



Master Power Brakes Disc Brake Conversion Kit Small Ford Bearing, Large Ford Bearing & Torino Bearing Flange P/N: DB1515BR, DB1516BR, DB1517BR and DB1515BHP, DB1516BHP, DB1517BHP



Thanks for your purchase of our Legend Series Universal Rear Disc Brake Conversion Kit for the Small and Large Ford Bearing Flanges and the Torino Bearing Flange applications. This system does not require any modifications to the rear axle housing and uses basic hand tools to install. The system is designed to take place of your current drum brake system and replace it with a simple disc brake system.

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 or a lift appropriate to the weight of the vehicle. In all cases, recommended ratings for jack stands should be at least 2-tons. If using a floor jack, be sure to use the appropriate wheel chocks.
- 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 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.**

Parts List	
Quantity	Description
1	Driver Side Caliper (Includes brake pads)
1	Passenger Side Caliper (Includes brake pads)
2	Brake Rotors
2	Primary Caliper Mounting Bracket
2	Secondary Caliper Mounting Bracket
2	Axle Flange Spacer Plates
8	3/8"-24 x 2" Grade 8 Hex Head Bolt
8	3/8"-24 Nyloc Lock Nut
8	3/8" Hi-collar Lockwasher
8	Bushing (.375" ID x .750" OD x 11/16" Thick)
2	Axle Centering Ring
1	Hose Kit (18" Hoses w/10mm Banjo Bolt & Hardware)

Replacement Parts	
Rear Brake Pads	FMSI No: D154

Installation:

1. With the vehicle properly supported, remove the rear wheels and tires.
2. Removing of the factory drum brake assembly is required next. With the drum removed, remove the axle shafts from the axle housing. With the axle shafts removed, remove the remaining drum brake components such as the shoes and backing plates. **NOTE:** Do not throw away the factory T-bolts as they will be used again later for installation of the caliper mounting brackets.
3. At this time, clean the axle shaft thoroughly and inspect the axle bearings and axle housing for any excessive wear. **IMPORTANT:** If bearing replacement is necessary, be sure the factory axle retainer is reinstalled on the axle shaft.
4. The outer diameter of the axle flange can be no larger than 6-1/8" in outside diameter. This is critical for proper fitment of the rotor over the axle flange. For axle with a flange larger than 6-1/8", using a lathe, machine the outer flange down to no larger than 6-1/8". See Figure 1 below for measuring reference.

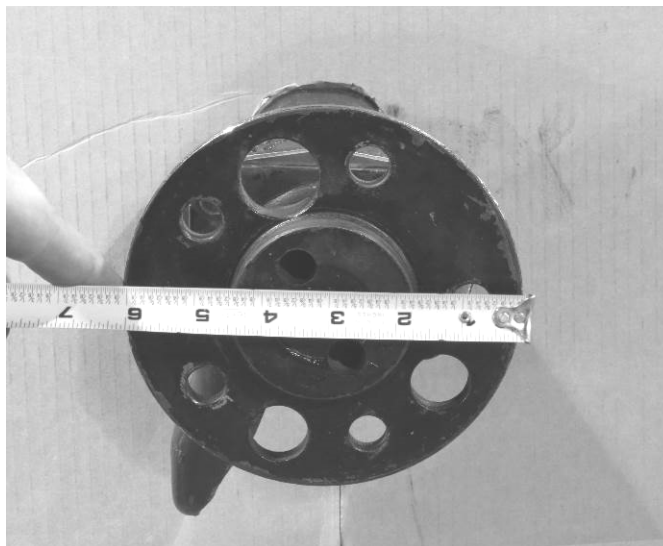


Figure 1 – Measuring the Axle Flange

5. Replace the four T-bolts into the axle housing. Do not put nuts on them at this time. Once installed, position the spacer flange over the four T-bolts against the axle flange. **NOTE:** New bolts may be used in the installation. If using new bolts, make sure you have adequate clearance on the backside of the flange for tightening purposes. Figure 2 can be used below for reference on installing the spacer flange.



Figure 2 – Spacer Flange in Place

6. Reinstall the axle shaft into the housing sliding the factory axle retainer over the four T-bolts. Follow this by installing the Primary Caliper Mounting Bracket over the T-bolts. Once everything is in place, reinstall the nuts and tighten. Follow factory specifications for torquing the nuts. **REMEMBER:** Install the caliper bracket so that it will position the caliper to the rearward side of the axle housing.



Figure 3 – Axle Re-installed w/Primary Caliper Mounting Bracket

7. Using the provided 3/8"-24 x 2" Grade 8 Hex Head Bolts along with the provided spacers, install the Secondary Caliper Mounting bracket to the inboard side of the Primary Caliper Mounting Bracket. The spacers install between the mounting two brackets. Once in position, use the 3/8"-24 Nyloc Lock Nuts that were provided and tighten and torque to 40 ft/lbs. Figure 4 below shows a complete bracket installation. **NOTE:** If using the factory T-bolts, it may be necessary to modify the heads of the bolt to allow for adequate clearance of the caliper mounting brackets.



Figure 4 – Caliper Mounting Brackets Fully Installed

8. Install the rotor onto the axle flange. A rotor centering ring is provided in the conversion kit. This will be used if when installing the rotor there is a gap between the centering register on the axle shaft and the rotor. If needed, position the centering ring on before installing the rotor. This will allow for proper centering of the rotor onto the axle shaft. Be sure the rotor sits completely flush onto the axle flange when installing the rotor. **TIP:** To aid in installing the caliper, it may be necessary to install a couple of nuts and flat washers to act as lug nuts to keep the rotor from moving.
9. Install the caliper over the rotor. When installing, make sure the bleeder screw is pointing up like shown in Figure 5 below. After installed and in place, slide the caliper mounting bolts through the caliper and thread them into the bracket. Torque the bolts to 50 ft/lbs.

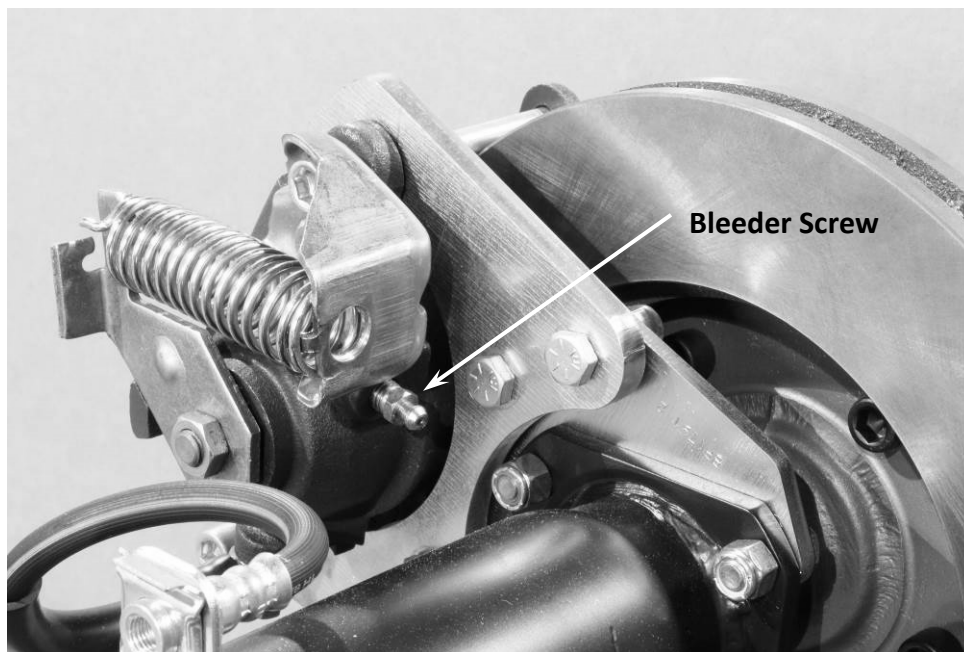


Figure 5 – Caliper Installed w/Bleeder Screw on Top

10. Once the caliper is installed, follow the instructions below on adjusting the caliper. **THIS IS A VERY IMPORTANT STEP!! If the caliper is not properly adjusted, a soft pedal will result and the rear brakes will not function correctly.**

- A. Remove the park brake cable return spring from between the adjusting lever and the cable support bracket. See Figure 6 below.

Park Brake Adjusting Lever

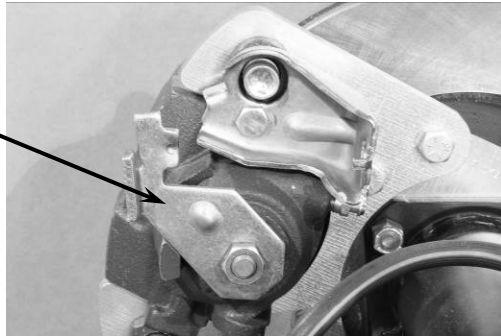


Figure 6 – Spring Removed

- B. Rotate the lever away from the Adjusting Lever Stop. While rotating the lever, spin the rotor until a slight drag is felt in the rotor.

Adjusting Lever Stop

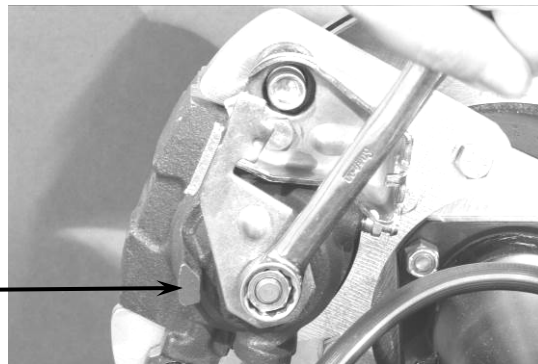


Figure 7 – Rotating the Adjusting Lever

- C. Allow the adjusting lever to return to the stop and reinstall the spring. When the lever returns to the stop, the piston should remain in its adjusted outward position therefore keeping a very slight drag on the rotors.
- D. Reinstall the park brake return spring between the adjusting lever and the cable support bracket.

11. Install the flexible brake hose. Attach the brake hose to the caliper using the provided banjo bolt and copper crush washers. Fasten the “L” shaped brackets onto the axle housing. This can be done with large worm style clamps like shown in Figure 8 or by welding or bolting. Once the brackets are installed, use the provided clip and attach the brake hose to the bracket. Attach the hardline to the brake hose. It may be necessary to shorten and re-flare the hardline.

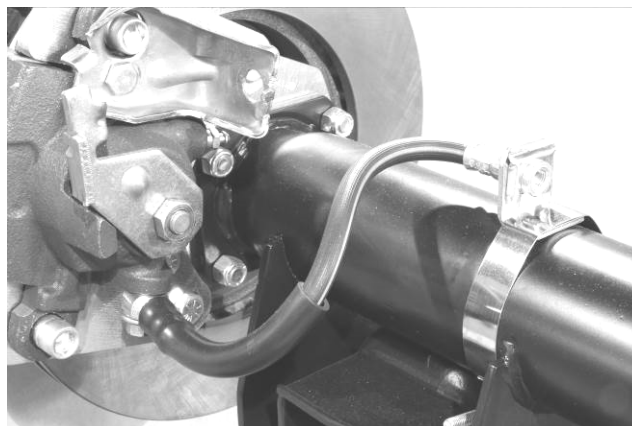


Figure 8 – Brake Hose Attached at the Rear Axle Housing

12. Attach the emergency brake to the caliper. If using the Master Power Brakes Universal Emergency Brake Cable Kit (p/n: HWC2500) shown below in Figure 9, please follow the instructions included with the cables. If obtaining cables locally, please follow the instructions for those cables. Adjust the park brake in the vehicle accordingly and make sure there is available movement in the cables to allow for suspension movement and that there is no drag on the calipers caused by the park brake.



Figure 9 – Universal Emergency Brake Cable Kit (p/n: HWC2500)

13. Once everything is installed and pre-adjustments have been made, bleed the brakes and re-install the wheels and tires.
14. Installation is now complete.

IMPORTANT – PLEASE READ

The GM calipers used in the Master Power Brakes Rear Disc Brake Conversion Kit require that the park brake system be used as often as possible. This can be difficult for people to remember as most people simply put the car in “Park” and walk away. With this system and caliper, this is not acceptable.

The rear caliper uses a “one-way clutch” or “sprag” inside the caliper piston. When the parking brake is applied, the sprag will recognize when there is more than 0.030” or more clearance between the friction material on the pad and the surface contact area on the brake pad. When the distance is at least 0.030”, the sprag turns inside the piston adjusting it outward and keeping the rear brakes properly adjusted.

If the park brake is not being set, this action can result in usually one of two scenarios: Scenario #1 - You will start to lose service in the brakes because the caliper piston is traveling more to reach the brake rotors. Therefore, the brake pedal will feel very soft. Scenario #2 - The sprag can seize inside the piston and possibly stop working.