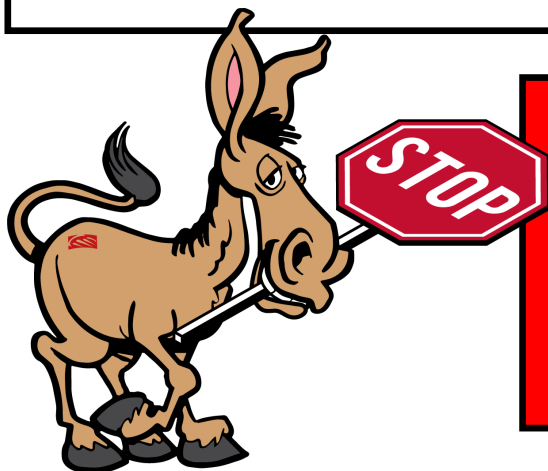


**!THIS IS A DRAG RACE BRAKE SYSTEM!**

These brake systems are designed for heavy, fast cars. Due to the application this brake system is built for, Baer supplies a more aggressive, high friction pad. This pad can be used on the street, but can be dusty and noisy compared to typical street pads. If these pads are changed out to a street version, it is highly recommended that the race pads be put back in the system for race applications. Street pads in competition will fade, outgas, and taper badly which could lead to other braking issues. Always keep in mind there is not one pad that works well in all driving situations.

INSTALLATION MANUAL**Part Number: 6000418****Product: SS4+ Ford 9" RACE****Vehicle Make: Ford & GM - Bearing on Axle****Model: All****Date: 6/4/20****Years: 08-14****READ THIS BEFORE STARTING**

Returns will not be accepted for ANY installed PART or ASSEMBLY. Use great care in preventing cosmetic damage when performing wheel fit check.

The recipient indemnifies Baer Inc. for all liabilities or losses incurred in connection with the recipient modifying or altering Baer Inc. product during installation.

Read and Follow BEFORE ATTEMPTING INSTALLATION

- All installations require proper safety procedures and protective eyewear.
- All installations should be performed by qualified personnel using 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 recommended ratings for jack stands should be at least 2-tons.

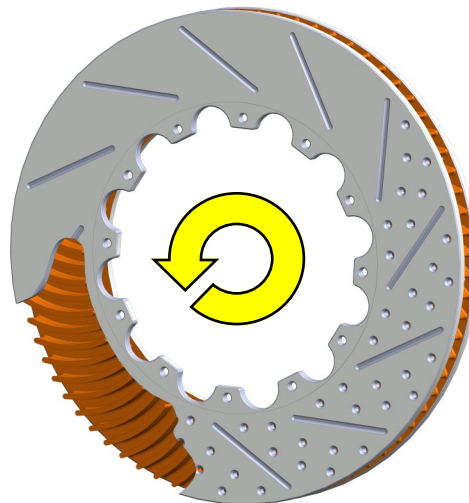
- A selection of hand tools sufficient to engage in the installation of these products is assumed and is the responsibility of the installer to have in his/her possession prior to beginning this installation.
 - All installations, which require removal of hydraulic hoses and/or bleeding of the brakes, 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.
 - 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 U.S. spec vehicles. Image above is of a “L” left rotor. NOTE: Slots and drill patterns sweep forward and internal vanes sweep rearward.
 - ◆ A professional wheel alignment is mandatory following the installation of any system requiring replacement of the front spindles, or tie rod ends. Return the vehicle to factory specifications unless otherwise indicated.
 - ◆ Stop the installation if something seems 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.

*** This system is designed for axles with standoff measurements of 2.5” and an axle flange diameter of 5.75” or less. ***



- ◆ ALWAYS PERFORM A COMPATABILITY TEST PRIOR TO BEGINNING THE 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 www.baer.com, ALWAYS place the actual corner assembly or a combination of the caliper assembly fit onto the rotor into the actual wheel to confirm proper clearance is available between the caliper and the wheel before proceeding with the actual installation.

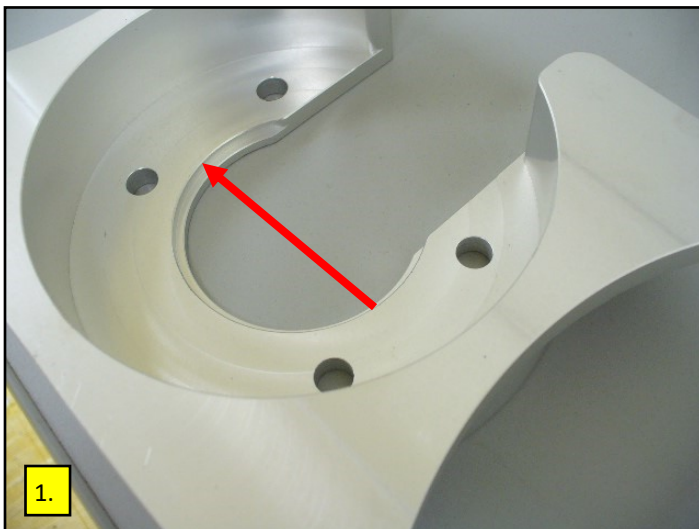
DIRECTION OF ROTATION



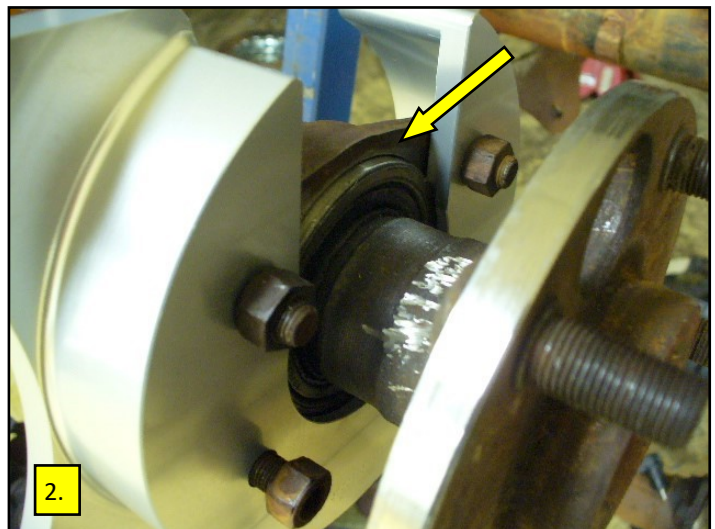
DIRECTION OF ROTATION

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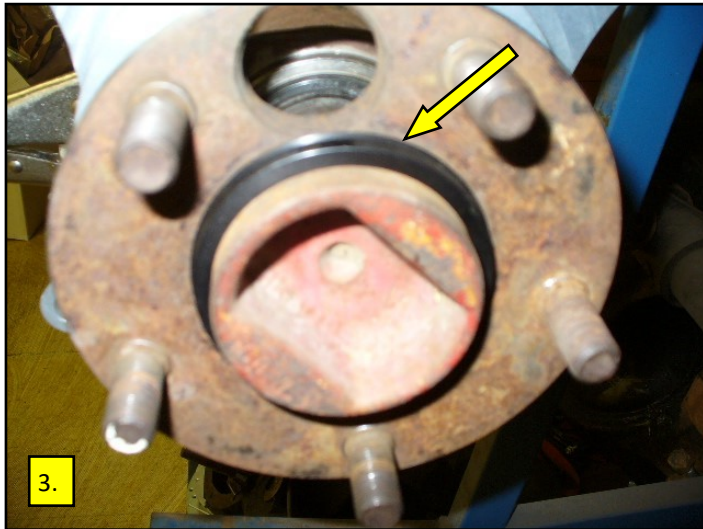
1. Disconnect the hardline from the drum brake slave cylinder and cap the line with the vinyl caps provided to prevent brake fluid dripping through the installation process.
2. Disconnect the park cable from attachment points on the frame and primary cable. There is no need to disengage from the backing plate.
3. Remove the bolts securing the drum brake backing plate to the housing. Retain the "T" bolts and nuts. These will be used to secure the caliper bracket.
4. If your axle flange diameter is larger than 5.750" it must be machined in a lathe to fit into the rotor hat. If the bearings are being replaced, the retainer can be left off as the caliper bracket will now serve as the bearing retainer. If the bearings do not need to be replaced the old retainer can be installed over the caliper bracket. **See Figure 1 for reference**
5. Clean the bearing seat and housing flange to be sure the new parts seat properly. With the axle in place, install the caliper bracket over the axle bearing. The bracket will bolt on with the opening above or below the axle. There is no difference either way. Secure this using the original "T" bolts, 3/8" bolts torque to 45 ft-lbs, 1/2" bolts torque to 85 ft-lbs. **See Figure 2 for reference.**
6. Place the correct side rotor over the axle and secure with at least 2 lug nuts using washers to prevent marking the anodized rotor hat.
7. With pads removed, install the caliper using the supplied 12mm hex bolts. Just snug these. Measurements will be taken to center the calipers. ****Note:** Shims will be placed between the caliper and the bracket. **See Figures 3, 4 and 5 for reference.**



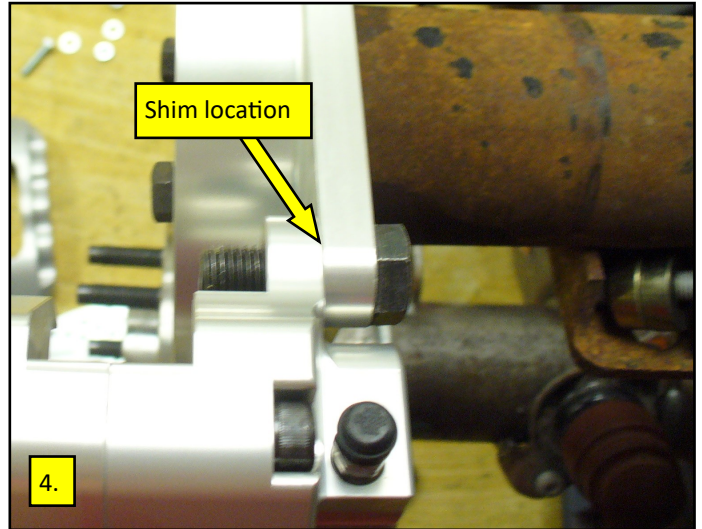
1. This installation begins at the point at which the old brake components have been removed, the hard lines have been capped to prevent leak down of the brake fluid. The caliper bracket has a step machined into it and this will serve as the bearing retainer.



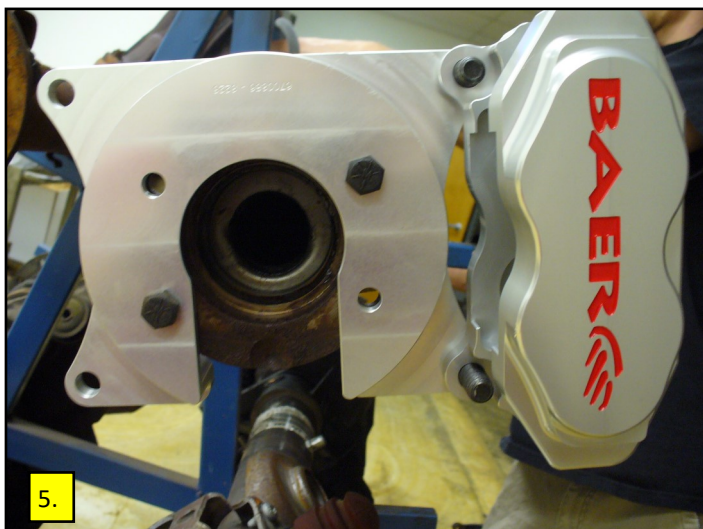
2. Make sure the rear end flange is clear from any rust or debris. This will ensure your bracket is sitting flat against the rear end flange. If your original retainer is still on the axle it can be bolted on top of the bracket. These axles were machined in a lathe to the proper diameter.



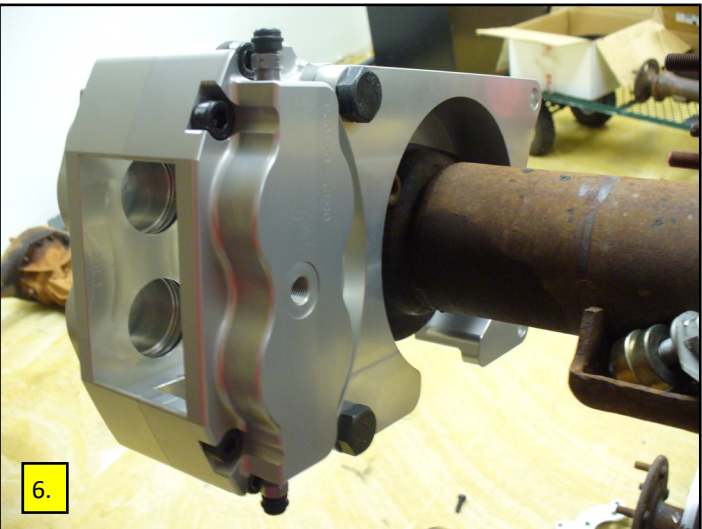
3. On Ford vehicles with 2.5" rotor register, place the BLACK CENTERING RING over the axle. This will allow the rotor to be properly centered on the axle.



4. Shim location shown.



5. Here the caliper is mounted in the trailing position. (Left rear shown)



6. Inboard view of the caliper mounted in the trailing position.

Refer to Bleeding and Pad Bedding & Rotor Seasoning Procedures contained on a separate sheet. Or on www.Baer.com

Shimming Procedure

With pads removed from the caliper, 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 .905", outside of .865" 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 the caliper centered perfectly is not necessary, but having the gaps as close as possible will give the best defense against noise.

****Note:** The purpose for shimming is due to the machining processes that were once performed in the past. Dimensioning tolerances weren't as necessary as today's standards, which caused variances in spindles.

Procedure

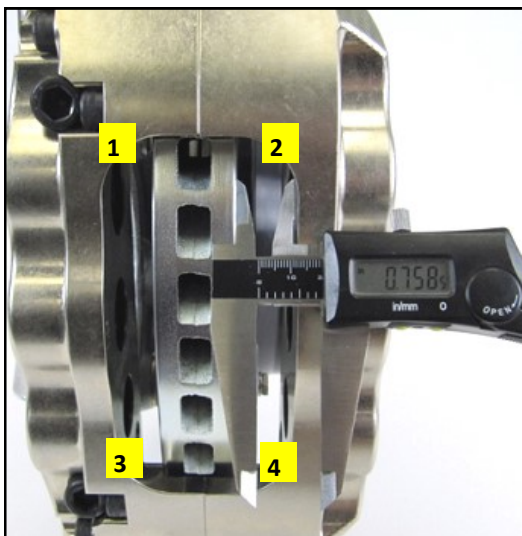
Select the required shims from the kit provided.

Remove the caliper.

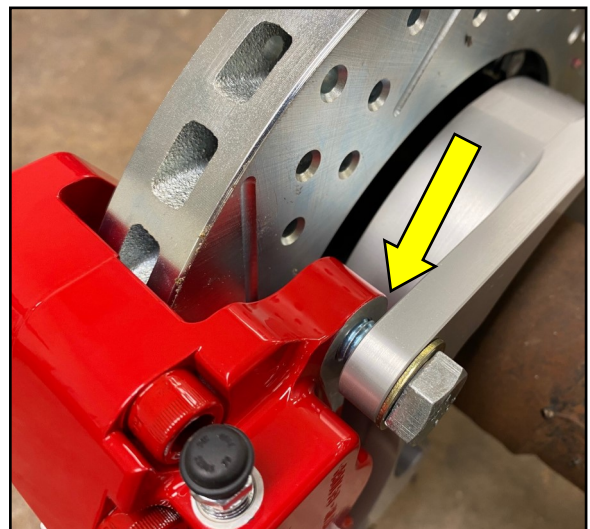
Install the appropriate shims (between the S4 Caliper and caliper bracket; or between the T4/6P/6S bracket and spindle or knuckle, **top and bottom caliper mounting holes**), removing one bolt at a time, and snug the same bolts for fit check. See Figure 7 for reference.

Re-shim if necessary. When proper shimming has been determined, remove the caliper and install the brake pads. Install the caliper then torque the caliper bolts to 85 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.



Location to measure - 6P caliper



Location of shims - S4 caliper

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