



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## **INSTALLATION INSTRUCTIONS**

**PART NUMBER:**

**21-438B (Blue Finish)**

**21-438C (Gun Metal Grey Finish)**

**21-438P (Vacuum Metalized Chrome-VMC)**

**21-438R (Red Finish)**

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2006 MITSUBISHI Eclipse V6-3.8L Manual Trans. C.A.R.B. E.O. # D-670-15

**Intake systems for vehicles listed are 50 state legal. See AEMIntakes.com for CARB status on each part for a specific vehicle.**

## PARTS LIST

Description	Qty.	Part Number
Air Filter Assy. 2.75 X 9" Dry Ele.	1	21-2029DK
Upper Pipe	1	2-360
Lower Pipe	1	2-364
Hose, Silicone 2.75x3" Blk.	1	5-275
Hose, DBL Hump 2.75" W/Screen	1	5-578
Mount, Rubber 1" X 6mm	1	1228599
Vacuum Cap, 1/8"	1	8-105
Drain Valve, 0.500"	1	8-145
Zip Tie, 6 Long	1	1-113
Bracket, Support	1	32-3039
Bolt, Hex M6 X 1.0 X 16mm	1	1-2030
Bolt, Hex M8-1.25 X 20mm	1	1-2034
Bolt, Hex M8-1.25 X 25mm	1	1-2066
Washer, ¼ SAE Flat	1	1-3028
Washer, 8mm Soft Mount	1	559960
Washer, 6mm Soft Mount	2	08160
Nut, M6 Hex Serrated	1	444.460.04
1/2" Bnd. Hose Clamp, 2.31-3.25"	4	9444
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. Do not discard stock components after removal of the factory system.

## 2. Removal of stock system



a. Before removing any of the O.E. components, label each individual part so that no components become mixed up during installation.



b. Remove the two plastic rivets holding the intake duct to the radiator support.



c. Remove the breather hose from inlet air hose by compressing the spring clamp and pulling it off.



d. Loosen the hose clamp on the throttle body.



e. Loosen the hose clamp on the air filter housing and remove the air inlet tube and upper resonator.



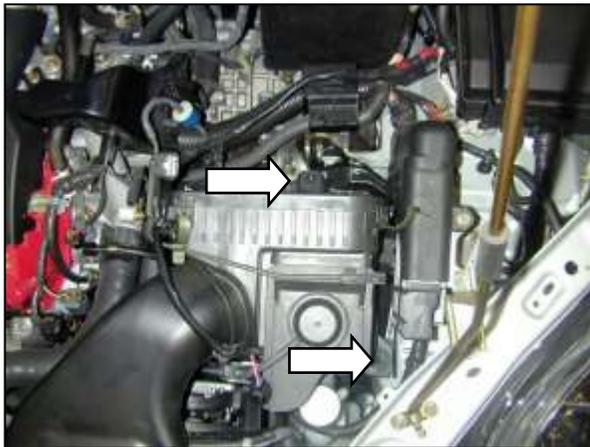
f. Unclip the Mass Air Flow (MAF) sensor wiring harness from the air filter housing. These clips can be removed undamaged from the harness using a small flat head screwdriver. Unplug the MAF sensor from the engine harness.



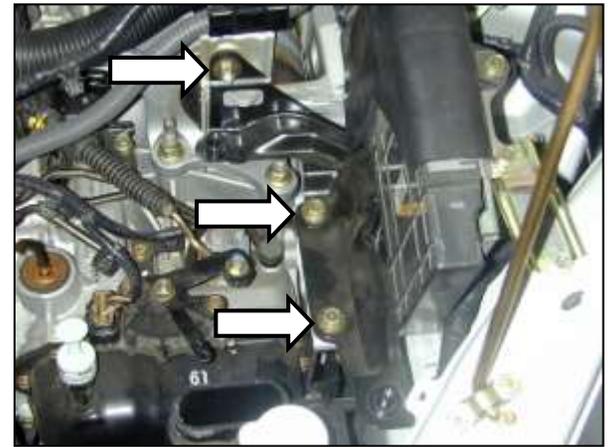
g. Unclip the air filter housing lid and remove the lid and the air filter.



h. Unplug the bypass solenoid harness and vacuum hose. Unclip the harness from the air filter housing. Unplug the vacuum hose from the intake manifold and remove the bolt securing the line.



i. Loosen the three bolts securing the ECU to the chassis. Remove the two bolts securing the air filter housing. Lift the housing out of the engine bay.



j. Remove the nut and two bolts securing the air filter housing bracket to the chassis. Remove the bracket.



k. Locate the bolt securing the lower resonator in the engine compartment and remove it.



m. Unplug the radiator fan harness. Unhook the radiator overflow hose from the reservoir and remove the reservoir.



o. Remove the ground bolt on the aluminum coolant line as shown.



l. Remove the five screws and four plastic connectors securing the driver's side underbody splash shield to the chassis.



n. Remove the bolt securing the horn to the chassis and remove the horn. Remove the remaining two bolts securing the lower resonator to the chassis and remove the resonator.



p. Remove the two bolts securing the MAF sensor to the air filter housing and remove the MAF sensor. Be careful not to damage the sensor.

### 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 bolt was removed in step 2o using the 1/4" flat washer as shown.



c. Install the 2.75" silicone coupler onto the throttle body and secure using a #44 hose clamp. Also, install the vacuum cap on the intake manifold nipple as indicated above.



d. Install the previously removed MAF sensor into the upper intake pipe using the two bolts removed in step 2p.



e. Check that the inside of the AEM® intake pipe is free from debris. Install the intake pipe into the previously installed coupler as shown.



f. Align the intake mounting bracket with the previously installed rubber mount and secure using a 6mm flat washer and serrated nut.



g. Plug in the MAF sensor wiring harness. Secure the plug and extra wire for the bypass solenoid using a 6" zip tie.



h. Attach the stock breather hose using the original spring clamp.



i. Install the lower pipe bolt on mounting bracket using the supplied M8 bolt and washer as shown. Leave this bracket fairly loose.



j. Install the supplied hump hose on to the end of the lower intake pipe. Secure using a #44 hose clamp.



k. Slide the lower intake pipe in from the bottom and align the upper and lower pipes. Slide the hump hose over the end of the upper intake pipe and secure using a #44 hose clamp.



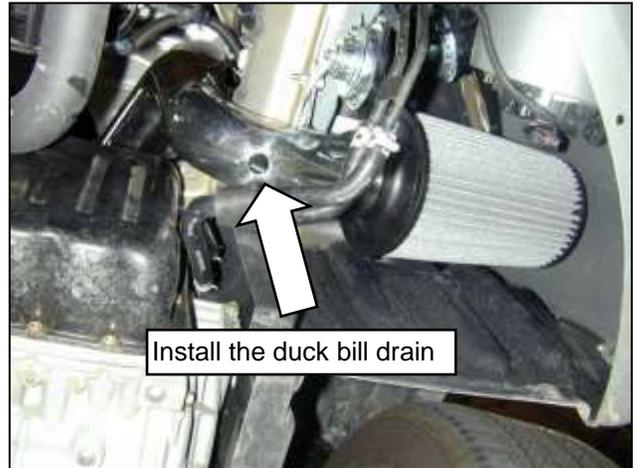
l. Align the fixed lower intake pipe bracket with the hole where the horn was previously removed. Install the supplied M8 bolt, washer, and horn.



m. Install the M6 bolt into the bracket installed in step 3h. Thread the bolt into the threaded bung on the lower intake pipe. Tighten the bolts loosened in step 2i.



n. Install the AEM® air filter onto the end of the intake pipe. Push the air filter over the intake pipe until the stop in the air filter is reached. Then install one hose clamp to secure the filter onto the intake pipe.



o. Install the duck bill drain into the hole on the lower intake pipe. Reinstall the radiator fluid reservoir and plug in the fan wiring harness removed earlier in steps 2m.



Factory air box system installed



AEM® intake system installed

#### 4. Reassemble Vehicle

- a. **Fender liner:** Install the driver side fender liner and hardware that were removed in steps 2l.  
**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'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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