Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 21-488

2006-2008	MAZDA 3 L4 2.3L	
2004-2008	MAZDA 3 L4 2.0L	
2004-2005	MAZDA 3 L4 2.3L	C.A.R.B. E.O. # D-670-2

LEGAL IN CALIFORNIA ONLY FOR RACING VEHICLES WHICH MAY NEVER BE USED, REGISTERED OR LICENSED FOR USE UPON A HIGHWAY.

See aemintakes.com for CARB status on each part for a specific vehicle

PARTS LIST

Description	Qty.	Part Number
Air Filter Assy. 2.50 X 5" Dry Ele.	1	21-201DK
Inlet Pipe	1	2-584
Hose, Adapter 2.50/2.75" X3" Bl.	1	5-254
Mount, Rubber 1" X 6mm	1	1228599
Bolt, Hex 1/4-20 X 3/4	1	1-2014
Bolt, Socket 8-32 X 1/2"	2	1-2028
Washer, 6mm Soft Mount	1	559999
Nut, 1/4-20 Nylock	1	1-2074
Nut, M6 Hex Serrated	1	444.460.04
1/2' Bnd. Hose Clamp, 2.15-3.00"	1	9440
1/2" Bnd. Hose Clamp, 2.31-3.25"	2	9444

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.

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.

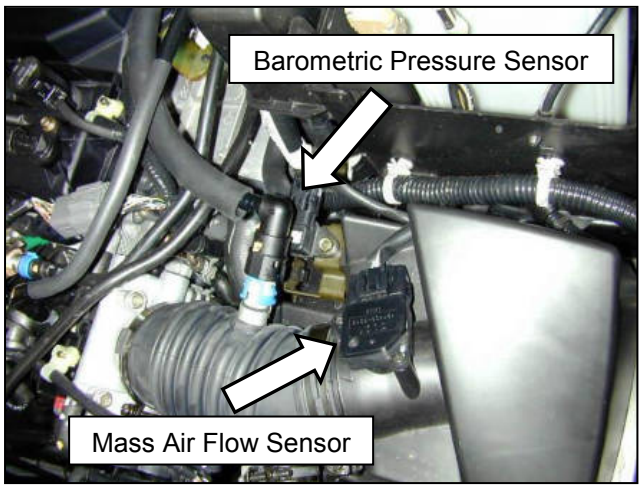
1. Preparing Vehicle

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. Do not discard stock components after removal of the factory system.

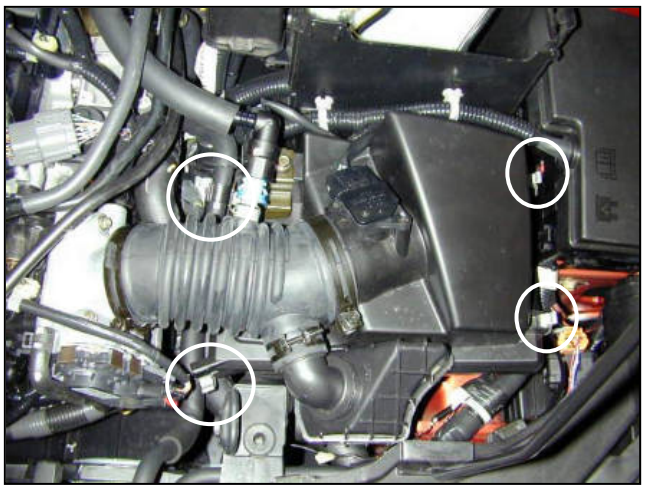
2. Removal of stock system

a. Factory air box configuration.

b. Remove the plastic screw connector holding the battery cooling duct in place. Remove the battery box cover and remove the battery cooling duct.

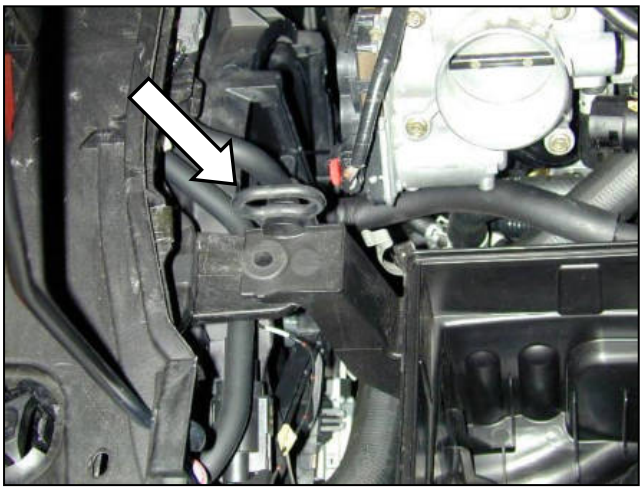


c. Unplug the MAF Sensor and the BP sensor from the wiring harness. Remove the plastic breather hose by pinching the blue connector and pulling on the hose.
NOTE: Not all models are equipped with a barometric pressure sensor.

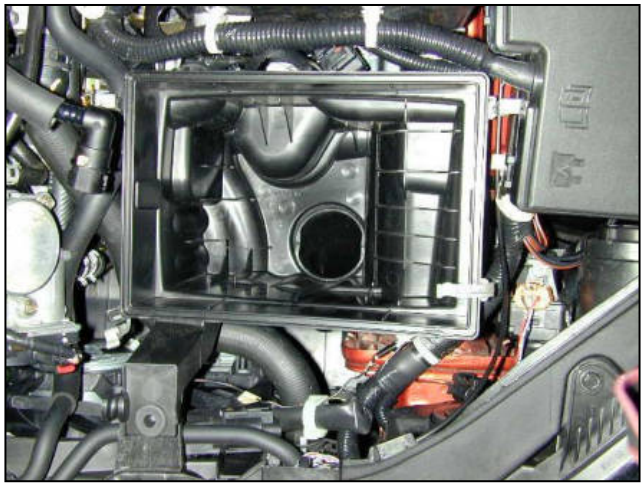


d. Unsnap the four metal retaining clips from the outer edge of the filter housing. Loosen the hose clamp securing the intake hose to the throttle body. Remove entire filter housing top.

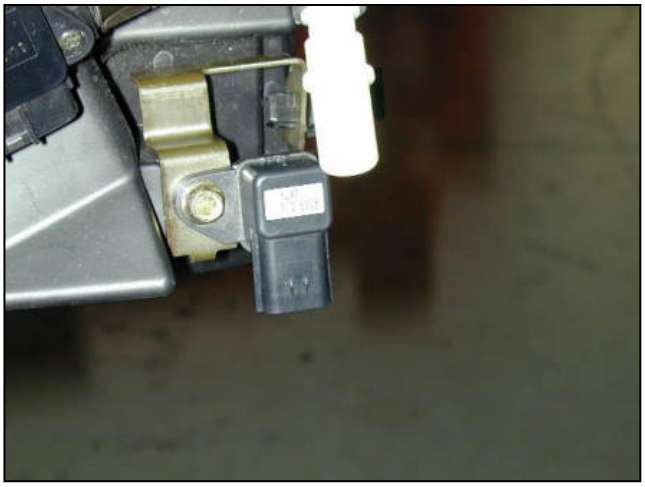
e. Carefully remove the blue plastic clip from the stock intake hose nipple. This can be done by gently prying the two tabs up and over the retaining ring with a small object such as a paperclip.



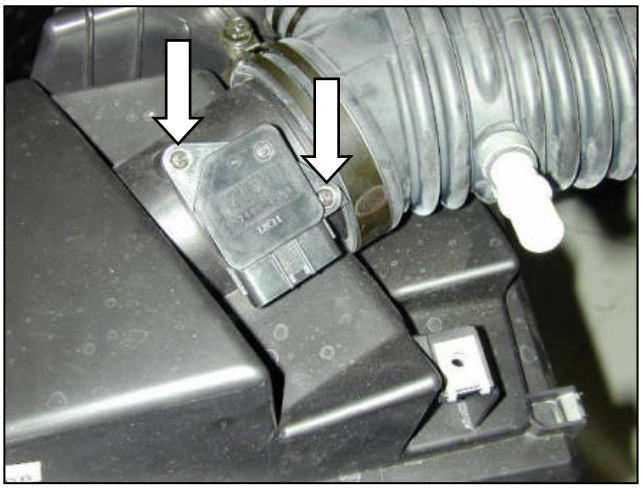
f. Remove the air filter from the lower air filter housing. Remove the rubber tie-down from the front of the housing mount by pulling up in the loop.



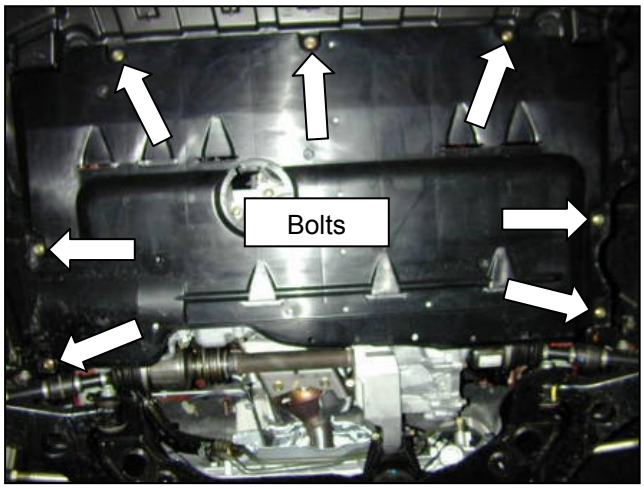
g. Lift up on the lower air filter housing to remove.



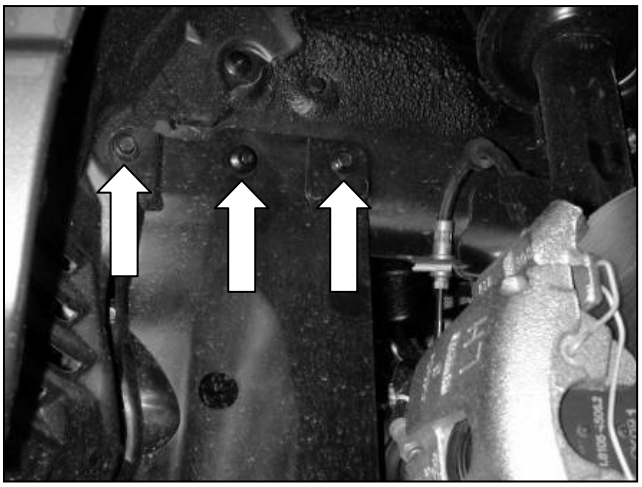
h. On models equipped with BP sensor, remove the bolt holding the BP sensor to the upper intake air box removed earlier. Set the BP sensor aside for later installation.



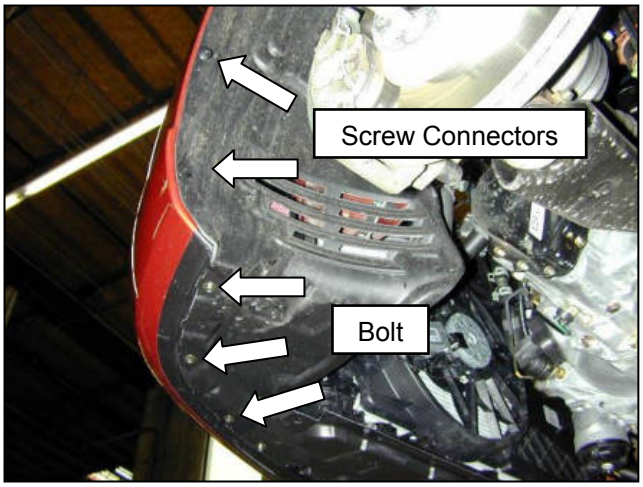
i. Remove the MAF sensor from the filter-housing top by removing the two screws shown.



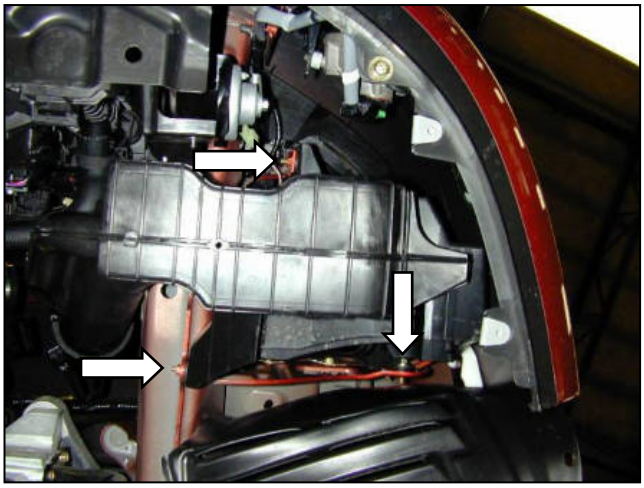
j. From underneath the car remove the seven bolts holding the splash shield in place and remove shield.



k. Remove driver side wheel. Remove the two bolts and the plastic screw connector holding the inner splash shield on and remove shield.



l. Remove the three bolts and the two plastic screw connectors holding the inner fender lining in place. Partially remove the fender liner to access the lower resonator box.

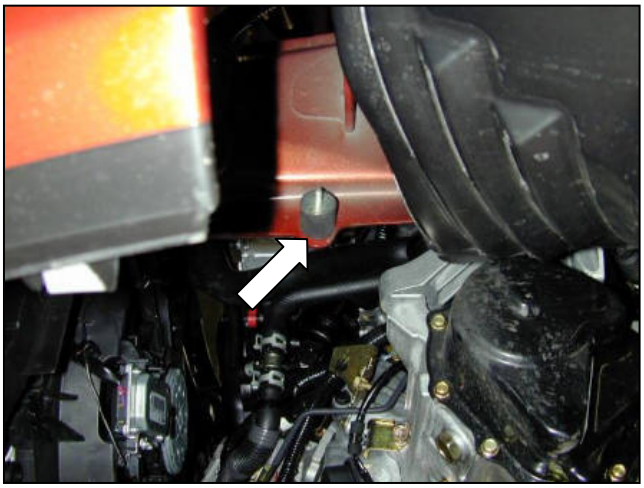


m. Remove the three bolts holding the lower resonator in behind the front bumper. Lower the resonator box out of the vehicle.

n. Factory air box system removed.

3. Installation of AEM® intake system.

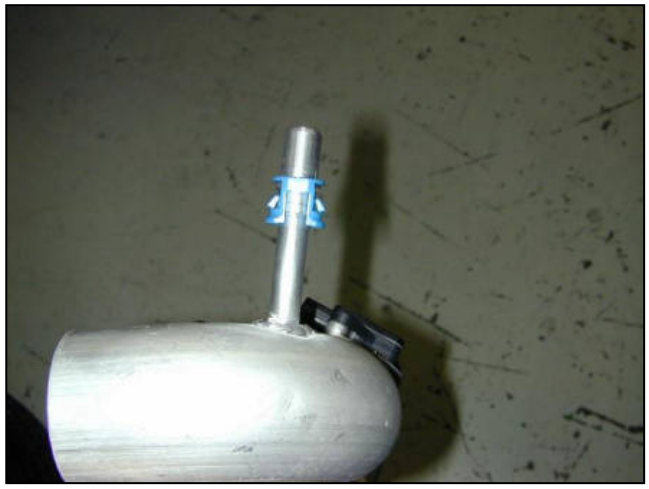
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



b. Install the supplied rubber mount where the stock resonator was mounted as shown.

c. Install reducing coupler onto the throttle body using the supplied #44 and #40 hose clamps. The #44 is for the throttle body end and the #40 is for the intake pipe end.

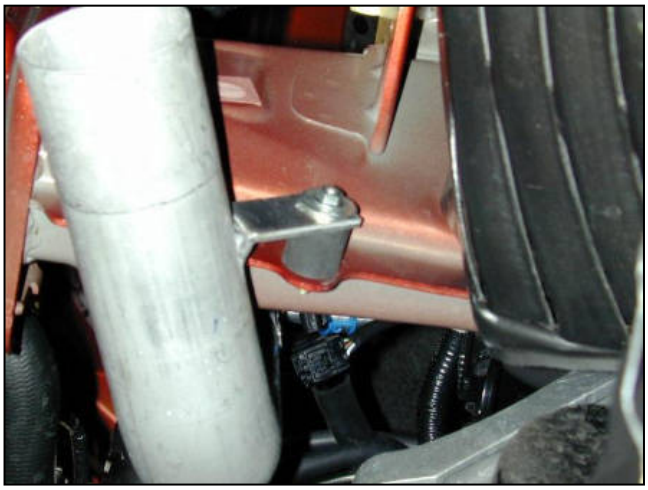
d. Using the two supplied socket bolts, attach the MAF sensor to the pipe as shown. Also, using the supplied ¼" bolt and nylock nut, attach the BP sensor to the intake pipe if equipped.
NOTE: If installing AEM® air bypass valve, measure exactly 1-3/4" from the bottom of the BP sensor mount and cut out a 1-5/8" section of pipe.



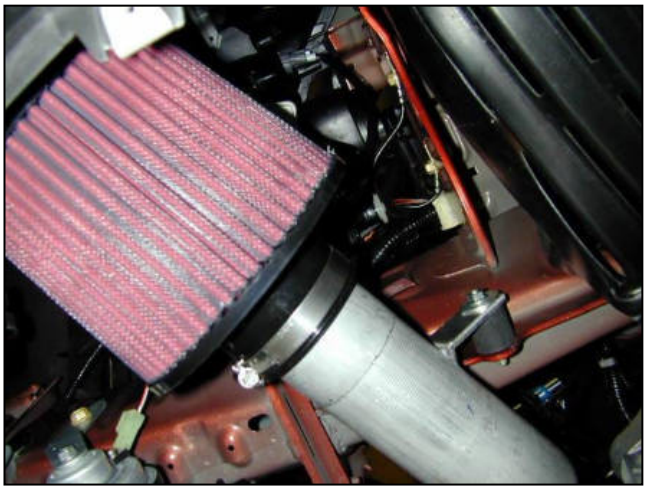
e. Slide the previously removed blue retaining clip onto the long nipple attached to the intake pipe. The clip will snap over the retaining ring on the nipple once fully installed.

f. Slide pipe into reducing coupler on the throttle body. Reconnect the MAF sensor and BP sensor.

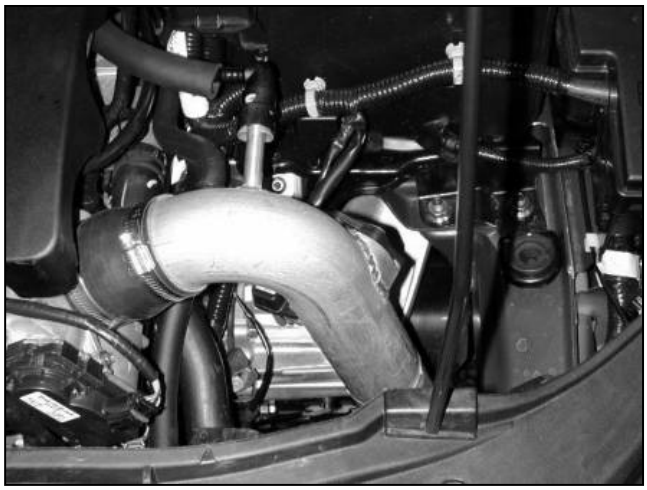
g. Attach breather hose to nipple by lining up the flat surfaces on the blue retaining clip and the breather hose fitting and gently sliding the hose onto the nipple.



h. Slide the intake pipe bracket over the rubber mount stud and secure using the supplied washer and nylock nut. Do not fully tighten the nut until proper adjustment has been checked.



i. Install the AEM® air filter onto the end of the inlet tube. Push the air filter over the inlet pipe until the stop in the air filter is reached. Install one hose clamp to secure the air filter onto the inlet pipe. Once fitment is checked, tighten the hose clamp.



j. Ensure the air filter is not touching any part of the vehicle. Position the AEM® intake pipe for best fitment. Be sure that the intake pipe does not contact any part of the vehicle or any other component. Tighten the hose clamps at the throttle body and silicone coupling. Tighten the nut on the mounting bracket. Re-adjust the pipe if necessary.

k. Reconnect the battery terminals and reinstall the battery cooling duct and battery box cover. These items must be installed! The supplied AEM® badge can be placed on the battery cooling duct; however the supplied CARB sticker needs to be placed in a visible location where it will avoid damage.

4. Reassemble Vehicle

a. **Fender Liner:** Install and secure the driver side fender liner that was partially removed in step 2k and 2l.
b. **Wheel:** Install the driver's 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.

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.

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