BIG CLAW PROMO PACKET CONTENTS:

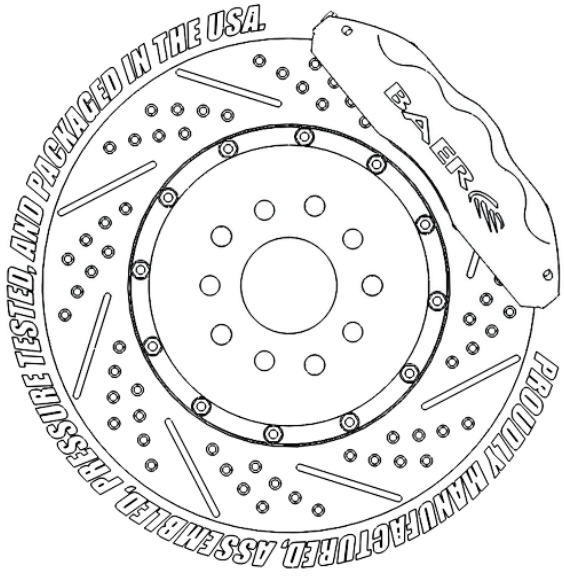
- **ROTOR INSTALLATION AND ROTATION INSTRUCTIONS**
- **ROTOR SEASONING AND PAD BEDDING INSTRUCTIONS**

CONTACT BAER WITH ANY QUESTIONS REGARDING YOUR BRAKE SYSTEM.

☎ 602.233.1411

WWW.BAER.COM

CONTACTUS@BAER.COM

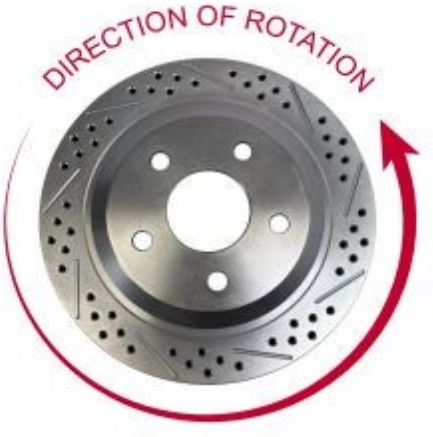


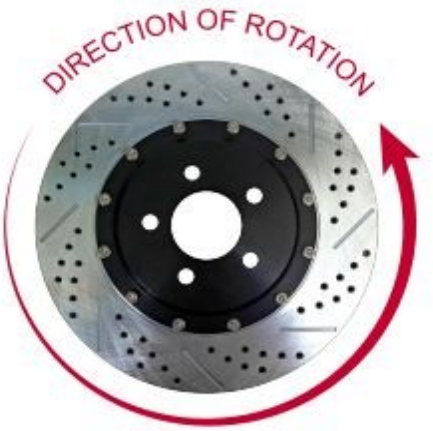
BRAKES WITHOUT LIMITS

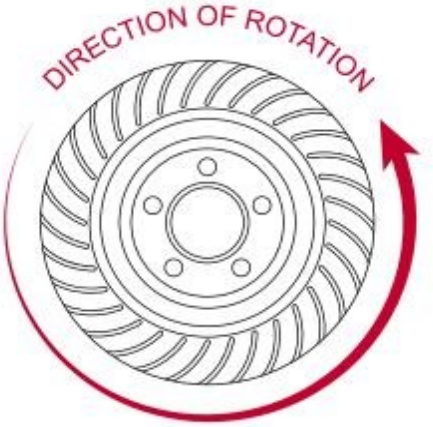
YOUR BAER BRAKES BIG CLAW SYSTEM WAS PROUDLY PACKAGED BY:_____

THANK YOU FOR YOUR PURCHASE

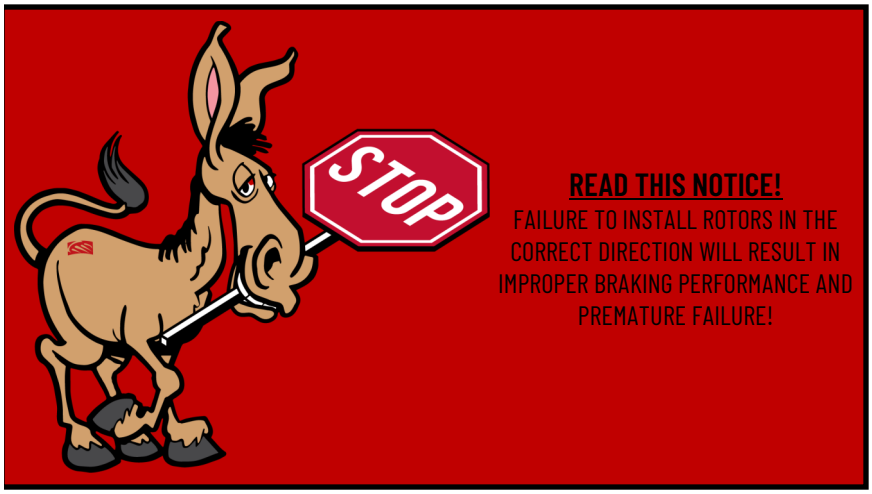
ROTOR DIRECTION & INSTALLATION:







Cross-section of Plain Rotor



Rotors that are directionally ventilated must rotate in the correct direction to allow for adequate airflow and proper cooling of the rotor.

Externally modified rotors employ a **REVERSE SLOT** or a **REVERSE SLOT & DRILL** pattern. These patterns are currently used in most racing and street driving applications. These patterns lower the potential for "carbon smearing" or "transfer" from the pad material to the trailing side of the slots on the rotor. In some cases, "carbon smearing/transfer" can affect the rotational balance of the rotor and cause a 'shake' or 'nibble' while braking.

Baer recommends externally modified rotor patterns pending individual vehicle application.

For racing and drag racing applications: Baer recommends rotors with a **REVERSE SLOT ONLY** or **NON-MODIFIED** pattern (plain rotors). In some cases, rotors with a **REVERSE SLOT & DRILL** pattern can experience cracking under extreme heat and braking conditions.

For street driving: Baer recommends rotors with a **REVERSE SLOT & DRILL** pattern. Rotors with this pattern typically do not encounter issues under ordinary braking conditions. The benefits of the **REVERSE SLOT & DRILL** pattern include, but are not limited to:

- Reduced rotor weight
- Improved rotor cooling

Rotors used in street driving applications can also have **REVERSE SLOT ONLY** or **NON-MODIFIED** patterns.

NON-MODIFIED (plain) rotors that employ a curved vane design must also rotate in a specific direction. The curved vane rotor is designed to draw air into the center of the rotor and force or "pump" the air to exit from the outer edge of the rotor.

ADDITIONAL ROTOR DETAILS:

There are specific break-in procedures, titled *"Rotor Seasoning & Pad Bedding"*, provided in this packet to ensure optimum rotor performance and durability for your brake system.

A removable stick-on label is placed on the rotors to designate which side of the vehicle the rotors are to be installed. Rotors that have a stick-on label with the letter "L" are to be installed on the left (driver) side of the vehicle. Rotors that have a stick-on label with the letter "R" are to be installed on the right (passenger) side of the vehicle.

The rotors shown on this sheet are all left (driver) side rotors. The surface slots on the rotors rotate forward. Always install the rotors in this fashion. **NEVER INSTALL ROTORS IN THE OPPOSITE DIRECTION OF ROTATION**, heat related fatigue and failure will result.

ROTOR SEASONING & PAD BEDDING

What proper "Rotor Preparation" is all about

To properly prepare the brake system for duty, the rotors must be subjected to the "Seasoning" process. During the seasoning process, the most visible effects are the burning of machine oils from the surface of the iron and the establishment of a wear pattern between the pad and rotor.

The seasoning process performs another task of relieving the internal stresses within the rotor material. An example of this process is pouring water into a glass of ice. The ice cracks when the water comes in contact. This example demonstrates the effects of internal stresses. The rotor casting and cooling processes leave the rotor with internal stresses like the example of cold ice cracking when contacting the warmer water.

Gradually heating the rotor material allows its crystalline structure to reconfigure, relieving the internal stresses present from the casting process. After these stresses are relieved, the rotor can readily accept the heat of bedding pads. Heating the rotors before they are fully seasoned can result in material deformation due to the unrelieved internal stresses in the material. This deformation may cause vibration when the brakes are applied.
Rotors must be gradually elevated to temperature before any severe use. A 'nibble', or slight vibration, normally indicates rotors that were heated too quickly.

Following the initial "**Seasoning**" process; when running your car at open track events or serious canyon carving, you should use the first lap of a session (or first couple of miles of open road) to warm the brakes as well as the engine, gearbox, etc.

An engine turns combustion into motion, the brakes then turn that motion into thermal energy through friction...and lots of it! Unlike the engine, there is no dedicated cooling system for the brakes. This means the brakes could use the courtesy of a warm-up to allow the rotors to gradually come up to operating temperature.

Remember to **ALWAYS WARM THE BRAKES** before any heavy use!

BIG CLAW BREAK IN PROCEDURE:

Use the vehicle for 5 to 6 days of gentle driving. Use the brakes to the same extent that you used the stock brakes. **DO NOT TEST PERFORMANCE OR ATTEMPT HEAVY USE UNTIL ALL ITEMS OUTLINED HAVE BEEN COMPLETED. It is imperative the rotors are not excessively heated at this stage.** They require temperature-cycling to relieve the internal stresses present from the casting process.

Note: Zinc plated rotors (optional performance upgrade) require a couple extra days of driving to wear through the plating before the "Seasoning" process will begin.

Following the 5 to 6 days of average driving, you may begin the break-in procedure detailed below:

1. Find a suitable location where you can safely perform a series of near stops without violating any traffic laws.

2. Accelerate to 30 mph, then moderately brake to a near stop (5-10mph). Perform this action **3-4 times**, never coming to a complete stop on any of the attempts.

3. Drive around for 10 minutes, braking as little as possible to allow the brakes to cool. Do not come to a complete stop during this period as the brake pads could be damaged by being pressed against the hot rotors.

4. Accelerate to 50 mph, then aggressively brake to a near stop (5-10mph). Perform this action **4-6 times**, never coming to a complete stop each time. During this step, you should be braking hard but not to the point where the tires skid.

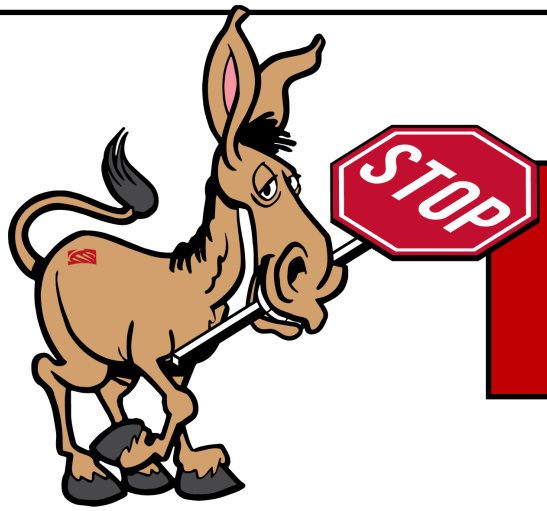
5. Drive around for 30 minutes, braking as little as possible to cool the brakes down. Do not come to a complete stop during this period as the brake pads could be damaged by being pressed against the extremely hot rotors. Baer recommends freeway driving at this point if possible to reduce the chance of having to brake and to allow the brakes to come down to ambient temperature.

6. Leave the vehicle parked overnight to allow the brakes to fully settle. For automatic vehicles, leave the vehicle in park. For manual vehicles, leave the vehicle in gear. **DO NOT** engage the parking brake during this cooling period, but ensure the vehicle cannot roll on its own. The break-in procedure has been completed following this cooling period.

INSTALLATION INSTRUCTIONS

PART NUMBER: 6000786
VEHICLE MAKE: N/A
MODEL: N/A
YEARS: N/A

PRODUCT: GENERAL BIG CLAW FRONT
REVISION: REVISION A
REVISION DATE: 22 JULY, 2024



READ BEFORE CONTINUING!
Returns will not be accepted for ANY installed PART or ASSEMBLY. Use great care in preventing cosmetic damage when performing wheel fit check. If a product must be returned, please contact Baer customer service for an 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 FITMENT BEFORE BEGINNING INSTALLATION OF ANY BRAKE SYSTEM OR "UPSIZED" ROTOR UPGRADE! In addition to checking wheel fitment of this system with the wheel fitment template (available online at www.Baer.com), always place the actual corner assembly or a combination of the caliper assembly on the rotor, and into the actual wheel with great care to prevent cosmetic damage. 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 of brake components.** Wheel fitment should be verified before installation using a wheel fitment template supplied at www.Baer.com
- When installing new Baer rotors, be sure to follow the direction of rotation indicated on the rotor hat area with either an arrow, an "L" for left, or an "R" for right, or both. "L" always indicates the rotor for the driver side of US spec vehicles. Follow the rotor installation and rotation instructions included in the promo pack (P/N 6020101) included with your system when installing rotors. **Failure to properly install rotors will not allow for proper function of the brake system and will cause heat related fatigue and failure.**

- **Note: Baer recommends taking photos of the brake system before disassembly and during each step of the disassembly process. Photos may allow technical support to better assist given any necessary troubleshooting.**
- If anything becomes unclear or any parts require force to install at any point during the installation, stop immediately and consult directly with Baer technical staff. Please have these instructions and the part number of the components that is/are proving difficult to install. Please provide technical staff with the make, model, and year (date of vehicle production is preferred) of your vehicle. Baer's technical staff is available by phone (602.233.1411) or email (ContactUs@Baer.com) from 8:30 AM - 5:00 PM MST (Mountain Standard Time) Monday - Friday (Arizona does not observe Daylight Savings Time).

REMOVAL OF FACTORY BRAKE COMPONENTS

1. Carefully lift and support the front end of the vehicle. It is recommended to engage the parking brake before lifting the front end of the vehicle.
2. Remove the front wheels from the vehicle.
3. Unbolt the brake caliper body from the caliper bracket. This will require you to remove the sliding pin bolts from the caliper assembly. **DO NOT** unbolt the brake hose from the caliper body, doing so will open the brake system and require you to bleed the brakes following installation. Set the sliding pin bolts to the side as they will be used to re-secure the caliper body to the new Big Claw anchor brackets.
4. Once removed, carefully support the caliper body tucked inside the wheel well. **DO NOT** allow the caliper body to hang, suspended by the brake hose as it may damage the brake hose.
5. Unbolt and remove the caliper anchor bracket assembly from the vehicle and place on an adequate work platform to perform the next step. The factory caliper anchor brackets will not be used with any of the new brake components in this system, however it is recommended that they are stored for future safekeeping. Set the factory caliper anchor bracket mounting hardware (typically flange bolts) to the side as they will be used to secure the new caliper anchor brackets to the vehicle.
6. Carefully remove the brake pads, brake pad abutment hardware, caliper sliding pins, and the rubber boots (if the new Big Claw anchors did not come with rubber boots pre-installed) from the caliper bracket. Store the abutment hardware, caliper sliding pins, and the rubber boots off to the side in a safe location as they will be utilized with the new Big Claw anchor brackets in this system.
7. Remove the factory brake rotor from the wheel hub and carefully inspect the rotor mounting face of the wheel hub for debris/damage. Clean any debris present on the rotor mounting face of the wheel hub and replace any damaged wheel hub components as necessary.
8. You may now begin installation/preparation of the new Big Claw brake components.

BIG CLAW ANCHOR BRACKET PREPARATION

1. It is recommended to install all of the necessary components into the new Big Claw anchor brackets before mounting them on the vehicle as it can be done easily on an adequate work platform/bench.
2. Carefully clean the factory caliper sliding pins with warm water and dish soap to prevent damaging any rubber components on the pins. Apply a thin, even coating of the supplied silicone grease to the clean pins and re-install the rubber boots on the pins. Install them into the Big Claw anchor brackets, ensuring that the rubber boots are fully seated within the grooves on the Big Claw anchor brackets. **Clean your hands, or replace gloves if any lubricant residue is present to prevent contact with the friction surface of new brake pads during installation.**
3. Install the factory abutment (brake pad) hardware to the Big Claw anchor brackets. The Big Claw anchor brackets were designed to use the factory abutment hardware and may require slight modification which can typically be performed with a pair of aviation snips and pliers. Modify abutment hardware as necessary to fit into the Big Claw anchor brackets.

BIG CLAW ROTOR INSTALLATION

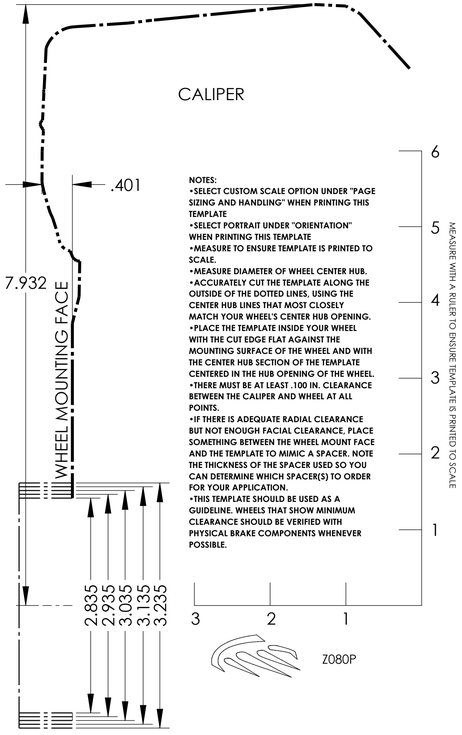
1. Install the correct side rotor to the wheel hub and temporarily secure with three lug nuts and washers to prevent scratching or marring the rotor hat face. Refer to the *"ROTOR DIRECTION AND INSTALLATION"* instructions contained within the promo packet provided with this system to ensure you install the correct side rotor.

BIG CLAW ANCHOR BRACKET INSTALLATION

1. Install the prepared Big Claw anchor bracket to the knuckle and secure with the factory hardware. The Big Claw anchor bracket mounts to the knuckle in the same location as the factory anchor bracket.
2. Torque the mounting hardware to the factory recommended torque spec to secure the prepared Big Claw anchor bracket to the knuckle.
3. Rotate the rotor multiple times to ensure there is no contact between the Big Claw anchor bracket and the rotor. The abutment hardware may contact the rotor as you rotate it, if this happens, the hardware can be bent away from the rotor with a set of pliers.
4. Install the brake pads into the new Big Claw anchor brackets. It is **highly** recommended to install fresh brake pads anytime new rotors are being installed on the vehicle. **Make sure no lubricant residue is present on the friction surface of the brake pads or rotor, this will significantly decrease performance of the brakes and potentially lead to harm or injury. If there is any lubricant residue present on the friction surface of the brake pads or rotor, properly clean said surface(s) with an appropriate brake clean product before installing on and operating the vehicle.**

CALIPER BODY INSTALLATION

1. Press the brake pads on the prepared Big Claw anchor bracket firmly against the rotor and reinstall the caliper body to the prepared Big Claw anchor bracket. Secure with the factory hardware. It should be noted that the pistons will have to be retracted in order for the caliper body to be installed.
2. Torque the mounting hardware to the recommended factory torque spec to secure the caliper body to the prepared Big Claw anchor bracket.
3. Remove the three lug nuts and washers that were previously used to temporarily secure the rotor to the wheel hub.
4. Reinstall the front wheels and torque the lug nuts to the factory torque spec to properly secure the wheels.
5. Refer to the *"ROTOR SEASONINIG AND PAD BEDDING INSTRUCTIONS"* contained within the promo packet provided with this system to ensure the rotors are properly seasoned and the brake pads are properly bedded for optimal braking performance.



NOTES:

- SELECT CUSTOM SCALE OPTION UNDER "PAGE SIZING AND HANDLING" WHEN PRINTING THIS TEMPLATE
- SELECT PORTRAIT UNDER "ORIENTATION" WHEN PRINTING THIS TEMPLATE
- MEASURE TO ENSURE TEMPLATE IS PRINTED TO SCALE.
- MEASURE DIAMETER OF WHEEL CENTER HUB.
- ACCURATELY CUT THE TEMPLATE ALONG THE OUTSIDE OF THE DOTTED LINES, USING THE CENTER HUB LINES THAT MOST CLOSELY MATCH YOUR WHEEL'S CENTER HUB OPENING.
- PLACE THE TEMPLATE INSIDE YOUR WHEEL WITH THE CUT EDGE FLAT AGAINST THE MOUNTING SURFACE OF THE WHEEL AND WITH THE CENTER HUB SECTION OF THE TEMPLATE CENTERED IN THE HUB OPENING OF THE WHEEL.
- THERE MUST BE AT LEAST .100 IN. CLEARANCE BETWEEN THE CALIPER AND WHEEL AT ALL POINTS.
- IF THERE IS ADEQUATE RADIAL CLEARANCE BUT NOT ENOUGH FACIAL CLEARANCE, PLACE SOMETHING BETWEEN THE WHEEL MOUNT FACE AND THE TEMPLATE TO MIMIC A SPACER. NOTE THE THICKNESS OF THE SPACER USED SO YOU CAN DETERMINE WHICH SPACER(S) TO ORDER FOR YOUR APPLICATION.
- THIS TEMPLATE SHOULD BE USED AS A GUIDELINE. WHEELS THAT SHOW MINIMUM CLEARANCE SHOULD BE VERIFIED WITH PHYSICAL BRAKE COMPONENTS WHENEVER POSSIBLE.

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MEASURE WITH A RULER TO ENSURE TEMPLATE IS PRINTED TO SCALE

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	NAME	DATE
DRAWN		
ENG APPR		
MATERIAL		

TITLE: **2020-24 JEEP JT BIG CLAW FRONT WHEEL FITMENT TEMPLATE**

SIZE **D**

DWG/FILE. NO. 2020-24 JEEP JT BIG CLAW FRONT WHEEL FITMENT TEMPLATE

REV

WEIGHT:

DO NOT SCALE DRAWING