

Part # AXM-3-411

CorkSport
MAZDA PERFORMANCE

CorkSport Mazda 3/6/Cx5 4 Piston Caliper Brake Kit

2014+ Mazda 3/6, 2013+ Cx5



This Package should contain:

- 1. Driver Side Caliper
- 2. Passenger Side Caliper
- 3. Brake Rotors
- 4. Brackets
- 5. Caliper & Bracket Bolts
- 6. Stainless Steel Brake Lines
- 7. Banjo bolts with crush washers

Please note: calipers will come fully assembled with street compound pads



CorkSport Mazda 3/6/Cx5 4 Piston Caliper Brake Kit

2014+ Mazda 3/6, 2013+ Cx5



Thank you for purchasing the CorkSport 4 Piston Caliper Kit. CorkSport Big Brake Kit provides the ultimate in stopping power for your Mazda. Crafted from extremely lightweight billet aluminum, the CorkSport calipers use an opposed piston design that is fixed to provide greatly improved pad wear, and caliper rigidity over the OEM design. We hope you enjoy your new CorkSport Brake Kit. Please let us know your feedback at: <http://corksport.com/2014-mazda-3-big-brake-kit.html>

Pre-Installation Notes:



Make sure your vehicle is completely cooled down prior to starting installation. If you are going to work on your car within an hour or two of having driven it, use a fan to cool off the car.



These instructions were written for reference only and the use of a factory service manual is recommended. Please read these instructions thoroughly prior to starting installation



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



These installation instructions were written using a 2015 Mazda 3 GT. Other year Mazda 3/6 and Cx5 models will be similar.

Materials and Time:



General Info.

Part #: AXM-3-411-10
Time Est: 1.5 hours
Wrench Rating: 4/5



Tooling List

10mm flare nut wrench
3/8" Drive Ratchet
1/2" Drive Ratchet
Pliers
Flat Head Screw Driver
Brake Fluid
Small ID Hose
Blue Loctite
Drain Pan
Torque Wrench



Parts List

One (1) CorkSport Caliper Set
One (1) CorkSport Bracket Set
One (1) CorkSport Brake line Set
One (1) CorkSport Slotted L Rotor
One (1) CorkSport Slotted R Rotor
Four (4) M12 Allen Head Bolts
Four (4) M14 Allen Head Bolts
Two (2) Banjo Bolts
Four (4) Crush washers

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



Order of Operations & Table of Contents



Lift and Support your Mazda

Section 1: Jacking and Support with Jack stands.

Pg. 2



Installation of the Brakes

Section 2: Install the CorkSport Calipers.

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Bleeding the brakes

Section 3: Bleeding the brakes.

Section 4: Bedding the brake pads.


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Detailed Instructions

1. Support the Car on Floor Jack/ Jackstands or Lift


Use a floor jack and jackstands to gain access to the underside of the vehicle

 Always refer to the floor jack and jackstand manufacturers instructions as well as the factory owners manual for your vehicle to determine jacking points and support points. Alternately, use an automotive lift to gain access to the underside of the vehicle. Redundant support mechanisms are recommended.

2. Install the Front CorkSport Brake Calipers

a) Remove the front drivers wheel from the vehicle using an impact wrench or 1/2" drive ratcheting wrench (or breaker bar) and 21mm socket (or other if using locking lug nuts).

b) Free the brake line using pliers or a screw driver to remove the clip from the brake line mount on the strut (shown by the red circle in Figure 2a.)

 When releasing brake fluid make sure to catch it with a pan. Brake fluid can take off paint and coatings so be cautious when performing this step.

c) Remove the one (1) 10mm brake line bolt using a 10mm line wrench. Line wrench and brake line shown in Figure 2b).

d) Free the brake line using pliers or a screw driver to remove the clip from the brake line mount on the body (shown by the red arrow in Figure 2b.)

e) Remove the two 17mm bolts from the back of the caliper and remove the caliper and rotor. A long 17mm wrench makes this easy. Shown with red circles in Figure 2c.

f) To install the caliper brackets you will need blue Loctite and the provided M14x1.5 Allen head bolts. Simply put a small amount of blue Loctite on the threads of the M14 bolts. Shown In Figure 2d.



Figure 2a

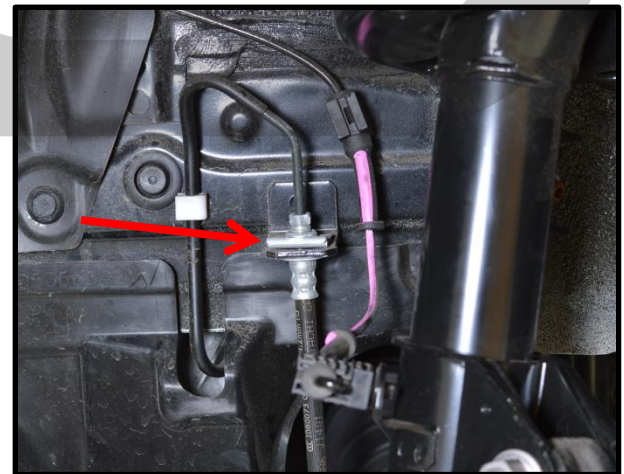


Figure 2b



Figure 2d

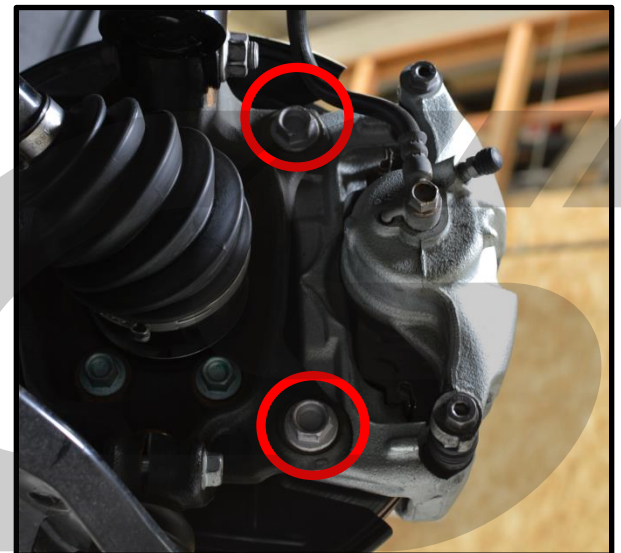


Figure 2c

2. Install the Front CorkSport Brake Calipers Continued

- g) **Install the Bracket using the provided M14 Allen head bolts.** Make sure the flat side of the bracket is faced towards the rotor. Shown in **Figure 2e** with rotor removed to make this more visible. Tighten with a wrench and then torque to 64-71ft.lbs.

- h) **Install the brake rotor.** Make sure the slots facing towards the front of the car, see **Figure 2f**.

- i) **Install the caliper using the provided M12 Allen Bolts.** Tighten with 10mm Allen socket to 64-71ft.lbs. There is a left and right caliper. Make sure the bleeder valves face up. Bleeder valve shown circled in **Figure 2f**. Drivers side shown for reference.

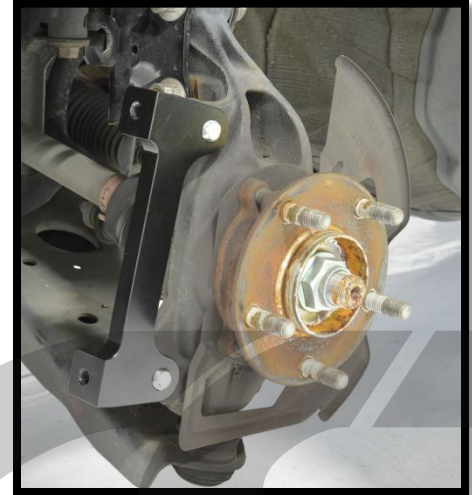


Figure 2e

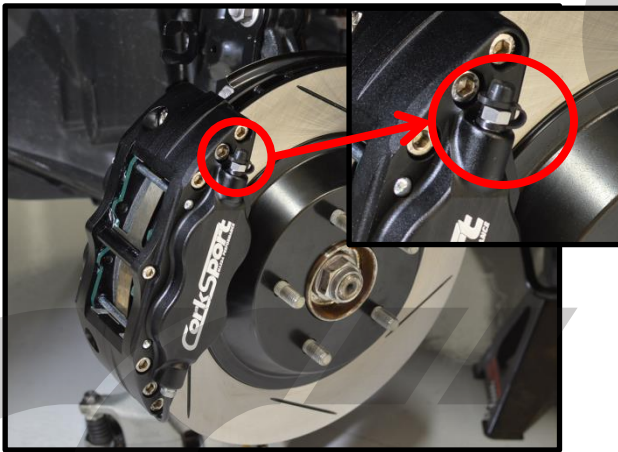


Figure 2f



Figure 2g

- j) **Install the brake line by starting at the caliper. Install the line with provided banjo bolt and two crush washers.** Make sure the line is facing towards the top of the caliper and tighten to 15-19 ft-lbs. Shown **Figure 2g**.

- k) **Next tighten the 10mm fitting at the chassis.** Install the brake line into the chassis bracket and secure it with the original brake line clip shown in **Figure 2h**. Tighten to 10-15ft.lbs.

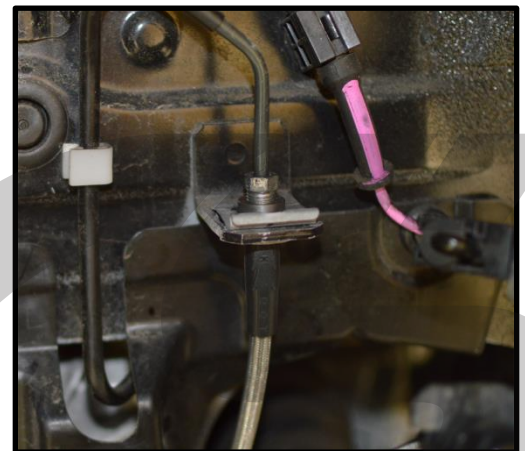


Figure 2h

2. Install the Front CorkSport Brake Calipers Continued

- l) **Install the brake line in the factory holder attached to the strut.** The top portion of the holder unscrews. This can be tightened in place with a wrench but do not over tighten. The other end nut can be tightened by hand. This keeps the line from sliding back and forth. Shown **Figure 2j**.

- m) **Repeat Step 2 Procedure for Passenger side of vehicle.**

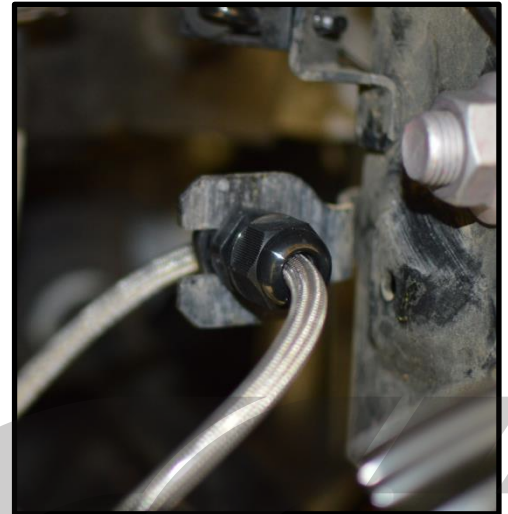


Figure 2j

3. Bleed the Brake Lines



Always start with the outside bleeder to ensure best results. Remember there are two bleeders per caliper so you will need to check each one. Outside and inside bleeds are shown in Figure 3a.

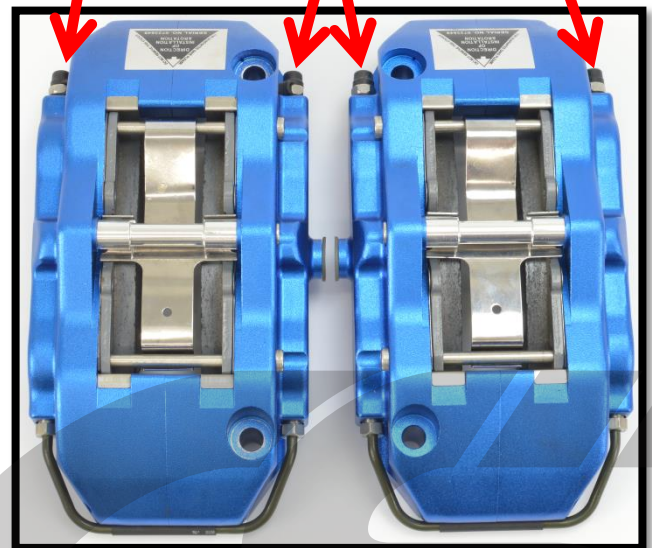


There are two methods provided for bleeding. If you have a friend with you, the second Method is faster and more preferred for accurate bleeding.

Method #1 is to get a two foot section of 5/32 diameter hose and a 1 liter plastic bottle. Put the hose on the end of the bleed screw. Put the other end of the hose in the 1 liter bottle. Fill the bottle with enough brake fluid to submerge the end of the hose. Loosen the brake bleed screw and make sure the hose stays attached to the end of it. Pump the brake pedal in the car until there are no bubbles coming from the hose in the 1 liter bottle. Tighten the bleed screw then remove the rubber hose. Check the brake fluid level in the master cylinder and keep it at the full line after bleeding each caliper, starting with the Passenger side because it is the furthest from the master cylinder.

Method #2 requires two people, a two foot section of 5/32 diameter hose, and a 1 liter plastic bottle. Put the rubber hose on the bleed screw and the other end in the 1 liter bottle. Have the extra person pump the brake pedal until there is pedal pressure. Have the extra person hold the pedal with pressure while you loosen the bleed screw. The pedal will go to the floor. Have the extra person hold the pedal to the floor until you tighten the bleed screw. Repeat the procedure 3 times per caliper. Check the brake fluid level and keep it at the full line after bleeding each caliper, starting from the farthest from the master cylinder.

Outside Bleeder Inside Bleeders Outside Bleeder



3. Bleed the Brake Lines Continued

Method #3 use a pressurized bleeding system that will push the brake fluid through the braking system until no bubbles are present. Then perform method #2 a couple times for each caliper.



This completes the installation of your CorkSport Brake Calipers. Check to make sure that the brake system is sealed and does not leak. On the first drive check your brakes carefully before speeding up. Also make sure to burnish your pads for the first time.

4. Bedding Your New Brake Pads



While burnishing your brakes, never drag the brake pedal while accelerating. Below is the preferred method but if you can not find an area to do this variations of this procedure can be performed. The idea is to slowly heat and cool the brakes. Not to start with a 60mph hard stop.

- a) Find an open road and accelerate to 30mph.
- b) Brake evenly and smoothly until you are almost stopped then accelerate to 30mph again.
- c) Repeat steps 4a and 4b roughly 10 times.
- d) Accelerate to 45mph.
- e) Brake evenly and smoothly but make these stops much harder. Brake until you are almost stopped then accelerate to 45mph again.
- f) Repeat steps 4d and 4e roughly 2-3 times
- g) Allow 15 minutes for system to cool. You are now ready to brake normally.

What's Next:



CorkSport Mazda 3 Rear Swaybar Kit

Give your car the extra level of confidence in the corners with the CorkSport Rear Swaybar Kit. The adjustable CorkSport RSB features two stiffness settings at 130% or 220% stiffer than OEM. Manufactured from a single CNC bent bar, there are no welds in the bar to crack and the bar is supported by 90a durometer polyurethane bushings and billet aluminum brackets. Available for the Mazda 3, 6, & CX-5.