

CorkSport SkyActiv Short Ram Intake

2012+ Mazda 3 and 2013+ CX-5 SkyActiv



Thank you for purchasing the CorkSport Power Series SkyActiv Short Ram Intake. One of the easiest and most beneficial performance enhancements you can do for your vehicle, the CorkSport Power Series Short Ram Intake replaces your factory airbox with an open intake system allowing more air into the intake chamber.

Please let us know your feedback about the CorkSport SkyActiv Intake by submitting a review at

<http://www.corksport.com/corksport-power-series-short-ram-intake-2010-mazda-3-2.0-standard-and-skyactiv-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 2013 Cx5 SkyActiv. Other years and models will be similar.

Materials and Time:



General Info.

Part #: Axl-6-117
Time Est: 1 hours
Wrench Rating: 2/5



Tooling List

10mm Socket
3/8" Drive Ratchet
3mm Allen Wrench
Small Philips Screw Driver



Parts List

One (1) Silicon Elbow
Two (2) 83-91mm T-bolt Clamps
One (1) 77-85mm T-Bolt Clamp
One (1) MAF Assembly
One (1) Air Filter

Mazda 3 Only

One (1) 5/8-3/5 Loom Clamp
Two (2) M6x.7 Locking Flange Nut

Need Help With Your Installation?

Call (360) 260-CORK

Checklist

This is an overview of each step in the build. You can use this as a reference and a checklist as you button up the work on your car



Video demonstrating the installation process available at the following link <http://youtu.be/wEmtUQORmow>

1. Remove the Factory Intake

- a) **Unplug MAF sensor.** (shown in green circle in Figure 1)
- b) **Remove Engine Cover** by pulling up on it. There is no screws that hold it down. This will help when loosening the Intake clamp. (Shown in green square Figure 2)
- c) **Remove valve cover hose** from intake elbow. It should pull out easily. (Figure 3)
- d) **Loosen hose clamp on air box to throttle body.** (Green Arrow Figure 4)
- e) **Remove Air Box Bracket.** (Red Arrows Figure 4)
- f) **Pull up on upper part of air box lid and remove it from the car.** (Figure 5)
- g) **Remove MAF from factory air box.** (Red arrows Figure 6)
 -  Take caution handling the MAF because the sensor is exposed inside the MAF housing. Try to handle only from the end that is outside of the MAF housing.
- h) **Remove two (2) 10mm bolts** that hold lower air box. (Red Arrows in Figure 7)
- i) **Pull entire lower section of air box** and remove it from the car. (Figure 8)

2. Installing Short Ram Intake

- a) **Install CS silicone elbow** onto throttle body with 77-85mm T-Bolt Clamp. (Figure 9)
- b) **Install breather tube fitting into the CS silicone elbow** facing up. (as shown in Figure 10)
- c) **Tighten 77-85mm T-Bolt Clamp at throttle body** with 10mm Socket. (Red arrow in Figure 10)
- d) **Install CS MAF** onto CS silicone elbow with AIRFLOW pointing towards the throttle body. Then tighten 83-91mm T-Bolt clamp that holds the MAF to the silicon elbow. (Red arrow in Figure 11)
- e) **Install air filter on MAF assembly** and tighten 83-91mm T-bolt clamp. (Red Arrow in Figure 12)
- f) **Install MAF sensor from factory air box.**
- g) **Reconnect wiring for MAF Sensor.** If you have a CX-5 this completes the installation of your SkyActiv intake. Mazda 3 owners should continue to Step h.
- h) **Only For the Mazda 3 SkyActiv short ram intake install the optional loom clamp** and nut on the T-clamp connecting the silicon to the throttle body (Figure 13).



This completes the installation of your SkyActiv Short Ram Intake. Check for any visible or audible leaks in the system. If there is a leak, the silicone tube may have been over tightened or misaligned. Check out our [knowledgebase](#) for additional install information

Need Help With Your Installation?

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Detailed Instructions

1. Remove the Factory Intake

- a) Unplug MAF sensor (shown in green circle in Figure 1)
- b) Remove Engine Cover by pulling up on it. There are no screws that hold it down. This will help when loosening the intake clamp. (Shown in green square Figure 2)
- c) Remove valve cover hose from intake elbow. It should pull out easily. Shown removed in Figure 3



Figure 1



Figure 3



Figure 2

- d) Loosen hose clamp on air box to throttle body (Green Arrow Figure 4)

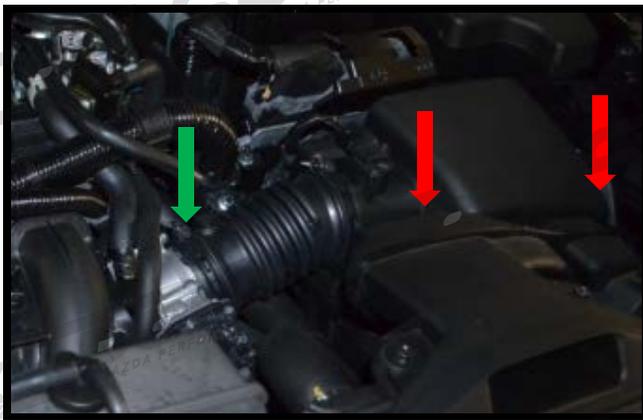


Figure 4



Figure 5

- e) Remove Air Box Bracket (Red Arrows Figure 4)
- f) Pull up on air box lid and remove it from the car (Figure 5)
- g) Remove MAF from factory air box with small phillips screw driver (Red arrows Figure 6). Take caution handling the MAF because the sensor is exposed inside the MAF housing. Try to handle it only from the end that is outside of the MAF housing.

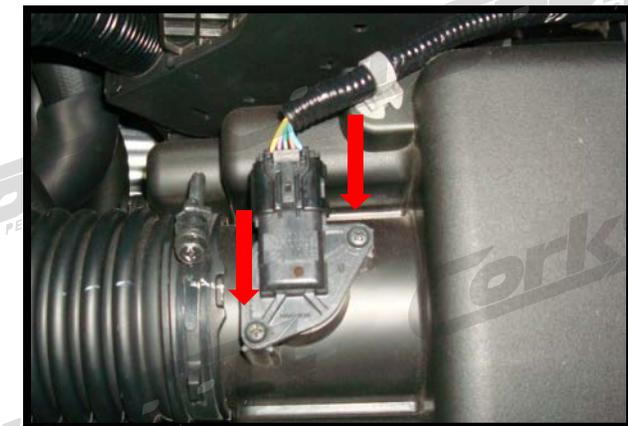


Figure 6

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Detailed Instructions

1. Remove the Factory Intake continued....

- h) Remove two (2) 10mm bolts that hold lower air box (Red Arrows in Figure 7)
- i) Pull entire lower section of air box and remove it from the car (Figure 8)

2. Install the Corksport SkyActiv Short Ram Intake

- a) Install silicone elbow onto throttle body with 2.75" T-Bolt Clamp. Make sure to orient the elbow so the breather tube is facing up. (Figure 9)



Figure 9

- b) Install breather tube fitting into the CS silicone elbow facing up (as shown in Figure 10) and adjust to the correct angle
- c) Tighten 77-85mm T-Bolt Clamp at throttle body with 10mm Socket (Red arrow in Figure 10)
- d) Install CS MAF onto CS silicone elbow with AIRFLOW pointing towards the throttle body. This will be the direction of flow. Make sure to orient the MAF sensor opening at the top similar to the factory setup. Then tighten a 83-91mm T-Bolt clamp to hold the MAF to the silicon elbow. (Red arrow in Figure 11)

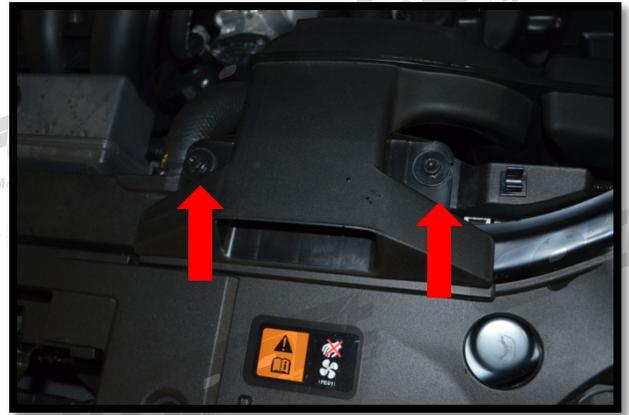


Figure 7



Figure 8



Figure 10

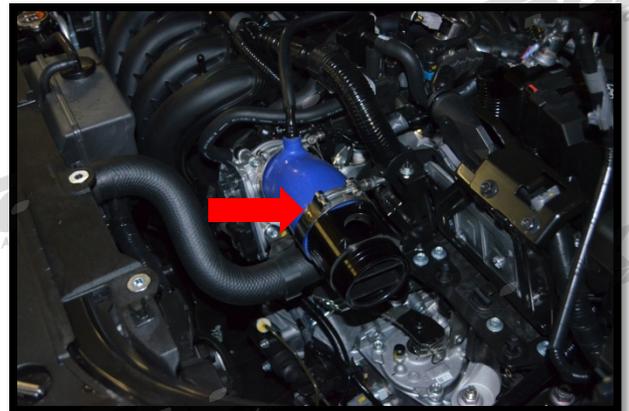


Figure 11

Detailed Instructions

2. Install the Corksport SkyActiv Short Ram Intake Continued...

- e) Install air filter on MAF assembly and tighten 83-91mm T-bolt clamp with a 10mm socket. (Red Arrow in Figure 12)
- f) Install MAF sensor from factory air box. Make sure the MAF seals flat and that the o-ring is not pinched between the MAF and housing. If necessary apply a small amount of grease to the o-ring. Start the two provided Allen head screws from the CS MAF assembly. Double check that the o-ring is not pinched before tightening the two 3mm Allen bolts down.
- g) Reconnect wiring for MAF Sensor (this was removed in step 1a).

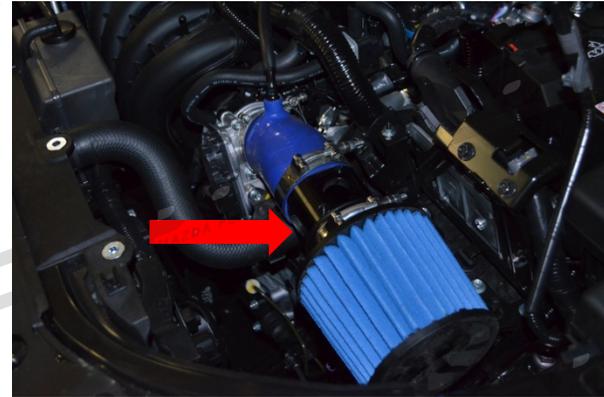


Figure12

 If you have a CX-5 this completes the installation of your SkyActiv intake. However Mazda 3 owners should continue to Step h.

- h) For the Mazda 3 SkyActiv short ram intake install the loom clamp and nut on the T-clamp connecting the silicone to the throttle body (Figure 13)



Figure13

 This completes the installation of your SkyActiv Short Ram Intake. Check for any visible or audible leaks in the system. If there is a leak, the silicone tube may have been over tightened or misaligned. Check out our [knowledgebase](#) for additional install information

What's Next:

[CORKSPORT Power Series Exhaust System for the Mazda 3, 2.0 Liter SkyActiv Engine](#)



Maximize airflow and increase power with the CorkSport Power Series Single Exit 60mm Exhaust for the 2010+ 2.0 liter standard and SkyActiv Mazda 3.

Featuring dual resonators, a slip fit compression connection to the aft end of the catalytic converter and a single tailpipe design, the CorkSport Mazda 3 exhaust eliminates the factory tailpipe muffler and features a non-resonated CorkSport dual wall 90mm exhaust tip.

* HIGH FLOW CATALYSTS ARE NOT AVAILABLE IN CALIFORNIA.