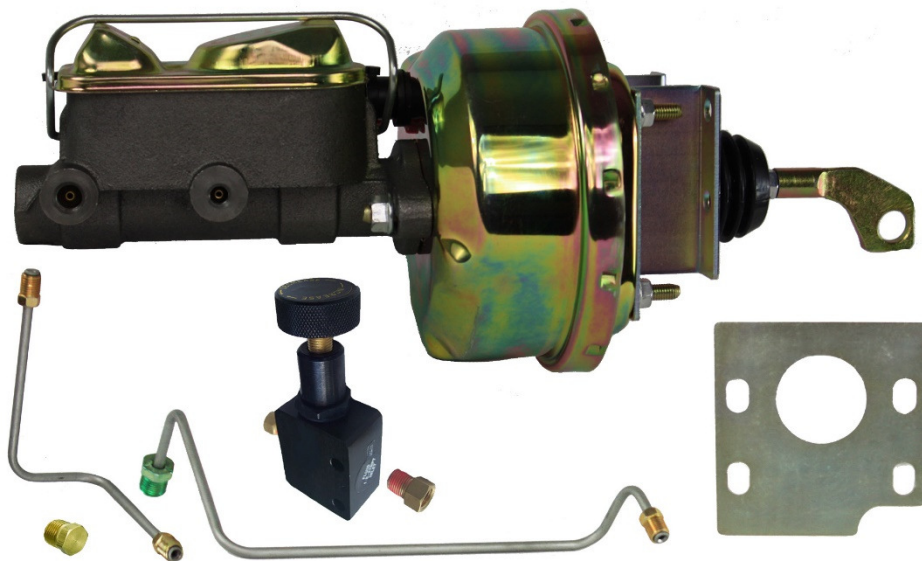




Installation Instructions

FC0042HK Power Kit Assembly



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, Torque Wrench, Lug Wrench, Pliers, Mallet, Brake Fluid, Brake Cleaner.

Vehicle Prep:

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. Remove wheels for easy access to the bleeders on your calipers & wheel cylinders.
3. From under the dash disconnect and remove the brake light switch and remove the pushrod from the pedal assembly.
4. Disconnect the brake line(s) from your master cylinder. **Be very careful not to spill any brake fluid on any painted surfaces as it will damage your paint.**
5. Remove all hardware retaining your current master cylinder or power booster to the firewall and remove it from vehicle.

Fire Wall Modification:

1. Prior to installing the booster assembly, it will be necessary to enlarge the pushrod hole in the firewall. The square plate included in the kit will cover the original hole and provide a tight fit to the boot on the power brake booster to ensure no fumes or water come into the passenger compartment.
2. Install the plate onto the firewall with the original bolts. Using the plate as a template trace the portion of the firewall that needs to be cut. **Photo 1 & 2**
3. Remove the plate and cut the firewall. Reinstall the plate and make sure the pushrod hole in the plate is no longer blocked. **The rubber accordion boot on the back of the booster must not contact any part of the firewall.**

Power Booster Assembly:

1. Install the **new push rod** onto the power booster, do not lock it into position yet as adjustments will need to be made later.
2. With the booster **check valve positioned** in the upper RH corner, install the power booster **mounting brackets** so that the longer leg of the bracket is at the bottom of the booster and the firewall plate is sandwiched between the booster brackets and the firewall.
3. Secure power booster to firewall using the flange head bolts and lock washers supplied. These bolts may be difficult to tighten with the limited space available. All 4 bolts can be accessed using a standard 3/8" wrench. It is also possible to install the brackets onto the firewall first and then bolt the power booster to the brackets. If you choose this method, you will need to leave the bracket bolt finger tight until the booster is fully installed and then give them a final tighten with a wrench. **Photo 3,4 & 5**

4. **The rubber accordion boot must fit halfway into the large hole in the supplied firewall plate.**
Depending on your installation it may be easier to remove the boot from the booster, work it into the firewall plate, and then push the boot back onto the booster before the assembly is installed on the firewall. Likewise, you can install the boot into the plate and then install the plate and brackets onto the firewall followed by the booster and then slide the open end of the boot back onto the booster. In either case **the boot must fit inside the firewall plate and not be jammed up on the engine bay side of the firewall. This can cause binding and sticking.**
5. From under the dash **adjust the pushrod** to meet the pedal in its original position. Once the pushrod has met the desired length, secure the **locking nut** to the pushrod. **The pushrod length cannot be adjusted between the coupler and the eyelet.** **Photo 6**
6. Install original pushrod locking mechanism to secure the pushrod to the pedal and install the brake light switch. Be sure to test the function of the brake light switch.
7. Use a **vacuum hose** to connect the power booster to a direct source of engine manifold vacuum or aftermarket vacuum pump.

Master Cylinder Dry Fit:

1. It will be much easier to test fit the master cylinder and loosely install all the brake lines prior to bench bleeding. This will also minimize the chance of getting brake fluid on any painted surfaces.
2. Install the **brake line with the (2) 3/8-24 fittings** into the open port on the distribution block. The other end of the line will install in the **front brake port** (port closest to the booster) of the master cylinder.
3. Install the small fitting of the other brake line to the **"IN" port of the Adjustable Proportioning Valve**. The larger fitting will be installed in the rear brake port (port furthest from the booster) of the master cylinder later.
4. The master cylinder **must now be removed for bench bleeding.**

Master Cylinder Bench Bleeding:

1. Before you install your master cylinder you must **bench bleed** it in a vice off 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 ensuring 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.

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

Master Cylinder Install:

1. Remove the master cylinder from the vice and install on the booster, secure with the provided hardware. **Be very careful not to 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. Install the brake line with the ½" fitting to the port for the rear brakes (port furthest from the firewall) and connect the other end to the "IN" port of the **adjustable proportioning valve**.
4. Install the brake line with the (2) 3/8" fittings into the front brake port (port closest to the firewall) and connect the other end to the open port in the factory distribution block.
5. 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 through 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 through 6 to ensure all air has been removed.

Once you feel you have successfully removed all air from your brake system you may install your wheels and spin them to ensure they still spin freely, and your brakes are not dragging or locked up.

You may now take your vehicle for a test drive in a safe area. If you have installed new rotors, drums and/or brake pads it is recommended 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 and/or drums with optimal braking performance.

That completes the installation of your hydraulic. If you purchased a kit containing other disc brake components, please refer to the separate instructions provided with those components.

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.



Installation Photos

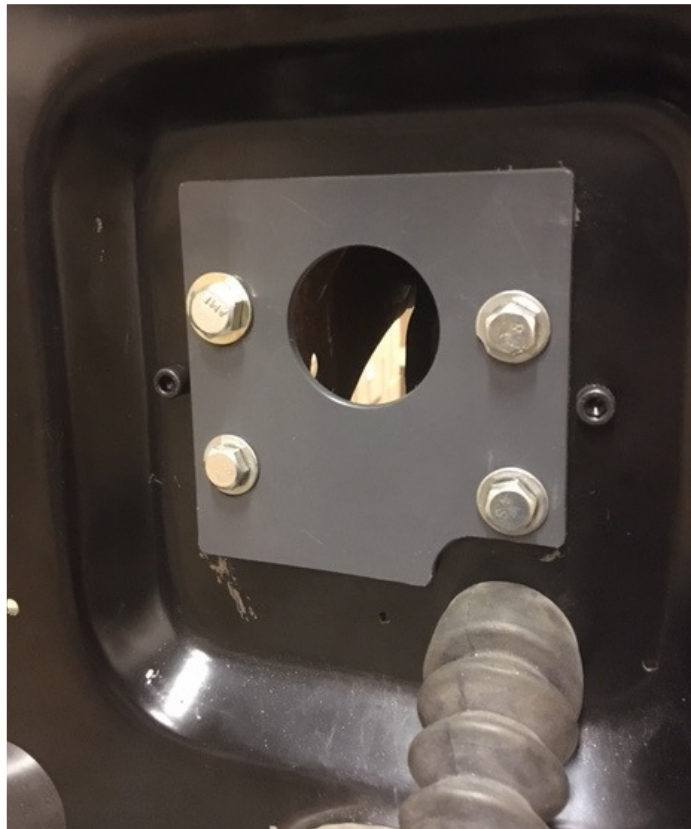


Photo 1



Photo 2

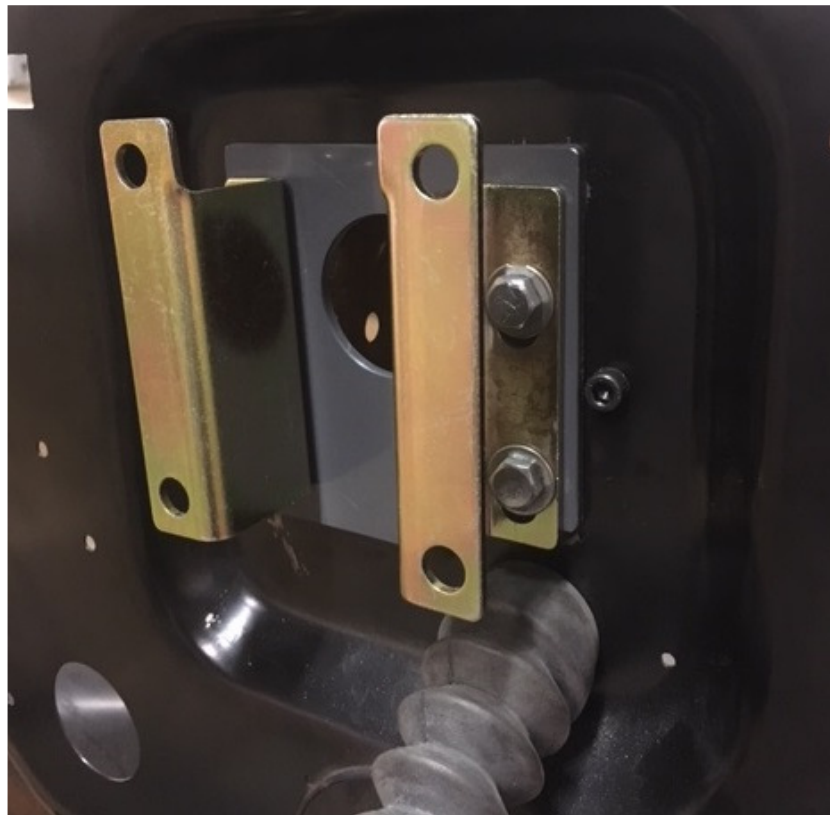


Photo 3

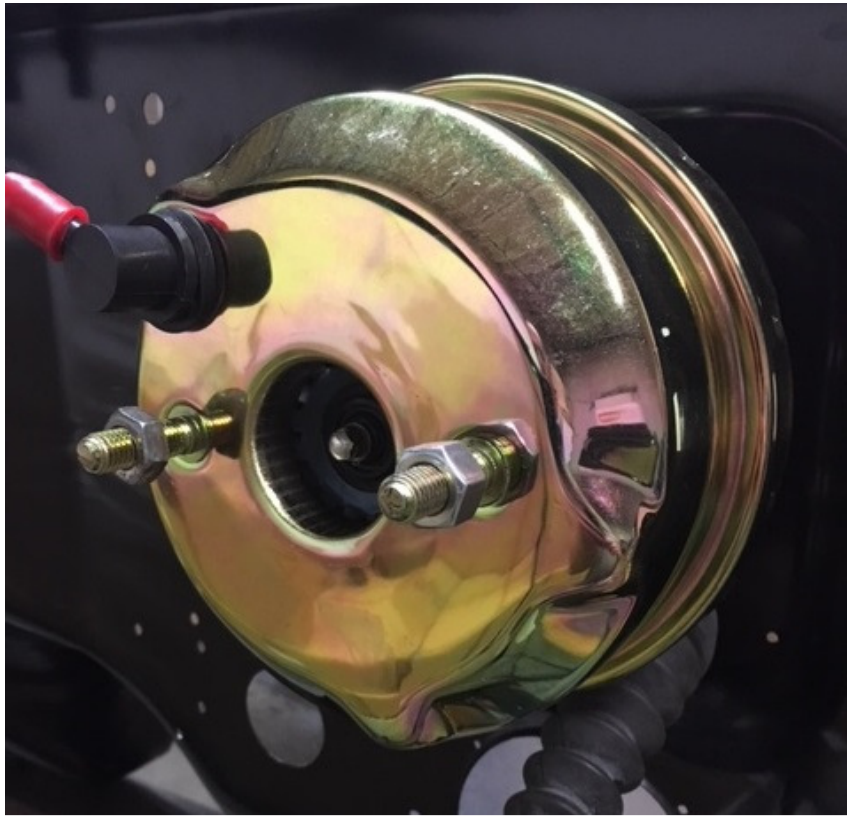


Photo 4



Photo 5

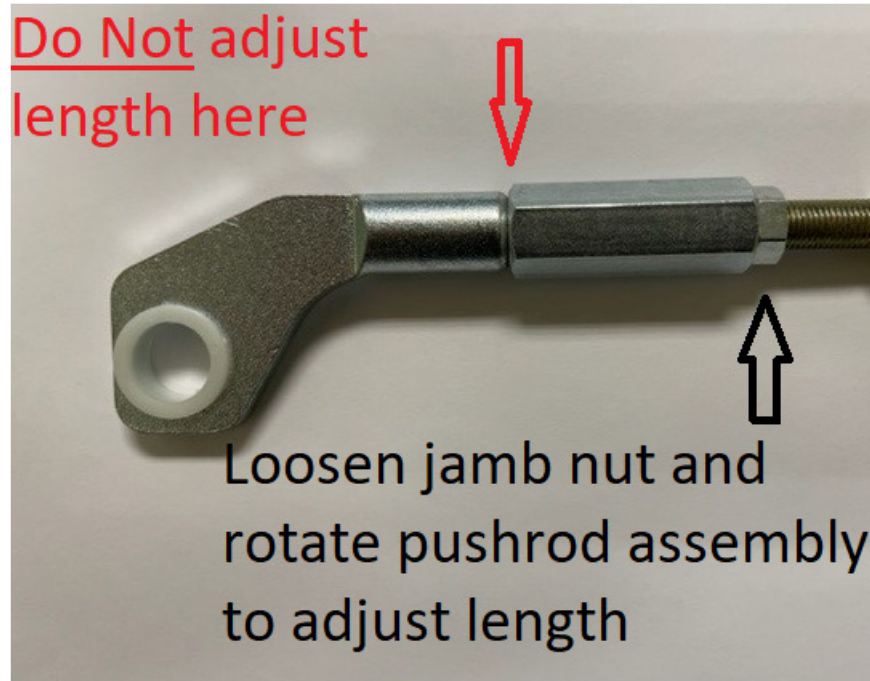


Photo 6