BAER ®Your Complete Performance Brake Supplier! BAER AlumaSport

Installation Instructions

Product: SS4 12" Rear Instruction Part Number: 6000386

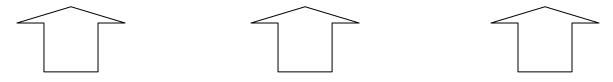
Vehicle

Make: Ford and GM

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

Year(s): All

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.



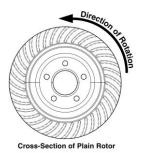
Notices - Read and Follow BEFORE ATTEMPTING INSTALLATION

- 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, 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 <u>not</u> 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 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:

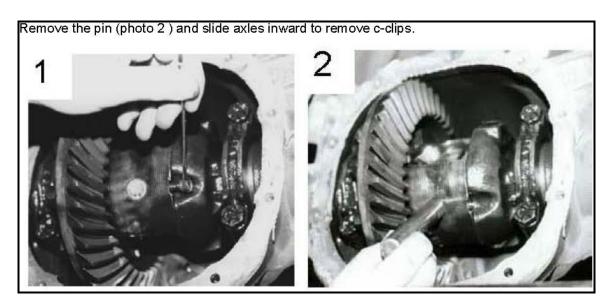




- A proper professional wheel alignment is required for any system requiring replacement of the front spindles, or tie rod ends. Follow factory prescribed procedures and specifications unless otherwise indicated.
- At all times stop the installation if anything is unclear, or the parts require force 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.

INSTALLATION:

- 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.
- 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.
- 3. Remove the differential pin lock bolt from the carrier (photo 1). Ford uses 5/16" bolt, most GM vehicles use 5/16" or ½" bolt head. It is best to use a 6 point wrench on this as it may be very tight.



- 4. 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 5.9". If yours is larger, a machine shop can turn these down for proper fit.
- 5. 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.
- 6. 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 photo on continued page for reference:



Park brake assembly correctly installed



Park assembly installed on driver's side

- 7. Repeat these procedures for the other side.
- 8. Install axles, c-clips, differential pin and retaining bolt. Install the cover and refill with proper gear lube.
- 9. Next, install the rotors on the correct sides and retain with three lug nuts and washers to avoid marking the hat surface.



Caliper installed on intermediate bracket.

10. Install the correct caliper (bleeder screws point upward). The 12mm [Non-Vibra Tite (no red thread coating)] 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 these to 75 ft·lbs.

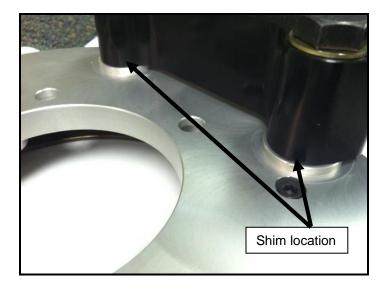


Caliper with CSV installed.

A CSV (centering stabilizer valve) will be attached to your caliper. See the photo above. This helps to keep the caliper properly centered over the rotor.

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

- 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
- Install the appropriate shims, 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 take the bolts from the intermediate bracket keeping the shims in place, one at a time, and replace them with the 12mm bolts with red Vibra-tite thread coating. Torque bolts to 85 ft-lbs. Finally, reinstall the caliper with the Vibra-tite bolts, and torque the last two 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.

11. Install the steel braid hose with one copper washer on each side of the banjo fitting on the back side of 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 fitting and banjo bolt to 15-20 ft·lbs.

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

**Important: Recheck all attachment points and fluid connections.

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

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