

Installation Instructions

Manual Kit Install

Item # FC0003HK



Thank you for choosing Leed Brakes for your automotive product needs. Before you begin your installation please inspect all parts immediately and contact our customer service team at 716-852-2139 if you have any missing or damaged or incorrect parts.

Please take the time to review these installation instructions prior to disassembly of your current brake system to insure a smooth installation. If you have any questions regarding your installation please call our customer service team at 716-852-2139

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.

Fitment Notes:

Some 1964.5 Cars may require an additional adapter fitting to re-install the pressure switch for the brake lights. These adapters are available thru most Mustang parts sources.

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 remove the pushrod from the pedal assembly.
- 4. Disconnect the brake line(s) from your master cylinder. <u>Be very careful not spill any brake fluid</u> 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 from vehicle.

Brake line Installation:

- 1. Remove the steel brake lines going from the original master cylinder to the factory distribution block. Disconnect the line going out to the rear brakes from the factory distribution block.
- 2. Install brass fittings into the Adjustable Proportioning Valve and tighten.
- 3. Install the Adjustable Proportioning Valve to the rear brake line, the "out" port of the adjustable valve will be used here.
- 4. Install the straight brake line supplied with (1) 7/16-20 fitting and (1) 3/8-24 fitting into the "IN" port of the adjustable valve. The other end of this line will go to the rear brake port of the factory distribution block.

Master Cylinder Prep:

- 1. Before you install your master cylinder 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:

- Remove the master cylinder from the vice and install on the firewall, secure with factory 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. Install the pre bent brake line with the ½" fitting to the port for the rear brakes on the master cylinder (port furthest from the firewall) and connect the other end to the top rear port of the factory distribution block.
- 4. Install the pre bent brake line with (2) 3/8-24 fittings between the master cylinder port for the front brakes (port closest to the firewall) and the top front port of the factory distribution block.
- 5. Secure all brake lines and check for leaks.
- 6. Remove the factory pushrod from your original master cylinder and install it into the new master cylinder with the original dust boot. If you master cylinder has never been replaced it may be difficult to remove the pushrod from your old master cylinder. There is a metal retaining clip that holds it in the master cylinder piston. It is usually necessary to break the clip to release the pushrod.
- 7. If you do not have your factory pushrod or you would like to adjust the pedal position contact GPS Automotive for information on our optional adjustable pushrod.

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. (Continued on next page)

Once you feel you have successfully removed all air from your brake system you may install your wheels, and spin them to insure 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.

Adjustable Proportioning Valve Instructions



Installation – The proportining valve is intended to be installed in the rear fluid line after any factory style distribution block. An adjustable proportining valve should never be installed between the master cylider and distribution block as the block will sence unequal pressure and block fluid flow.

Use only the two .25" holes in the valve body to secure the valve to a mount. The two ports have 3/8-24 inverted flare fittings to adapt double flared hard brake lines directly to the valve.

Connect the "IN" port to the brake line coming from the master cylinder or distribution block. Connect the line going to the rear calipers to the "OUT" port.

Adjustments - The adjusting knob is marked with an arrow indicating the direction required to decrease line pressure to the calipers. The knob rotated all the way out in a counter-clockwise direction will provide a maximum pressure reduction of 55%. Rotating the knob in a clockwise direction will increase line pressure, up to the full pressure that your system allows.

TESTING THE SYSTEM - Do not attempt to operate the vehicle until the system has been fully tested undercontrolled conditions in a safe location. After the system has been bled, checked for leaks, and the proper pedal travel has been determined, make a series of low speed stops, then gradually progress to normal operating speeds.

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.