BAER ®*Your Complete Performance Brake Supplier!*

Installation Instructions

Product: SS4 12", 13" Rear w/Park brake

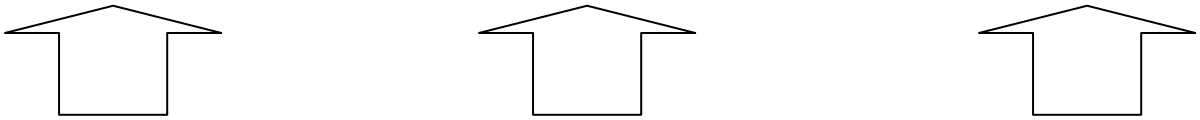
Instruction Part Number: 6000428

Vehicle

Revision Date: 16 December 2013

Make: Chevy Full Size Bearing on Axle
Model: All
Year(s): 55-68

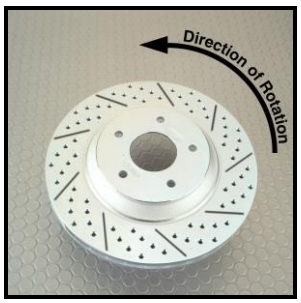
***ATTENTION:* Read this before going any farther! Returns will not be accepted for ANY installed PART or ASSEMBLY. Use great care to prevent cosmetic damage when performing wheel fit check. In the event that a product must be returned, please contact Baer Customer Service for a RMA Number.**

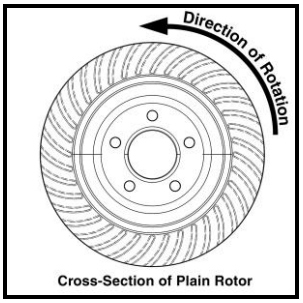


Notices – Read and Follow BEFORE ATTEMPTING INSTALLATION

- 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:

This system is designed for axles with standoff measurements of 2.5" and an axle flange diameter of 5.750" or less.

1. Disconnect the hardline from the drum brake slave cylinder and cap the line with the vinyl caps provided to prevent brake fluid from dripping throughout the installation process.

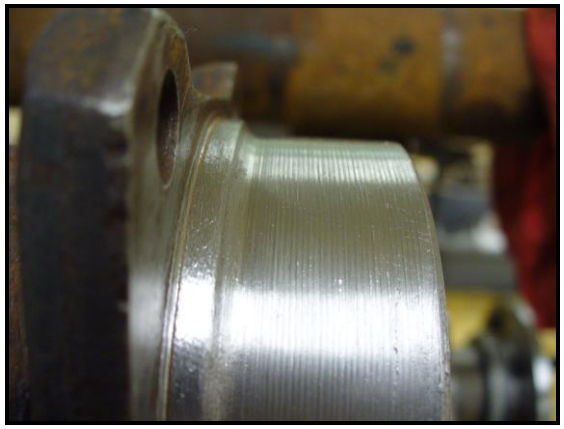
2. Disconnect the park cable from attachment points on the frame and primary cable. There is no need to disengage from the backing plate.

3. Remove the bolts securing the drum brake backing plate to the housing. Retain the bolts and nuts because these will be used to secure the Banksia Plate.

4. Remove the axle from the housing. Inspect the condition of the bearings and seals, replace if necessary. 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 Banksia Plate will now serve as the bearing retainer. If the bearings do not need to be replaced, the old retainer can be installed over the Banksia Plate.

5. Clean the bearing seat and housing flange to be sure the new parts seat properly. This can be accomplished with a piece of emery cloth.

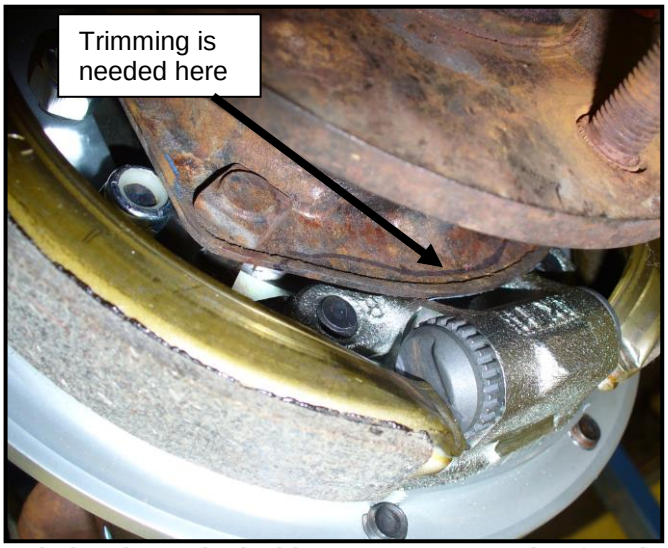
Before cleaning



After cleaning

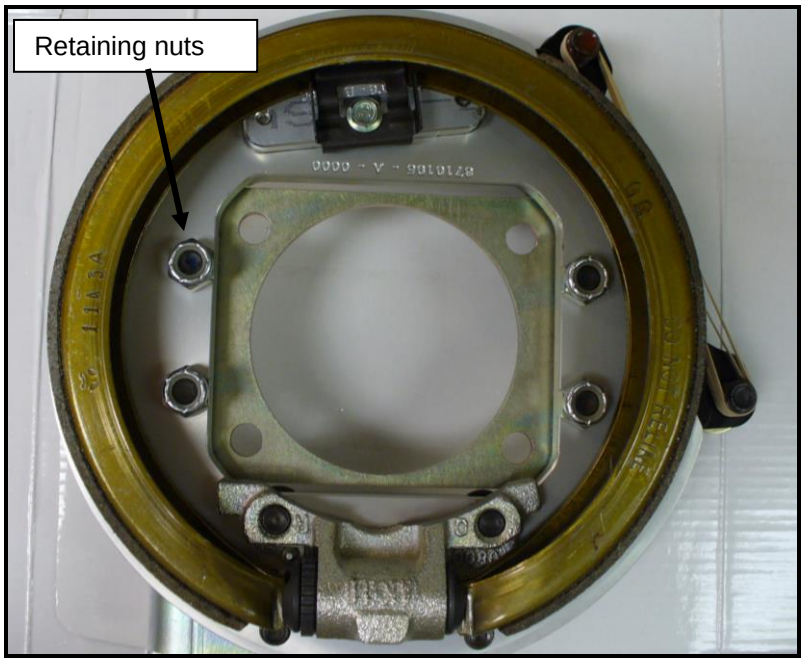
**** Important:** Before installing the Banksia Plate, the steel plate around the axle bearing will need to be trimmed. See the photos on the following page for reference:

Trim along dashed line for fit (Your system may require similar trimming)

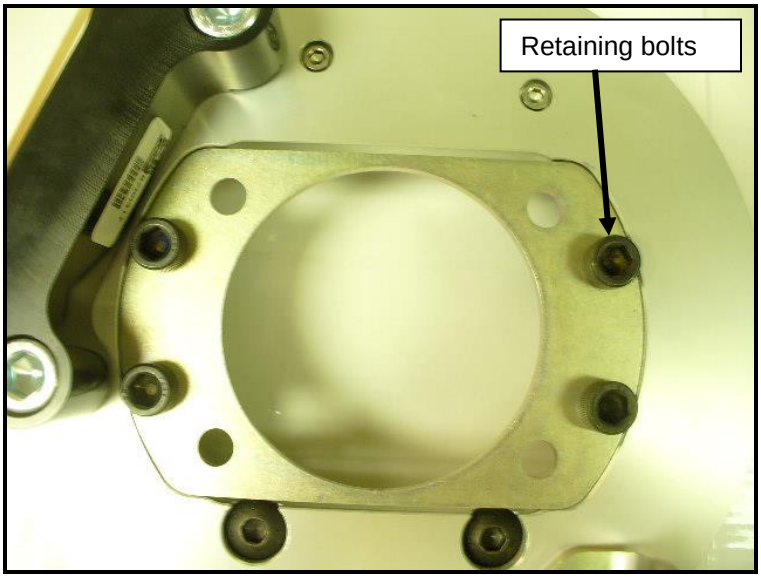


The steel plate is marked with a permanent marker for trimming

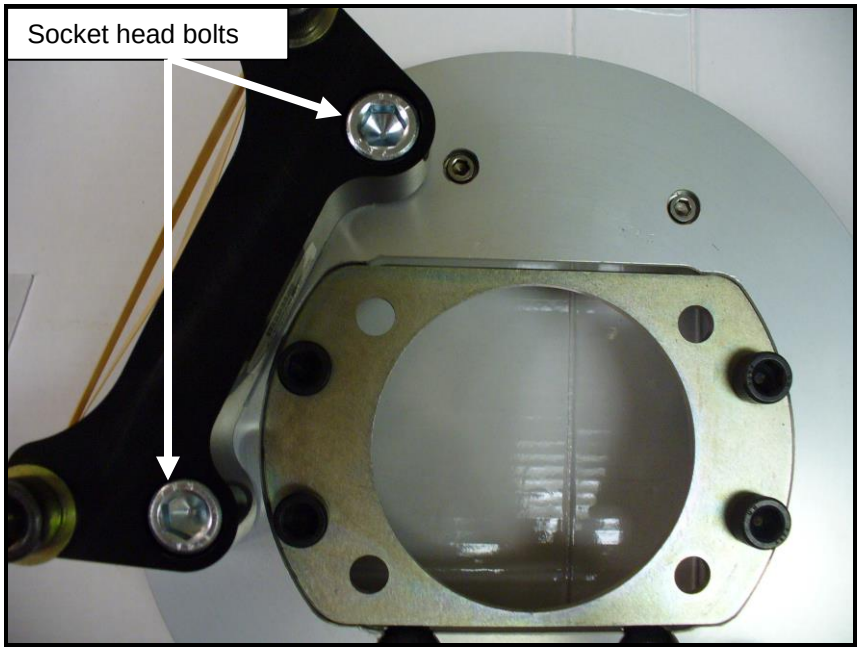
6. After trimming the steel plate, the adapter plate retaining bolts will need to be securely tightened. Ensure the flat face of each nut is parallel with the edge of the plate so that it fits without interference. Torque these bolts to 25 ft·lbs. See photo on continued page for reference:



The faces of the retaining nuts are flush with the plate



7. Once trimming is complete and the retaining bolts are secure, the socket head bolts will need to be tightened, not torqued as shimming will need to be performed in the latter portion of installation.



8. Install the Banksia Plate onto the housing flange using the original bolts. Torque these to 45 ft·lbs.

9. Install the axle and rotor. Secure the rotor with three lug nuts and washers to allow for an easier shimming procedure.

10. With pads removed, install the correct side caliper onto the intermediate bracket. Simply tighten the bolts for now as shimming will occur next.

**Note: All SS4 Calipers are made with dual bleeders for orientation depending on the brake setup.

Shimming

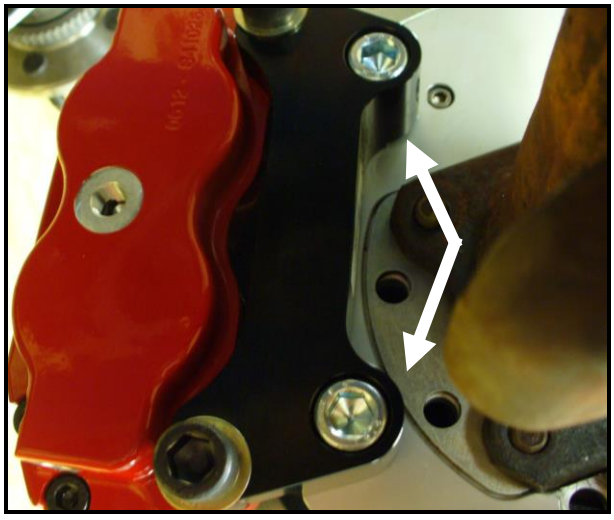
Using a Dial or Digital Caliper, measure the gap from the rotor to caliper body at 4 points, top inside and outside, bottom inside and outside. Write down all measurements. Subtract the top inside measurement from top outside. This will require a shim at the top bracket bolt equal to half of this difference to center the caliper. For instance, inside measurement of .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

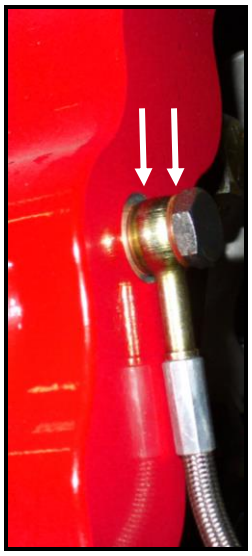
1. Select the required shims from the kit provided
2. Remove the caliper and loosen the bolts from the intermediate bracket that are connected to the Banksia Plate
3. Install the appropriate shims (between the Bankisa Plate and intermediate bracket), removing one bolt at a time, and snug the same bolts for fit check
4. Reinstall the intermediate bracket and caliper, and recheck gap measurements
5. Re-shim if necessary. When proper shimming has been achieved, torque the intermediate bracket bolts to 85 ft·lbs. Finally, remove the caliper and install the brake pads. Re-install the caliper back onto the bracket and torque the caliper bolts to 75 ft·lbs.

**If you do not have access to a Dial or Digital 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 of shims

11. 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.



Installation of brake hose and washers
(photo shown as reference only)

12. Repeat these steps for the other side of the vehicle and be sure to recheck all attachment points and fittings.

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.