

Equipped with AEM<sup>®</sup> Dryflow™ Filter No Oil Required!

# INSTALLATION INSTRUCTIONS PART NUMBER 21-809C (GUN METAL GRAY FINISH)

2012-2014 MAZDA 2 1.5L (MANUAL)

Not legal for sale or use on any pollution controlled motor vehicle in California or states adopting California emission procedures. See AEMIntakes.com for CARB status on each part for a specific vehicle.

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	21-2127DK	AIR FILTER; 2-3/4" X 5" OVAL DRYFLOW	1
2	2-1590C	INTAKE TUBE; 2.50"OD X 25"L, 21-809, GUNMETAL GRAY	1
3	08476	HOSE; 2-1/2" TO 2-1/4" ID X 2" L TPRD REINFORCED	1
4	9436	1/2' BNDHOSE CLAMP,1.81"-2.75"	1
5	9440	HOSE CLAMP, 2.15-3.00"	1
6	9448	1/2" BNDHOSE CLAMP,2.56"-3.50"	1
7	444.460.04	NUT; M6 HEX SERRATED	1
8	08160	WASHER; 1"D X 1/4 HOLE FENDER	1
9	1228598	MOUNT, RUBBER 5/8" X 6MM	1
10	784638	GROMMET; 7/8"OD, 3/8"ID, 7/16"THK, 3/16"GAP	1
11	1-2023	BOLT; SOCKET 8-32 X 5/16" SS	2



Read and understand these instructions <u>BEFORE</u> attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine. If you need <u>any</u> assistance please call1-800-858-3333 to speak with a representative in our Customer Service Center

before returning the product.

## 1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set the parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect negative battery terminal.
- e. Do not discard stock components after removal of the factory system.
- f. Open the air intake kit package and make sure all parts are included.

Tools Needed: Optional:

Screwdriver Small Torque

8mm Socket Wrench

10mm Socket

Ratchet

3mm Hex Key

## 2. Removal of stock system



a. Use a small flat head screwdriver to pry the stock intake scoop from the main intake system. Pry points are circled in white above.



b. Pull the solenoid from its mount in the intake elbow.The mount for the solenoid is circled in white above.Also, pull the breather hose from the nipple.



c. Unhinge the (4) release latches that fasten the air box lid. This will aid in removal of the intake elbow.



d. Loosen the (2) hose clamps securing the intake elbow. Then, remove the elbow. Do not discard any stock components.



e. Remove the (2) Phillips head screws and pull the Mass Air Flow (MAF) sensor from the intake pipe. Disconnect the sensor from the harness. Do not discard any stock hardware. You may also re-latch the air box lid at this time.

# 3. Installation of $\mathbf{AEM}^{\mathbb{B}}$ intake system.

a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



a. Install the MAF sensor and grommet into the AEM intake pipe as shown. Use the (2) supplied M4 bolts to fasten the MAF sensor.



c. Install the supplied M6 nut, washer, and rubber mount into the threaded hole in the frame rail. Leave the nut and washer loose.



b. Install the throttle body coupler with hose clamps onto the throttle body. Make sure the smaller end of the coupler is on the throttle body. Tighten the hose clamp on the throttle body side to 30 in-lbs.



d. Insert the AEM intake tube into the throttle body coupler and line up the bracket with the rubber mount. Do not tighten the hose clamp or nut at this time.



e. Remove the (2) fender liner screws. Pull the fender liner out of the way and install the AEM filter with hose clamp onto the intake tube. Orient the filter such that the flat surface is parallel to the ground. Tighten hose clamp to 30 in-lbs.



g. Insert the solenoid stud into the grommet on the intake tube bracket. Also, connect the breather hose onto the nipple.



f. Re-secure the fender liner. Make sure the filter clears the fender liner and the bottom of the front bumper. Adjust filter position if necessary. Once this is done, go ahead and make final adjustments to the positioning of the intake tube. Then, tighten the hose clamp on the throttle body coupler and the nut on the rubber mount.



h. Reconnect the MAF sensor harness and reinstall the stock intake scoop.



STOCK INTAKE INSTALLED



**AEM INTAKE INSTALLED** 

## 4. Reassemble Vehicle

- a. Position all kit components for best fitment. Ensure that no components contact any unintended part of the vehicle.
- b. Check for proper hood clearance. Re-adjust components if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and ensured that all fasteners that were moved or removed are properly tightened.
- d. Reconnect negative battery terminal and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. Service and Maintenance

- a. AEM Induction Systems requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 1-1000 and follow the easy instructions.
- b. Use window cleaner to clean your powder coated AEM® intake tube.

NOTE: DO NOT USE aluminum polish on powder coated AEM® intake tubes.

For technical inquiries
e-mail us at
sales@aemintakes.com
or
call us at
800.992.3000

### **AEM Air Intake System Warranty Policy**

AEM® warrants that its intake systems will last for the life of your vehicle. AEM® will not honor this warranty due to mechanical damage (i.e. improper installation or fitment), damage from misuse, accidents or flying debris. AEM® will not warrant its powder coating if the finish has been cleaned with a hydrocarbon-based solvent. The powder coating should only be cleaned with a mild soap and water solution. Proof of purchase of both the vehicle and AEM® intake system is required for redemption of a warranty claim.

This warranty is limited to the repair or replacement of the AEM® part. In no event shall this warranty exceed the original purchase price of the AEM® part nor shall AEM® be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM® must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is nontransferable. Improper use or installation, use for racing, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM® disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM®. Warranty returns will only be accepted by AEM® when accompanied by a valid Return Merchandise Authorization (RMA) number. Credit for defective products will be issued pending inspection. Product must be received by AEM® within 30 days of the date RMA is issued.

If you have a warranty issue, please call (800) 992-3000 and our customer service department will assist you. A proof of purchase is required for all AEM® warranty claims.

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