



Master Power Brakes Disc brake Conversion Kit Mustang II Spindles/Various Applications P/N: DB2520B



Thanks for the purchase of our Rallye Series Disc Brake Conversion Kit for the OE Mustang II spindles. The Mustang II suspension design is a common staple in the hot rod world and our conversion kit will provide the improved brakes you are looking for that will complement your upgraded suspension. This kit is a complete bolt-on and able to be performed with normal hand tools. This system will not alter the track width based on the OE spindle track width with factory brakes installed.

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 11" Rotor (Cross-drilled, Slotted, & Zinc-washed) |
| 1 | RH 11" Rotor (Cross-drilled, Slotted, & Zinc-washed) |
| 2 | Billet Aluminum Hub Assembly (w/Bearings and Seals Installed) |
| 1 | LH Primary Caliper Mounting Bracket |
| 1 | RH Primary Caliper Mounting Bracket |
| 2 | Dust Caps (w/Mounting Screws) |
| 2 | Braided s/s brake hose (Includes 2-10mm Banjo bolts, 4-Crush washers, 2-3 AN x 3/8"-24 adapters) |
| 2 | 1/2"-13 x 2" Grade 8 Hex Head Bolts |
| 2 | 1/2" SAE Flatwasher |
| 2 | 7/16"-14 x 1 1/2" Grade 8 Hex Head Bolts |
| 2 | 7/16" SAE Flatwasher |
| 1 | Shim Package |
| 1 | Syringe bleeder |
| 1 | 30" Bleed hose |
| 2 | Vinyl brake line caps |
| 2 | Spindle Castle Nuts & Cotter Pins |

Installation:

1. With the vehicle properly supported, remove the front wheels and tires.
2. If starting with a new spindle, skip to Step 4. Otherwise, remove the original disc brake or drum brake system from the spindle.
3. Before installing the disc brake kit, inspect the spindles for any excessive wear or damage. If any is present, replace, 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.
4. Install the caliper mounting bracket on the spindle. Position the bracket on the spindle using the provided 1/2"-13 x 2" and 7/16"-14 x 1 1/2" Grade 8 Hex Head Bolts. The bracket is positioned on the spindle opposite the steer arm as shown in Figure 1 below. **NOTE:** Due to manufacturing variations in the spindle, it may be necessary to drill the upper mounting hole in the spindle. If necessary, use a 1/2" drill bit. **IMPORTANT:** Due to tolerances, it is necessary to start both bolts before tightening. Once both bolts are started, torque the upper 1/2" bolt to 95 ft/lbs and the lower 7/16" bolt to 65 ft/lbs.



Figure 1 – Bracket Installed on the Spindle

5. 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.
6. 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 2 below shows the direction for reference.

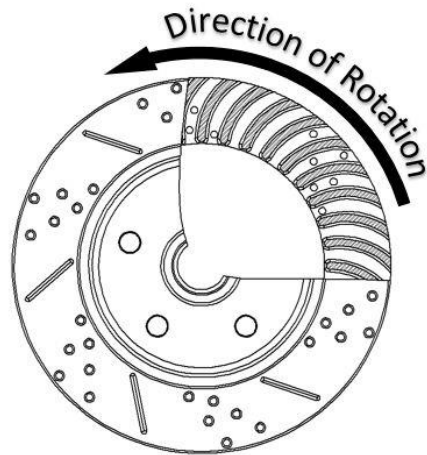


Figure 2 – Direction of Rotor Rotation

7. With the pads removed from the caliper, position the caliper over the brake rotor and secure using the supplied M12 x 35mm Hex Head Bolts. Snug the bolts only at this time as they may need to be removed at a later step.
8. 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.
 - 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. Install the pads into the calipers and reinstall the calipers onto the brackets. Torque the bolts to 80 ft/lbs.

NOTE: Shimming of the caliper is required due to variations in spindle manufacturing and wear at the bearing seat area of the inner bearing. Refer to Figure 3 on the next page for measuring reference.

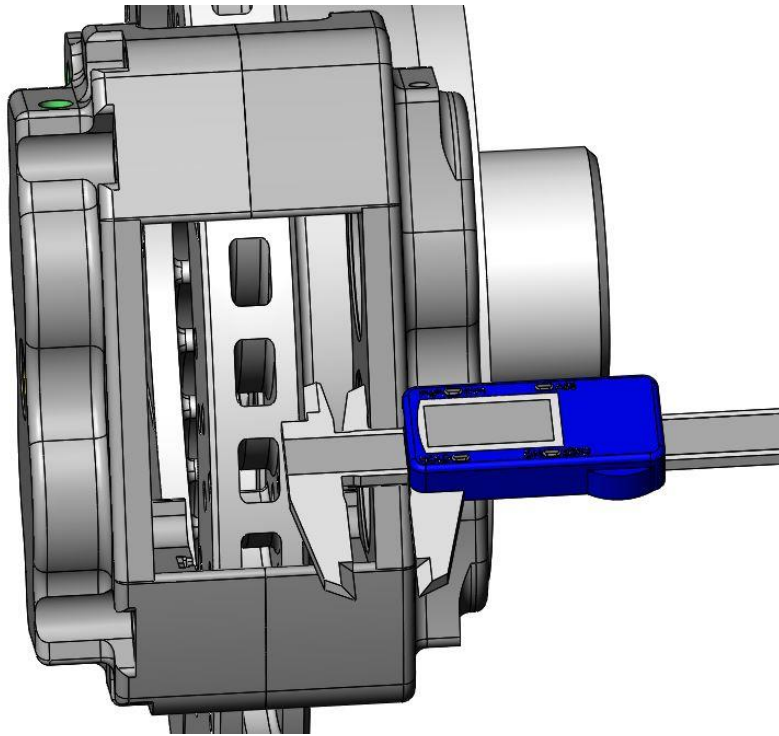


Figure 3 – Measuring the Caliper to Rotor Clearance

9. Repeat these steps for the other side and recheck all attachment points and fittings.
10. 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.

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