

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

# INSTALLATION INSTRUCTIONS PART NUMBER: 21-544

2002-2006

NISSAN

Sentra

L4-2.5L

C.A.R.B. E.O. # D-670-2

The installation of this AEM<sup>®</sup> intake system requires some modification to the vehicle's inner fender. A specialized power tool will be needed to modify the vehicle's inner fender so the AEM<sup>®</sup> intake system can be installed. When using any power tools always use proper eye and hand protection. See steps 3D to see the details describing the necessary modification.

AEM® bypass valves are not compatible with this intake system (part number 21-544)

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
Element Parts Kit 3.00 X 5" Dry Ele.	1	21-203DK
Upper Pipe	1	2-491
Lower Pipe	1	2-492
Adapter, MAF	1	2-641
Hose, Adapter 2.75/3.00 X 3" Bl.	1	5-273
Hose, Silicone 3.00x3" Blk.	2	5-300
Hose; 5/8"ID X 16"L	1	5-7016
Mount, Rubber 1" X 6mm	1	1228599
Washer, 6mm Soft Mount	1	08160
Nut, M6 Hex Serrated	1	444.460.04
1/2" Bnd. Hose Clamp, 2.56"-3.50"	5	9448
1/2" Bnd. Hose Clamp, 2.31-3.25"	1	9444
Hose Clamp, 1"	2	08407
1/2" Bnd. Hose Clamp, 2.90"-3.75"	1	9452

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.

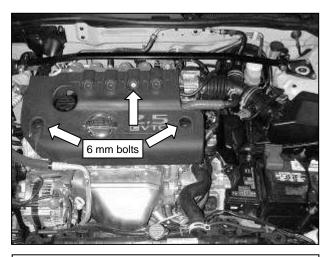
## 1. Preparing Vehicle

- 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.**

- i. Remove driver side wheel.
- f. Do not discard stock components after removal of the factory system.

# 2. Removal of stock system



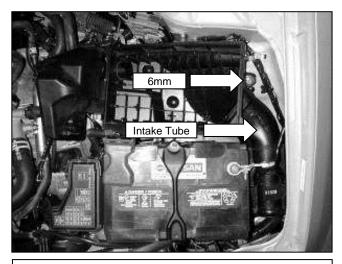
a. Loosen the three 6mm bolts on the engine cover and remove it.



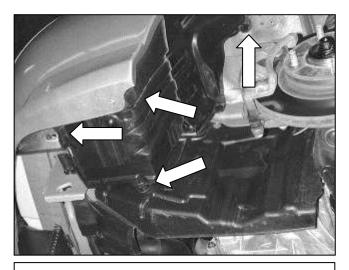
b. Loosen the air filter tube hose clamps, air cleaner lid clips, and remove the air filter lid and intake hose assembly.

#### **Manual Transmission Vehicles:**

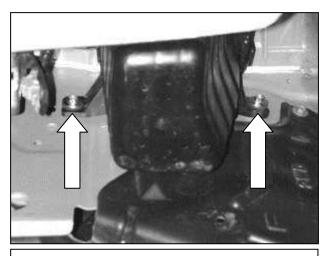
On manual transmission vehicles remove the transmission line from the stock intake hose located near the firewall.



c. Loosen the 6mm air cleaner hold down bolt, remove the air cleaner assembly, and intake tube.



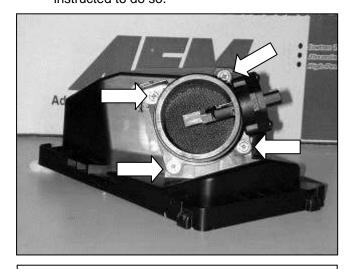
d. Remove the inner fender liner fasteners and remove the driver side fender liner.



e. Loosen the two 6mm bolts and remove the intake air silencer.

# 3. Installation of AEM<sup>®</sup> intake system.

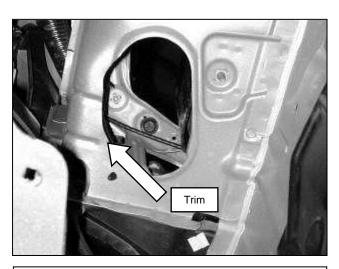
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



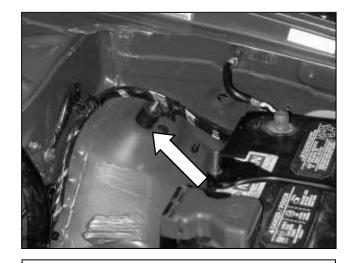
b. Loosen the four 6mm bolts, and remove the MAF Sensor from the air cleaner lid.



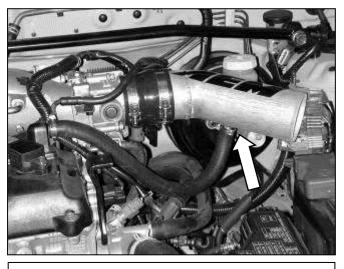
c. Install the included MAF adaptor onto the sensor using the factory bolts as shown.



d. The factory hole that the inlet pipe passes through must be enlarged for clearance of the AEM® intake pipe. The use of a specialized power tool will be needed to cut through the inner fender so the AEM® intake pipe is able to clear the inner fender opening. Trim about ¾" from the outside edge of the inner fender hole as shown. Ensure that any rough or sharp edges are smoothed and that the AEM® intake pipe is able to clear the opening without touching any part of the inner fender.



e. Install the supplied rubber mount as shown.



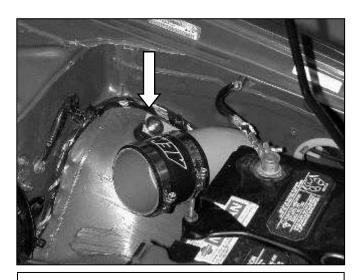
f. Using the supplied reducer coupler, #48 clamp, and a #44 clamp, attach the upper intake pipe to the throttle body as shown. Then attach the 5/8" hose to the cam cover breather and the upper pipe, using the included small clamps, as shown.

## **Manual Transmission Vehicles:**

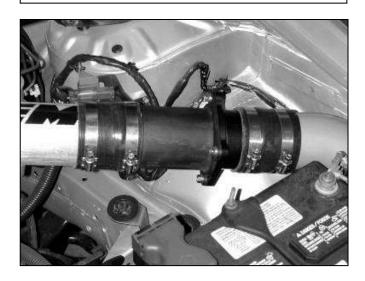
Attach the stock transmission breather hose to the back of the intake pipe near the fender wall.

## **Automatic Transmission Vehicles:**

Attach the supplied cap to the intake pipe.



g. Install the lower intake pipe, securing the intake pipe bracket onto the rubber mount on the inner fender. Secure as shown using the included washer and nylock nut.



h. Insert the MAF/adaptor assembly into both the upper and lower intake pipes as shown. The adaptor end will connect to the lower intake pipe. Connect the MAF sensor plug, as shown.



i. Install the air filter onto the end of the lower intake pipe, using the provided clamp.



AEM® intake system installed

### 4. Reassemble Vehicle

- a. Fender liner: Install the fender liner and any hardware that was removed in step 2d.
  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. Engine Cover: Install the engine cover and secure with the three bolts removed in step 2a.
- d. 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.
- e. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- f. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- g. Reconnect negative battery terminals and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.
- h. Please note that AEM<sup>®</sup> bypass valves will not work with this application (part number 21-544) due to space restrictions and the MAF sensor location. 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<sup>®</sup> Dryflow<sup>™</sup> 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<sup>®</sup> 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<sup>®</sup> 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.