



INSTALLATION MANUAL

Part Number: 6000386

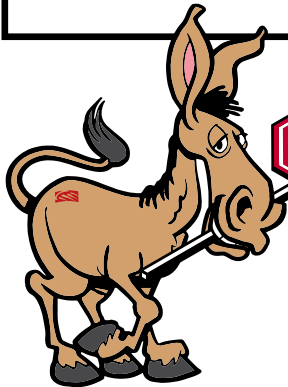
Product: SS4 12" Rear

Vehicle Make: Ford and GM

Model: 7.5/8.8" Ford and 10/12 Bolt GM Axle with Bearings in Housing

Years: All

Date: 12/01/2021



READ THIS BEFORE STARTING

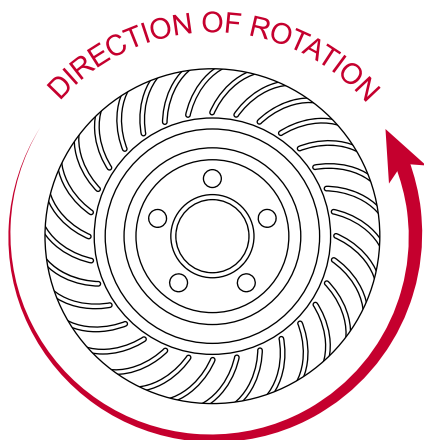
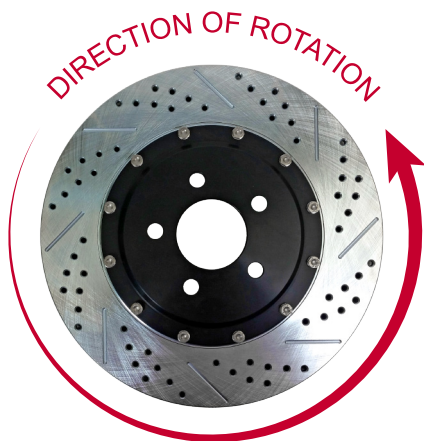
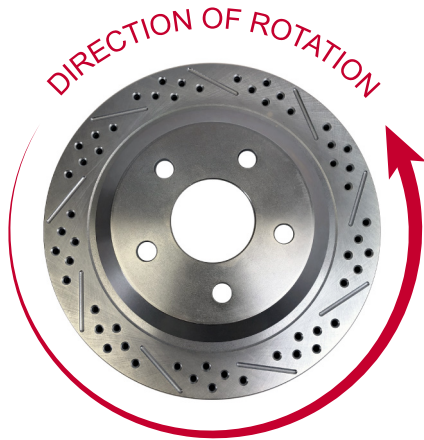
Returns will not be accepted for ANY installed PART or ASSEMBLY. Use great care in preventing cosmetic damage when performing wheel fit check.

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

NOTE: Maximum Axle Flange Diameter for this Baer Brake System is 6.25"

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.



Cross-section of Plain Rotor



- 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.

- 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 spin-dles, or tie rod ends. Return the vehicle to factory specifications unless otherwise indicated.

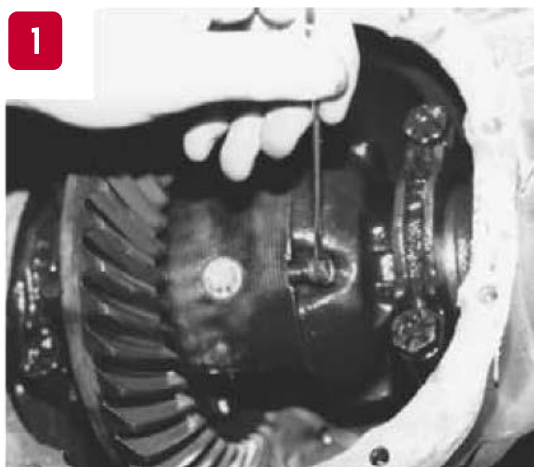
- Stop the installation if something seems unclear or the parts require force to install. Consult directly with Baer Technical Staff in such instances to confirm details. Please have these instructions, as well as the part number machined on the component that is proving difficult to install, as well 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.



INSTALLATION NOTES:

1. Support the vehicle with properly rated jack stands and remove the rear wheels. Place a drain pan under the differential and remove the cover.

3. Remove the differential pin lock bolt from the carrier (photo 1). Ford uses 5/16" bolt, most GM vehicles use 5/16" or 1/2" bolt head. It is best to use a 6 point wrench on this as it may be very tight.



2. Remove the drums. Sometimes the drums will adhere to the axles from rust. If this is the case, tapping on the outer edge of the drum with a hammer will shock this loose and allow removal of the drum.

4. Remove the pin (photo 2) and slide axles inward to remove c-clips.



5. Remove the axles, taking care not to damage the seals. This is a good time to inspect the seals, axles and bearings, replacing as necessary. Also, measure the outside diameter of the axle flange. To properly seat in the rotor, the flange diameter can not exceed 6.25". If yours is larger, a machine shop can turn these down for proper fit.

7. Install the new bracket/park brake assembly using the original T-bolts that secured your brake backing plate. These are left and right specific, the left (drivers side) begins with a part number engraved 671, and the right side will begin with 672. The park shoe actuator will be at the bottom, the retainer at the top. Torque the fasteners to 45 ft·lbs. See Figures 3 and 4 for reference.

6. Disconnect the fluid lines from the backing plate and cap with supplied vinyl caps. Leaving all drum brake components attached, remove the brake backing plate. Save the fasteners as these will be reused for the new intermediate bracket. Disengage the park cable from the frame and front primary cable. The Baer cable, if supplied, will attach to the frame and primary cable just as the OE unit did.

8. Repeat these procedures for the other side.

9. Install axles, c-clips, differential pin and retaining bolt. Install the cover and refill with proper gear lube.

10. Next, install the rotors on the correct sides and retain with three lug nuts and washers to avoid marking the hat surface.

PARK BRAKE ASSEMBLY CORRECTLY INSTALLED



11. With pads removed, install the caliper using the supplied 12mm bolts and washers. The bolts insert through the stainless steel slider pins and into the caliper. The slider pins seat into the relief machined into the caliper mounting tabs. Torque each of the bolts to 75 ft-lbs. See Figure 5 for reference.

NOTE: All SS4 Calipers are designed and built with dual bleeders to allow for various mounting positions, depending on preference.

12. **NOTE:** The park assembly will be shipped with the caliper bracket attached and .125" spacers installed. These must remain in place, any shims needed to center caliper will be added to these.

13. Perform the Shimming Procedure which is located on the last page. When the procedure has been completed continue with the Step 14.

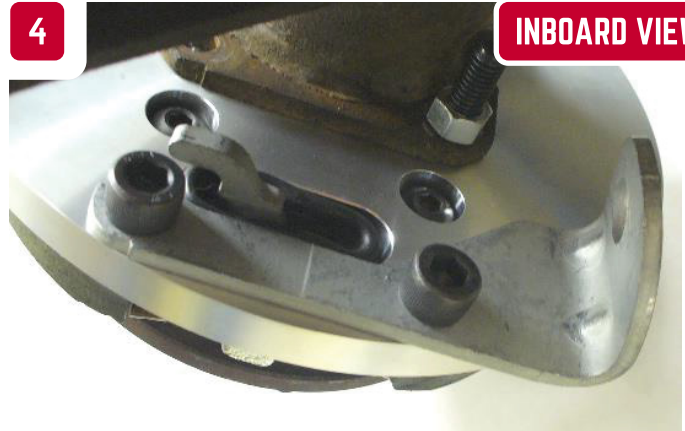
14. Install the banjo bolt, with one copper washer on each side of the steel braided hose banjo fitting, into the caliper. Finger tighten the banjo bolt. Connect the hose to the hardline and install the hose lock.

IMPORTANT: Position the hose to avoid interference with the wheel and suspension components through the entire range of motion. Tighten banjo bolt between 15-20 ft-lbs.

15. If park cables were included in your system, install first into the caliper, then to frame bracket, and then connect to primary cable.

16. **IMPORTANT:** Recheck all attachment points and fluid connections.

PARK ASSEMBLY INSTALLED ON DRIVER'S SIDE



CALIPER INSTALLED ON INTERMEDIATE BRACKET



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.



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.

1. Select the required shims from the kit provided
2. Remove the caliper
3. Loosen the bolts from the intermediate bracket that are connected to the park 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 caliper and 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 caliper bolts to 75 ft·lbs. Finally, torque the bracket 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.

