



Master Power Brakes
Rear Disc brake Conversion Kit
Small Flange, Large Flange & Torino Flange Ford Applications
P/N: DB4550BR, DB4551BR, & DB4552BR



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 www.mpbrakes.com.

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	M12 x 30mm Grade 8 Hex Head Bolts
4	7/16" Flat Washers
2	Rotor Centering Ring
2	Brake Hose Axle Bracket
2	Axle Bracket Clamps
1	Syringe bleeder
1	30" Bleed hose
2	Vinyl brake line caps

Installation:

1. With the vehicle properly supported, remove the rear wheels and tires.
2. 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.
3. 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.
4. 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, attach to the frame and the existing cables just like the OE cables.
5. 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.
6. Reinstall the axle into the axle housing. No axle retainer is used at this point as the park brake backing plate retains the axle into the housing.
7. To begin installation, it is first necessary to disassemble the Banksia park brake assembly for installation onto the rear axle. Remove the Allen screws holding the retainer assembly from the park bracket backing plate. Once the screws are removed, slide the clip from the park brake shoe. For reference, see Figure 1. **NOTE:** It is not necessary to remove the intermediate caliper mounting bracket from the backing plate.

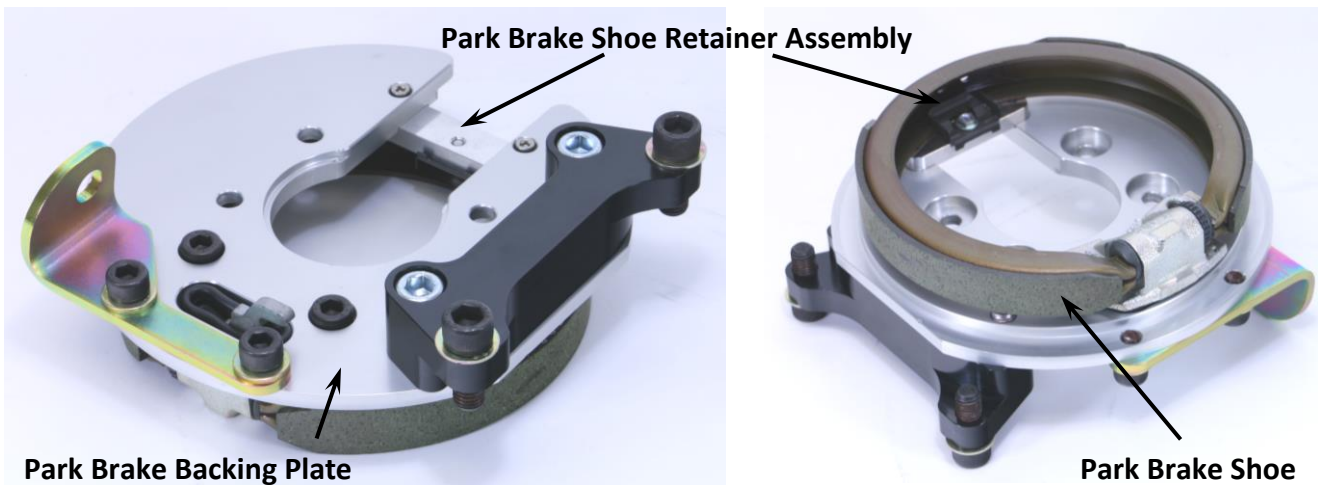


Figure 1 – Banksia Park Brake Assembly

8. With the park brake disassembled, install the park brake backing plate onto the rear axle housing. The backing plate installs from the bottom of the axle flange and the opening in the backing plate will go around the axle shaft. Figure 2 shows the backing plate being installed. Retain the backing plate using the original T-Bolts. If your axle uses 3/8" T-bolts, torque the nuts to 45 ft/lbs and if using 1/2" T-Bolts, torque to 85 ft/lbs.



Figure 2 – Installing the Park Brake Backing Plate

9. Slide the park brake shoe over the axle flange and slip the park brake shoe onto the actuator from the bottom up. **NOTE:** Ensure the pistons are seated flush into the actuator and that the parking brake latch is firm and not easily moved once the shoe is installed. If the pistons are not fully seated, slightly move the latch left, and right, and inward until the pistons are seated. See photos Figure 3 for reference on how the pistons should look when seated.

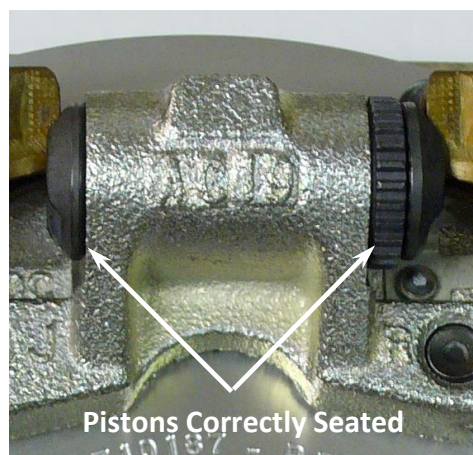


Figure 3 – Park Brake Actuator

10. Install the shoe retainer and ensure the shoe is centered and held into place under the retainer. Using the original Allen Head Cap Screws, attach the park brake retainer bracket to the backing plate and torque the bolts to 5 ft/lbs. Figure 4 below shows the retainer installed onto the park brake shoe and the backing plate.



Figure 4 – Installed Park Brake Shoe Upper Retainer

11. 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 5 below shows the direction for reference.

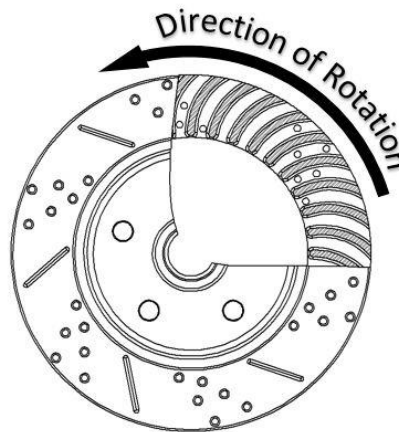


Figure 5 – Direction of Rotor Rotation

12. 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.
13. 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, replace the bolts for the bolts with the Vibra-Tite finish. Torque the bolts to 80 ft/lbs. Reinstall the caliper and torque the caliper mounting bolts to 80 ft/lbs.

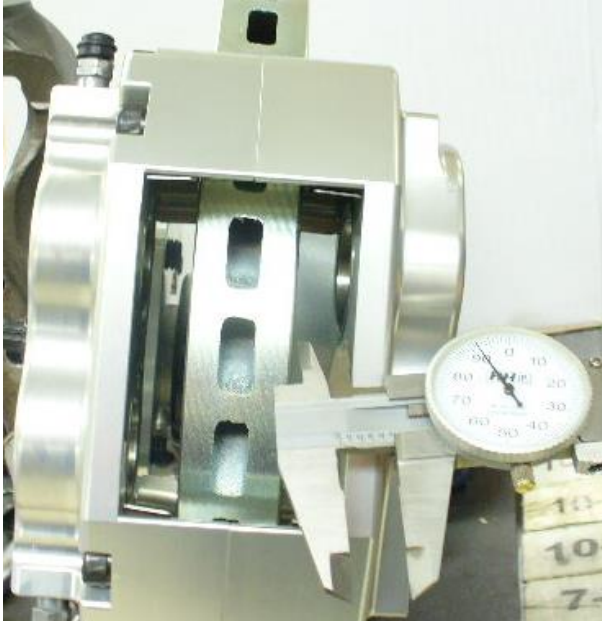


Figure 6a – Measuring the Pad to Rotor Clearance

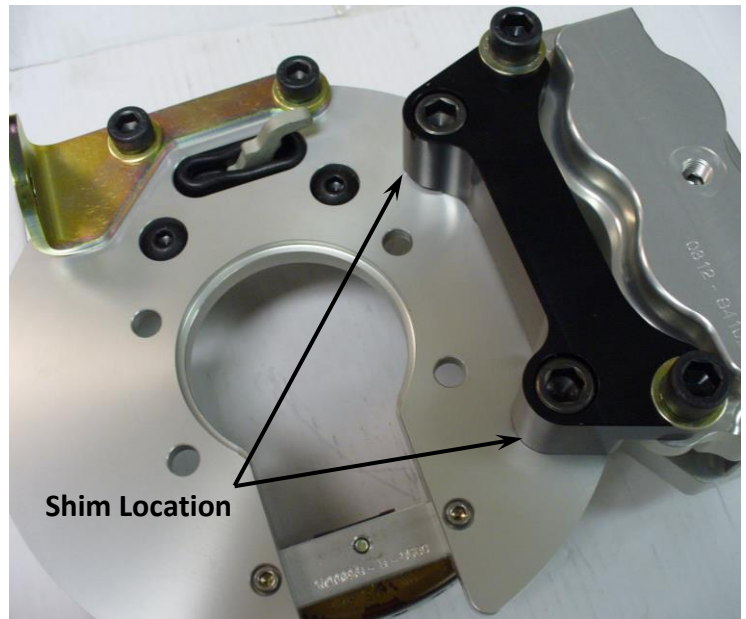


Figure 6b - Shim Location

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.