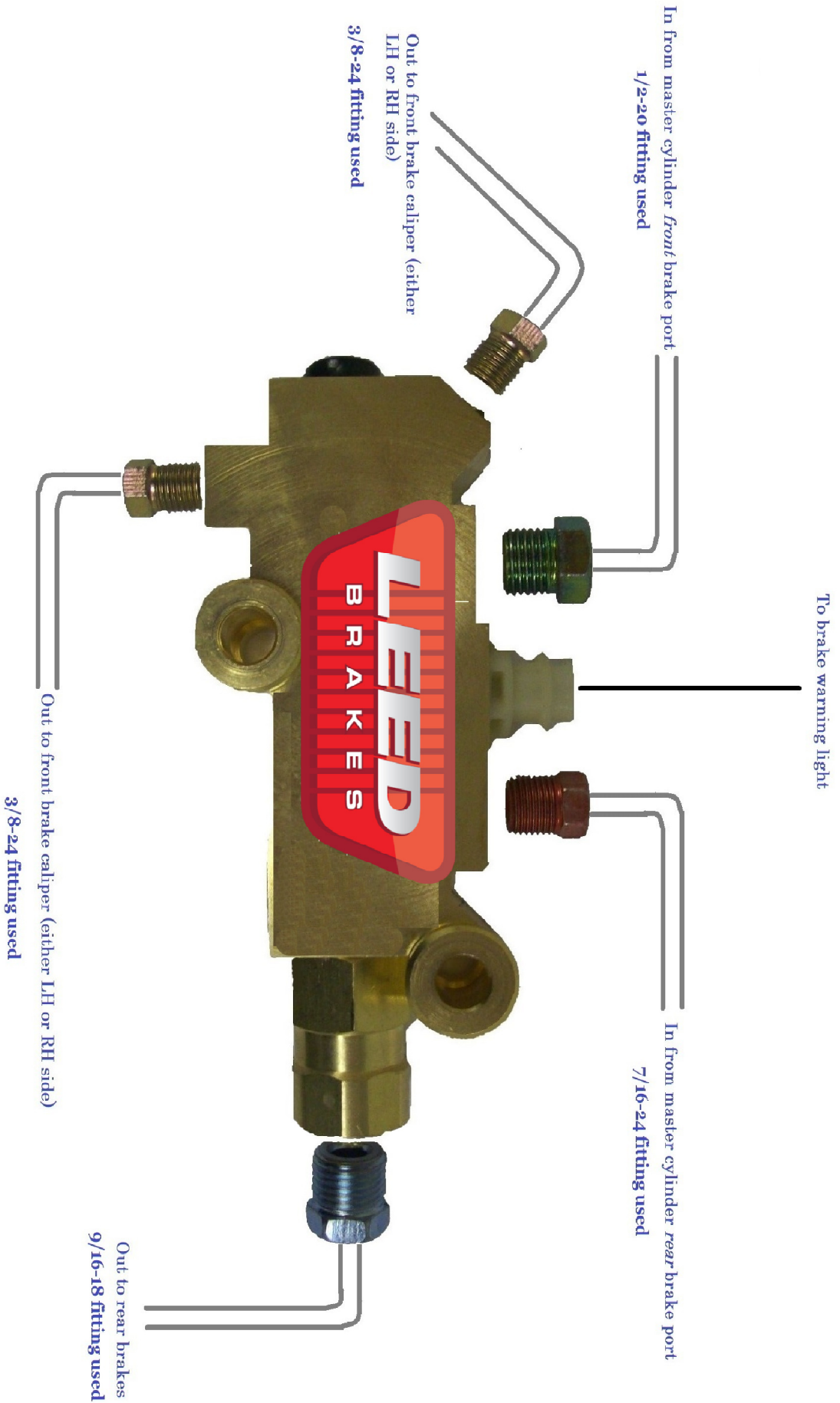




Photo 1



Photo 2



Photo 3



Photo 4