

CorkSport Mazda 3 Cold Air Intake

2010-2013 Mazda 3



Thank you for purchasing the CorkSport Mazda 3 Cold Air Intake.

With the CorkSport Cold Air Intake for your Mazda 3 you can drastically reduce air intake temperatures which results in better throttle response and more power. By relocating the air filter outside the engine compartment you prevent hot air from pulling directly into the engine which can cause loss of power. The Cold Air Intake also allows more air into your engine than your stock air box which will increase power and efficiency. Get the best of both worlds by increasing power, without losing throttle response, or losing power to heat.

<http://www.corksport.com/corksport-2010-2013-mazda-3-cold-air-intake.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 an overview checklist for the more technically advanced users along with step-by-step instructions for customers that require additional detail.



These installation instructions were written using a 2010 Mazda 3. Other year Mazda 3 models will be similar.

Materials and Time:



General Info.

Part #: Axl-6-217
Time Est: 1 hours
Wrench Rating: 2/5



Tooling List

10mm Socket (deep)
3/8" Drive Ratchet
12" Extension
Phillips head Screw Driver
3mm Allen Wrench
Needle Nose pliers



Parts List

Aluminum Cold Air Intake Pipe
Silicone Hump Coupler
CS Aluminum MAF Housing
Silicone Elbow
Dry Flow Air Filter
Four (4) 91-83 T-bolt Clamps
One (1) 85-77 T-bolt Clamp
Two (2) 10mm nuts
One (1) Rubber Isolater
One (1) Loom Clamp

Need Help With Your Installation?



Call (360) 260-CORK

Checklist

1. Remove the factory air filter box assembly.

- a) Remove the MAF sensor harness from the air filter box (green arrow in Figure 1a).
- b) Remove the air filter box bracket from the core support (red circle in Figure 1a).
- c) Loosen the intake boot clamp (blue arrow in Figure 1a).
- d) Pull the crankcase vent hose out of the boot (green circle in Figure 1a).
- e) Pull the coolant hose free from the intake boot (red arrow) and firmly pull up on the air filter box to remove the air filter box assembly from the car (Figure 1a).
- f) With the factory air filter box assembly removed, your engine bay should look like Figure 1b.
- g) Lastly, remove the MAF sensor from the air filter box (Figure 1c).

2. Install the CorkSport Cold Air Intake.

- a) Install the MAF sensor into the CorkSport MAF housing using the supplied 3mm hex screws (Figure 2a).
 Be careful of tearing the O-ring in this process. A damaged O-ring may result in inaccurate MAF readings and poor engine drivability.
- b) Place the small end of the CorkSport silicone elbow onto the throttle body with the nipple facing upward and use the supplied 85-77 t-bolt clamp (red arrow in Figure 2b).
- c) Push the crankcase vent hose into the nipple on top of the silicone elbow (red circle in Figure 2b).
- d) Install the MAF sensor housing with the "AIRFLOW" arrow pointed towards the engine (Figure 2b).
- e) Locate the threaded hole on the underside of the Driver's side frame rail (Figure 2c).
 Some models will have a 10mm bolt installed here from the factory. Remove this bolt and discard.
- f) Screw the supplied rubber isolator mount into the threaded hole in the frame rail and tighten by hand (Figure 2c).
- g) Assemble the Cold Air Intake Pipe. Review Figure 2d to see the final assembly.
- h) Attach the air filter onto the bracket end of the intake pipe and Attach the silicone hump coupler to the other end where the pipe attaches to the MAF housing (Figure 2d).
- i) Put the intake pipe into the engine bay. Guide the air filter down under the frame rail and attach the silicone hump coupler end to the MAF sensor housing (Figure 2e).
- j) Attach the Cold Air Intake Pipe to the rubber Isolator mount previously attached to the frame rail in step 2c (red circle in Figure 2f).

Checklist

2. Install the CorkSport Cold Air Intake.

- k) Adjust the pipe connections so that the intake does not rub anything and the intake air flows as smoothly as possible (Figure 2e).
- l) Lastly, tighten all remaining loose clamps with a deep 10mm socket.

! This completes the installation of your Cold Air Intake. You are now ready to start the car, if there are issues with the idle or the intake triggers a Check Engine Light (CEL), check for visible and audible vacuum leaks in the system, check your connections - hose clamps for tightness and check to make sure the MAF sensor is fully seated in the housing and not cocked at a non parallel angle relative to the housing surface. After a test drive, recheck all hose clamps again for tightness. Check out our [knowledgebase](#) for additional install information

Detailed Instructions

 These instructions are made for 2010-2013 Mazda 3

1. Remove the Factory Air Filter Box Assembly.

- a) Carefully remove the MAF sensor harness from the air filter box with a pair of needle nose pliers, and disconnect the harness plug from the MAF sensor (green arrow in Figure 1a).
- b) Remove the 10mm bolt attaching the air filter box to the core support (red circle in Figure 1a).
- c) Loosen the intake boot clamp with a 10mm socket (Blue Arrow in Figure 1a).
- d) Pull the crankcase vent hose out of the boot (green circle in Figure 1a).
- e) Pull the coolant hose free from the intake boot (red arrow) firmly pull up on the air filter box and remove the air filter box assembly from the car (Figure 1a).
- f) With the factory air filter box assembly removed, your engine bay should look like Figure 1b.
- g) Lastly, use a Phillips head screw driver to remove the two screws fastening the MAF sensor to the air filter box and gently remove the sensor (Figure 1c).

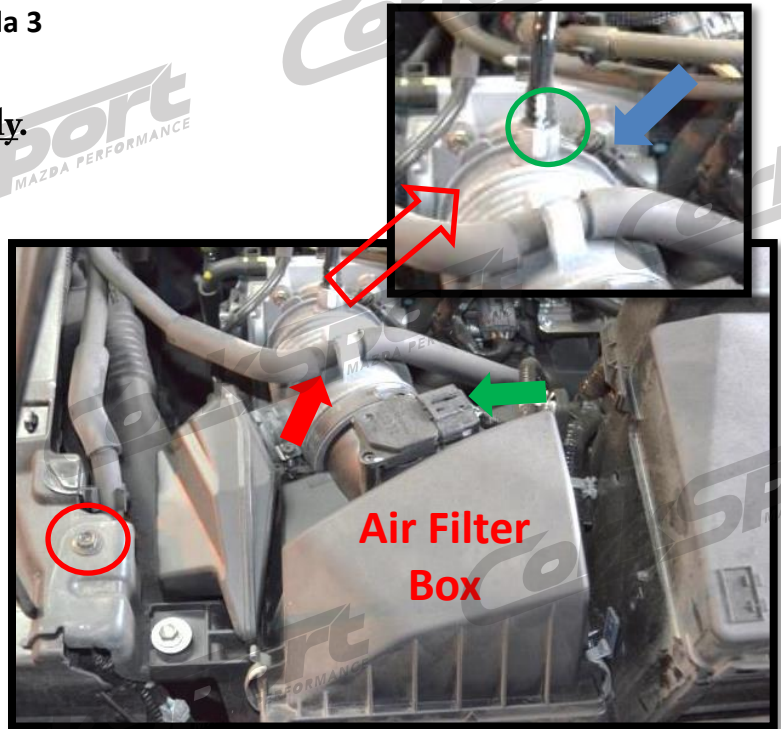


Figure 1a



Figure 1b



Take great care when handling the MAF sensor. It is an extremely sensitive electronic component.

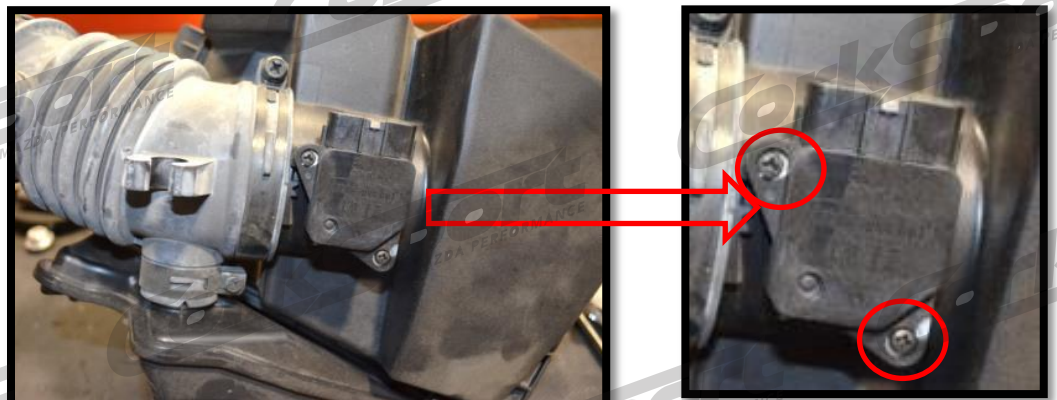



Figure 1c

Detailed Instructions

2. Install the CorkSport Cold Air Intake.

- a) Begin with installing the MAF sensor into the CorkSport MAF housing using the supplied 3mm hex screws (Figure 2a).


 Be careful of tearing the O-ring in this process. A damaged o-ring may result in inaccurate MAF readings and poor engine drivability.

- b) Place the small end of the CorkSport silicone elbow onto the throttle body with the nipple facing upward and the supplied 85-77 t-bolt clamp (red arrow in figure 2b). Route the coolant hose you removed earlier from the factory intake over the throttle body.

- c) Push the crankcase vent hose into the nipple on top of the silicone elbow (red circle in figure 2b).

- d) Place a 91-83 clamp (green arrow) onto the large end of the silicone elbow, and install the MAF sensor housing with the "AIRFLOW" arrow pointed towards the engine. Tighten the clamp with a deep 10mm socket (Figure 2b).

- e) Locate the threaded hole in the underside of the Driver's side frame rail (Figure 2c).

 Some models will have a 10mm bolt installed here from the factory. Remove this bolt and discard.

- f) Screw the supplied rubber isolator mount into the threaded hole in the frame rail and tighten by hand (Figure 2c).

- g) **Assemble the Cold Air Intake Pipe.** Attach the air filter onto the pipe end with the bracket. Fasten it in place with a supplied 91-83 t-bolt hose clamp. Attach the silicone hump coupler to the MAF housing end with another 91-83 t-bolt clamp and tighten. Review Figure 2d to see the final assembly.



Figure 2a



Figure 2b

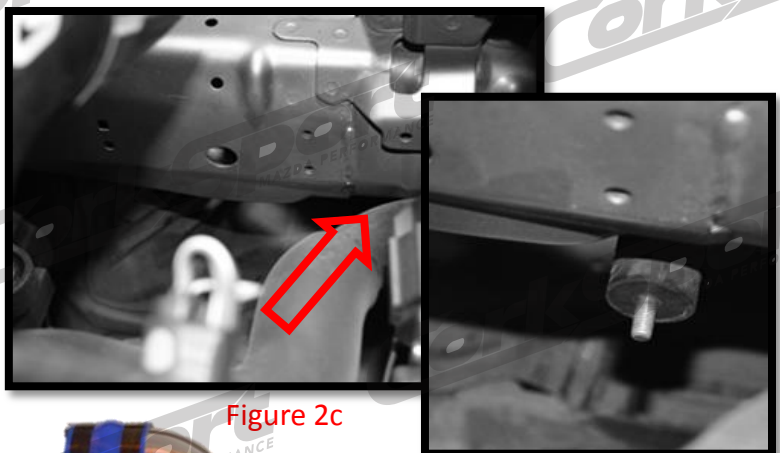


Figure 2c



Figure 2d

Detailed Instructions

2. Install the CorkSport Cold Air Intake Continued...

- h) **Put the intake pipe into the engine bay.** Guide the air filter down under the frame rail and attach the silicone hump coupler end to the MAF sensor housing with the last supplied 91-83 t-bolt clamp (**Figure 2e**).
- i) **Attach the Cold Air Intake Pipe to the rubber Isolator previously attached to the frame rail in step 2c.** Fasten the pipe to the rubber isolator with the supplied 10mm nut (**red circle in Figure 2f**).
- j) **Adjust the remaining pipe connections that are remaining loose** so that the intake does not rub anything inside of the engine bay, and the air flows as smoothly as possible within the pipe (**Figure 2e**).
- k) **Use the loom clamp to hold the coolant hose routed over the throttle body** (As shown in **Figure 2g**). Attach the loom clamp to the t-bolt clamp with a supplied 10mm nut.
- l) **Lastly, tighten all remaining loose clamps with a deep 10mm socket.**



Figure 2e



Figure 2f



This completes the installation of your Cold Air Intake. You are now ready to start the car, if there are issues with the idle or the intake triggers a Check Engine Light (CEL), check for visible and audible vacuum leaks in the system, check your connections - hose clamps for tightness and check to make sure the MAF sensor is fully seated in the housing and not cocked at a non parallel angle relative to the housing surface. After a test drive, recheck all hose clamps again for tightness. Check out our [knowledgebase](#) for additional install information



Figure 2g

What's Next:

Reduce the throw of your shifter and improve precision and performance. Improve your shifting times and shifter feel with the CorkSport Mazda 3 Short Shift Plate Kit. Providing a 33% throw reduction, the CorkSport Mazda 3 Short Shift Plate is designed for spirited driving and will reduce throw while keeping the height of the OEM shifter unchanged.

<http://www.corksport.com/corksport-mazda-3-short-shift-plate-kit.html>



Get improved handling and road feel while maintaining a comfortable ride with the CorkSport Rear Motor Mount for Mazda 3. Designed as a direct OEM replacement, the CorkSport Mazda 3 Rear Motor Mount maintains OEM fitment while adding a large urethane thrust surface for added stiffness and improved driver responsiveness.

<http://www.corksport.com/corksport-mazdaspeed-3-mazda-3-race-rear-motor-mount.html>

Get optimal flow and minimal back pressure with the a CorkSport Mazda 3 Power Series Exhaust for the 2010+ Mazda 3.

Gain extra power while improving the sound of your car with a Cat Back Exhaust system. Available in both 2.0L and 2.5L versions you will notice a power increase that is accompanied by the awe inspiring growl of a CorkSport exhaust.

Get the 2.5L Version Here:

<http://www.corksport.com/corksport-power-series-exhaust-system-mazda-3-2.5.html>

Get the 2.0L Version Here:

<http://www.corksport.com/corksport-power-series-exhaust-system-mazda-3.html>

