

Thank you for your purchase of our Pro Driver Rear Disc Brake Conversion Kit for the 1960-1987 Chevrolet Full-Size trucks. This is a bolt-on kit and is a great complement to our Pro Driver front kit and will work equally as well with other front conversion kits. This system is a complete bolt-on conversion kit and should only require basic hand tools.

Installation Notes:

- Please read all instructions before attempting the installation.
- Proper operation of your brakes is essential for your safety and the safety of others. Any brake service should be performed by a professional technician experienced in the installation of brake systems.
- Any installation requiring you to remove a wheel or gain access under the vehicle requires use of jack stands appropriate to the weight of the vehicle. In all cases recommended ratings for jack stands should be at least 2-tons.
- All installations require proper safety procedures and protective eyewear.
- A selection of hand tools sufficient to engage in the installation of these products is assumed and is the
 responsibility of the installer to have in his/her possession prior to beginning this installation. All
 installations, which require removal of hydraulic hoses and/or bleeding of the brakes, require
 appropriate fitting/line wrenches, as well as a safety catch can and protective eyewear. Other than
 these items, if unique or special tools are required they are listed in the section for that step.
- ALWAYS CONFIRM WHEEL FITMENT PRIOR TO BEGINNING THE INSTALLATION OF ANY "UPSIZED" BRAKE SYSTEM!! Returns will not be accepted for ANY installed part or assembly. Use great care to prevent cosmetic damage when performing wheel fit check!
- Before starting the installation, verify that all parts are included with the brake kit. If items are missing, notify Master Power Brakes immediately.
- Master Power Brakes recommends the use of a high quality DOT 3 or DOT 4 brake fluid. ALL WARRANTY IS VOID IF DOT 5 FLUID IS USED.

If you have any questions regarding installation, feel free to contact Master Power Brakes at (888) 351-8781 or through our website at <u>www.mpbrakes.com</u>.

Parts List	
Quantity	Description
2	Billet aluminum 4-piston calipers (Pads included)
1	LH 12" Rotor (Cross-drilled, Slotted, & Zinc-washed)
1	RH 12" Rotor (Cross-drilled, Slotted, & Zinc-washed)
1	LH Banksia Park Brake Assembly w/Caliper Mounting Bracket
1	RH Banksia Park Brake Assembly w/Caliper Mounting Bracket
2	Braided s/s brake hose (Includes 2-10mm Banjo bolts, 4-Crush
	washers, 2-3 AN x 3/8"-24 adapters)
1	Shim Package
4	Caliper Mounting Bolts w/Slider Assembly (Installed in calipers)
2	Brake Hose Axle Bracket
2	Axle Bracket Clamps
2	Center Stabilizing Valves (Attached to Calipers
	w/banjo bolts & crush washers)
1	Syringe bleeder
1	30" Bleed hose
2	Vinyl brake line caps
1	Shim Kit

Installation:

- 1. With the vehicle properly supported, remove the rear wheels and tires.
- 2. Place a drain pan under the rear differential and drain the fluid from the rear axle.
- 3. Remove the differential pin lock bolt from the carrier that retains the carrier cross shaft. Most GM vehicles use a bolt with a 5/16" or a 1/2" head on the bolt. **NOTE:** A 6-point wrench is recommended as this bolt is usually very tight. Figure 1 shows the removal of the retaining bolt and Figure 2 shows the removal of the cross shaft.



Figure 1 – Bolt Removal

Figure 2 – Cross Shaft Removal

- 4. Remove the brake drums. **NOTE:** In some instances, the brake drum will be difficult to remove due to rust from the axle. To remove, lightly tap on the outer edge of the brake drum with a hammer to loosen the rust and allow for the brake drum to be removed.
- 5. Remove the axles from housing taking care not to damage the bearings or the seals. Inspect the axles, seals, and the bearings and replace the components as necessary.
- 6. With the axles removed, disconnect the wheel cylinders and the parking brake cables and remove the brake shoes, hardware and backing plates. Use the provided rubber caps to cap the brake lines to prevent brake fluid from dripping. **NOTE:** Pay attention to how the factory cables are routed and attach to the vehicle. The new cables, if purchased, may attach to the frame and the existing cables just like the OE cables.
- 7. Before beginning the installation of the new disc brake conversion, measure the diameter of the flange on the axle. This diameter can be no more than 5.900". If the flange is larger than 5.900", it will be necessary to turn the outer flange on a lathe to a diameter of 5.900" to allow the new rotor to seat on the axle properly.
- 8. Install the bracket/park brake assembly using the original bolts that secured your original drum brake backing plate. The park brake assemblies are left and right specific. The driver side (LH) carries a part number engraved beginning with the numbers 671. The passenger side (RH) begins with the numbers 672. The park shoe actuator will be at the bottom with the brake shoe retainer at the top. Torque the fasteners to 45 ft/lbs.
- 9. Install the axles into the rear axle housing on both sides. Assemble the carrier cross shaft into the rear differential and insert the retaining bolt. Torque this bolt to factory specifications based on the type of axle.
- 10. Place the correct LH or RH rotor onto the axle flange. Use three lug nuts when installing to hold the rotor tight against the flange which will the rotor from moving to allow for caliper installation and to avoid scratching the rotor. When installing rotors, be sure to follow the direction of rotation indicated on the rotor hat area with either an arrow or with an "L" for driver side or an "R" for passenger side. Figure 3 below shows the direction for reference.



Figure 3 – Direction of Rotor Rotation

- 11. With the pads installed into the caliper, position the caliper over the brake rotor and secure using the supplied M12 x 30mm Hex Head Bolts.
- 12. After installing the caliper, it is necessary to center the caliper over the rotor. A shim kit is supplied with the disc brake kit to accomplish this. Measure the gap from the rotor to caliper body at 4 points (top inside and outside and the bottom inside and outside). With all measurements taken, subtract the top inside measurement from the top outside measurement. Take that difference and divide by two to determine the shim required. For example, the inside measurement is .865" and the outside measurement is .905" leaving a difference of .040". Divide the difference by two leaving the necessary shim at .020". Do this procedure at both the top and bottom to determine appropriate shimming. It is possible for the top and bottom to require different thickness shims. Set the gaps to within .005" of each other. This will keep the possibility of noise to a minimum. Follow the steps below for proper shimming of the calipers once the measurements have been taken:
 - a. Select the required shims from the shim kit provided.
 - b. Remove the caliper.
 - c. Loosen the bolts from between the park brake backing plate and intermediate caliper bracket.
 - d. Install the appropriate shims removing one bolt at a time. Snug bolts at this time.
 - e. Reinstall the caliper and recheck the gap as described above. If necessary, add or remove shims.
 - f. Once proper caliper location has been achieved through shimming, remove the caliper along with the bolts from the intermediate bracket keeping the shims in place. With each bolt removed, use High Strength Loctite on the threads and torque the bolts to 80 ft/lbs. Reinstall the caliper and torque the caliper mounting bolts to 80 ft/lbs.



Figure 4 – Measuring Reference

Figure 5 – Shim Location (Bracket May Differ - Shown for Reference Only)

13. A Centering Stabilizer Valve (CSV) is attached to each rear caliper. The CSV can be seen in Figure 6. The CSV is used to keep the caliper properly centered over each rotor. Attach the banjo bolt using two copper crush washers on each side of the hose end. The CSV can be positioned in any direction and should be positioned to allow the best fitment of the brake hose. Install the hardline retainer bracket onto the rear axle housing retaining it to the axle tube using the provided stainless steel clamp. With the retainer installed, insert the -3 AN x 3/8"-24 Adapter into the retainer and install the provided hose lock. With the hose properly positioned away from interference, torque all banjo connections to 15-20 ft/lbs. Figure 5 shows a completed installation and possible hose routing and attachment.



Figure 6 – Centering Stabilizer Valve (CSV)

- 14. Install the stainless steel braided hose using one copper washer on each side of the banjo fitting. Connect the hose to the hardline and install the hose lock. **IMPORTANT:** Position the hose to avoid interference with the wheel and suspension components through the entire range of motion. Torque the banjo bolt to 15-20 ft/lbs.
- 15. Modifying the hard lines as necessary to attach to the stainless brake hoses or creating new hardlines will be required.
- 16. If park brake cables were purchased with the system, attach them at the park brake first followed by attaching them to the factory primary cables.
- 17. Installation is now complete for the rear disc brake conversion. Following the instructions in a separate document, bleed the brakes accordingly.

If you have any questions or comments, please call Master Power Brakes at (888) 351-8781.