

A  
t  
e  
-  
6  
-  
1  
1  
7

# CorkSport Power Series Intake

## 2003 - 2008 Mazda 6



**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 2003 - 2008 Model year, if you have a different 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: Ate-6-117 Time Estimate: 20-30 min Wrench Rating: 2/5	Model Mazda 6	Year 2003 - 2008	Trim i (2.3L)
<b>TOOLING LIST:</b> 3/8 Drive Ratchet 10mm Long socket 3mm Allen Wrench Small Phillips Screwdriver  <b>OPTIONAL TOOLING:</b> 10mm End Wrench Large Phillips Screwdriver Needle Nose Pliers		<b>PARTS LIST:</b> Molded Silicone Coupler Aluminum MAF Housing w/ 2x Stainless Steel Inserts CorkSport DryFlow Air Filter 2x 3.5" (83-91mm) T-Bolt Clamp 1x 3.25" (77-85mm) T-Bolt Clamp 2x M4x.7 12mm Long Socket Head Cap Screws 1x 3/8" x 1/2" double ended barbed fitting 1x 2ft of 14mm ID Silicone Hose	



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

# Installation Instructions: Corksport Short Ram Intake for 2003-2008 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 coupler (engine side).
- 1e) Loosen hose clamp from throttle body and airbox.
- 1f) Remove the airbox by pulling up on the assembly.

### 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.
- 2c) Attach Air filter using supplied T-bolt clamp.

### 3. Installing the Pwer Series Intake System

- 3a) Install Intake assembly onto Throttle Body & Tighten clamp.
- 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.
- 3e) Enjoy



# Installation Instructions: Corksport Power Series Intake 2003-2008 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).

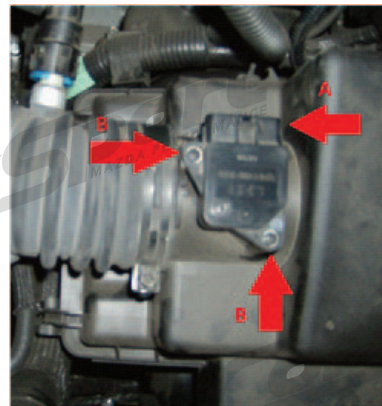


Figure 1

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



Figure 2

E) Loosen the left hose clamp that secures the intake boot to the throttle plate (See Figure 3 below).



Figure 3

F) Pull up on the factory airbox (Figure 4 to the right), pulling the plastic lugs in the bottom of the airbox from the isolation grommets in the chassis (Don't be afraid to give it a little force). Remove the airbox assembly from the engine compartment.



Figure 4

# Installation Instructions:

## CorkSport Power Series Intake

### 2003-2008 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 5 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 5

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. One of the 3.5 inch clamp goes over the MAF Housing side of the coupler, and the other 3.5 inch clamp goes over the other side of the coupler. Tighten 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 6 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 6

B) Install the larger side of the supplied barbed fitting in one end of the 12" long, larger ID silicone hose (B from Figure 7 on the right). The smaller end of the barbed fitting will fit snugly into the silicone coupler breather outlet (A). The other end of the silicone hose will attach to the breather on the back of the valve cover (B).

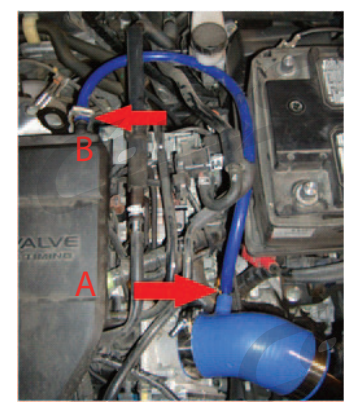


Figure 7

# Installation Instructions:

## CorkSport Power Series Intake

### 2003-2008 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 8 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.

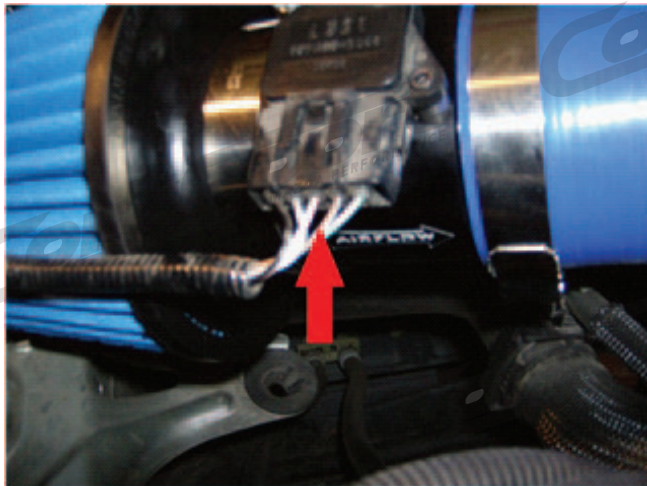


Figure 8

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 9 below.



Figure 9

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