Paragon 2-piece Rotor Installation Instructions

WARNING:
Read these instructions completely before installation. The installation and assembly of all components should only be performed by qualified professionals or personnel with experience in the installation and assembly process of automotive components / systems. These components will not function as intended if not installed or assembled properly to the correct specifications. It is the responsibility of the person installing or assembling any brake component to determine the suitability, and safety of the component. This product is intended for off-road use only.

Disclaimer:

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Aluminum Hat Finish:

Paragon Performance aluminum hats are black / hard anodized. They are subject to corrosion when in contact with corrosive agents including brake fluid, certain types of wheel cleaner / soap, road salt, etc. Please exercise caution when the aluminum hats are in contact with these substances.

Noise, Vibration, and Harshness (NVH):

High performance automotive components tend to create more noise, vibration and harshness when compared to OEM components. Most of our rotors utilize anti-rattle clips, but NVH is still possible. NVH related problems with the brake system can be caused by many factors including calipers and brake pads. The customer is responsible for any noise, judder, vibration, and harshness with the brake system.

CAUTION:

Paragon Performance 2-piece Rotors are pre-assembled and torqued to correct specifications prior to shipment. DO NOT re-torque. Paragon rotors do not require cleaning with brake cleaner or soap before installation.

Installation Instructions:

Step 1: Apply thermal paint to monitor rotor operating temperature (If applicable) before installation.

Step 2: Chock front or rear wheels (chock rear wheels if replacing front rotors). Raise vehicle and support with jack stands. NOTE: NEVER support vehicle with only floor jack. A floor jack IS NOT a jack stand.

Step 3: Remove wheel, and unbolt caliper. NOTE: It is not necessary to remove brake line. NEVER hang brake calipers by brake lines.

Step 4: Remove used rotor and OEM brake shield (if applicable) from wheel hub. Inspect and verify that the aluminum hat and wheel hub mounting surfaces are completely flat and clean, and free from any rust, burrs, dents and abnormal wear; otherwise these surfaces should be reconditioned. The rotor assembly should fit onto the wheel hub easily.

Step 5: Install new rotor assembly onto wheel hub.

NOTE: Paragon Performance rotors utilize curved directional ventilation vanes. In order for ventilation vanes to cool the rotors efficiently as designed, ventilation vanes must be facing the correct direction. Refer to Fig. 1 for the correct rotor rotation direction & placement. Use direction of ventilation vanes as reference points.

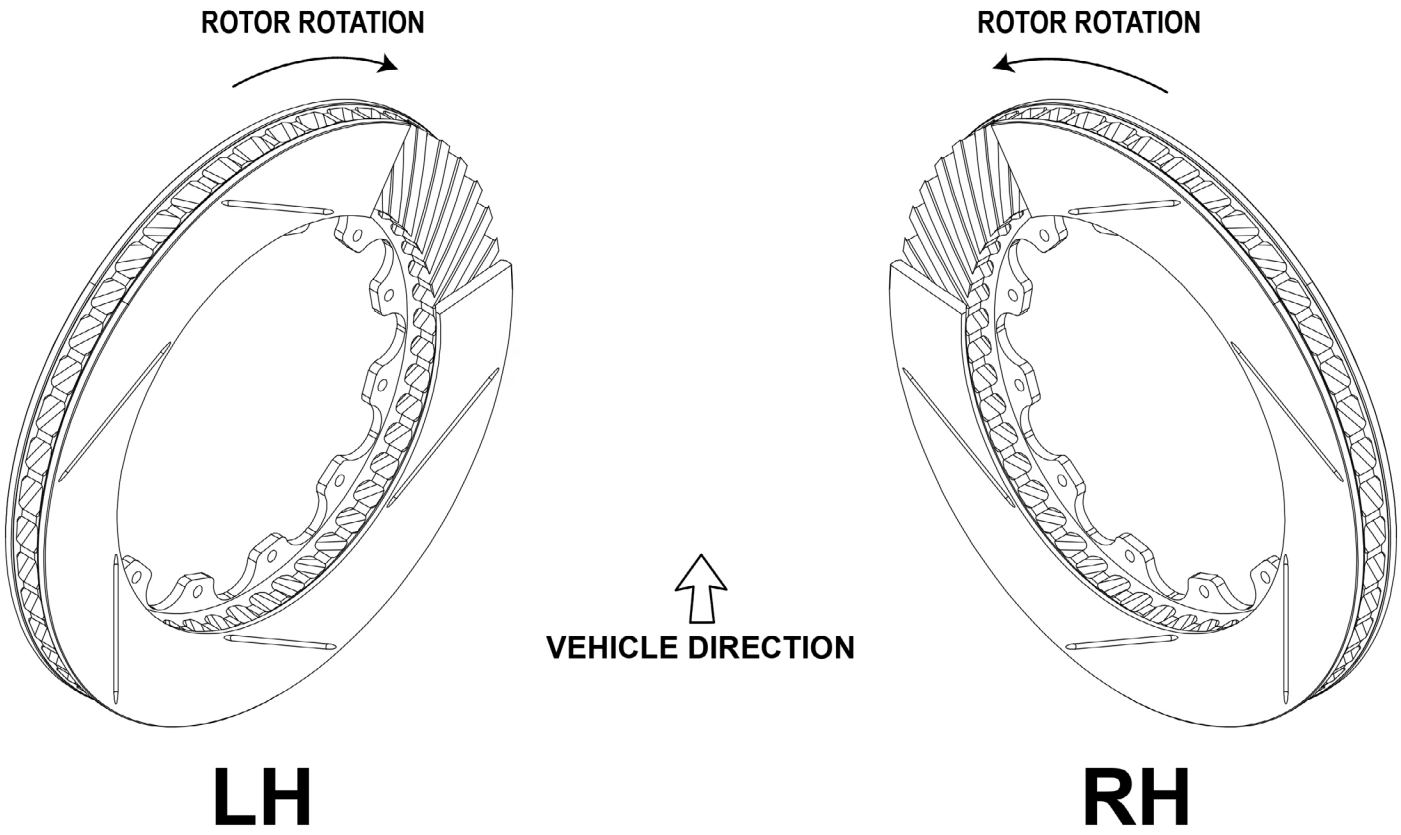

Fig. 1

Step 6: Re-install calipers, install brake pads, and torque bolts to factory specifications. Install wheels and torque to factory specifications.

Step 7: Repeat the procedure on the other corner(s) of the vehicle.

Step 8: Perform safety inspection before driving. Inspect and ensure proper clearance between brake pads, calipers, rotors, wheel hubs, and wheels. Inspect and ensure all bolts and wheel nuts are torqued properly. The wheels should be able to rotate freely without any residual torque.

Step 9: Lower vehicle and remove chocks. Drive vehicle at low speed with extra caution and ensure the brake system is functioning properly. Do not operate the vehicle if you notice any problems.

Inspection and Maintenance:

The following inspection and maintenance procedure is highly recommended before and after each race / track day. High performance brake components are consumable items that must be maintained to ensure safe and optimum results.

- Inspect rotors for fatigue, damage and wear.
- Inspect rotor surface (outside and inside). Refer to Fig 2. Check for cracks longer than 5 mm. Fine surface cracks (hairline cracks) shorter than 5mm are generally acceptable and are normal on rotors after heavy track use. In case the crack begins from the inside or outside diameter, even if the length is shorter, the rotor must be replaced.

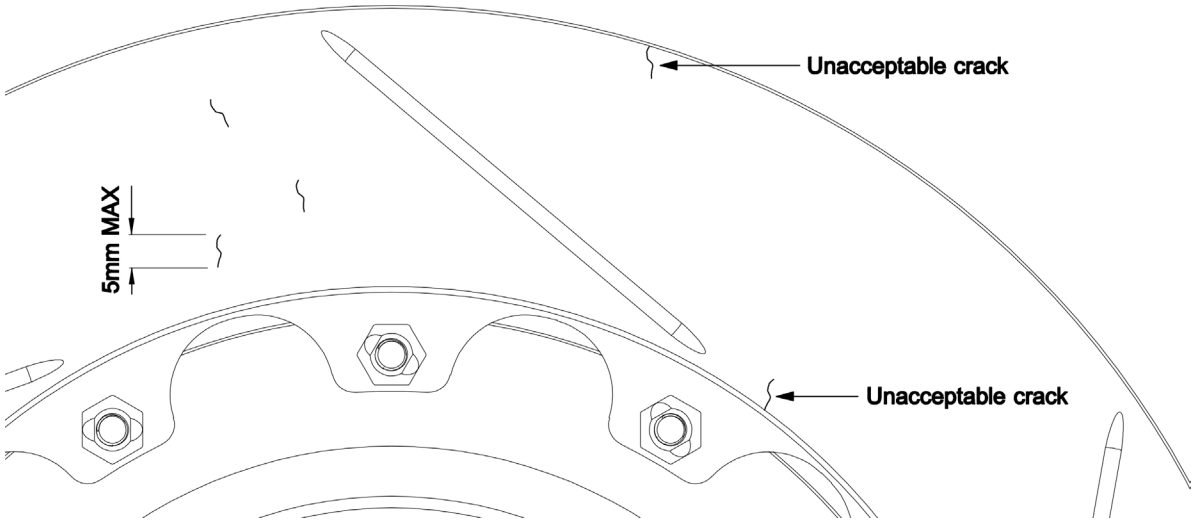

Fig. 2

- Measure and check if the rotor has reached / close to minimum rotor thickness. Minimum rotor thickness is engraved on the side of the rotor. DO NOT use rotor beyond minimum thickness. Replacement rotor rings are available for a competitive price.
- Inspect and ensure wheels rotate freely without any residual torque.
- Inspect and ensure proper clearance between brake pads, calipers, rotors, wheel hubs, and wheels.

General Bed-in Procedure:

WARNING:
Only perform bed-in procedure in a safe and controlled environment without any obstructions. Paragon Performance Products Inc. shall not be responsible for any damage, injury or death as a result of the bed-in procedure. Perform at your own risk. Start slowly at first with extra caution to make sure the brake system is functioning properly.

This is a general guideline and may not apply to all setups. Refer to the brake pad manufacturer's instructions for exact guideline.

The purpose of bed-in procedure is to mate the brake pads with the rotors to ensure full contact, establish proper and consistent friction surface (transfer layer), and release the organic binding material (resin) held inside the pads during manufacturing process. With proper bed-in, excellent brake modulation, pad and rotor wear, and stopping power can be achieved. This process can also help minimize brake judder and rotor cracking.

NOTE: Avoid holding on the brake pedal during complete stops, which may lead to imprinting. Avoid ABS Intervention. Do not drag brakes. Block off brake ducts if necessary to allow optimal bedding-in temperature.

Step 1: While the vehicle is stationary, pump the brakes to ensure a firm pedal.

Step 2: Drive the vehicle with utmost caution and ensure the brake system is working properly.

Step 3: Applying moderate brake pressure, make 6 to 10 stops to 5 MPH (8 KM/H) from approximately 30 to 35 MPH (48 KM/H to 56 KM/H). After each stop to 5 MPH (8 KM/H), immediately accelerate back up to speed and repeat the process.

Step 4: Make 2 to 3 stops to 5 MPH (8 KM/H) from approximately 40 to 45 MPH (64 KM/H to 72 KM/H). After each stop to 5 MPH (8 KM/H), immediately accelerate back up to speed and repeat the process.

Step 5: Cruise at 45+ MPH (72+ KM/H) for 10 minutes to allow the brake system to cool.

Step 6: Inspect the rotor visually. Make sure there is an even layer of wear on the entire rotor surface. Otherwise, repeat steps 3 to 6. The brakes may overheat quicker than expected, which may lead to glazing on the brake pads. Inspect rotors frequently. Do not apply emergency brakes right after bedding-in.

For more technical information, visit
https://www.paragonbrakes.com/technical-information/

If you need any assistance, please contact
technical support at tech@paragonbrakes.com

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