



Master Power Brakes

Front Disc Brake Conversion Kit

54-56 Full-Size Ford & Mercury Applications

P/N: DB1511B



Thanks for your purchase of our Legend Series Disc Brake Conversion Kit for the 1954 to 1956 Ford/Mercury Full Size applications. This system will not require any modifications and uses basic hand tools to install. The system is designed to work with a newer style spindle and therefore it will require removal of the OEM spindles. **NOTE:** This kit requires the use of 15" wheels for clearance.

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 requires the use of a high quality DOT 3 or DOT 4 brake fluid. Synthetic DOT 4 fluids are acceptable. **ALL WARRANTY IS VOID IF SYTHETIC DOT 5 FLUID IS USED.**

| Parts List | |
|------------|---|
| Quantity | Description |
| 1 | LH Spindle |
| 1 | RH Spindle |
| 1 | LH Caliper (Includes brake pads) |
| 1 | RH Caliper (Includes brake pads) |
| 2 | Brake Rotors |
| 1 | LH Caliper Mounting Bracket |
| 1 | RH Caliper Mounting Bracket |
| 1 | LH Splash Shield |
| 1 | RH Splash Shield |
| 2 | A12 (Outer Wheel Bearing) |
| 2 | A13 (Inner Wheel Bearing) |
| 2 | 6815 (Inner Grease Seal) |
| 2 | Steel Spacer Bushing (1.000" OD, .697" ID, .375" L) |
| 6 | 5/16"-18 x .500" Hex Head Flange Bolt |
| 2 | 1/2"-13 x 2.250" Hex Head Flange Bolt |
| 2 | 7/16"-14 x 1.500" Hex Head Flange Bolt |
| 2 | Spindle Nut Kit |
| 2 | Dust Caps |
| 2 | Caliper Anti-Rattle Clip |
| 2 | Caliper Support Key |
| 2 | Caliper Support Key Spring |
| 2 | Caliper Retaining Bolt |
| 1 | Hose Kit (15" Hoses w/ Banjo Bolt & Hardware) |

| Replacement Parts | |
|-------------------|--------------|
| Front Brake Pads | FMSI No: D91 |

Installation:

1. With the vehicle properly supported, remove the front wheels and tires.
2. Removing of the factory drum brake assembly and factory spindle is required next. All of this can be removed as one complete assembly. Retain the OEM ball joint nuts so that they can be reused in a later step. **NOTE:** The most common method to separate the ball joint and tie rod end from the OEM spindle is by use of a suspension fork tool. Although giving the mounting bosses around the ball joints a slight tap with a hammer works well too.
3. Before installing the disc brake kit, inspect the ball joints and tie rod ends for any excessive wear or damage. If any damage is present, replace the components as necessary. If the ball joints and tie rod ends are good, clean them to insure proper installation of the new components.
4. Install the spindles onto the car next. Place the spindle over the lower ball joint. **NOTE:** The steer arm should be pointing towards the rear of the car. Install one of the included spacer bushings over the lower ball joint stud followed by the OEM ball joint nut. Place the upper ball joint in the spindle along with the tie rod end. Follow this by installing the OEM ball joint nut and the Tie Rod End nut. Torque the ball joint castle nuts to 85 lb-ft. and the tie rod nut to 40 lb-ft. Refer to Figure 1 and Figure 2 on the next page for installation reference. Be sure and install new cotter pins in each location.



Figure 1 – Spindle Orientation

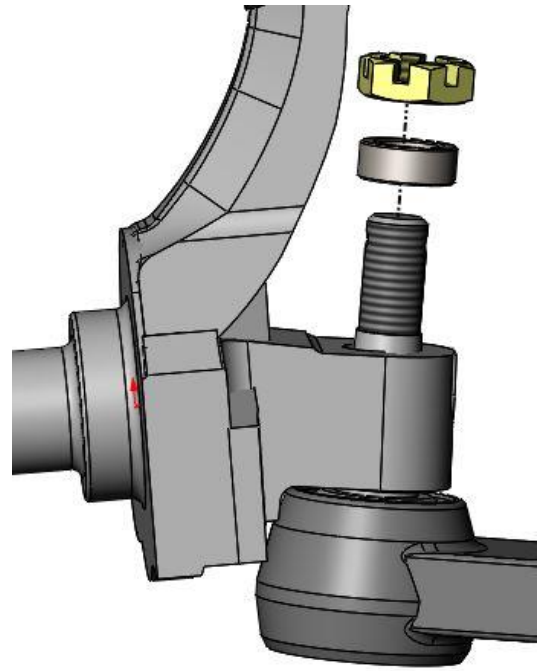


Figure 2 – Spacer Bushing Install On Lower Ball Joint

- Attach the caliper bracket to the spindles. Loosely install a 1/2"-13 x 2.250" Hex Head Flange Bolt through the upper hole in the caliper bracket through the upper hole on the spindle. Follow that by loosely installing a 7/16"-14 x 1.500" Hex Head Flange Bolts through the lower hole on the caliper bracket and into the spindle. With both bolts installed, torque the 1/2" bolt to 90 lb-ft and the 7/16" bolt to 65 lb-ft. Refer to Figure 3 and Figure 4 for reference.



Figure 3 – Caliper Bracket Installed (Front View)

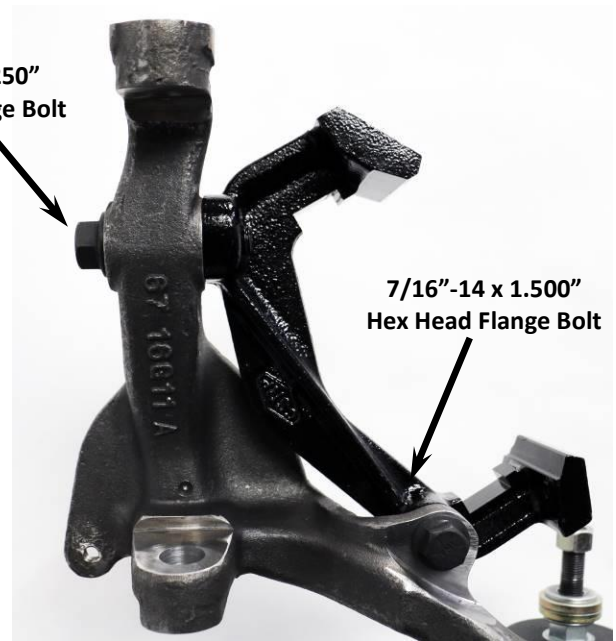


Figure 4 – Caliper Bracket Installed (Back View)

6. Install the splash shields onto this spindle. Align the splash shields so that the cut out of the splash shield on the same side as the caliper bracket. Fasten the splash shield to the spindle using the 5/16" -18 x 0.500" Hex Head Flange Bolts and torque them to 10 lb-ft. Refer to Figure 5 below for reference.



Figure 5 – Splash Shield Orientation

7. The wheel bearings can now be packed with a high quality wheel bearing grease available at your local parts store and the bearings can be installed in the rotors at this time. Once the inner bearing is installed, tap the inner seal in at this point. Figure 6 below shows the installation of the bearing and grease seal.

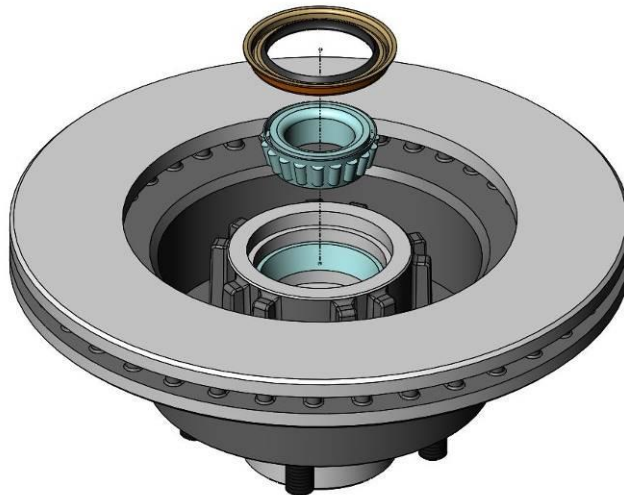


Figure 6 – Bearing and Grease Seal Installation

8. Slide the rotor onto the spindle. The inner wheel bearing and grease seal should be installed at this point. With the rotor fully pushed onto the spindle, install the outer wheel bearing followed by the keyed washer and the spindle nut. When tightening the spindle nut, tighten to 5-10 lb-ft. Loosen the nut and tighten again using the same 5-10 lb-ft. Do this a couple of times spinning the rotor to fully seat the wheel bearings onto the spindle. Loosen the nut a final time and re-tighten to move all play. Tighten approximately an additional 1/16th of a turn to give the appropriate pre-load. Install the spindle nut retainer and loosen or tighten the spindle nut to line up the cotter pin followed by the grease cap. See Figure 7 on the next page shows the rotor installation.

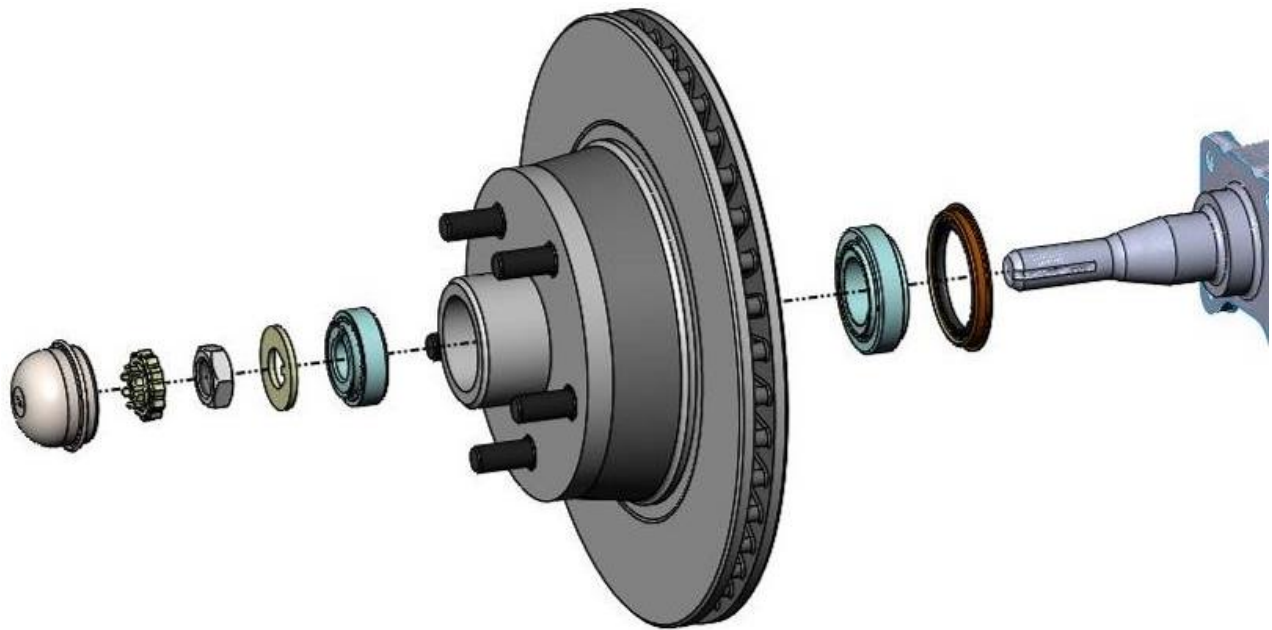


Figure 7 – Rotor Installation

9. Fit the Anti-Rattle Clip to the trailing edge of the inner brake pad. The clip presses onto the pad and stays on there with a friction fit. Refer to Figure 8 below on the orientation of the clip. Slip the pad in the caliper bracket on the back side of the rotor making sure the Anti-Rattle Clip is closest to the bottom of the spindle. Press the brake pad all the way up against the back of the brake rotor. **NOTE:** Getting the inner brake pad in the caliper bracket with the Anti-Rattle Clip installed can some times be difficult. The clip and pad WILL fit in to the caliper bracket, just use some patience. Refer to Figure 9 below for location of the Anti-Rattle Clip.



Figure 8 – Anti-Rattle Clip Orientation (Inner Brake Pad)



Figure 9 – Anti-Rattle Clip Location

10. Install the caliper loosely onto the caliper bracket. Place the outer brake pad inside the caliper and slide the caliper over the brake rotor. **NOTE:** When installing the calipers, make sure the brake bleeders are pointing upwards.
11. Position the Caliper Support Key Spring on top of the Caliper Support Key so that the spring cradles the support key. Refer to Figure 10 below on how the Caliper Support Key and Caliper Support Key Spring are oriented. Slide them in between the brake caliper and the lower side of the caliper bracket. **NOTE:** The Caliper Support Key and Caliper Support Key Spring fit **EXTREMELY** tight between the caliper and the caliper bracket. It will have to be carefully tapped into place with a hammer. Refer to Figure 11 below for reference.



Figure 10 – Caliper Support Key and Caliper Support Key Spring Orientation

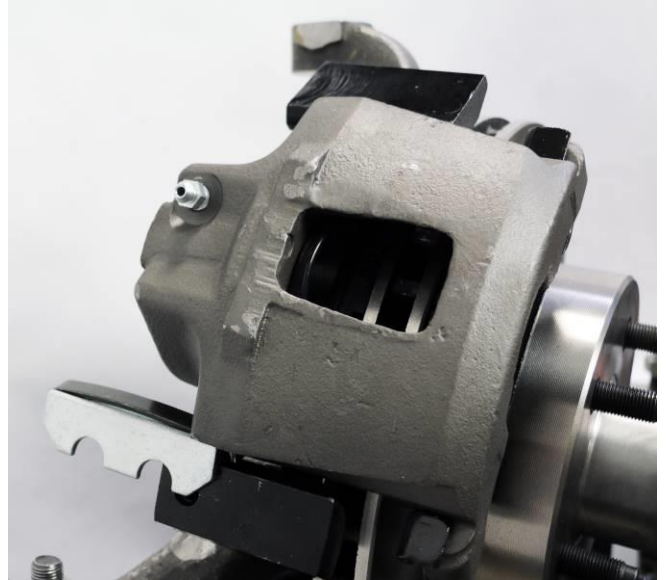


Figure 11 – Caliper Support Key Installation

12. Carefully tap the Caliper Support Key and Caliper Support Key Spring all the way in until the half moon notch on the Caliper Support Key lines up with the threaded hole in the caliper bracket. Install the Caliper Retaining Bolt and torque it to 15 lb-ft. Refer to Figure 12 below for reference.



Figure 12 – Caliper Retaining Bolt Installation

13. Install the brake hoses onto the caliper and attach to the original plumbing on the vehicle. **NOTE:** Be sure the copper crush washer has been installed on the brake hose to prevent leaks before installing.
14. Once the master cylinder has been properly bench bled and then installed on the vehicle, the remaining brake system can be bled to remove all of the air from the system. **REMEMBER:** Master Power Brakes requires the use of either DOT 3 or DOT 4 brake fluid and recommends the use of Pentosin Super Dot 4 fluid as seen below in Figure 6. Any warranty is void if DOT 5 fluid is used.



Figure 6 – Pentosin Super DOT 4

15. The installation is now complete.