

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

# INSTALLATION INSTRUCTIONS PART NUMBER: 22-441

1995-1998

NISSAN 240SX L4-2.4L

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

### PARTS LIST

Description	Qty.	Part Number
Element Parts Kit 2.75 X 5" Dry Ele.	1	21-202DK
Short Pipe	1	2-4411
Adapter, MAF	1	2-633
Hose, Adapter 2.50/2.75 X 3" Bl.	2	5-257
Hose; 5/8" ID X 11"L	1	5-7011
Stud; Rubber Mount, M6X1 Male/Female	1	02033
Bracket, Support	1	32-3002
Bracket, Support	1	32-3004
Bolt, Socket M6-1 X 16mm	4	1-2042
Washer, M6 X 12mm OD Zinc	6	1-3018
Washer, 6mm Soft Mount	3	08160
Nut, M6 Hex Serrated	2	444.460.04
Hose Clamp, 1"	2	08407
1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448
1/2' Bnd. Hose Clamp, 2.15-3.00"	2	9440
1/2" Bnd. Hose Clamp, 2.31-3.25"	2	9444
Srew; Set M6X1X25	1	1-1018

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.

### 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. There are three breather hoses, an intake air temperature (IAT) sensor, and a mass air flow (MAF) sensor. Refer to the following diagrams for the identification of these components. **(Fig. 1)**
- b. Unplug the MAF and IAT sensor connectors.
- c. Disconnect the large upper breather hose from the valve cover.
- d. Disconnect the large lower breather tube from the intake tube. Do not lose the hose clamp.
- e. Disconnect the small breather hose from the intake tube. Do not lose the hose clamp.
- f. Remove the small breather hose from the plastic clamp on the intake tube. (Fig. 2)
- g. Release the four clips holding down the air box cover. (Fig. 3)
- h. Loosen the hose clamp on the throttle body. Remove the bolt from the radiator fan shroud and the mounting tab nut from the radiator support. (Fig. 4)
- i. Remove the air intake tube, intake tube mounting tab, MAF, and air box cover from the vehicle.
- j. Loosen the two nuts and one bolt that secure the lower air box. Remove the stock lower air box from the vehicle. (Fig. 5)

#### NOTE: It is not necessary to remove the stock resonator from inside the fender well.

- k. Remove the IAT sensor from the stock air box. The IAT sensor is mounted with two bolts that thread through the air box into a threaded backing plate on the inside of the air box. Keep the mounting plate and the two mounting screws, they will be used with the AEM<sup>®</sup> MAF adaptor.
- I. Loosen the four mounting bolts and remove the MAF from the stock air box cover. Remove the stock air inlet tube from the MAF.

## 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. Ensure that the AEM<sup>®</sup> inlet pipe and air filter are clean and free from any obstructions.
- c. Install the 2.75" side of a reducer coupler onto the throttle body using a 2.75" hose clamp.
- d. Install one 2.50" hose clamp onto the other end of the reducer coupler.
- e. Slide the throttle body end of the AEM<sup>®</sup> inlet pipe into the coupler on the throttle body. The throttle body end is the end nearest the breather hose nipples on the AEM<sup>®</sup> inlet pipe.
- f. Install the IAT sensor into the AEM<sup>®</sup> MAF adaptor using the original screws and backing plate. (Fig. 6 & 7)
- g. Remove the rubber bushing assembly from the factory air box mounting tab. Remove the metal sleeve first, then the rubber piece will pull out. **(Fig. 8)**
- h. Install the bushing and metal sleeve into the larger hole of the lower MAF mounting bracket. (Fig. 9)
- i. Mount the AEM<sup>®</sup> MAF adaptor to the MAF sensor using the four supplied M6 socket head bolts and washers. Position the adaptor so that the MAF and IAT sensor are oriented as they were originally positioned.
  - i. Mount the IAT sensor connector bracket to the MAF mounting hole that it was originally bolted to.

- ii. Mount the lower MAF mounting bracket to the MAF mounting hole below the IAT sensor connector bracket. The bend in the bracket should angle away from the MAF sensor and towards the round end of the MAF adaptor. **Do not tighten this screw. (Fig. 10)**
- j. Thread the supplied set screw into the rubber mount with 3/8" from the end of the set screw to the rubber. Then screw the set screw into the MAF adaptor.

# NOTE: The threaded ends on the rubber mount are different lengths. The shorter end threads into the MAF adaptor.

- k. Remove the nut from the far right of the radiator support.
- I. Place two large fender washers over the exposed stud. (Fig. 11)
- m. Use the original nut and a supplied M6 washer to secure the upper MAF bracket to the stud. **Do not tighten** (Fig. 12).
- n. Install the reducer coupler onto the end of the AEM<sup>®</sup> inlet pipe with a 2.50" hose clamp.
- o. Install the MAF into the reducer coupler using a 2.75" hose clamp.
  - i. The rubber mount stud should line up with the hole in the upper MAF bracket. Install an M6 washer and nylock nut. Do not tighten.
  - ii. The lower MAF bracket should line up with one of the lower air box mounting studs. Install a large fender washer and nylock nut. Do not tighten. (Fig. 13)
- p. Install the AEM<sup>®</sup> air filter onto the MAF adaptor using a 2.75" hose clamp.
- q. Connect the small breather hose to the small nipple on the AEM<sup>®</sup> inlet pipe.
- r. Connect the lower large breather hose to the lower nipple on the AEM<sup>®</sup> inlet pipe. Use the original hose clamp.
  - i. The lower large breather hose will need to be cut for proper fitment. When cut just after the first bend in the hose, the lower large breather hose should line up with the lower nipple on the AEM<sup>®</sup> inlet pipe. (Fig. 14)
- s. Replace the upper large breather hose with the supplied 5/8" hose and the two 1" Hose clamps. (Fig. 15)

### 4. Reassemble Vehicle

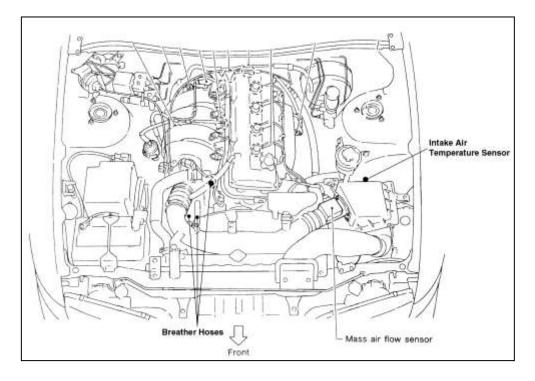
- a. Connect the wiring harness for both the MAF and IAT sensors.
- b. Position the inlet pipes for the best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle. Tighten the rubber mount, all bolts, and hose clamps.
- c. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- d. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- e. 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<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  $\mathsf{AEM}^{^{(\!\!\!\!\ensuremath{\mathbb{R}})}}$  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).



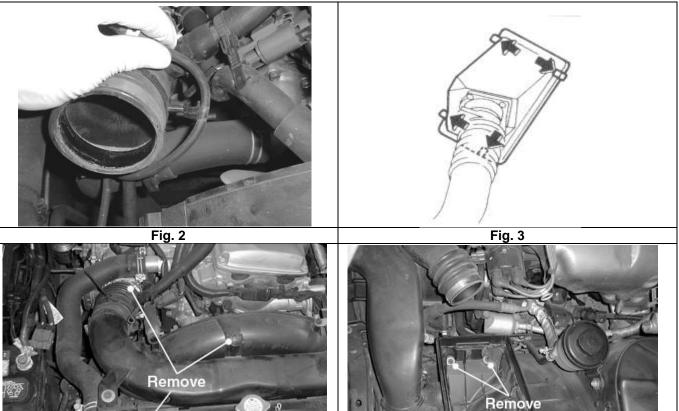
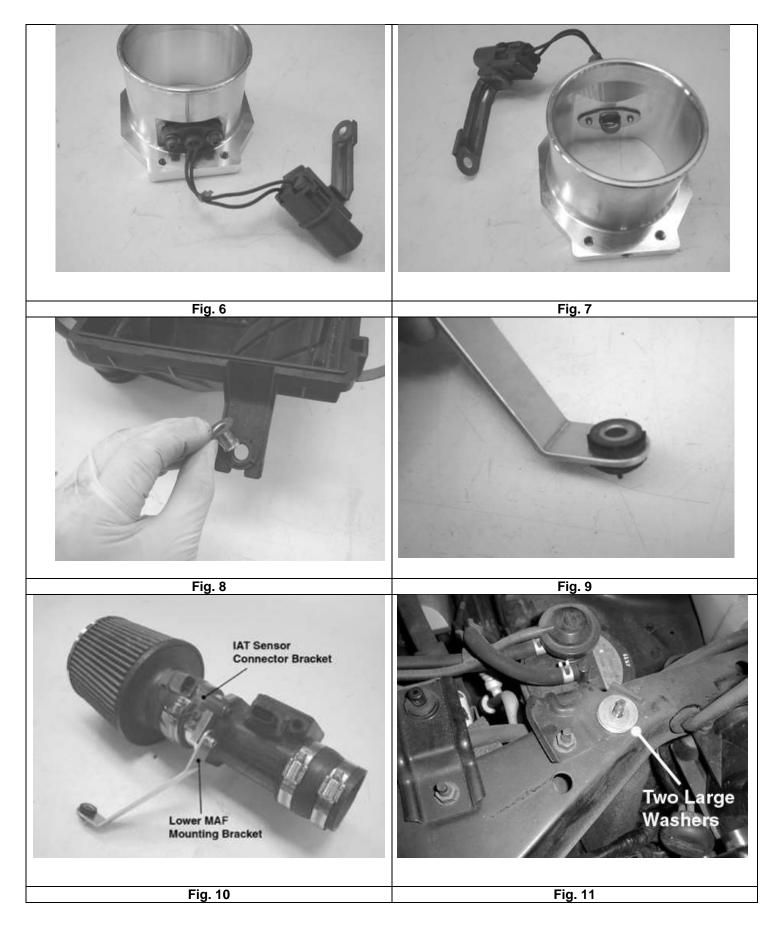


Fig.5

Fig. 4



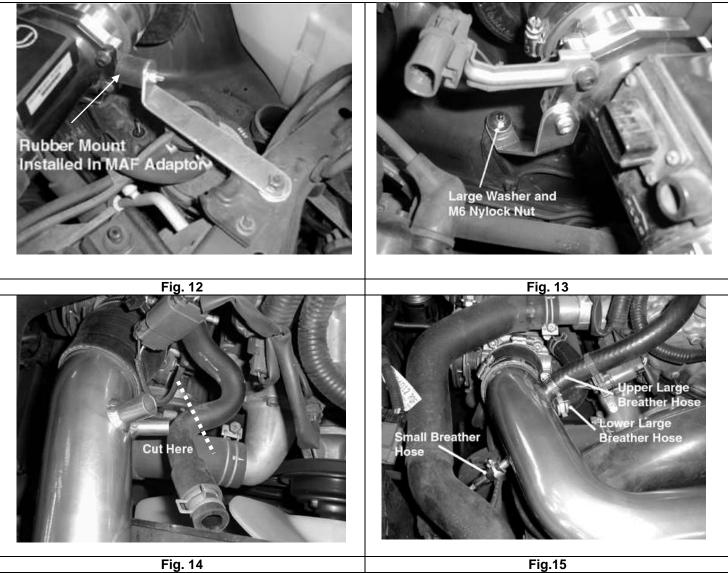


Fig. 14



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.