

Installation Instructions

Product: SS4+ Front

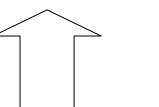
Vehicle

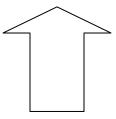
Instruction Part Number: 6000391

Revision Date: 25 May 2016

Make: Ford Model: Mustang Year(s): 68-73 w/ OE Disc Brakes

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.



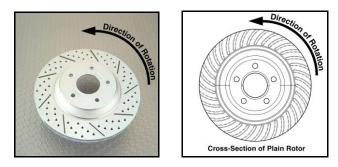


Notices – Read and Follow BEFORE ATTEMPTING INSTALLATION

- 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 LEFT side of vehicle always refer 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 Baer recommends jack stands rated for at least 2-tons.
- 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 FIT PRIOR TO BEGINNING INSTALLATION OF ANY BRAKE SYSTEM OR "UPSIZED" ROTOR UPGRADE! In addition to already having checked fit using the Baer Brake Fit Templates available online at <u>www.baer.com</u>, always place the actual corner assembly or a combination of the caliper assembly fit onto the rotor into the actual wheel to reconfirm proper clearance is available 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 performing wheel fit check to prevent cosmetic damage.



• When installing rotors on any Baer Products 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 all times 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 machined on the component 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 Tech Staff is available from 8:30-am to 5-pm Mountain Standard Time (Arizona does not observe Daylight Savings Time) at 602 233-1411 Monday through Friday.

INSTALLATION:

- 1. Disconnect the brake hose from the hardline at the frame using a line wrench. Cap the hardline with the supplied vinyl cap to avoid brake fluid dripping. See Figure 1 for reference.
- 2. Remove the hose lock and disengage the hose from the bracket.



Figure 1: Hose lock location and vinyl cap installed

Disk Brake Removal: Remove the bolts retaining the caliper and remove the caliper from the rotor. Remove the dust cap, cotter pin, retainer nut and rotor. **Do not** remove the spindle.

- 3. Thoroughly clean all attachment points and the spindle pin to ensure proper installation of the new components.
- 4. The caliper position will be behind the spindle pin centerline. Install the base bracket to the spindle using the supplied M10-1.5 x 16mm button head bolts in the upper mount, 7/16" x 1.5" bolts in the lower mount in the steering arm. Part numbers are engraved into the brackets. The left side will have an engraved number beginning with 661 while the right side will have an engraved number beginning with 662. The lower tab will mount to the outboard side of the mount on the steering arm. See Figures 2 and 3 for reference.

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Figure 2: Left bracket installed, caliper to rear of spindle pin



Figure 3: Upper caliper bracket bolt

5. This system contains a new hub which has screw in studs that can be used with different bolt patterns. Determine the correct bolt pattern for the wheel being used then install the studs into the hub from the inboard side. Torque the studs to 85 ft-lbs. See Figure 4 for reference.

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Figure 4: Hub with screw in studs

- 6. Install the new billet aluminum hub. The new bearings are pre-packed with Red Line 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 retighten the nut while spinning the hub several times. Loosen the nut, tighten to remove all play, tighten approximately 1/16th turn or more to align cotter pin holes, to give a small amount of preload. Install nut retainer, cotter pin and dust cap.
- 7. Install the correct side rotor and secure with three lug nuts, and washers to avoid scratching the rotor hat.
- 8. With the pads removed, install the correct caliper (bleeder screw pointed up) and secure with the supplied 12mm bolts. Just snug these bolts, as shimming will need to be performed in the next part of the installation process. **Note: Working with the pads removed is easier for shimming.
- 9. Perform the Shimming Procedure which is located on the last page. When the procedure has been completed continue with the Step 10.
- 10. Install the steel braid hose with one copper washer on each side of the banjo fitting. Finger tighten the banjo bolt. 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. Tighten fitting and banjo bolt to 15-20 ft·lbs.
- 11. Repeat these steps for the other side and recheck all attachment points and fittings.

For these systems, Baer recommends the use of a 15/16" master cylinder bore. The original equipment application is 1978 Malibu with manual brakes.

Refer to Bleeding and 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.

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.

Procedure

- 1. Select the required shims from the kit provided
- 2. Loosen the caliper bolts
- 3. Install the appropriate shims between the caliper and bracket, removing one bolt at a time, and snug the same bolts for fit check
- 4. Reinstall the caliper and recheck gap measurements
- 5. Re-shim if necessary. When proper shimming has been achieved, 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.

**Note: The purpose for shimming is due to early machining processes which led to variances in dimensions. Shimming allows for the caliper to be mounted center onto the rotor even with these variances.