

INSTALLATION INSTRUCTIONS



CORKSPORT Stage 1 4 Piston Caliper KIT 2006-2007 Mazdaspeed 6

PART #: **ATE-3-412-10**



We absolutely, positively, deliver – every time.

CORKSPORT.COM

PAGE 1





CORKSPORT Stage 1 4 Piston Caliper KIT 2006-2007 Mazdaspeed 6

PRODUCT DESCRIPTION:

The CorkSport 4 Piston Caliper Kit for Mazdaspeed 6 provides an improvement to braking by offering improvements to each component present in the stock system. 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.

Please let us know your feedback of the by submitting a review at: https://corksport.com/mazdaspeed-6-big-brake-caliper-kit.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.

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
- 14mm Socket
- 17mm Socket
- 21mm Socket
- 8mm Allen Socket
- 10mm Allen Socket
- 10mm Line Wrench
- 17mm Wrench
- 19mm Wrench
- Hvdraulic Jack
- Jack Stands
- Pliers
- Flathead Screwdriver
- Drip Pan
- Dead blow hammer
- Blue Loctite
- 5/32" hose
- Brake Fluid
- Plastic Bottle

PARTS LIST:

- 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) M10x50mm
 Socket Head Cap Screws
- Four (4) Large Washers
- Four (4) Small Washers



ORDER OF OPERATIONS & TABLE OF CONTENTS:

	OEM BRAKE REMOVAL Section 1: OEM Brake Removal	Pg. 4-5
	CORKSPORT CALIPER INSTALL Section 2: CorkSport 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



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



Fiaure 1b

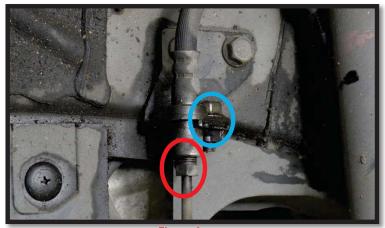


Figure 1c



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.



Check the OEM Rotors for wear and cracking. Replacing or resurfacing the rotors is highly recommended.

Figure 1d



2. CorkSport 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 2b shows the proper bracket orientation. Torque the bolts to 64-71 ft-lbs.

Figure 2a



Figure 2b

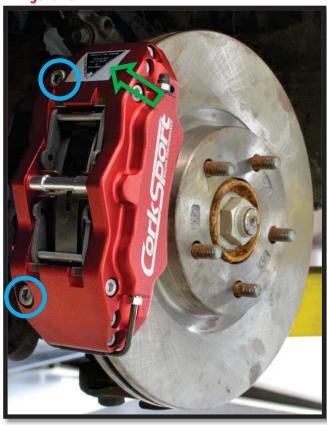




2. CorkSport Caliper Install (continued)

- d) Apply blue Loctite or similar thread locker to two supplied M10x50mm bolts.
- e) Install the left side CorkSport brake caliper using an 8mm 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 blue circles and correct sticker orientation with a green arrow. Torque the bolts to 64-71 ft-lbs.

Figure 2c



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 blue arrows.



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

Figure 3a





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



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.
- I) 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



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.

Method 1 (Preferred): 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 your are confident there is no air in the system. Check that your brake fluid level is at "full" after each bleed screw.

Method 2: You will need a two foot 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. Fill the bottle with enough brake fluid to submerge the end of the hose. Loosen the bleed screw and pump the brake pedal until there are no more bubbles coming from the hose in the plastic bottle. Tighten the bleed screw. Before moving on to the next bleed screw, ensure that your brake fluid level is at "full".



Once completed, ensure there are no fluid leaks before driving and remember to torque your 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 4-piston Caliper Kit. Enjoy the upgraded braking performance and improved pedal feel!



WHAT'S NEXT?

CorkSport Lowering Springs

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.

