

CorkSport
MAZDA PERFORMANCE

INSTALLATION INSTRUCTIONS



CORKSPORT Stage 2 13" **BIG BRAKE KIT**

2006-2007 Mazdaspeed 6, 2003-2008 Mazda 6

PART #: ATE-3-413-10

Need Help With Your Installation? Call (360)260-CORK



*We absolutely, positively,
deliver - every time.*

CORKSPORT.COM

PAGE 1



CORKSPORT Stage 2 13" BIG BRAKE KIT

2006-2007 Mazdaspeed 6, 2003-2008 Mazda 6

PRODUCT DESCRIPTION:

The CorkSport 13" Big Brake Kit for Mazdaspeed 6 provides a drastic improvement to braking by offering improvements to each component present in the stock system. Larger rotors, 4-piston calipers, stainless steel brake lines, upgraded pads, and everything you need to install it on your Speed 6 is included in this kit. If the CorkSport Big Brake Caliper Kit was not enough for you and your ride, look no further than the CorkSport 13" BBK.

Please let us know your feedback of the by submitting a review at: <https://corksport.com/13-big-brake-kit-for-2006-2007-mazdaspeed-6-and-2003-2008-mazda6.html>

PRE-INSTALLATION NOTES:



Verify that the car is on a level surface before proceeding. Use appropriate load rated jack stands to support the vehicle.



These instructions were written for reference only and the use of a factory service manual is recommended.



How our instructions work: To best cover all of our customers experience levels, we have included a table of contents/order of operations along with step-by-step instructions.



These instructions were written using a 2007 Mazdaspeed 6. Earlier Mazdaspeed 6 will be similar.



There will be slightly increased noise while braking due to the upgraded pads.



Wheel spacers are required for OE wheels and some aftermarket wheels.

MATERIALS & TIME:

GENERAL INFO:



Time Est:
3hr



Difficulty:
3/5



CEL:
No



Warranty:
2-Year

TOOLING LIST:

- 3/8" Drive Ratchet
- 1/2" Drive Breaker Bar
- 1/2" Drive Torque Wrench
- 12mm Socket
- 17mm Socket
- 21mm Socket
- 10mm Allen Socket
- 10mm Line Wrench
- 17mm Wrench
- 19mm Wrench
- Hydraulic Jack
- Jack Stands
- Drip Pan
- Dead blow hammer
- Phillips Screwdriver
- Blue Loctite
- 5/32" hose
- Brake Fluid
- Plastic Bottle

PARTS LIST:

- One (1) CorkSport Left Side 330mm Brake Rotor
- One (1) CorkSport Right Side 330mm Brake Rotor
- One (1) CorkSport Left Side Brake Caliper
- One (1) CorkSport Right Side Brake Caliper
- Two (2) Caliper Mounting Brackets
- Two (2) Stainless Steel Brake Lines
- Two (2) M10 Banjo Bolts
- Four (4) Crush Washers
- Four (4) M12x35mm Socket Head Cap Screws
- Four (4) M12x60mm Socket Head Cap Screws
- Four (4) Large Washers
- Four (4) Small Washers
- One (1) Bottle of Touch-Up Paint

ORDER OF OPERATIONS & TABLE OF CONTENTS:

-  **OEM BRAKE REMOVAL**
Section 1: OEM Brake Removal Pg. 4-5

-  **CORKSPORT 13" BBK INSTALL**
Section 2: CorkSport Rotor & Caliper Install Pg. 5-6
Section 3: CorkSport Brake Line Install Pg. 6-7

-  **CORKSPORT BBK SETUP**
Section 4: CorkSport Brake Bleed Pg. 8
Section 5: CorkSport Brake Pad Burnish Pg. 8

ROTOR ROTATION IDENTIFICATION:

DRIVER SIDE ROTOR



PASSENGER SIDE ROTOR



DETAILED INSTRUCTIONS:

1. OEM Brake Removal



Verify that the car is on a level surface before proceeding. Use appropriate load rated hydraulic jack and jack stands to support the vehicle.

a) Engage the parking brake and raise the front of the vehicle with a hydraulic floor jack, then support with jack stands.



Please refer to the owners manual for proper jack stand location.

b) Remove the driver-side wheel with a 21mm socket and impact wrench/breaker bar. Other sockets may be needed depending on your lug nuts.

c) Free the brake line from the strut mount using a 12mm socket or wrench to remove the bolt. Shown with red circle in Figure 1b.



When releasing brake fluid, catch it with a drip pan. Brake fluid can take off paint and coatings so be cautious if the fluid is spilled. Using a small vacuum cap will prevent any unnecessary fluid leakage.

d) Remove the 10mm brake line bolt using a 10mm line wrench. Brake line bolt shown with red circle in Figure 1c.

e) Free the brake line from the chassis mount using a 12mm socket or wrench to remove the bolt. Shown with blue circle in Figure 1c.



Figure 1a

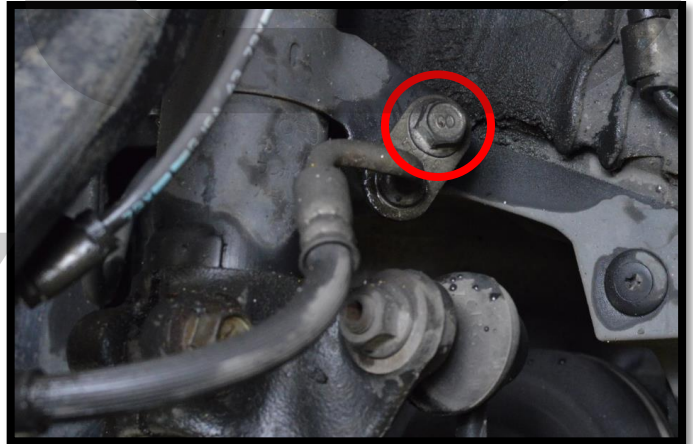


Figure 1b

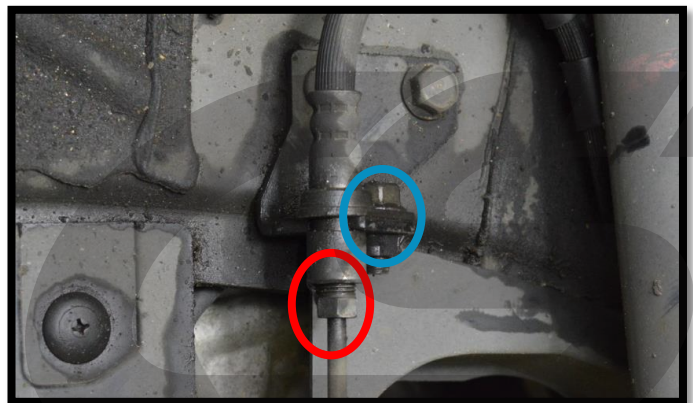


Figure 1c

DETAILED INSTRUCTIONS:

1. OEM Brake Removal (continued)

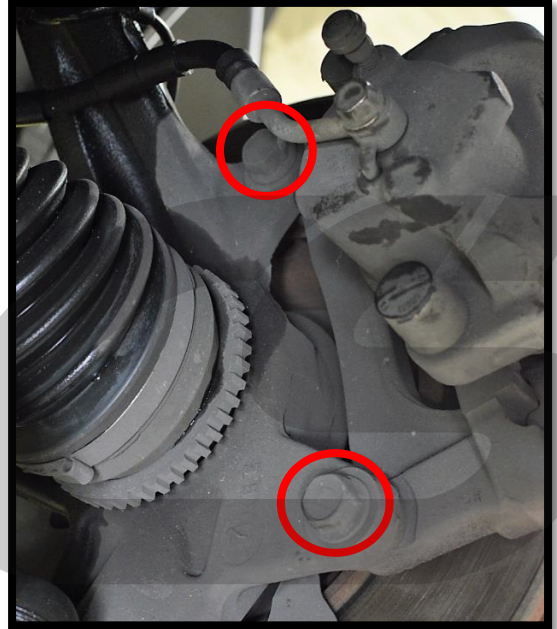
f) Remove the two 17mm bolts from the back of the caliper using a long 17mm wrench or breaker bar with 17mm socket. Bolts shown with red circles in **Figure 1d**.

g) Remove the OEM caliper from the vehicle. The OEM brake line will come with it.

h) Remove the two OEM Philips head screws from the OEM rotor hat. They hold the rotor to the vehicle. (if your vehicle does not have these screws, they are not necessary)

i) Remove the OEM rotor from the vehicle by pulling straight out. You may need to hit the rotor with a dead blow hammer or rubber mallet to help dislodge it from the hub.

Figure 1d



2. CorkSport Rotor & Caliper Install

a) Apply blue Loctite or similar thread locker to two supplied M12x35mm bolts.

b) Install a CorkSport caliper bracket using a 10mm Allen socket and the hardware from above. Use one large washer for each bolt. Ensure the flat portion of the bracket faces outward. **Figure 2a** shows the proper bracket orientation. **Torque the bolts to 64-71 ft-lbs.**

Figure 2a

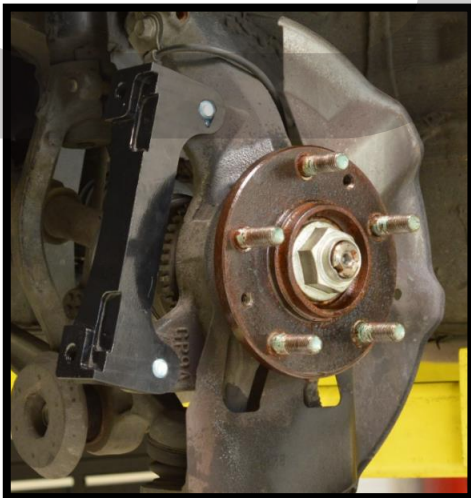
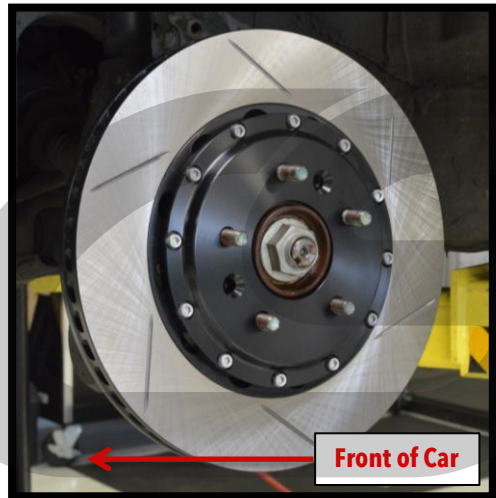


Figure 2b



DETAILED INSTRUCTIONS:

2. CorkSport Rotor & Caliper Install (continued)

c) Install the left side CorkSport brake rotor. **Figure 2b** on the previous page shows the correct rotor for the left side of the vehicle. If your vehicle has them, reinstall the two OEM counter-sunk screws to secure the brake rotor to the hub (the CS test vehicle did not have these screws and they are not necessary for proper brake operation).

d) Apply blue Loctite or similar thread locker to two supplied M12x60mm bolts.

e) Install the left side CorkSport brake caliper using an 10mm Allen socket and the hardware from above. Use one small washer for each bolt. Ensure the bleed screws face upwards and the sticker matches the direction of forward rotation. **Figure 2c** shows the bolt locations with **red circles** and correct sticker orientation with a **green arrow**. **Torque the bolts to 64-71 ft-lbs.**

Figure 2c

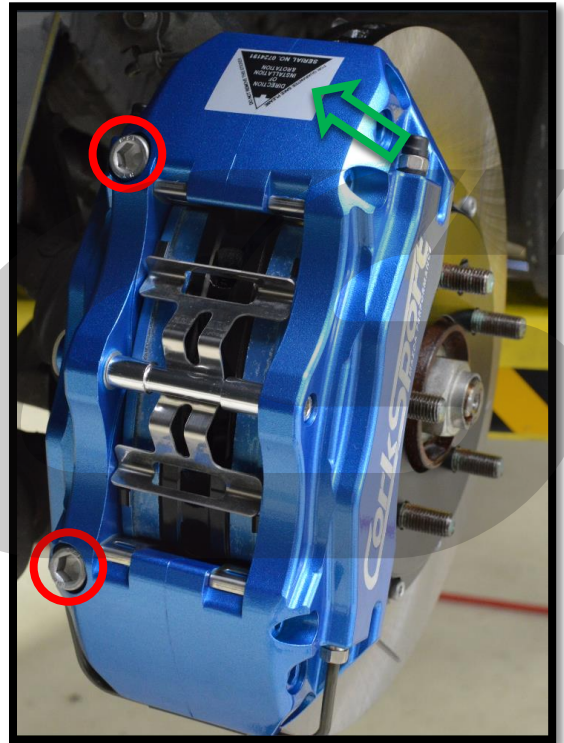
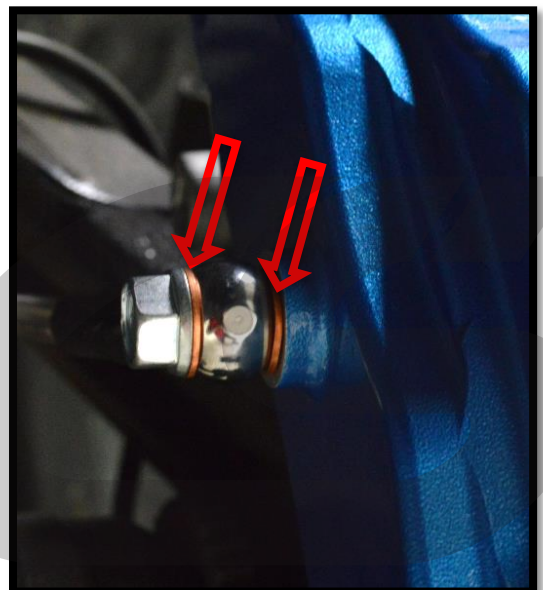


Figure 3a



3. CorkSport Brake Line Install

a) Attach one CorkSport brake line to the caliper using one supplied banjo bolt and two crush washers. Route the line above the axle shaft, below the knuckle, just like the OE line. **For now, only tighten the banjo bolt finger tight.** **Figure 3a** shows correct crush washer locations with **red arrows**.



Improper positioning or failure to use crush washers will cause your brakes to leak and potentially fail.

DETAILED INSTRUCTIONS:**3. CorkSport Brake Line Install
(continued)**

b) Remove the plastic 22mm locknut from the fitting located in the center of the brake line (**red circle** in **Figure 3b**). Also, loosen the 19mm plastic retaining nut (**blue arrow**) to allow the fitting to move along the brake line.

c) Slide one of the brake line brackets over the plastic threads. See the **green arrow** in **Figure 3b** for clarity.

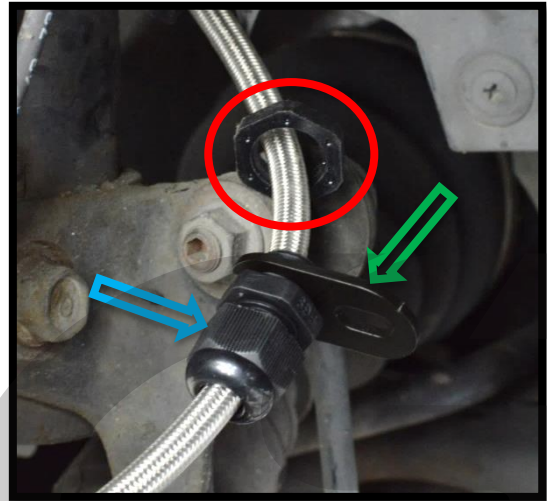
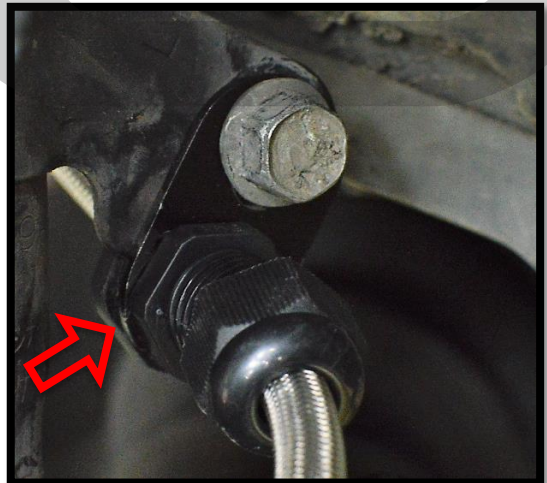
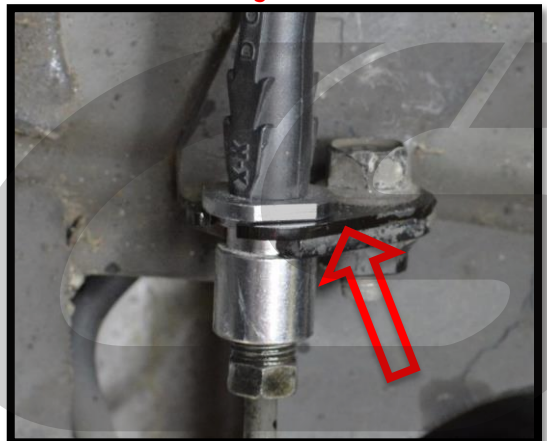
d) Attach the brake line bracket to the OE strut mount by reusing the OE 12mm bolt. Tighten until snug. **Figure 3c** shows the bracket attached to the strut.

e) Tighten the plastic 22mm locknut. Sandwich the brake line bracket and strut mount between the two sections of the plastic fitting. Tighten hand tight. The **red arrow** in **Figure 3c** shows the locknut tightened.

f) Slide another brake line bracket over the end of the brake line. Bracket shown with **red arrow** in **Figure 3d**.

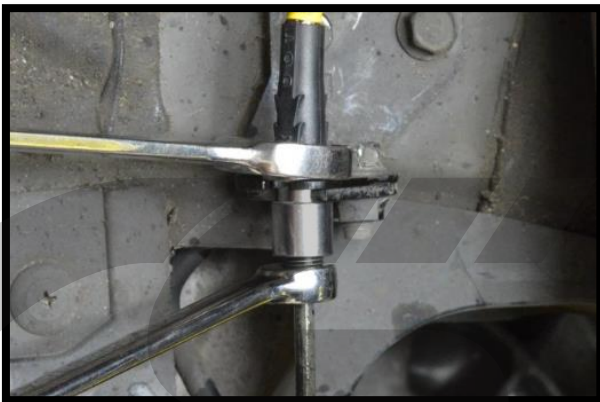
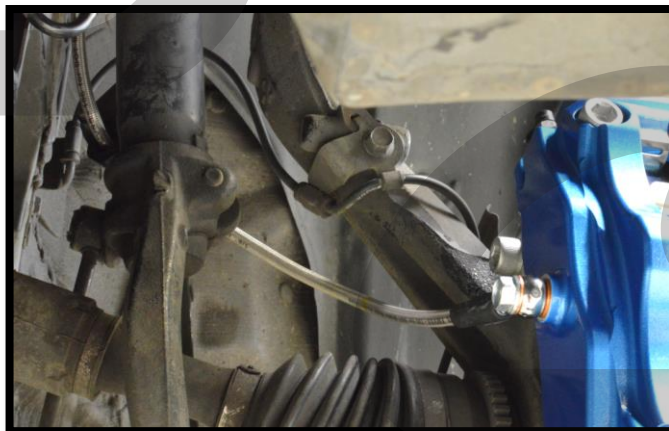
g) Attach the bracket and brake line to the chassis of the vehicle by reusing the OE 12mm bolt. Tighten until snug. The round metal end of the brake line will slide into the round cutout on the chassis.

h) Screw the OE hard line fitting into the CorkSport brake line. Shown completed in **Figure 3d**.

**Figure 3b****Figure 3c****Figure 3d**

DETAILED INSTRUCTIONS:**3. CorkSport Brake Line Install (continued)**

- i) Tighten the CorkSport Brake Line to the OE hard line fitting using a 10mm line wrench and 17mm wrench. Procedure shown in **Figure 3e**.
- j) Position the brake line so that it has good clearances from all suspension and driveline components. If needed, you can push/pull the line through the plastic fitting to gain more slack where needed.
- k) Tighten the 19mm plastic retaining nut to lock the brake line in place. Shown tightened in **Figure 3f**.
- l) Tighten the banjo bolt to 15-19 ft-lbs with a 14mm socket. Do not over tighten. While tightening, ensure the line retains good clearances to all suspension and driveline components. (shown in **Figure 3g**)
- m) Repeat all steps in sections 1-3 for the opposite side of the vehicle.

**Figure 3e****Figure 3f****Figure 3g**

DETAILED INSTRUCTIONS:

4. CorkSport Brake Bleed



For best results, always start with the bleed screw located the furthest away from the master cylinder and work your way closer. There are two bleed screws for each caliper. Start with the outer bleed screw on the passenger side, then passenger inner, driver outer, and finally driver inner.

Brake Bleeding: You will need a friend, a short section of 5/32" diameter hose, and a plastic bottle. Put one end of the hose on the bleed screw and the other in the bottle. Have your friend pump the brake pedal 3-5 times until there is sufficient pedal pressure. Then, have them hold the brake pedal firmly as you loosen the bleed screw. The pedal will go to the floor while fluid and air will enter the bottle. Make sure your friend holds the pedal down as you retighten the bleed screw. Repeat the procedure around 3 times per bleed screw, or until you are confident there is no air in the system. Check that your brake fluid level is at "full" after each bleed screw.

Once completed, ensure there are no fluid leaks before driving.



Carefully install the wheels onto the studs. Check the clearance between the brake caliper and the wheel spokes. You need a minimum of 2-3mm of clearance between the caliper wheel spoke when the wheel lug nuts are correctly torqued. Torque lug nuts to 66-86ft-lbs.

5. CorkSport Brake Pad Bedding



Follow the steps below to slowly heat and cool the brakes. Do not attempt to stomp on the brakes right after install.

- a) Find an open road and accelerate to about 30MPH.
- b) Brake evenly and smoothly until almost stopped, then accelerate to 30MPH again.
- c) Repeat steps 5a and 5b roughly 10 times.
- d) Repeat steps 5a and 5b but accelerate to 45MPH and stop much quicker.
- e) Repeat step 5d 2-3 times.
- f) Allow 15 minutes for the system to cool. You are now able to brake normally.



This completes the installation of your CorkSport Big Brake Kit.
Enjoy the upgraded braking performance and improved pedal feel!

WHAT'S NEXT?

CorkSport Adjustable Shock/Strut Assembled Package

Give your Mazdaspeed6 the performance appearance and edge you have been looking for with the CorkSport Lowering Springs for the Mazdaspeed6. By reducing ride height approximately 1.5" in the front and 1.6" in the rear, adding the CorkSport Lowering Springs to your Mazdaspeed 6 will result in a quicker turning response, crisper road feel, a more aggressive appearance, and a firmer spring rate, all while maintaining excellent ride quality.



CorkSport Mazdaspeed Turbocharger

Experience a boost in performance with our drop-in Mazdaspeed turbocharger. It easily bolts in and replaces your undersized OEM turbo with NO mechanical modifications. The CorkSport turbo supports a range of 250-450 horsepower in your Mazdaspeed. If your Mazdaspeed 3 or Mazdaspeed 6 turbo is worn out or is smoking, you need our turbo. Add the power without the hassle today!



CorkSport Mazdaspeed Camshafts

The CorkSport Mazdaspeed Performance Camshafts are developed with the latest design, manufacturing, and casting technologies and ground to CNC precision for the best performance for your Mazdaspeed. Near factory idling cams for the daily driver and even the aggressive track driver bringing improvement in throttle response and torque to your Mazdaspeed.

