

CorkSport Power Series Intake 2009 - 2010+ Mazda 6i 4cyl (2.5L)



NOTE: 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.



NOTE: These installation instructions are for use with a 2009 - 2010+ model year, if you have a previous generation, please contact us for the appropriate instructions for your vehicle.



WARNING: Disconnect the negative terminal of the battery prior to starting installation. This promotes a fresh learning cycle by the engine management system which will provide the best results for your car.

Part Number: Ath-6-117 Time Estimate: 15-45 min Wrench Rating: 1/5	Model Mazda 6	Year 2009 - 2010 +	Trim i (2.5L)
TOOLING LIST: 3/8 Drive Ratchet 10mm Long socket 3mm Allen Wrench Small Phillips Screwdriver OPTIONAL TOOLING: 10mm End Wrench Large Phillips Screwdriver Needle Nose Pliers		PARTS LIST: Molded Silicone Coupler Aluminum MAF Housing w/ 2x Stainless Steel Inserts CorkSport DryFlow Air Filter 2x 3.25" (77-85mm) T-Bolt Clamp 1x 3.5" (83-91mm) T-Bolt Clamp 2x M4x.7 12mm Long Socket Head Cap Screws 1x 3/8" Double ended barbed fitting 1x 2ft of 12mm ID Silicone Hose	







For help with installation, call 360-260-CORK (2675)

Installation Instructions:

Corksport Short Ram Intake for 2009-2010+ Mazda 6

How the Instructions Work

To best cover all of our customers experience levels and familiarity with the systems on their Mazda, we have broken our instructions down into numbered steps, each of which has the core information in the header with additional detail as needed depending on your experience. If you have a high level of experience, you can just use the checklist below and then skip to the step number where you need help or assistance. Video assistance may also be available for certain steps and is indicated by the HD icon:  Areas where there is a safety concern are indicated by the warning icon:  Cautionary areas (where parts are fragile, etc) are indicated by the caution icon:  Key tips are indicated with the light bulb icon: 



Overview/Checklist:

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

1. Remove Factory Airbox Assembly

- 1a) Disconnect the Negative Battery Terminal
- 1b) Disconnect the MAF housing harness plug
- 1c) Remove MAF housing from airbox.
- 1d) Disconnect the valvecover breather hose from the factory couplers (both ends).
- 1e) Unclip coolant line from airbox and move out of the way.
- 1f) Remove the 2–8mm bolts that hold the snorkel on the airbox. Remove snorkel.
- 1g) Loosen hose clamp from throttle body and airbox.
- 1h) Remove airbox from engine compartment by removing from isolation grommets.

2. Assembling the Pwer Series Intake System

- 2a) Install MAF housing into CS MAF housing.
- 2b) Attach coupler to MAF housing using supplied T-bolt clamp 3.25".
- 2c) Attach Air filter using supplied T-bolt clamp 3.5".

3. Installing the Pwer Series Intake System

- 3a) Install Intake assembly onto Throttle Body & Tighten clamp 3.25".
- 3b) Install silicone hose onto intake by pressing one end onto the 3/8" barbed connection. Press other end of silicone hose firmly onto valve cover breather.
- 3c) Reconnect MAF sensor.
- 3d) Reconnect the negative lead of the battery to the terminal and start the car.

Installation Instructions:

Corksport Power Series Intake

2009-2010+ Mazda 6

1: Remove Factory Airbox Assembly.

A) Disconnect negative battery terminal.

Tip: write down stereo presets (this will make reprogramming them much easier).



WARNING: Disconnect the negative terminal of the battery prior to starting installation. This promotes a fresh learning cycle by the engine management system, which will provide the best results for your car.

B) Disconnect the MAF Housing harness plug (A from Figure 1 on right) from Mass Airflow Sensor by pushing the thumb latch and pulling the plug out of the sensor.



WARNING: MAF sensor is very sensitive, handle with care.

C) Using the small Phillips Screwdriver, remove the two screws (B on right) that connect the MAF Sensor to the airbox, and remove the sensor from the airbox using a twisting/pulling motion. Turning while pulling will ensure that the O-Ring does not get damaged (See Figure 1).

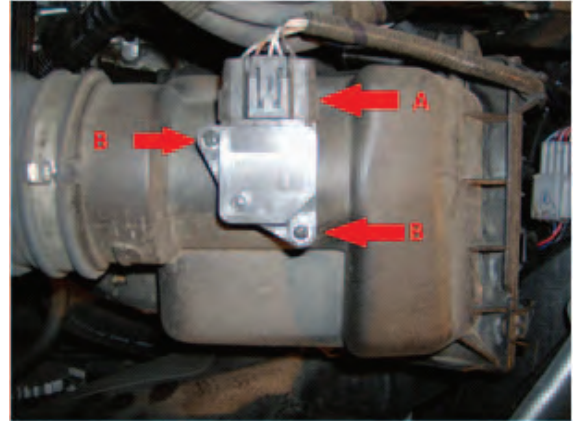


Figure 1

D) Disconnect the valvecover breather hose from both the intake (Figure 2a) and engine side (Figure 2b) by squeezing the 2 green tabs and pulling out on the hose.



Figure 2a

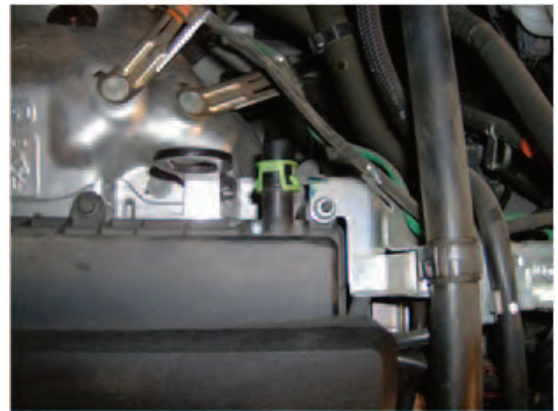


Figure 2b

E) Unclip the coolant line and move it out of the way (Figure 3).

Note: you may want to use a screwdriver to aid in unclipping the coolant line.



Figure 3

Installation Instructions:

Corksport Power Series Intake

2009-2010+ Mazda 6

1: Removal (Continued).

F) Remove the 2 - 8mm bolts that attach the snorkel to the vehicle (Figure 4a). Then with a little force, the assembly will pull up and out of the vehicle (Figure 4b).



Figure 4b



Figure 4a

G) Loosen the left hose clamp that secures the intake boot to the throttle plate. (see Figure 5a on right). Note: The valvecover breather hose should already be disconnected.



Figure 5a

H) Pull up on the factory airbox, pulling the plastic lugs in the bottom of the airbox from the isolation grommets in the chassis. There are 3 lugs that need to be removed from the grommets. Remove the airbox assembly from the engine compartment. (See Figure 5b on right).



Figure 5b

Installation Instructions:

CorkSport Power Series Intake

2009-2010+ Mazda 6

2: Assembling the Power Series Intake System

A) Place MAF Sensor into CorkSport MAF, using the same turning motion while pressing the sensor back in place (See Figure 6 on right). Ensure that the O-ring is entirely seated in the housing and fasten the two socket head cap screws into the stainless threaded bosses on the MAF Housing. Do NOT pinch the o-ring. If necessary a little dab of grease goes a long way. Double check the alignment of the sensor and tighten the socket head cap screws down with a 3mm Allen Wrench.



Figure 6

B) Install the silicone coupler to the MAF Housing as shown above, with both of the T-Bolt Band Clamps loosely fit over the ends of the coupler. The 3.5 inch clamp goes over the MAF Housing side of the coupler, and the 3.25 inch clamp goes over the throttle body side of the coupler. Tighten the larger of the two band clamps over the MAF Housing until the silicone is snug to the housing with the 3/8 drive ratchet and 10mm long socket. Note that the AIRFLOW designation on the MAF sensor points toward the silicone coupler and away from the Air Filter side of the MAF Housing.

C) 10. Install the CorkSport Air Filter and 3.5" T-Bolt Band Clamp around the MAF Housing as above and tighten the 10 mm fastener on the clamp until snug with the 3/8 drive ratchet and 10mm long socket.

3: Installing the Power Series Intake System

A) Install the silicone coupler and 3.25" T-Bolt Band Clamp over the throttle body and tighten the band clamp until snug (See Figure 7 on right). Test to ensure that all three band clamp connections are firmly connected and cannot be pulled apart by hand. If you can pull any of the connections apart, reseal them and tighten the band clamp nut down 1-2 more turns and test it again. The entire assembly should be tight and not come apart when pressure is applied.



Figure 7

B) Install the supplied 3/8" barbed fitting in one end of the 12mm ID silicone hose (A from Figure 8 on the right). The other end of the barbed fitting will fit snugly into the silicone coupler breather outlet (B). The other end of the silicone hose will attach to the breather on the back of the valve cover.

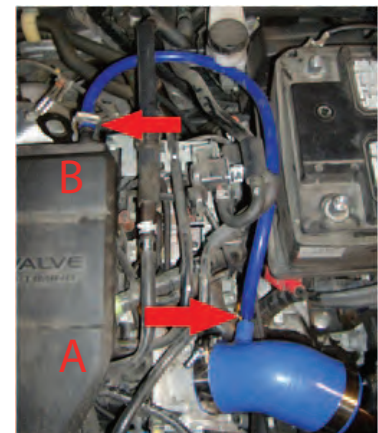


Figure 8

Installation Instructions:

CorkSport Power Series Intake

2009-2010+ Mazda 6

3: Installing the Power Series Intake System (Continued)

C) Plug the factory MAF sensor harness into the MAF sensor as Shown in Figure 9 to the right. Double check that the MAF sensor is fully seated into the MAF housing. Loosen it, reseal it and tighten the socket head cap screws if necessary.

D) Reconnect the negative lead of the battery to the terminal and start the car. If you see a check engine light or experience a rough idle, it is probably due to a disconnected MAF sensor or a loose connection causing a vacuum leak that is disrupting airflow around the MAF sensor. Check that all connections are tight, that the valvecover breather hose is attached to the nipple on the silicone coupler and that the MAF sensor is fully plugged and latched into the factory wiring harness.

E) Your CorkSport Power Series intake should now look like Figure 10 below.

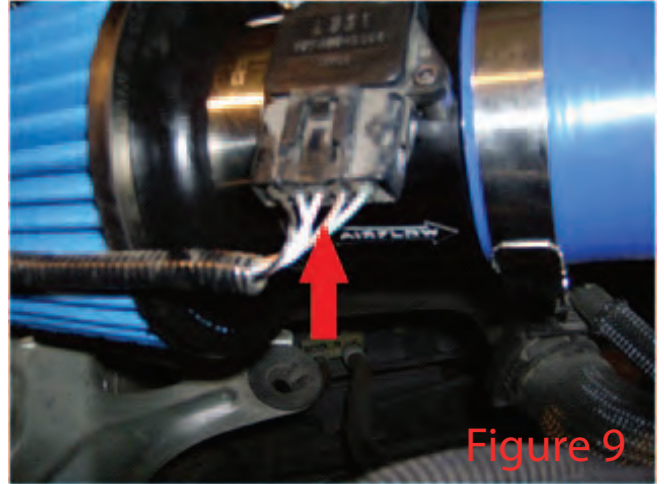


Figure 9



Figure 10