

INSTALLATION INSTRUCTIONS



CORKSPORT Power Series Cat Back Exhaust

2018+ Mazda 6 2.5T

PART #: **ATK-6-101-12**



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CORKSPORT.COM

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CORKSPORT Power Series Cat Back Exhaust

2018+ Mazda 6 2.5T

PRODUCT DESCRIPTION:

The CorkSport Power Series Cat Back Exhaust for 2018+Mazda 6 with the 2.5T engine provides a great sound to match the performance of the new Sky-T. Comfortable during daily driving yet noisy enough to have some fun on a backroad, the CS exhaust really is the best of both worlds. This sound comes from 80mm piping and flow-thru resonators that also give a horsepower increase. To finish it off, the exhaust tips have been enlarged & lengthened to compliment the new look of the Mazda 6.

Please let us know your feedback of the by submitting a review at: https://corksport.com/2018-mazda-6-2.5l-turbo-cat-back-exhaust.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.



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

MATERIALS & TIME:

GENERAL INFO:









Time Est: 2hr

Difficulty: 2/5

CEL:

Warranty 2-Year

TOOLING LIST:

- 10mm Socket
- 12mm Socket
- 14mm Socket
- 17mm Socket
- 3/8" Drive Ratchet
- 6" ExtensionOxygen Sensor Socket
- 1/2" Drive Ratchet
- 10mm Wrench
- 12mm Wrench
- 17mm Wrench
- · Flathead Screwdriver
- Lubricant Spray
- Jack Stands
- Floor Jack
- Channel Lock Pliers
- Bungee Cord
- 1/8" Drill Bit or Punch

Optional:

- Exhaust Hanger Pliers
- Push Clip Removal Tool
- Blue Painter's Tape

PARTS LIST:

- One (1) CorkSport
 Axleback Section for MZ6
 T
- One (1) CorkSport
 Connector Pipe for MZ6
 2 FT
- One (1) CorkSport Front Midpipe Section for MZ6
- One (1) CorkSport Rear Midpipe Section for MZ6 2.5T
- Four (4) 80mm Exhaust Gaskets
- Six (6) M10x1.25x35mm Bolts
- Six (6) M10x1.25 Nuts
- Six (6) M10 Lock Washers
- Twelve (12) M10 Flat Washers



ORDER OF OPERATIONS & TABLE OF CONTENTS:

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1. Removing the OEM Axle Back Section



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) Raise the rear of the vehicle with a hydraulic floor jack, then support with jack stands. You will need to access the midpipe & axle back exhaust sections. Shown in Figure 1a.





c) Using a 14mm socket & ratchet, remove the two nuts that connect the OEM axle back section to the OEM midpipe section. Nuts are shown circled in red in Figure 1b.



OEM Mid Pipe Section

Figure 1b



1. Removing the OEM Axle Back Section (continued)

- d) Using a bungee cord, floor jack, or friend, support the rear portion of the OEM midpipe section. See Figure 1c for clarity.
- e) Spray the rearmost rubber exhaust hangers with your spray lubricant (WD40, silicone spray, or even glass cleaner work well). Hangers circled in red in Figure 1d.
- f) Using channel lock pliers remove the rearmost rubber hangers from the OEM axleback section. Hangers circled in red in Figure 1d.

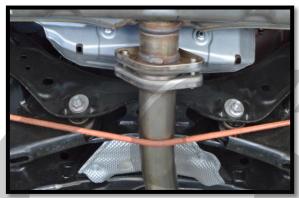


Figure 1c



Figure 1d



Exhaust hanger pliers make removing the rubber hangers much easier & faster.



Removing the rearmost hangers will allow the rear portion of the OEM axle back to hang downwards as shown in Figure 1e.



Figure 1e



1. Removing the OEM Axle Back Section (continued)

g) Remove the two remaining rubber hangers from the OEM axle back section. Circled in blue in Figure 1d on the previous page. The underside will look like Figure 1f upon removal.



Support the axleback as you remove it from the rubber hangers to keep it from falling to the ground or onto you. The easiest way is to get a friend to help you or use a floor jack.

2. Accessing the OEM Midpipe Section

- a) Remove four (4) push clips using a flathead screwdriver from the silver underbody shield. These clips are near the front of the vehicle and are circled in red in Figure 2a.
- b) Remove three (3) 10mm bolts from the silver underbody shield. Shown circled in blue in Figure 2a. The silver underbody shield can then be removed from the vehicle.
- c) Remove four (4) 10mm bolts from the chassis braces. Two are located in the forward brace, two are located in the rearward brace. Shown circled in green in Figure 2a.
- d) Remove fourteen (14) 12mm bolts from the chassis braces. Six are located in the forward brace, eight are located in the rearward brace. Shown circled in yellow in Figure 2a. Two bolts on the forward brace are hard to see and are shown with yellow arrows.
- e) Remove the forward chassis brace. There is a tab on each side that must slide out of a slotted hole on each frame rail. Then the brace can be removed by sliding it rearwards.
- f) Remove the rearward chassis brace. There is a tab on each side that must slide out of a slotted hole on each frame rail. Then the brace can be removed by sliding it forwards.



Figure 1f



Figure 2a



3. Removing the OEM Midpipe Section

- a) Remove the two 10mm nuts from the oxygen sensor wiring brackets. These brackets connect the wiring to an OEM exhaust resonator. Circled in red in Figure 3a.
- b) Trace the oxygen sensor wiring to the frame rail and use a flathead screwdriver to remove the black clip from the frame rail. Clip circled in red in Figure 3b. Try not to break the clip during removal.
- c) Unplug the oxygen sensor electrical connector. Connector circled in blue in Figure 3b.
- d) Remove the two 14mm nuts that attach the OEM midpipe section to the OEM downpipe. The nuts are circled in red in Figure 3c. The midpipe section will remain supported by the rubber hangers and the rear support method you used in step 1d.
- e) Remove the OEM midpipe section from the two blue rubber hangers. Then remove the OEM midpipe section from the vehicle. The rubber hangers are circled in red in Figure 3d.



Support the midpipe section as you remove it from the rubber hangers to keep it from falling to the ground or onto you.

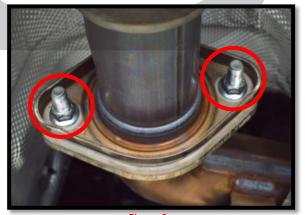


Figure 3c



Figure 3a

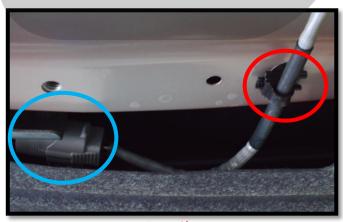


Figure 3b

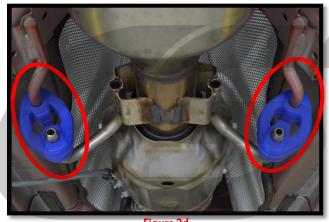


Figure 3d



4. Installing the CorkSport Midpipes

- a) Remove the oxygen sensor from the OEM midpipe using a 21mm oxygen sensor socket. Sensor circled in red in Figure 4a.
- b) Install the oxygen sensor into the CorkSport front midpipe section using a 21mm oxygen sensor socket. Do not over tighten the sensor, about ½ turn past finger tight is plenty. Sensor shown swapped to the CS midpipe in Figure 4b.
- c) Attach the CorkSport front midpipe section to the CorkSport rear midpipe section. Use the supplied hardware and a supplied 80mm gasket. See Figure 4c for proper flange alignment & Figure 4d for proper hardware setup.



Ensure you attach the CorkSport midpipe sections together so the routing matches the OEM routing.



Ensure flanges are properly aligned when connecting the CorkSport midpipe sections together. Only hand tighten hardware for now.



Figure 4a



Figure 4b

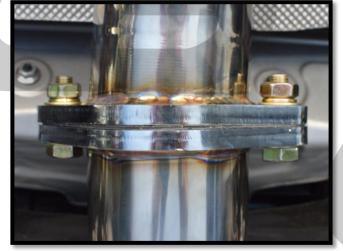


Figure 4c

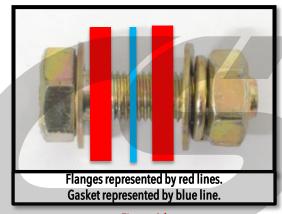


Figure 4d



4. Installing the CorkSport Midpipes (continued)

d) Lift the CorkSport midpipes into place, supporting the rear like you did in step 1d. Then install the CorkSport midpipes onto the OEM blue rubber hangers. Shown installed in Figure 4e. Some lubricant spray will help with hanger install.



The OEM blue hangers & your rear support method will hold the CorkSport midpipes in place.

e) Install the CorkSport midpipes to the OEM downpipe using a supplied 80mm gasket & the OEM 14mm nuts. Only hand tighten for now. Figure 4f shows the CS midpipes installed on the OEM downpipe. The supplied gasket is shown with the red arrow.



Failure to use a supplied gasket can result in an exhaust leak and loud/strange noises coming from the exhaust.



Figure 46

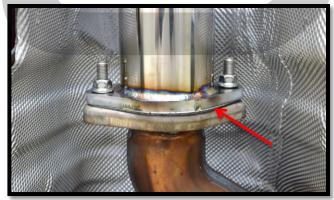


Figure 4f

5. Installing the CorkSport Axle Back

a) Attach the small CorkSport connecting pipe to the CorkSport axle back using the supplied hardware and a supplied gasket. Ensure the orientation matches what is shown in Figure 5a. Only hand tighten for now.



Ensure the flanges are aligned and you use the same hardware setup as shown in Figure 4d on the previous page.

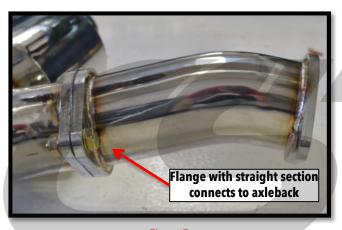


Figure 5a



5. Installing the CorkSport Axle Back (continued)



For the next step, ensure you have a friend to help you out or a way of supporting the exhaust so the tips do not scratch or damage the paint on your bumper.

b) Install the CorkSport axle back onto the rearmost rubber exhaust hangers. Hangers used shown with blue circles in Figure 5b.

The forward axleback hangers are not used (red x in Figure 5b) Be careful to not scratch or damage the paint on your bumper.



Blue painter's tape can be applied to the exhaust tip cutouts of your bumper to help prevent any scratches or damage.

c) Attach the CorkSport connecting pipe onto the CorkSport rear midpipe section. Use the supplied hardware & gaskets as shown in Figure 4c & 4d. Only hand tighten for now. Figure 5c shows the axleback installed.



Figure 5b



Figure 5c



6. Aligning the Exhaust Tips & Reassembling the Vehicle

a) Align the exhaust tips and hangers so the exhaust is straight & centered. Figure 6a shows how the exhaust tips will look when properly aligned.



The tips of the exhaust should fit perfectly within the arched exhaust cut outs in the bumper and should not rub the under body heat shields or sub frame.



Misalignment of the axle back muffler section could result in melting the exhaust cut out sections of the bumper cover. Make sure there is at least a ½ inch gap between the exhaust tip and the bumper, all the way around.



Figure 6a

- b) Tighten nuts on OEM downpipe to 35-40 ft-lbs with a 14mm socket.
- c) Tighten all supplied hardware to 35-40 ft-lbs. with a 17mm socket & wrench.
- d) Double check tip position for clearance. Reference Figure 6a for proper positioning.
- e) Plug in your oxygen sensor & reattach the plastic clip that was removed in step 3b. Figure 3b shows the plug & clip properly installed.



6. Aligning the Exhaust Tips & Reassembling the Vehicle (continued)

- f) Drill or punch a 1/8" hole in the OEM heat shielding. Choose a location that leaves slack in the wiring when the rear oxygen sensor wiring bracket is aligned with the hole.
- g) Attach the rearward oxygen sensor wiring bracket to the OEM heat shielding using the supplied zip tie. The other oxygen sensor wiring bracket can also be attached in a similar manner if desired. Figure 6b shows the wiring attached to the heat shield.



Ensure none of the wiring can rub on the sharp bottom edge of the heat shield.





- j) Secure the chassis bracing with the fourteen (14) 12mm bolts removed earlier. Tighten to 15-17 ft-lbs.
- **k) Secure the OEM under tray with the 4 10mm bolts removed earlier.** Tighten to 10-14 ft-lbs.
- I) Reattach the silver underbody shield using the four (4) push clips & three (3) 10mm bolts removed earlier. Figure 6c shows the shield installed for reference. Tighten the 10mm bolts to 10-14 ft-lbs.



Bring the car down off the jack stands and start the car. Use a flashlight to check under the car to ensure that you do not see any visible exhaust fumes and listen for leaks (usually a whispering or tick sound at the flange). If there are leaks, most of the time a flange has been over tightened or is misaligned. There may be a burning off smell as the exhaust is heated for the first time. This smell will go away after some driving.



Figure 6b



Figure 6c



This completes the installation of your CorkSport Cat Back Exhaust. Enjoy the great sound and upgraded performance!



WHAT'S NEXT?

CorkSport Short Ram Intake

The CorkSport Mazda6 Power Series Short Ram Intake replaces your restrictive factory airbox with a free-flowing intake system to get more power and sound out of your 2.5L SkyActiv Turbo.

Increase efficiency, power, and style under your hood with the CorkSport Short Ram Intake. Each component in the CS intake system was designed for function and fitment to get the best out of your Mazda 6 Turbo.

Dynamometer testing showed gains of 8-12WHP and some of the best sound we've heard from a short ram intake that installs in as little as 30minutes!



CorkSport License Plate Relocation Kit

Give your 2018+ Mazda 6 a visual boost, improve airflow, and avoid those pesky tickets with the CorkSport License Plate Relocation Kit.

By offsetting your factory license plate and moving it to the factory tow hook location on the driver's side, you are able to keep your plate out of your radiator and intercooler's air while staying legal and looking good.

