



Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 21-483

2003-2008 MAZDA 6 V6-3.0L C.A.R.B. E.O. # D-670-2

Excludes Mazda 6 V6-3.0L wagon models for 2004-2007 years

**AEM® bypass valves are not compatible with this intake system (part number 21-483)
DO NOT attempt to install an AEM bypass valve on this intake system!**

*** NOTE: Legal in California only for racing vehicles which may never be used upon a highway.**

PARTS LIST

Description	Qty.	Part Number
Air Filter Assy 2.75 X 5" Dry Ele.	1	21-202DK
Upper Pipe, Mazda 6	1	2-444
Lower Pipe, Mazda 6	1	2-453
Hose, Adapter 2.75/3.00 X 3" Bl.	1	5-273
Mount, Rubber 1" X 8mm	1	1228560
Mount, Rubber 1" X 6mm	1	1228599
Vacuum Cap, 3/8"	1	8-101
Cap, Vacuum 3/16	1	444.130.10
Zip Tie, 6 Long	1	1-113
Bolt, Socket 8-32 X 5/16 SS	2	1-2023
Washer, 8mm Soft Mount	1	559960
Washer, 6mm Soft Mount	1	08160
Nut, M6 Hex Serrated	1	444.460.04
Nut, M8 Hex Serrated	1	444.460.08
1/2" Bnd. Hose Clamp, 2.31-3.25"	1	9444
1/2" Bnd. Hose Clamp, 2.90"-3.75"	1	9452
1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448

Read and understand these instructions **BEFORE** 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.

The AEM[®] intake system is a performance product that can be used safely during mild weather conditions. During harsh and inclement weather conditions, you must return your vehicle to stock OEM air box and intake tract configuration. Failure to follow these instructions will void your warranty.

1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect negative battery terminal.
- e. Raise the front of the vehicle with a jack. Refer to your owner's manual for proper jack and jack stand placement to properly support vehicle. Support your vehicle using properly rated jack stands before wheel removal or while working under the vehicle.

NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS.

- f. Remove the front left wheel.
- g. Do not discard stock components after removal of the factory system.

2. Removal of stock system



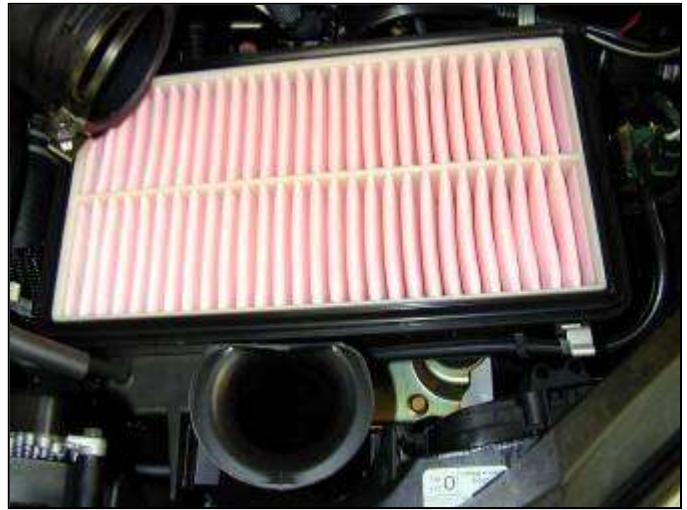
a. Stock air box system installed.



b. Unplug MAF sensor and loosen hose clamp at air box inlet.



c. Release all clips and remove upper air box from vehicle.



d. Remove the air filter from lower air box.



e. Unplug green connector on vacuum solenoid.



f. Pull vacuum hose off of the nipple on the air box.



g. Pull the air box up and out of the engine bay. Remove the two bolts holding down the air box bracket and remove the bracket from the vehicle.



h. Remove the vacuum solenoid from the air box. Remove all vacuum lines from the solenoid. Plug green connector back into solenoid and secure it to a wiring harness utilizing the supplied zip tie.



i. Release plastic clips inside the fender.



j. Remove the four screws on the bottom of the fender liner.



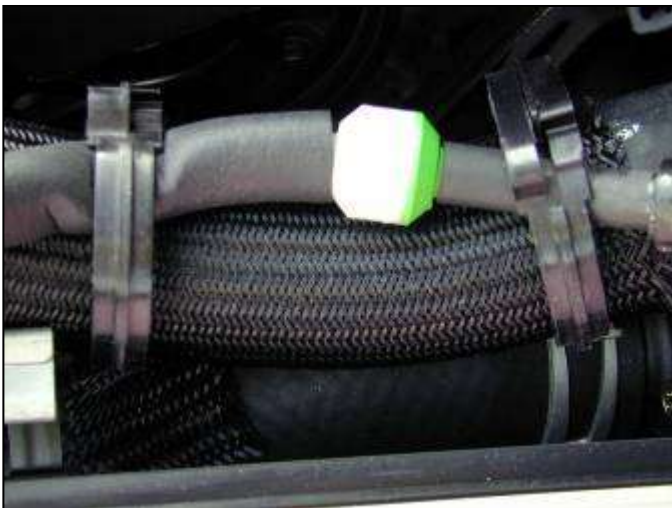
k. Place the partially removed fender liner as shown.



l. Release the three nuts securing the resonator box. Remove the box from the vehicle.

3. Installation of AEM® intake system.

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



b. Release the two hose clamps that hold the vacuum hose to the radiator hose.



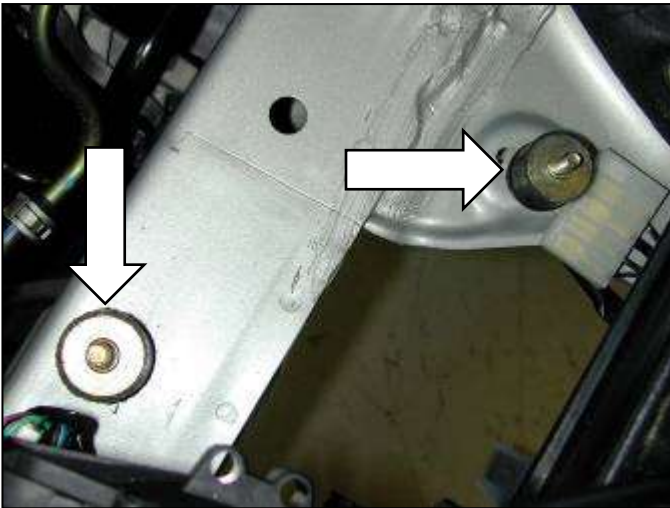
c. Follow the vacuum hose from the air box up to the plastic vacuum fitting under the throttle body. Carefully pull the vacuum hose off of the fitting. Be careful not to break it. Remove hose from vehicle.



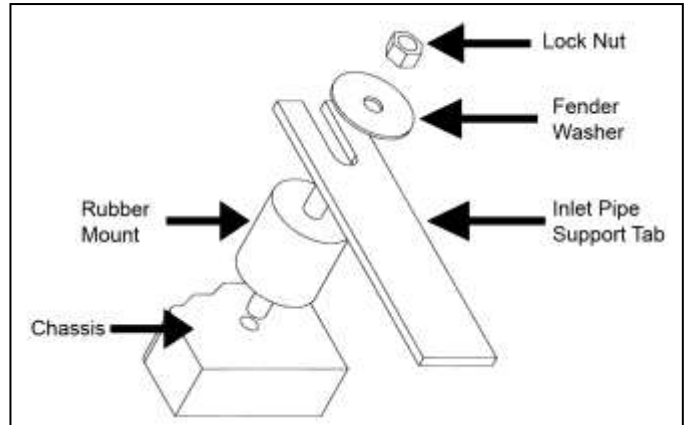
d. Install supplied vacuum cap onto the open port on the vacuum fitting.



e. Remove the bolt in the fender sheet metal.



f. Install the supplied rubber mounts as shown. Refer to diagram for proper installation.



g. Proper assembly of rubber mount.



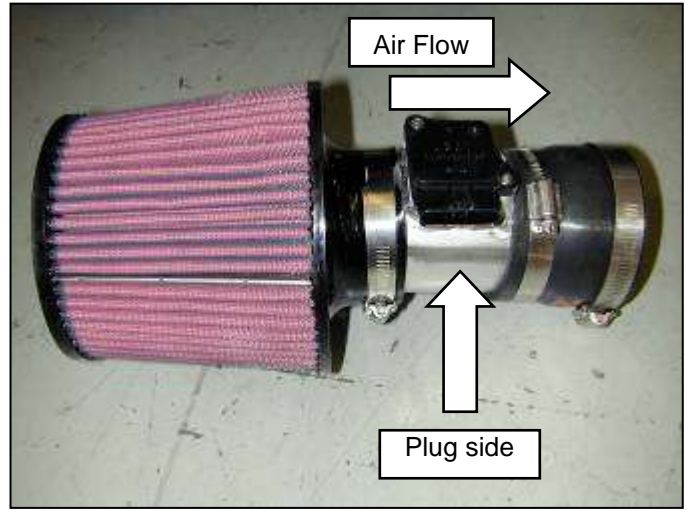
h. Place the intake pipe in the engine bay as shown.



i. Secure the pipe with the supplied washers and lock nuts. Do not completely tighten lock nuts.



j. Secure the upper end of the pipe utilizing the stock inlet hose and clamp. A small amount of WD-40 on the end of the pipe may ease installation.



k. Remove the air flow meter from the stock air box. Secure it to the smaller pipe using the supplied screws as shown. Attach the air filter and reducer to the pipe using a size 44 hose clamp on the reducer. **NOTE: Confirm that the air flow sensor is installed as shown above.**



l. Attach the air filter apparatus as shown. Route the stock air flow sensor wiring harness through the hole in the fender and plug it into the sensor as shown. Again check the position of the air flow meter and confirm that is positioned as shown above.



AEM® intake system installed

4. Reassemble Vehicle

- a. **Fender liner:** Install the fender liner and any hardware that was removed in steps 2i through 2j.
NOTE: Failure to install the fender liner will result in diminished performance and increase the potential for engine damage due to water ingestion in rainy conditions.
- b. **Wheel:** Install the driver side wheel using the factory torque specification (see owner's manual).
- c. Position the inlet pipes for the best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle. Tighten the rubber mount, all bolts, and hose clamps.
- d. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- e. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- f. Reconnect negative battery terminals and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.
- g. Please note that AEM[®] bypass valves will not work with this application (part number 21-483). The use of a bypass valve could have adverse effects on the performance of the system.

5. CARB Sticker Placement

- a. The C.A.R.B. exemption sticker, (attached), must be visible under the hood so that an emissions inspector can see it when the vehicle is required to be tested for emissions. California requires testing every two years, other states may vary.

6. Service and Maintenance

- a. It is recommended that you service your AEM[®] Dryflow™ filter every 20,000 miles for optimum performance. Use AEM Dryflow cleaning kit part # 21-110.
- b. Use aluminum polish to clean your polished AEM[®] intake tube.
- c. 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.