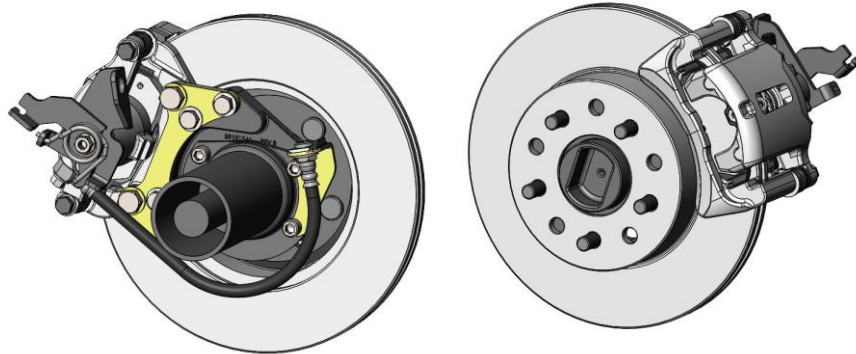




Rear Disc Brake Conversion Kit

Small Bearing Ford, Large Bearing Ford, & Torino Flange Large Bearing

P/N: DB1515BR / BRHP, DB1516BR / BRHP, & DB1517BR / BRHP



*** DB1515BR Pictured Above***

Thanks for your purchase of our Legend Series Universal Rear Disc Brake Conversion Kit for 9" Ford Rear Axles with either a Small Bearing, Large Bearing or the New Style Torino Flange. 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.

IMPORTANT

This kit requires the use of at least 15" wheels for clearance and this kit has a 5 x 4.500" bolt pattern

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.**

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
1	Driver Side Caliper (Includes brake pads and Caliper Anchor Bracket)
1	Passenger Side Caliper (Includes brake pads and Caliper Anchor Bracket)
2	Brake Rotors
1	Left Primary Caliper Mounting Bracket (Black Anodized)
1	Right Primary Caliper Mounting Bracket (Black Anodized)
2	Secondary Caliper Mounting Bracket (Gold Zinc Plated)
8	3/8"-24 x 1.500" Socket Head Cap Screws (DB1515 & DB1517 Only)
8	1/2"-20 x 1.500" Button Head Cap Screws – Machined (DB1516 Only)
8	3/8"-24 Nyloc Lock Nut (DB1515 & DB1517 Only)
8	3/8" AN Washer (DB1515 & DB1517 Only)
8	1/2"-20 Nylon Jam Lock Nuts (DB1516 Only)
8	1/2" AN Washer (DB1516 Only)
8	3/8"-24 x 1.250" Grade 8 Hex Head Bolt
8	3/8" SAE Flat Washer
4	M12-1.75 x 30mm Hex Head Bolts
4	M12 Flat Washer
2	Hub Centric Ring
1	Caliper Bracket Shim Kit
1	Hose Kit (14" Hoses w/10mm Banjo Bolt & Hardware)
1	Left Brake Hose Mounting Bracket
1	Right Brake Hose Mounting Bracket

Replacement Parts	
Rear Brake Pads	FMSI No: D1082

Installation:

1. With the vehicle properly supported, remove the rear wheels and tires.
2. Removing 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.
3. At this time, clean the axle shaft thoroughly and inspect the axle bearings and axle housing for any excessive wear. **IMPORTANT: The factory axle retainer must be removed from the axle shaft.**
4. The outer diameter of the axle flange can be no larger than 6.125" in outside diameter. This is critical for proper fitment of the rotor over the axle flange. For axle with a flange larger than 6.125", using a lathe, machine the outer flange down to no larger than 6.125". See Figure 1 below for reference.

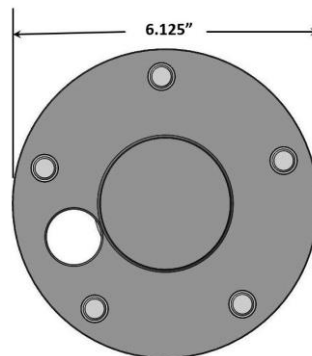


Figure 1 – Measuring the Axle Flange

- Reinstall the axle shaft into the axle housing. Follow this by installing the supplied 3/8"-24 x 1.500" Socket Head Cap Screws (p/n: DB1515 or DB1517) or the 1/2"-20 x 1.500" Button Head Cap Screws (p/n: DB1516) into the axle housing. Make sure that the 2 forward most bolts go through the supplied Brake Hose Mounting Brackets. These brackets are left and right specific and are designed so the tab faces inward to the vehicle. With the bolts in place, slide the Primary Caliper Bracket over the axle shaft and onto the bolts. **NOTE: The Primary Caliper Brackets are left and right specific and designed to position the calipers towards the rear of the vehicle.** See Figures 2a and 2b below for bracket orientation and installation. Install the AN washers and Nylon Lock Nuts and torque all bolts (the 3/8"-24 bolts torque to 40 lb/ft and the 1/2"-20 bolts torque to 75 lb/ft). Refer to Figures 2c and 2d below for what it will look like properly installed.



Figure 2a – Caliper Bracket Orientation
(LH Side Shown)

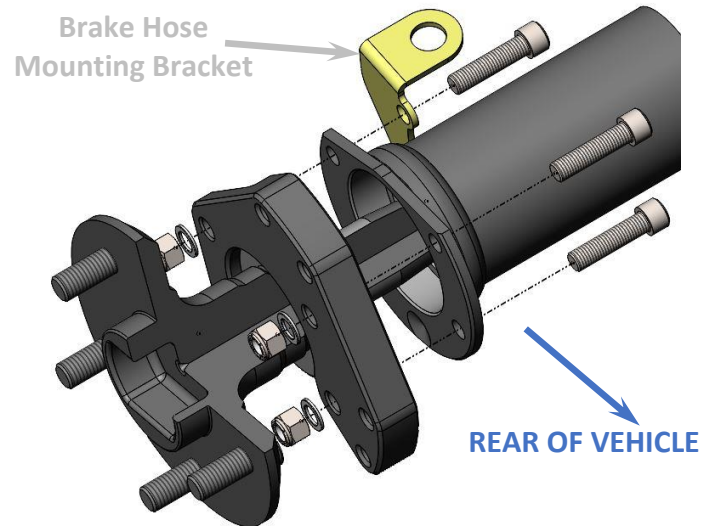


Figure 2b – Axle Re-installation w/Primary Caliper Mounting Bracket
(DB1515BR LH Side Shown)

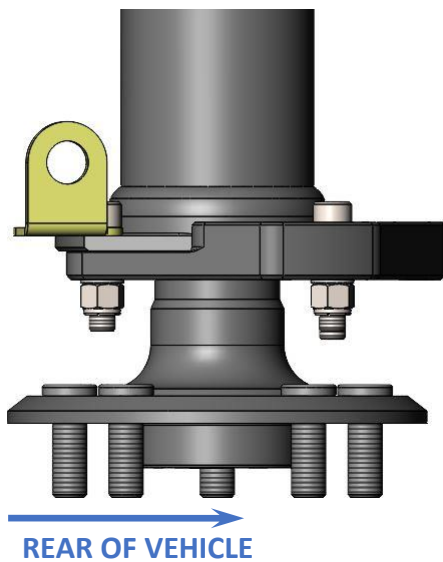


Figure 2c – TOP VIEW Primary Caliper Bracket Installed
(DB1515BR LH Side Shown)

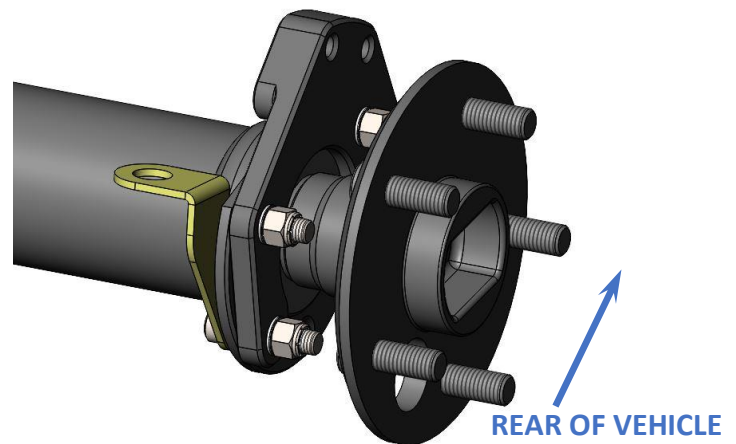


Figure 2d – Primary Caliper Bracket Installed
(DB1515BR LH Side Shown)

6. Using the provided 3/8"-24 x 1.250" Grade 8 Hex Head Bolts and 3/8" SAE Flatwashers, install the Secondary Caliper Mounting bracket to the inboard side of the Primary Caliper Mounting Bracket. **NOTE:** Do not fully tighten the bolts at this point due to possible removal for shimming. The bolts will be torqued in a later step. Figure 3 below shows the bracket being installed.

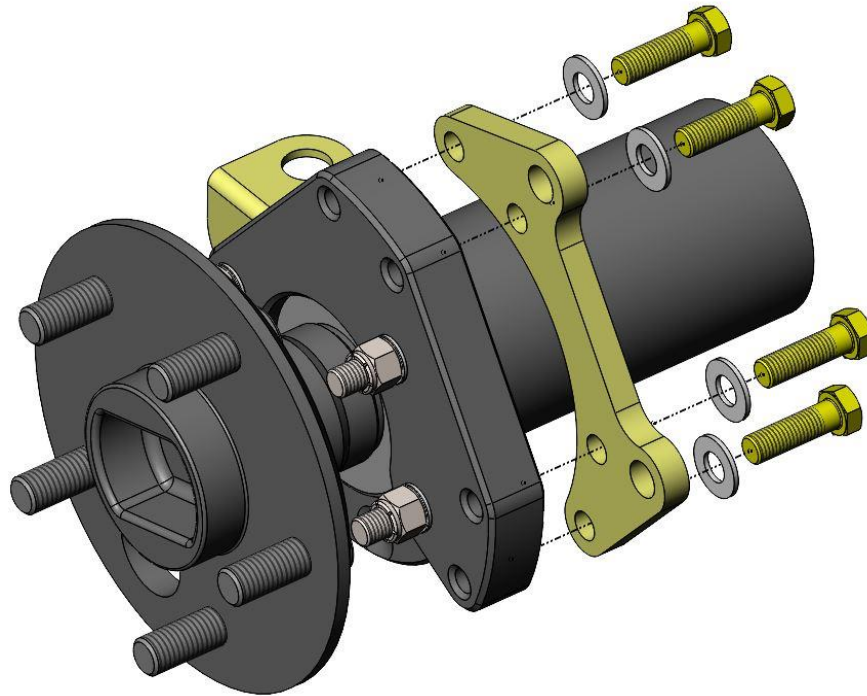


Figure 3 – Caliper Mounting Brackets Fully Installed
(DB1515BR LH Side Shown)

7. A Centric Ring is provided to center the rotor onto the axle shaft. Place the Centric Ring over the axle hub register. **NOTE:** To allow the Centric Ring to go all of the way against the axle shaft flange, it may be necessary to clean the hub register with a wire brush or emery cloth. Once the Centric Ring is in place, slide the rotor over the studs and verify that the rotor is flush to the axle flange. Figure 4a below shows the proper sequence. To make caliper installation easier, thread a couple of flat washers and nuts against the rotor to act as a lug nut and hold everything in place. **IMPORTANT:** If using slotted and drilled rotors, pay close attention to Figure 4b below for proper rotor placement on the driver and passenger side.

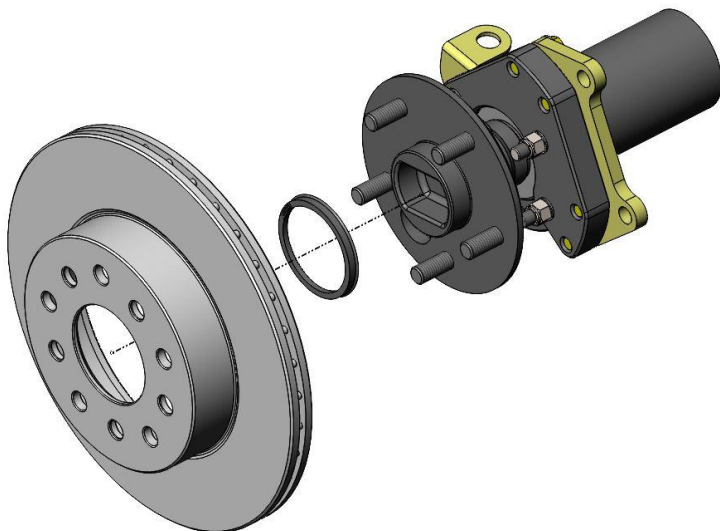


Figure 4a – Rotor and Centering Ring Installation
(DB1515BR LH Side Shown)

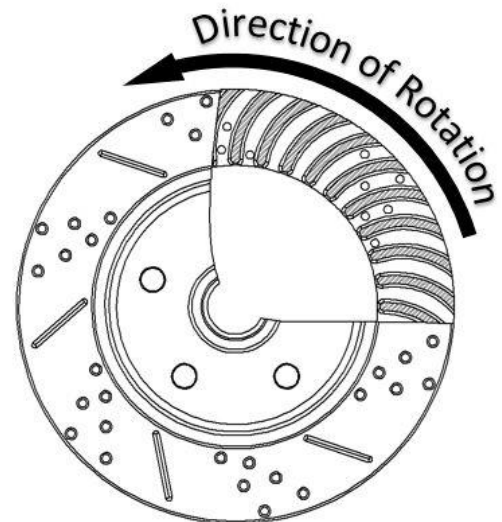


Figure 4b – Rotor Orientation

- Remove the Caliper Anchor Bracket from the caliper along with the brake pads. Install the Caliper Anchor Bracket over the rotor and position against the Secondary Caliper Mounting Bracket. Use the provided M12 Flat Washers and M12-1.75 x 30mm Hex Head Bolts and torque the bolts to 80 lb/ft. See Figure 5 below for reference.

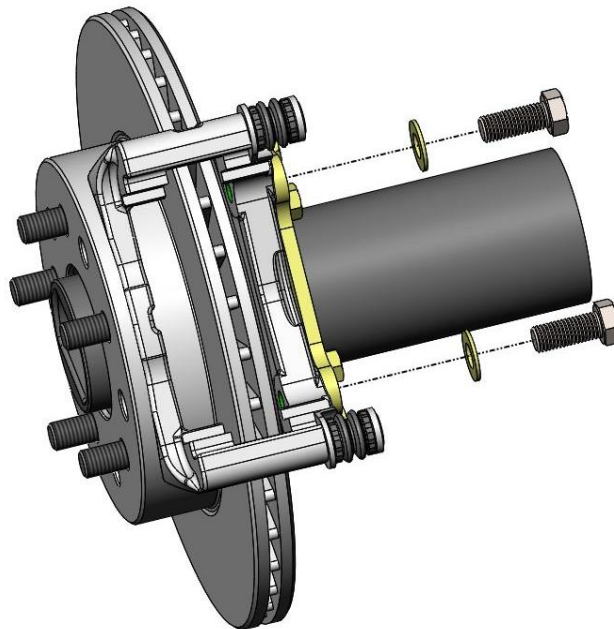


Figure 5 – Caliper Anchor Installed

- Depending on original manufacturing tolerances, shimming of the Caliper Anchor Bracket may be required. To determine if shimming is necessary, measure between the Caliper Anchor Bracket and the brake rotor at both the outside and inside surface. See Figure 6a below for the measuring locations. Both measurements should be within .010" of each other. If they are not, using Figure 6b below for an example, calculate the necessary shim thickness. Remove the four 3/8"-24 x 1.250" Grade 8 Hex Head Bolts and place the appropriate shims between the Primary Caliper Mounting Bracket and the Secondary Caliper Mounting Bracket. Figure 6c below shows the proper location of the shims. With the shims installed and the Caliper Anchor Bracket centered over the rotor, torque the 3/8"-24 x 1.250" Grade 8 Hex Head Bolts to 40 lb/ft.

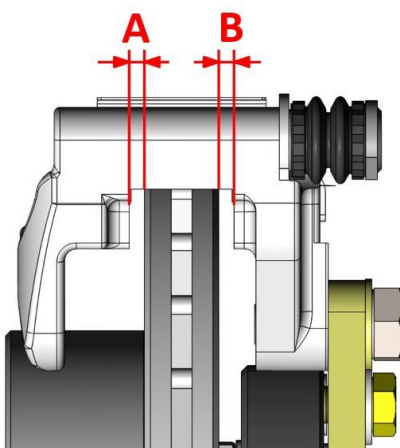


Figure 6a – Caliper Anchor Bracket Measuring Location

Shimming Process Example

$$\frac{(\text{Location A} - \text{Location B})}{2} = \text{SHIM THICKNESS NEEDED}$$

$$\frac{(.184'' - .124'')}{2} = .030'' \text{ SHIM THICKNESS NEEDED}$$

Figure 6b – Shim Location Calculation Example

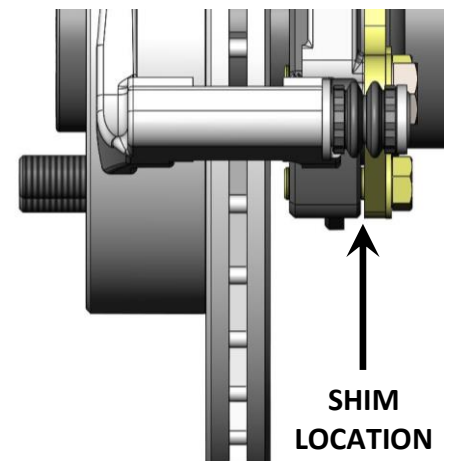


Figure 6c – Shim Location

10. Place the Stainless Steel Abutment Clips into the Caliper Anchor Bracket at this time. Refer to Figure 7a and Figure 7b below for installation reference.

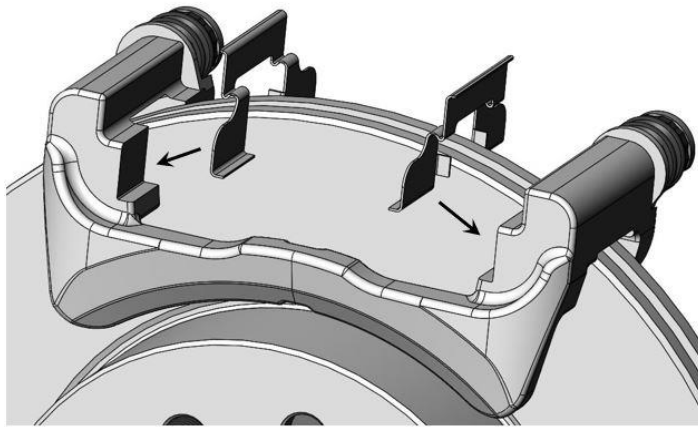


Figure 7a – Abutment Clips Installation

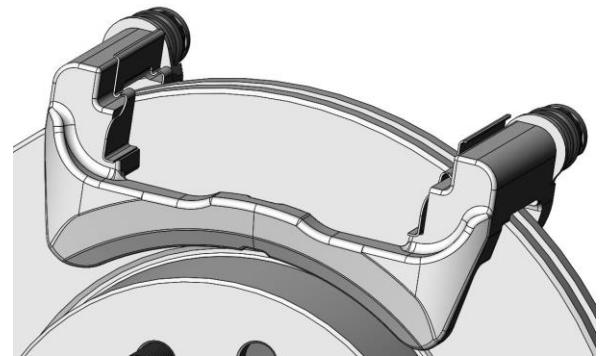


Figure 7b – Abutment Clips Installed

11. With the Abutment Clips installed, Install the pads into the Caliper Anchor Bracket. Refer to Figure 8a below for reference. Once the pads are installed slide the caliper body over the brake pads and Caliper Anchor Bracket. With the caliper in place, re-install the caliper mounting bolts between the caliper and the bracket. Torque the bolts to 30 lb/ft. **IMPORTANT:** Make sure that the bleeder screw is pointing upward. See Figure 8b below for reference on installing the caliper.

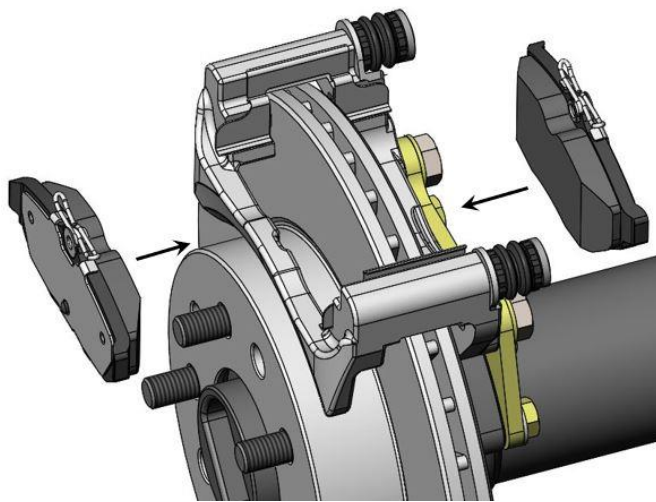


Figure 8a – Brake Pad Installation

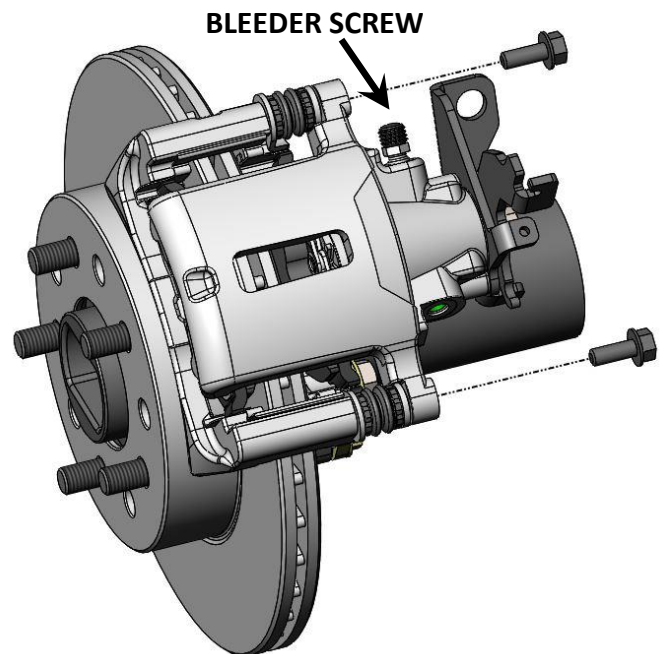


Figure 8b - Caliper Installation and Bleeder Screw Orientation

12. Install the flexible brake hose. Attach the brake hose to the caliper using the provided banjo bolt and copper crush washers as shown in Figure 9a on the next page. Next route the hose under the axle tube and attach it to the previously installed Brake Hose Mounting Bracket with the provided clip. Attach the hardline to the brake hose. **NOTE: Depending on the location and fitting size on the OEM hardline, it may be necessary to shorten and re-flare along with slightly bending the hardline to line up properly.** Proper installation of the flexible brake hose can be seen in Figure 9b on the next page.

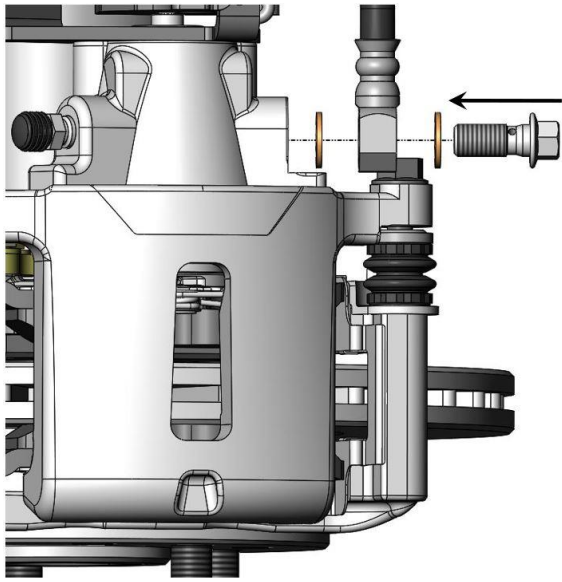


Figure 9a –Flexible Brake Hose Attachment to Caliper

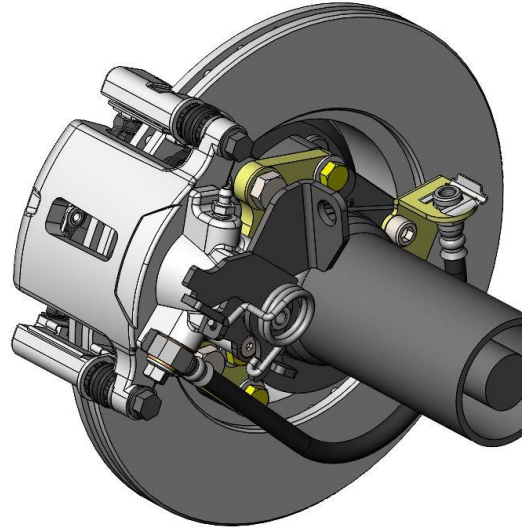


Figure 9b – Brake Hose Attached at the Rear Axle Housing
(DB1515BR LH Side Shown)

13. Once the caliper has been installed and everything is torqued to spec, it is recommended that the caliper be adjusted before installing any emergency brake cables. To do so, simply rotate the park brake lever on the caliper a couple of times. This will move the brake pads closer to the rotor and allow for adequate movement along with a proper feeling pedal.
14. With the caliper adjusted, 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 10, please follow the instructions included with the cables. If obtaining cables from a different source, please follow the instructions for those cables. Once the cables are installed, please verify that there isn't excessive drag caused by the cables and caliper adjustment. Also, please verify that there isn't excessive movement or travel within the cables.



Figure 10 – Universal Emergency Brake Cable Kit (p/n: HWC2500)

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

If you have any questions or comments, please call Master Power Brakes at (888) 533-1199.