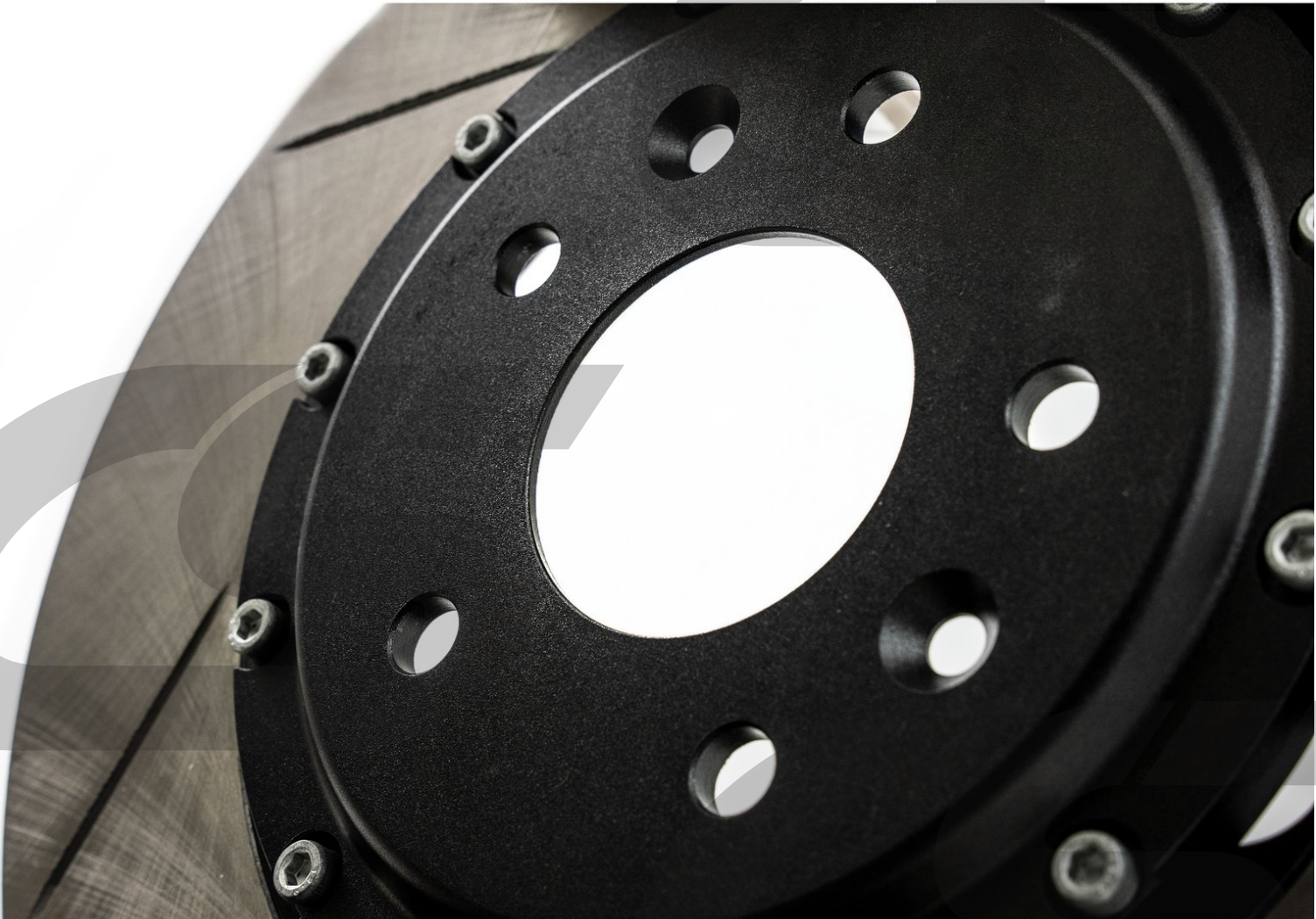


CorkSport Performance

GEN-3-413-18 Big Brake Kit Rotor Ring Replacement

Installation Instructions for the CorkSport Performance 13" Big Brake Kit Replacement Rotor Rings

Written By: Daniel Palomaki



INTRODUCTION

In this installation guide we have provided step by step instructions to remove the existing CorkSport rotors, install the new rotor rings, and reinstall the rotors.

Advisory:

- Working under the vehicle requires a safe and sturdy location for the vehicle to sit on jackstands.
- Pad bedding must be done properly to prevent braking issues. Follow the instructions carefully to prevent vehicle damage or personal injury.
- Proper inspection of the wheel clearance to the brake caliper must be performed to prevent damage to the caliper and/or wheel

The following brake pads series may operate with the CorkSport 13" BBK. Other brake pad manufacturers may have pad designs for this configuration that is not listed here:

Hawk – HB110 (HB110F.654 HPS, HB110B.654 HPS 5.0, HB110N.654 HP+, HB110W.654 DTC-30, HB110U.654 DTC-70)

G-Loc – GPX6

Brembo – B52

AP Racing – AP5200 & CP3215

Carbotech – CTCP3215

 **TOOLS:**

- Hydraulic Jack (1)
- Jack Stand (2)
- 3/8" Drive Ratchet (1)
- 1/2" Drive Breaker Bar (1)
- 3/8" Torque Wrench (1)
- 1/2" Torque Wrench (1)
- 17mm Socket - Deep (1)
- 21mm Socket - Deep (1)
- 5mm Allen Key Socket (1)
- 10mm Allen Key Socket (1)
- Wrench, 10mm (1)
- Shop Towels/Rags (1)
- Blue Threadlocker (1)
- Brake Clean Spray (1)
- Large Zip Tie (1)

 **PARTS:**

- CorkSport Left Side 330mm Brake Rotor Ring (1)
- CorkSport Right Side 330mm Brake Rotor Ring (1)
- CorkSport 330mm Rotor Ring Hardware Kit (1)

Step 1 — Getting Started



- First and foremost; **THANK YOU** for becoming a part of the CorkSport Family. We hope to bring you the highest level of Parts, Customer Service, & Support
- ⓘ How To Use These Instructions
 - The instruction format will relate colored marking in the image to the color dot in the text to the right of the image
- ⓘ The vehicle used in these instructions was a 2021 Mazda 3 Turbo. Other models will be very similar if not identical.
- ⓘ Throughout these instructions, if you get stuck, please see the install instructions that came with your BBK for more images
- ⓘ We recommend replacing brake pads at the same time as replacing the rotor rings. This ensures a good pad & rotor bedding

Step 2 — Lifting the Car & Removing the Front Wheel



⚠ Ensure the vehicle is parked on a level surface before proceeding.

- Start by lifting up the front of the car using the hydraulic jack and jack stands.

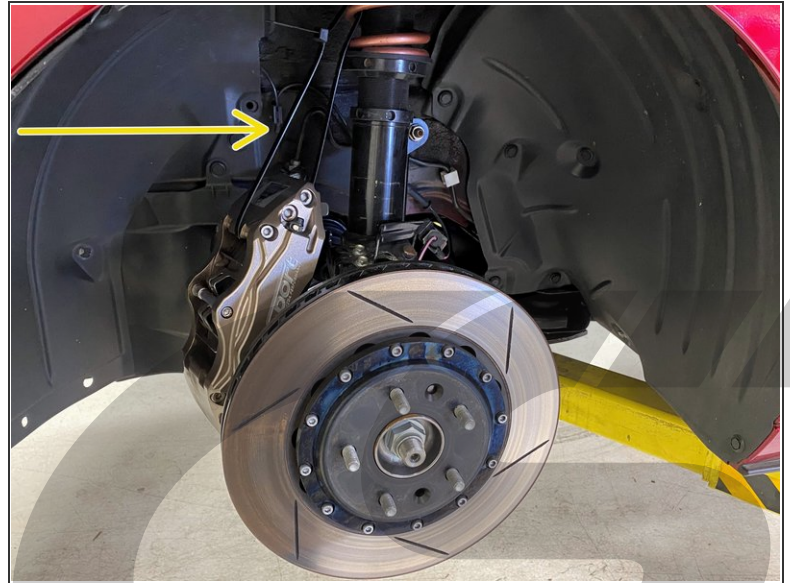
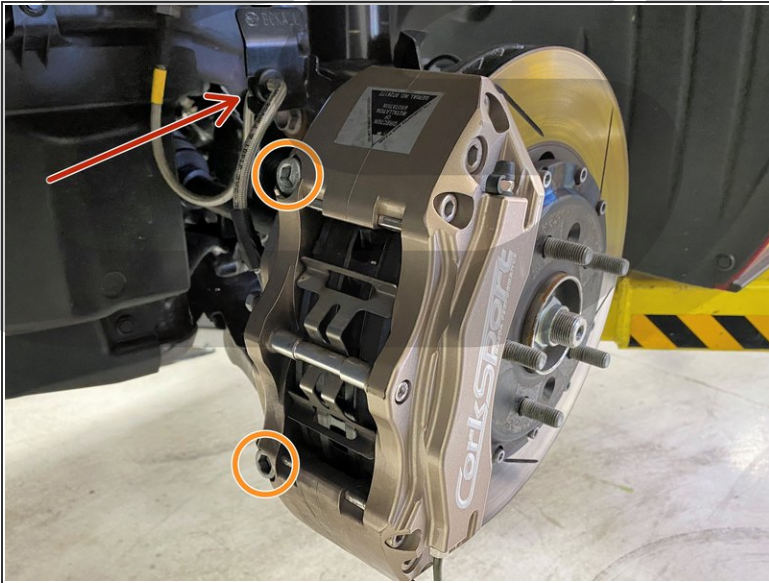
⚠ Be sure to reference your owners manual for jack points and the jack manufacturer's instructions for proper practices.

- Remove the front wheel from the vehicle using a 1/2" drive breaker bar or impact gun and 17mm or 21mm socket.

i 17mm or 21mm lug nuts present depending on year and model of your Mazda

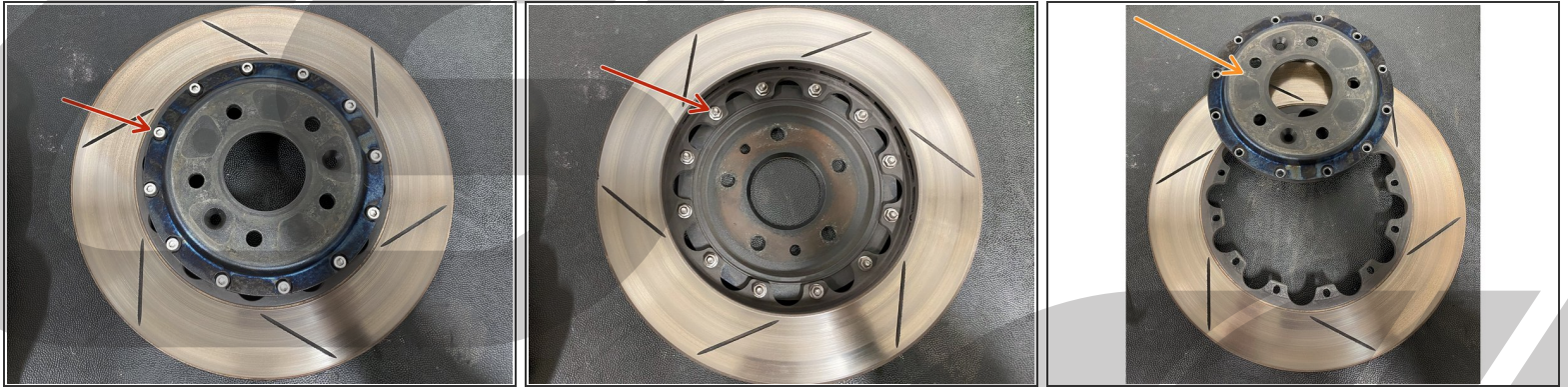
i A different socket may be required if you have aftermarket or locking lug nuts.

Step 3 — Removing & Securing the Brake Caliper



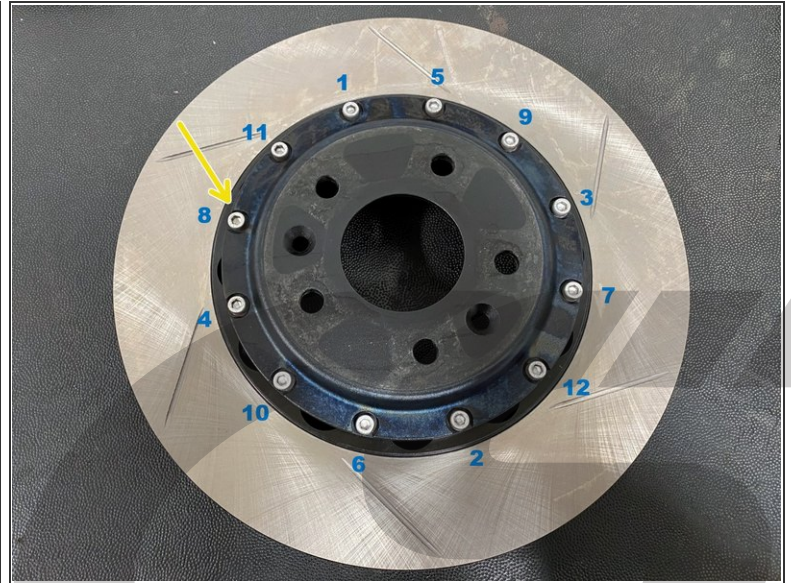
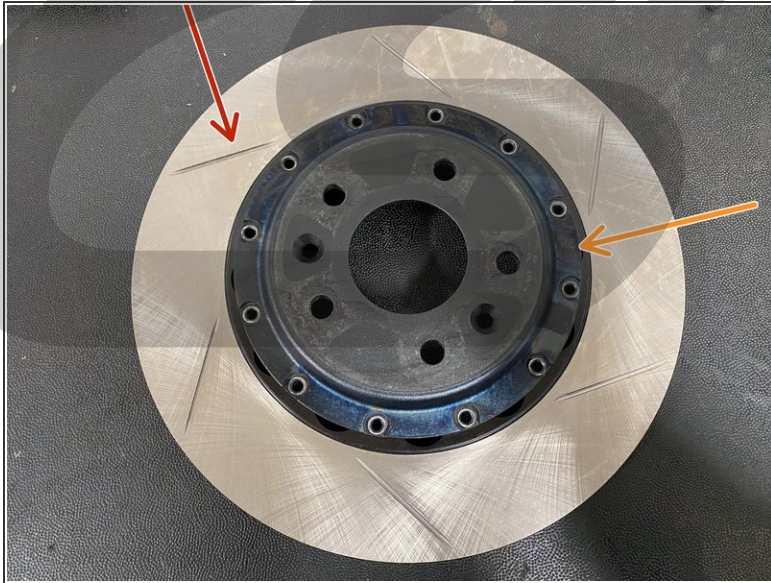
- Locate the front brake line. Follow it to the center and remove the brake line retainer from the bracket on the strut
 - ⓘ Some vehicles may have a rubber retainer, others will have a plastic fitting that will need to be unscrewed
- Before the next step, ready a large zip tie. We will use this zip tie to hold the caliper up and out of the way to avoid putting stress on the brake line
- ⚠ Once the next step is completed, the brake caliper will only be held on with the brake line. Use caution to not damage the brake line during this process
- Remove the two caliper mounting bolts using a 10mm Allen wrench/socket
- Lift the brake caliper off the rotor and secure the caliper up and out of the way using a large zip tie.
 - ⓘ We attached our zip tie to the spring of the suspension

Step 4 — Rotor Removal & Disassembly



- The rotor rings shown in the images do not yet need to be replaced. They were only disassembled for these install instructions
- Remove the rotor from the vehicle
- Using a 5mm Allen wrench/socket and a 10mm wrench, remove all 12 bolts & nuts that connect the rotor hat and rotor ring
- ⓘ Backside of rotor shown in second image
- ⓘ New hardware is provided so the old hardware can be discarded
- Clean all surfaces of the aluminum hat with brake parts cleaner to remove brake dust and road grime

Step 5 — New Rotor Ring Installation



- Verify the new rotor ring is for the correct side of the vehicle. For example, the ring shown is for the LEFT side. Opposite side rotor rings will have the slots facing the other direction
- Line up the rotor hat with the new rotor ring
- Install all supplied new bolts/nuts and tighten until snug
- Torque each bolt/nut to **12ft-lbs.** using the order shown in the third image

Step 6 — CorkSport Big Brake Kit Reassembly



- Install the CorkSport brake rotor onto the vehicle
 - ⓘ If needed to help keep the brake rotor in position for the next step, you can loosely tighten a lug nut against the brake rotor
- Clean off the threads of the caliper mounting bolts so they are free from old threadlocker
- Apply new threadlocker to the caliper mounting bolts
- Cut the zip tie holding the brake caliper and remount the caliper using the existing caliper mounting bolts
- Tighten caliper mounting bolts to **64-71ft-lbs** using a 10mm Allen socket
- Reinstall the brake line retainer onto the bracket on the strut

Step 7 — Repeat for Opposite Side



- Repeat steps 2-6 for the opposite side of the vehicle
- If replacing brake pads, please do so at this time

Step 8 — Final Reassembly



- Reinstall your wheels onto the vehicle
- Torque your wheels in a star pattern to 80-90ft-lbs using a 17mm or 21mm socket and torque wrench
- ⓘ A different socket may be required if you have aftermarket or locking lug nuts.

Step 9 — Brake Pad Bedding



- ① In order for your brake pads & rotors to wear evenly, you must complete the following procedure to "bed" in the pads & rotors
- ① Carefully drive to an open road with no cars around. You will be performing many accelerations & stops. Do not attempt to stomp on the brakes right after install
- ① You may notice a brake smell and/or some smoke during this operation. This is normal as the brakes will get very hot during bedding
 - Accelerate until ~30MPH. Brake smoothly and evenly until almost stopped and then again accelerate to ~30MPH
 - Repeat the previous step ~10 times
 - Accelerate to ~45MPH. Brake much more aggressively until almost stopped. Then accelerate again until ~45MPH
 - Repeat the previous step ~3 times
 - Drive the car around for 15 minutes to let the brake system cool. The less you use the brakes the better

Step 10 — Installation Complete



- After bedding, you are now able to drive normally! Some brake squeaking is normal with the CorkSport BBK
- This completes your installation of the CorkSport Performance 13" Big Brake Kit Replacement Rotor Rings!
- Contact us with any questions or concerns at sales@corksport.com or (360) 260-2675.
- Please leave a review here: <https://corksport.com/13-inch-big-brake-...>
- Share your experience using #CorkSport on Instagram, Facebook, and Twitter.