



Master Power Brakes
Front Disc Brake Conversion Kit
65-67 All Ford Mustang, 68-73 Ford
Mustang w/OE drum brakes
P/N: DB4512B



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.**

Parts List	
Quantity	Description
2	Billet aluminum 4-piston calipers (Pads included)
1	LH 13" Rotor (Cross-drilled, Slotted, & Zinc-washed)
1	RH 13" Rotor (Cross-drilled, Slotted, & Zinc-washed)
2	Billet hub assemblies (Fully assembled with bearings and seals using Red Line Synthetic grease)
1	LH Primary caliper mounting bracket
1	RH Primary caliper mounting bracket
1	LH Secondary caliper mounting bracket
1	RH Secondary 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)
4	M14-2.0 x 40 Grade 8 Hex Head Bolts
4	M14 Flatwashers
4	3/8"-16 x 1-1/4" Flat Socket Head Bolt
2	3/8"-16 x 1-1/4" Grade 8 Hex Head Bolt
2	3/8"-16 x 2-1/4" Grade 8 Hex Head Bolt
8	3/8"-16 Nyloc Hex Nut
4	M12-1.75 x 35 Grade 8 Hex Head Bolts
4	M12 Flatwashers
2	Dust Caps
1	Shim Package
2	Spindle Washers
2	Spindle Castle Nuts
2	Cotter Pins
1	Syringe bleeder
1	30" Bleed hose
2	Vinyl brake line caps

Installation:

1. With the vehicle properly supported, remove the front wheels and tires.
2. Disconnect the brake hose from the hardline at the frame using a line wrench. Cap the hardline with the supplied rubber caps to avoid fluid dripping. Remove the clip retaining the brake hose and disengage the hose from the bracket. Refer to Figure 1 below for reference.



Figure 1 – Brake hose removal

3. Removal of the factory drum brake assembly is required next. Remove the dust cap, cotter pin, retainer nut and drum. Unbolt the drum backing plate. **DO NOT** remove the spindle from the vehicle.
4. Before installing the disc brake kit, inspect the spindles for any excessive wear or damage. If any wear is present, replace the spindle(s) as necessary. If spindles are good, clean all attachment points along with the spindle pin to insure proper installation of the new components.
5. Install the primary caliper mounting bracket on the spindle using the provided hardware. **NOTE:** Position the bracket on the spindle so that the caliper mounts on the steer arm side of the spindle. Use the two 3/8"-16 x 1-1/4" Flat Head Bolts in the top holes with a 3/8"-16 x 1-1/4" and a 3/8"-16 x 2-1/4" Grade 8 Hex Head Bolt in the lower holes. Once positioned, use four of the 3/8"-16 Nyloc Lock Nuts and torque to 45 ft/lbs.
6. Install the billet aluminum hub. The new hub assembly comes with the Timken bearings pre-installed and packed with Red Line Synthetic wheel bearing grease. **NOTE:** It is not necessary to add more grease. Apply a small amount of grease to the hub sealing surface and install the hub assembly. Using the new castle nut along with the nut retainer, tighten the nut to 5-10 ft/lbs. Loosen the nut and tighten the nut again using the same 5-10 ft/lbs. Do this a couple of times spinning the hub to fully seat the wheel bearings onto the spindle. Loosen the nut a final time and re-tighten to remove all play. Tighten approximately an additional 1/16th of a turn to give the appropriate pre-load and line up the cotter pin hole. Install the cotter pin and dust cap.
7. Install the intermediate caliper mounting bracket onto the primary caliper mounting bracket that was installed in Step 5. Place the bracket on the backside of the previously installed bracket. Use the M14-2.0 x 40mm Hex Head Bolts and M14 Flatwashers. Snug these bolts only at this time as they will be removed in a later step when shimming the calipers.
8. Place the correct LH or RH rotor onto the hub assembly. Use three lug nuts when installing to hold the rotor tight against the hub which will allow for accurate shimming of the calipers which will be done in a later step. 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 4 below shows the direction for reference.

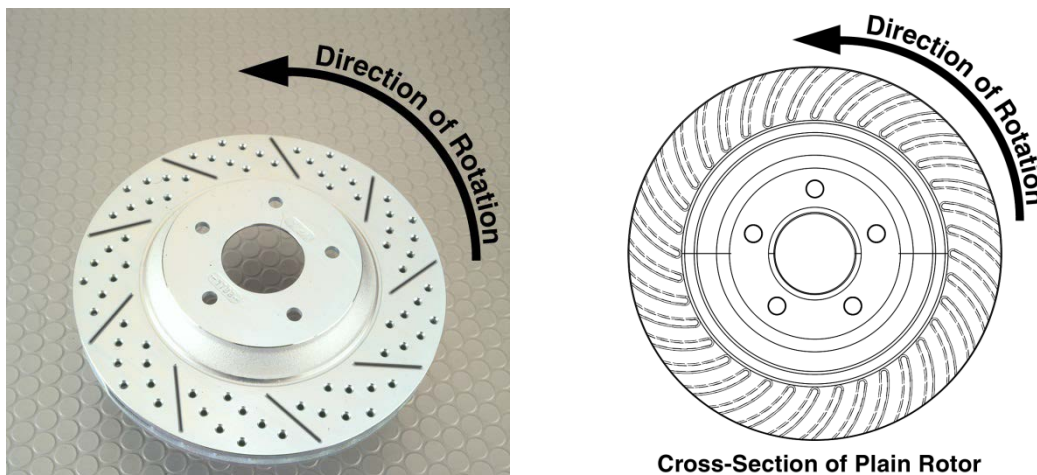


Figure 4 – Direction of Rotor Rotation

9. With the pads removed from the caliper, position the caliper over the brake rotor and secure using the supplied M12 x 35mm Socket Head Bolts. Snug the bolts only at this time as they may need to be removed at a later step.

10. 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 primary and intermediate brackets.
 - 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.

NOTE: Shimming of the caliper is required due to variations in spindle manufacturing and wear at the bearing seat area of the inner bearing.

11. With shimming complete, remove the caliper and rotor and torque the bolts from the Secondary Caliper Bracket to the Primary Caliper Bracket. Use High Strength Loctite and torque to 100 ft/lbs.
12. Place the rotor back on the hub. Like previous, it is recommended that the rotors have a couple of lug nuts installed to keep the rotor seated and centered on the hub.
13. Re-install the caliper with the pads installed. Torque the M12-1.75 x 35mm Socket Head Cap Screws to 85 ft/lbs.
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. Repeat these steps for the other side and recheck all attachment points and fittings.
16. Installation is now complete. Install the master cylinder or a booster/master cylinder combination and bleed the brakes accordingly following the instructions included in a separate document.