BAER® *Your Complete Performance Brake Supplier!*

Installation Instructions

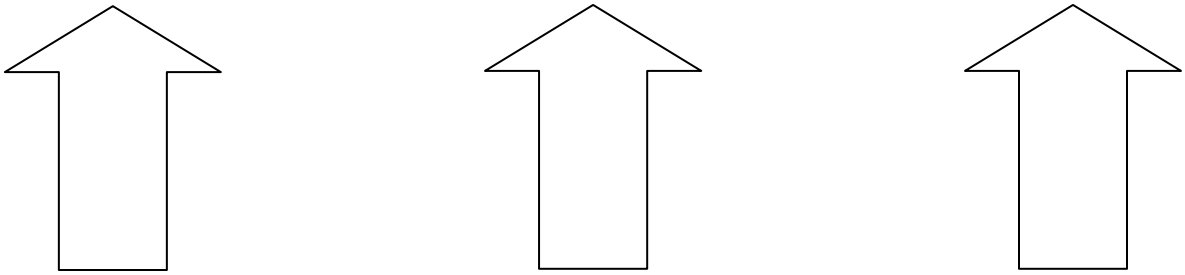
Product: Extreme Plus/Pro Plus Rear

Instruction Part Number: 6000397
Rev Date: 11 December 2015

Vehicle

Make: GM
Model: F body / G body
Year(s): F: 82-92 with drum brakes / G: 78-88

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.

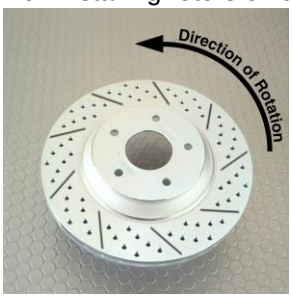


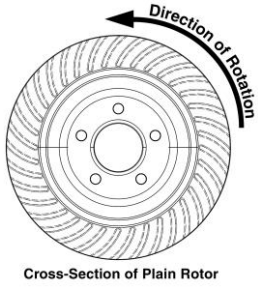
Notices – Read and Follow BEFORE ATTEMPTING INSTALLATION

- 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 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 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.





Cross-Section of Plain Rotor

- 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.

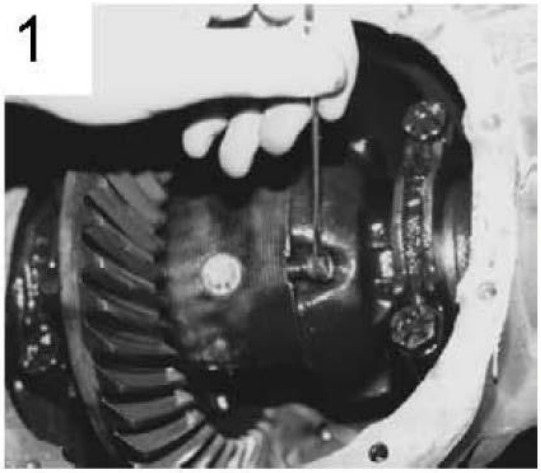
INSTALLATION:

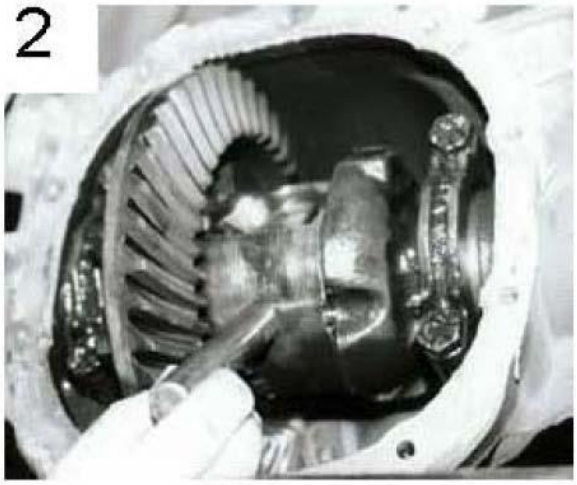
1. Support the vehicle with properly rated jack stands and remove the rear wheels. Place a drain pan under the differential and remove the cover.

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). Most GM vehicles use 5/16" or ½" bolt head. It is best to use a 6 point wrench on these bolts.

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





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. Disengage the park cable from the frame and front primary cable. The Baer cable will attach to the frame and primary cable just as the OE unit did.

6. The two small bolt holes for the backing plate need to be drilled out to .375". See figure 3 for reference.

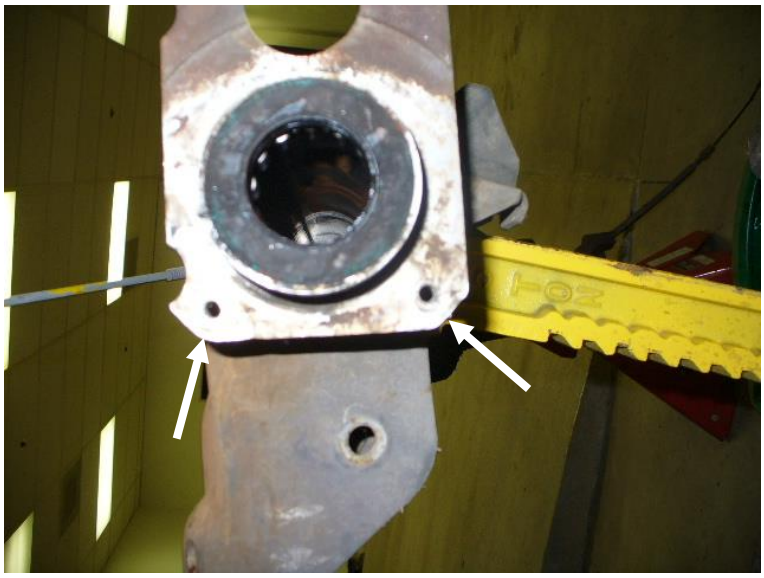


Figure 3: Drill these two holes to .375”

7. Bolt the parking assembly backing plate to the housing using the supplied 3/8” x 1.5” bolts with Nylock nuts. See Figure 4 for reference. Drill holes in the axle flange for the upper mount holes in the park backing plate. Cover the axle opening to prevent chips from contaminating the axle gear lube.

8. Washers are provided to be placed between the park/caliper bracket and the housing due to a relief machined into the flange. After drilling, remove the lower bolts and place the washers between the housing and park/caliper bracket for all 4 bolts.

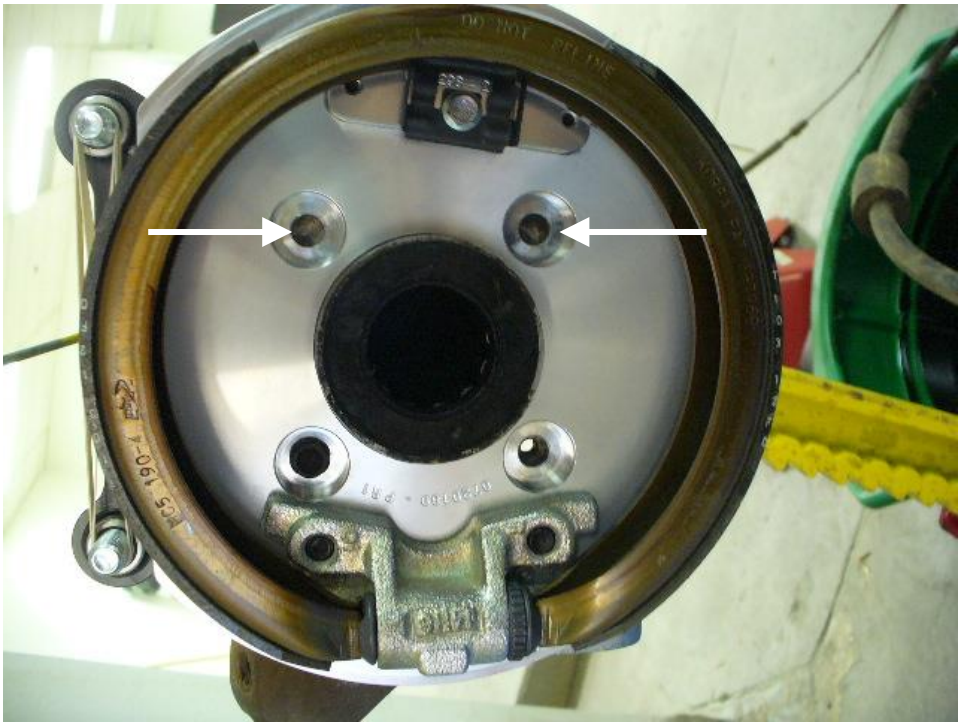


Figure 4: Drill upper two holes to .375”

9. Secure with the supplied 3/8” bolts and nylock nuts. Place the bolts through the inboard side of the flange, place the washers on the bolts and place the park assembly over the bolts. Torque all 4 to 45 ft-lbs.

10. Repeat this procedure for the other side.

NOTE:
The upper portion of the flange bracket will interfere with 2 of the 3 caliper mounting positions that the park/caliper bracket allows. The lower rear can be used without modification. If the upper rear or the front (leading) mount are preferred, the flange will need to be clearanced or removed above the mounting holes that were drilled for the upper bracket bolts. This can be seen when the bracket is bolted on for marking the upper holes.

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

12. Install the rotors on the correct sides and retain with 3 lug nuts using washers to avoid marking the hat surface.

13. Install the radial mount bracket on the park assembly with the supplied 12mm bolts. The shoulder of the slider will rest against the park bracket, the bracket slides on over these, and the bolt with washer retains this. Tighten the bolts snugly (do not torque yet) as shimming procedure may require removing them.

14. With the pads removed, install the calipers with the bleeder screw pointed up, just snug these bolts as the shimming procedure will be performed next.

15. Perform the Shimming Procedure on the last page. When the procedure is complete continue with Step 16.

16. Attach the banjo bolt to the steel braided hose and into the caliper using copper washers on either side of the banjo fitting. A hardline retainer kit was provided with this system. Follow the instructions contained with this to connect your original hard lines to the stainless steel braid hoses supplied with your rear brake system. Install the Hardline retainer assembly, bending the original hardline to fit into the bracket provided with this set. Attach the hardline to the steel braided hose and install the hose lock provided. *****IMPORTANT: Position the hose to avoid contact with wheels and frame, and suspension components.** Torque banjo bolt to 15-20 ft·lbs.

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

18. Recheck all attachment points and fluid connections.

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

C-clip style rear axle designs allow the axle to move inboard and out board from .005” to .030”. The design of the slide pins on the Baer caliper bracket allow the caliper to follow this movement, but must be adjusted to prevent the caliper body from contacting the rotor surface.

Procedure:

1. Push the axle inboard until it stops (this may not move much) and slide the caliper and bracket outboard, against the stop.

2. Using a feeler gauge measure between the inboard side of the rotor and the caliper body. The minimum clearance must be at least .020”. If this measurement is less, shims will be needed to bring this up to at least .020”.

   Before installing shims, check the clearance on the outboard side of the rotor. Pull the rotor outboard until it stops and slide the caliper inboard, against the stop. Measure the gap between the outboard side of the rotor and the caliper body. The minimum clearance must be at least .020”.

   If the difference in inboard to outboard measurements is very different (ie. .050” outboard with .010” inboard), shims can be used to equalize this. Using that example, a .020” shim between the slider pin and the park assembly, this would increase the inboard measurement to .030” and decrease the outboard measurement to .030”. Again, the main goal is not less than .020” clearance between caliper body and rotor on both sides.

3. Remove the allen bolts from the caliper and remove the caliper. Loosen the bolts connecting the caliper bracket to the park brake assembly (M12-1.75x45 hex bolts)

4. Install the appropriate shims (between the slider pin head and park brake assembly), removing one bolt at a time, and snug the same bolts for fit check. See Figure 5 for reference. Install the caliper again for clearance check.

5. Re-shim if necessary. When proper shimming has been achieved, torque the caliper bracket bolts (M12-1.75x45 hex bolts) to 85 ft·lbs. Install the pads in the caliper and place over the rotor on the bracket. Torque the allen caliper bolts to 75 ft-lbs.

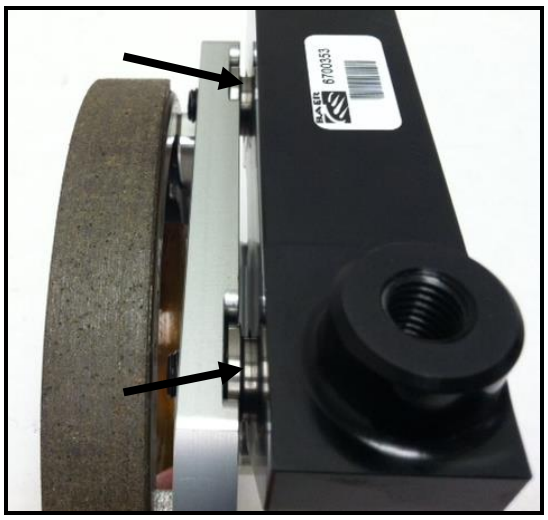


Figure 5: Shim placement to center caliper