Installation Instructions

Product: Pro+ Front

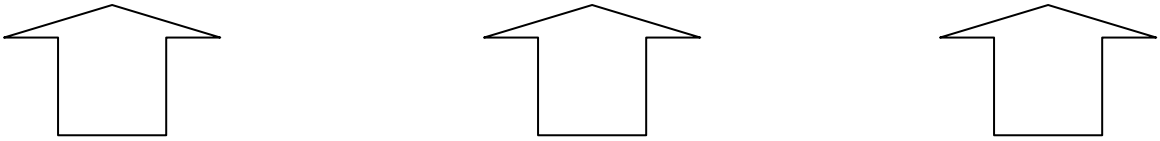
Instruction Part Number: 6000345

Revision Date: 01 May 2014

Vehicle

Make: Ford
Model: Mustang w/ Original disc spindle
Year(s): 68-73

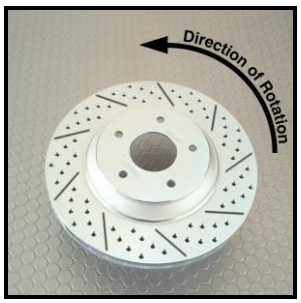
ATTENTION: ***Read this before going any farther! Returns will not be accepted for ANY installed PART or ASSEMBLY. Use great care to prevent cosmetic damage when performing wheel fit check. In the event that a product must be returned, please contact Baer Customer Service for a RMA Number.***

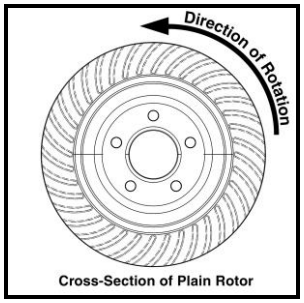


Notices – Read and Follow BEFORE ATTEMPTING INSTALLATION

- All installations require proper safety procedures and protective eyewear.
- All installations assume basic mechanical skill and a factory service manual for the vehicle on which the installation is to be performed.
- All references to the “left” side of the vehicle correlate to the driver’s side of the vehicle.
- 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, jack stands rated for a minimum of 2-tons is recommended.
- 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, safety catch can, and protective eyewear. Other than these items, if unique or special tools are required they will be stated appropriately in the installation step.
- ALWAYS CONFIRM WHEEL FIT PRIOR TO BEGINNING INSTALLATION OF ANY BRAKE SYSTEM OR “UPSIZED” ROTOR UPGRADE! In addition to checking wheel fitment (available online at www.baer.com), always place the actual corner assembly or a combination of the caliper assembly onto the rotor, and into the actual wheel. This procedure will reconfirm proper clearance between the caliper and the wheel before proceeding with the actual installation.
- Returns will **not** be accepted for systems that have been partially or completely installed. Use extreme care when checking wheel fitment to prevent any cosmetic damage.

- When installing new Baer rotors, be sure to follow the direction of rotation indicated on the rotor hat area with either an arrow, or an “L” for left, or an “R” for right, or both. “L” or left always indicates the driver’s side of US spec vehicles. Images shown are “L” left rotors:





- A proper professional wheel alignment is required for any system requiring replacement of the front spindles, or tie rod ends. Follow factory prescribed procedures and specifications unless otherwise indicated.

- At any point, stop the installation if anything is unclear, or the parts require force to install. Consult directly with Baer Technical Staff in such instances to confirm details. Please have these instructions, as well as the part number of the component (part numbers are machined into the brackets) that is proving difficult to install, as well as the make, model, and year (date of vehicle production is preferred) of your vehicle available when you call. Baer’s Technical Staff is available from 8:30a.m. - 5:00p.m. Mountain Standard Time (Arizona does not observe Daylight Savings Time) by phone: (602)-233-1411 Monday through Friday.

INSTALLATION:

1. Disconnect the fluid hose at the frame and cap the hardline with the supplied vinyl cap. Remove the hose lock and disengage the hose from the frame bracket. See Figure 1 for reference.

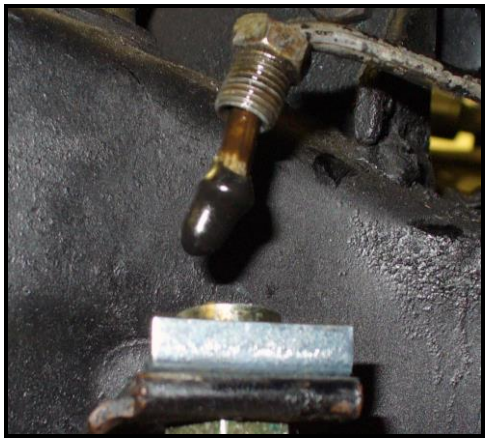


Figure 1: Hardline capped with vinyl cap

2. Remove the two bolts retaining the original caliper assembly to the spindle and slide the caliper off of the rotor.

3. Remove the original rotor from the spindle and thoroughly clean the spindle pin and caliper attachment points to ensure proper seating of the new components.

4. The base brackets are labeled for left (driver's side) and right (passenger side). The left is engraved with part number 6610112 and the right is engraved with 6620112. Install the bracket to the spindle, above the steering arm, using the supplied bolts and washers. The 9/16"x2.25" bolt and washer will bolt into the top hole on the spindle and the bottom hole will house the 7/16"x 1.5" bolt and washer. Torque the top bolt (9/16") to 150 ft·lbs, and the bottom bolt (7/16") to 70 ft·lbs.

5. The Mustang disc spindle may be machined in a manner which does not allow the base bracket to be positioned parallel to the rotor surface. This may require shims between the lower mounting point of the bracket and the spindle. Both bolts will have to be loosened to install shims in this area. Get this as close as possible, with final shimming performed on the intermediate bracket in later steps. Apply the specified torque (see Step 4) to each of the bolts after shimming is complete. See Figure 2 for reference.

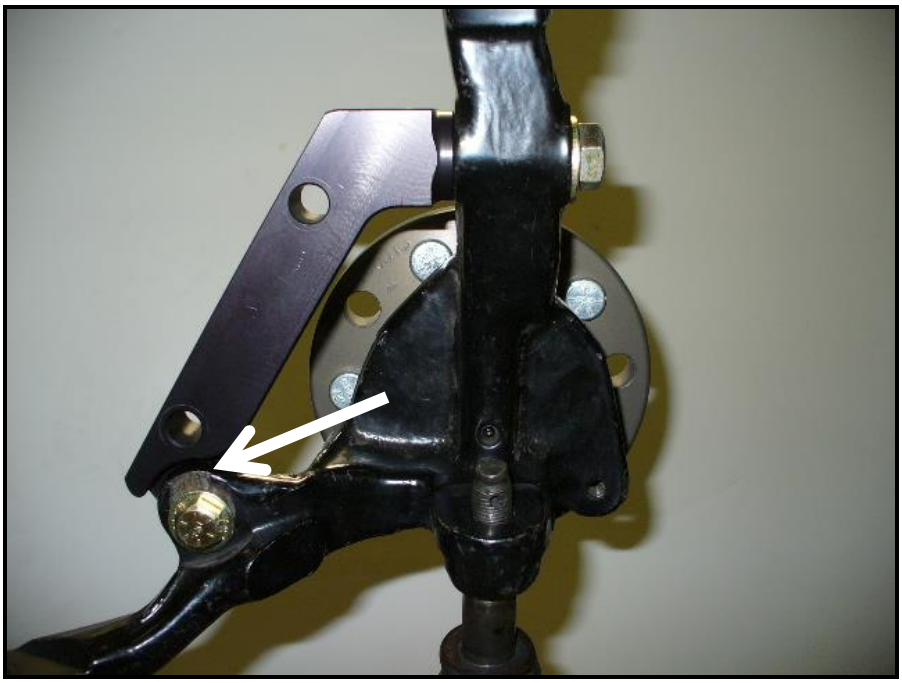


Figure 2: Left spindle shown with base bracket installed
(Arrow indicates location of shims, if necessary)

6. Install the intermediate bracket (pre-installed in the caliper for ease of shipping) to the ***outboard*** side of the base bracket using the supplied M12-1.75x50 bolts and washers. The side of the intermediate bracket with the machined relief will face the base bracket and the intermediate bracket bolt boss will overhang the base bracket slightly. Simply, tighten the bolts for now as shimming will be required in the latter portion of the installation process. See Figure 3 for proper orientation.

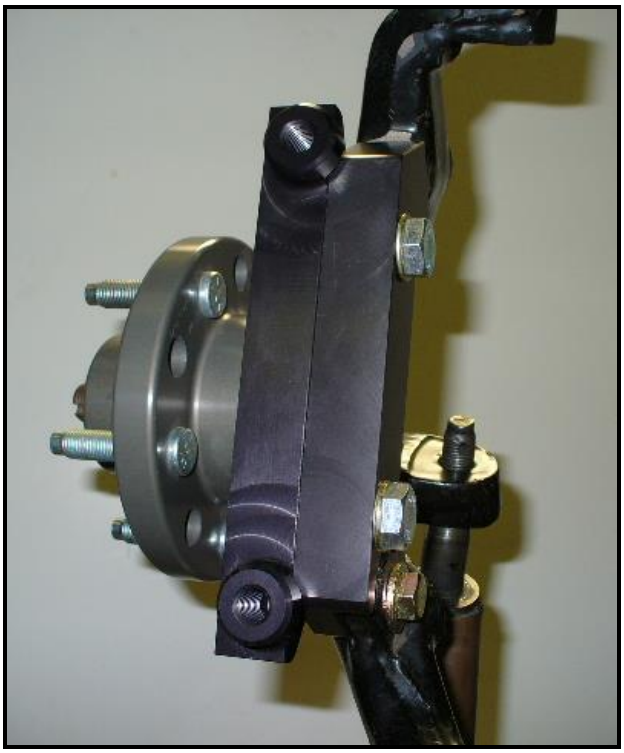


Figure 3: Intermediate bracket installed

7. Install the new Baer billet aluminum hub. The new bearings are pre-packed with synthetic grease. ***Do not*** add more grease. Apply a small amount of grease to the hub seal surface and install the hub. Tighten the nut to 5-10 ft·lbs and spin the hub to seat the bearings. Loosen and re-tighten the nut while spinning the hub several times. Loosen the nut, tighten to remove all play, tighten approximately 1/16th turn to give a small amount of pre-load. Install nut retainer, cotter pin and dust cap.

8. Install the correct side rotor and secure with three lug nuts and washers to avoid scratching the rotor hat.

9. With pads removed, install the correct side caliper (bleeder screw points up), using the supplied M12-1.75x45 Socket Head Bolts. Snug these bolts with a 10mm allen wrench, but do not torque them to spec.

Shimming Procedure

Measure the gap from the rotor to caliper body at 4 points, top inside and outside, bottom inside and outside. Write down all measurements. Subtract the top inside measurement from top outside. This will require a shim at the top bracket bolt equal to half of this difference to center the caliper. For instance, inside measurement of .865", outside of .905" has a difference of .040 which would require a .020" shim installed to center. Do the same with the bottom measurements to center this also. Getting these gaps as close as possible within .005" will keep the possibility of excessive noise to a minimum. This may require different thickness shims top and bottom.

Note: The purpose of shimming is because there are variations in spindle manufacturing and wear at the bearing seat area of the inner bearing.

Procedure

1. Select the required shims from the kit provided
2. Remove the caliper and rotor
3. Loosen the bolts holding the base bracket to the intermediate bracket
4. Install the appropriate shims (between both brackets), removing one bolt at a time, and snug the same bolts for fit check.
5. Reinstall the rotor and caliper. Recheck gap measurements.
6. Re-shim if necessary. When proper shimming has been achieved, remove the caliper and install the brake pads. Reinstall the caliper and torque the bolts holding both brackets in place (M12-1.75x50) to 85 ft·lbs. Finally, torque the caliper bolts to 75 ft·lbs.

If you do not have access to a dial caliper, these measurements can be made with pads installed using a feeler gauge between the rotor and pad. Take measurements from top inside and outside, then bottom inside and outside. Minimum clearance is .010" between pad and rotor, but gaps as close to equal as possible at all four locations is best.

10. Finger tighten the steel braid banjo hose end with one copper washer on each side of the banjo fitting into the rear of the caliper. Connect the hose to the hardline at the frame and install the hose lock. ****IMPORTANT: Position the hose to avoid interference with the wheel and suspension components through the entire range of motion.** Tighten fitting and banjo bolt to 15-20 ft·lbs. See Figure 4 for reference.

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

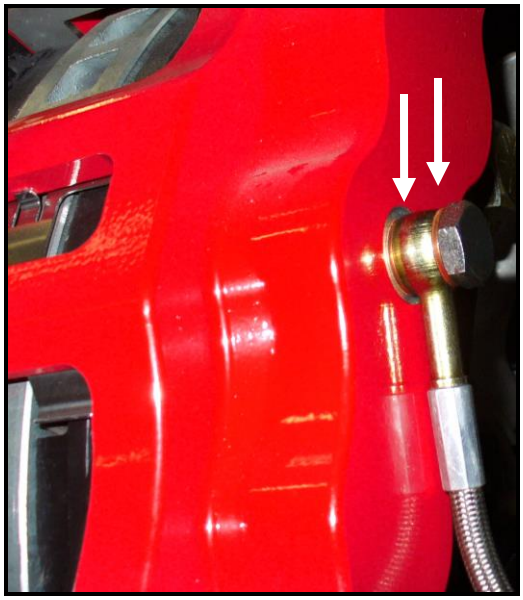


Figure 4: Installation of hose and washers

Refer to Bleeding and Pad Bedding & Rotor Seasoning Procedures contained on a separate sheet, or on www.baer.com

For service components and replacement parts contact your Baer Brake Systems Tech Representative.