

## CorkSport 2.5L SkyActiv Short Ram Intake

2014+ CX-5, 2014+ Mazda6, 2014+ Mazda3



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: <a href="http://www.corksport.com/corksport-2014-mazda-3-6-cx-5-short-ram-intake.html">http://www.corksport.com/corksport-2014-mazda-3-6-cx-5-short-ram-intake.html</a>

### **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 2014 Mazda6 SkyActiv.** Other years and models will be similar.

#### Materials and Time:



General Info.
Part #: Axm-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 Needle nose Pliers

Optional: Silicone Grease



#### **Parts List**

One (1) Silicon Elbow

One (1) 95-103mm T-bolt Clamp

One (1) 86-94mm T-bolt Clamp

One (1) 77-85mm T-Bolt Clamp

One (1) MAF Assembly

One (1) Air Filter





## 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

. Remo	ove the Factory Intake
a)	Remove Engine Cover by pulling up on it (shown in green square Figure 1a).
□ b)	Unplug MAF sensor (shown in Figure 1a with a red circle and in Figure 1b close up).
c)	Remove valve cover hose from intake elbow (shown removed in Figure 1c).
☐ d)	Loosen hose clamp on air box to throttle body (green arrow Figure 1d).
e)	Remove Air Box Bracket (red arrows Figure 1e).
f)	Disconnect the MAF wiring and pull up on air box lid and remove it from the car (Figure 1f).
g)	Remove two (2) 10mm bolts that hold lower air box (red arrows in Figure 1g) and remove it from the car. Simply pull up.
h)	Remove MAF from factory air box with small Phillips screw driver (red arrows Figure 1h).
<u> </u>	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.
2. <u>Installing Short Ram Intake</u>	
NOTE	If you purchased the CorkSport Cold Air Box for Mazda 3 or Mazda 6, please refer to those instructions now.
a)	Install the intake onto the throttle body with the 77-85mm T-Bolt Clamp with the breather tube facing up (Figure 2a).
☐ b)	Install breather tube fitting into the CS silicone elbow facing up (as shown with green Arrow in Figure 2a) and adjust to the correct angle.
c)	Tighten the 77-85mm T-Bolt Clamp at throttle body with 10mm Socket (red arrow in Figure 2a).
☐ d)	Install air filter on MAF assembly and tighten 95-103mm (Red Circle in Figure 2a on previous page)
e)	Install MAF sensor from factory air box (red circles in Figure 2b).
f)	Reconnect wiring for MAF Sensor (this was removed in step 1b).
	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.



## **Detailed Instructions**

#### 1. Remove the Factory Intake

a) 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 1a).





Figure 1a

b) Unplug MAF sensor (shown in Figure 1a with a red circle and in Figure 1b close up). Press down on the latch and the sensor will unplug.

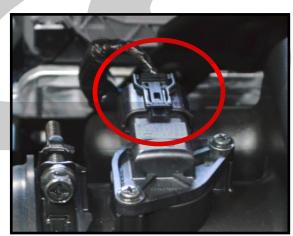


Figure 1b

- c) Remove valve cover hose from intake elbow. It should pull out with a little effort (shown removed in Figure 1c).
- d) Loosen hose clamp on air box to throttle body (green arrow Figure 1d). This will require a large screw driver or a 10mm socket.



Figure 1d

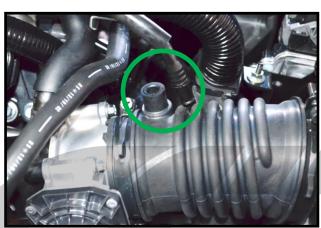


Figure 1c

## **Detailed Instructions**

- 1. Remove the Factory Intake (continued)
  - e) Remove Air Box Bracket (red arrows Figure 1e). They will push off the top of the box but stay on the lower housing of the air box.



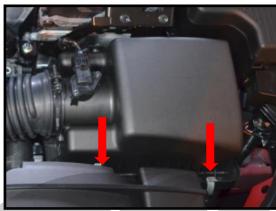


Figure 1e

e) Disconnect the MAF wiring and pull up on air box lid and remove it from the car (Figure 1f). You will need needle nose pliers to compress the sides of the wiring harness tie down.

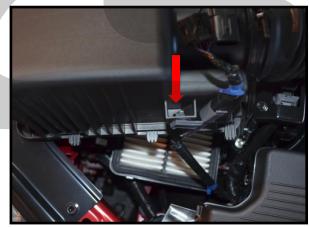


Figure 1f

g) Remove two (2) 10mm bolts that hold the lower air box (red circles in Figure 1g) and remove it from the car. Simply pull up.

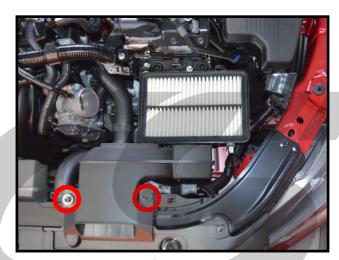


Figure 1g

## **Detailed Instructions**

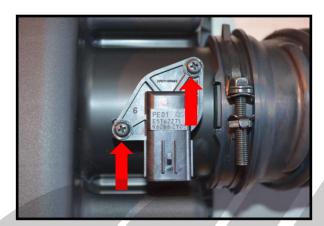
- 1. Remove the Factory Intake (continued)
  - h) Remove MAF Sensor from factory air box with small Phillips screw driver (red arrows Figure 1h).



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.



If you purchased the CorkSport Cold Air Box for Mazda 3 or Mazda 6, please refer to those instructions now.



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Figure 1h

## 2. Install the Corksport SkyActiv Short Ram Intake

- a) Install the silicone elbow onto the throttle body with the 77-85mm T-Bolt Clamp. Make sure to orient the elbow so the breather tube is facing up (green arrow shows the breather tube and red arrow in Figure 2a shows the clamp location).
- b) Install the MAF assembly onto the silicone elbow with 86-94 T-Bolt clamp. Clamp and MAF assembly shown in assembled intake picture.



Figure 2a



Make sure the Arrow on the back side of the MAF is pointing towards the throttle body. The MAF sensor wiring will be pointing toward the firewall as shown in Figure 2a.

c) Install breather tube fitting into the CS silicone elbow so that it seats all the way (as shown with green arrow in Figure 2a).



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## **Detailed Instructions**

- 2. Install the Corksport SkyActiv Short Ram Intake Continued...
  - d) Tighten the 77-85mm T-Bolt Clamp at throttle body with 10mm Socket (red arrow in Figure 2a).

- e) Tighten the 86-94mm T-Bolt Clamp at MAF with 10mm Socket (Figure 2b).
- f) Install air filter on MAF assembly and tighten 95-103mm T-bolt clamp with a 10mm socket (Red Circle in Figure 2c).

- g) 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 included with the CS MAF assembly. Double check that the o-ring is not pinched before tightening the two 3mm Allen bolts down (red circles in Figure 2d).
- h) Reconnect wiring for MAF Sensor (Figure 1b).



Figure 2b



Figure 2c



Figure 2d



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. If you get a Check Engine Light (CEL), check the connection at the Mass Air Flow(MAF) sensor to see if the o'ring was pinched or miss aligned. Check out our <a href="mailto:knowledgebase">knowledgebase</a> for additional install information

## **Detailed Instructions**

## What's Next:



Get added power and upgrade the new look of your Mazda with the CorkSport Power Series Axle Back Exhaust. The engineers at CorkSport were given free reign to design an axle back exhaust in the best way fitting to the graceful design. As always, the CorkSport Axle Back Exhaust was built using only the highest quality materials and design.





Brighten up your interior with the CorkSport LED kit. CorkSport's LED light kit replaces the incandescent bulbs for the dome lights, vanity visor lights, door lights, and trunk light. The lights are simple to install, with no custom adapters or wiring required.

Give your car the performance appearance and edge you have been looking for with the CorkSport Lowering Springs for your Mazda. By reducing ride height add the CorkSport Lowering Springs to your Mazda 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.

