



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-8504

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2010-2011	NISSAN	Frontier	V6-4.0L		SEE * NOTE
2010-2011	NISSAN	Pathfinder	V6-4.0L		SEE * NOTE
2010-2011	NISSAN	Xterra	V6-4.0L		SEE * NOTE
2007-2009	NISSAN	Frontier	V6-4.0L		C.A.R.B. E.O. # D-670
2006	NISSAN	Frontier	V6-4.0L	Auto Trans.	C.A.R.B. E.O. # D-670
2005	NISSAN	Frontier	V6-4.0L		C.A.R.B. E.O. # D-670
2005-2009	NISSAN	Pathfinder	V6-4.0L		C.A.R.B. E.O. # D-670
2007-2009	NISSAN	Xterra	V6-4.0L		C.A.R.B. E.O. # D-670
2005-2006	NISSAN	Xterra	V6-4.0L	Auto Trans.	C.A.R.B. E.O. # D-670

**\* 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. 3.25 X 9" Dry Ele.	1	21-2109DK
Inlet Pipe	1	2-85041
Heat Shield	1	20-RND26
Hose; 5/8"ID X 17"L	1	5-7017
Edge Trim, 17"	1	8-4017
Edge Trim, 11"	1	8-4011
Rubber Edge Trim 10"	1	8-3010
Mount, Rubber 1" X 8mm	1	1228560
Zip Tie, 6 Long	1	1-113
Four Way Cable Tie Holder .19"	1	1-118
Bolt, Hex/Flange M6-1 X 20	2	1-2038
Washer, 8mm Soft Mount	2	559960
Nut, M8 Hex Serrated	2	444.460.08
1/2" Bnd. Hose Clamp, 3.15"-4.00"	1	9456

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.

## 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. Loosen the hose clamp at the inlet pipe side only.



b. Loosen the hose clamp on the airbox side.



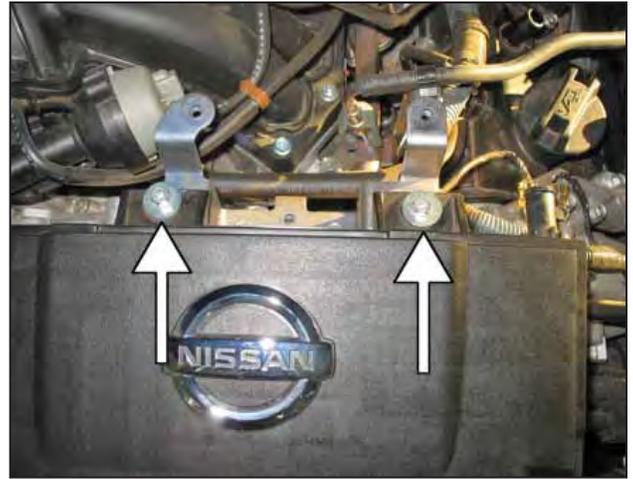
c. Loosen and remove the bolts to the engine cover, remove the engine cover.



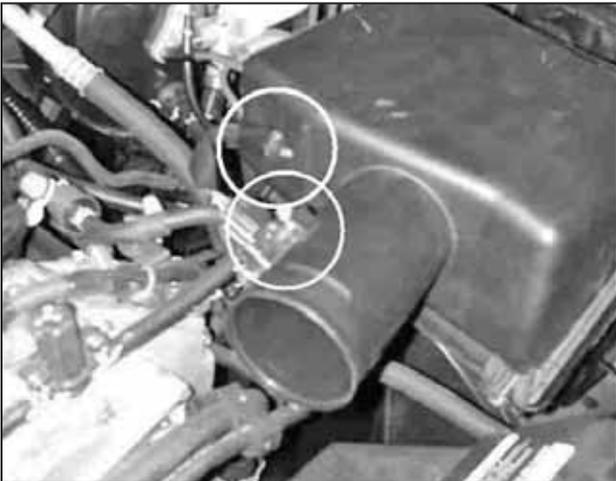
d. Remove the crankcase breather tube from the valve cover, save the spring clamp for later use.



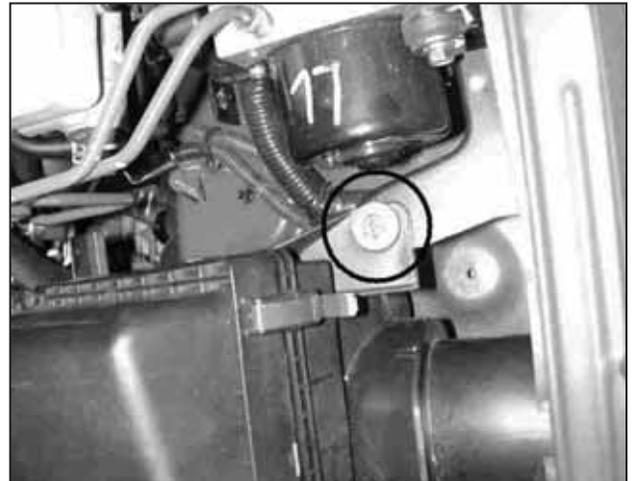
e. Unclasp the spring clamp. Remove breather hose from the air inlet tube. Save the spring clamp for later use.



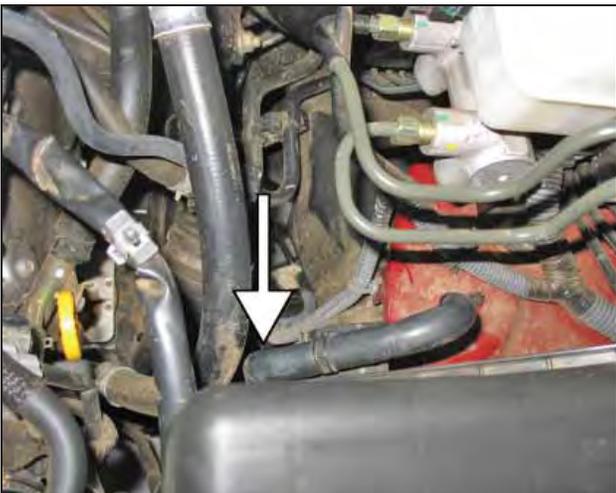
f. Remove the remaining bolts to the air inlet tube and then remove the inlet tube from the vehicle.



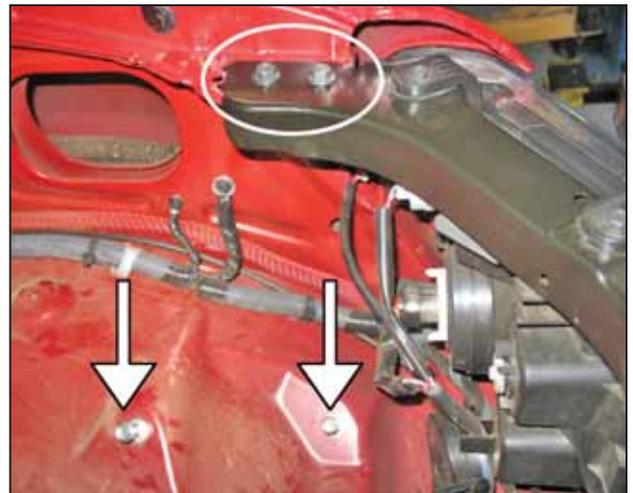
g. Unplug the MAF sensor and remove the MAF sensor harness.



h. Remove rear mounting bolt to the airbox. Remove the airbox from the engine bay. For 2WD vehicles go to step 2(j). For 4WD vehicles, proceed to step 2(i).



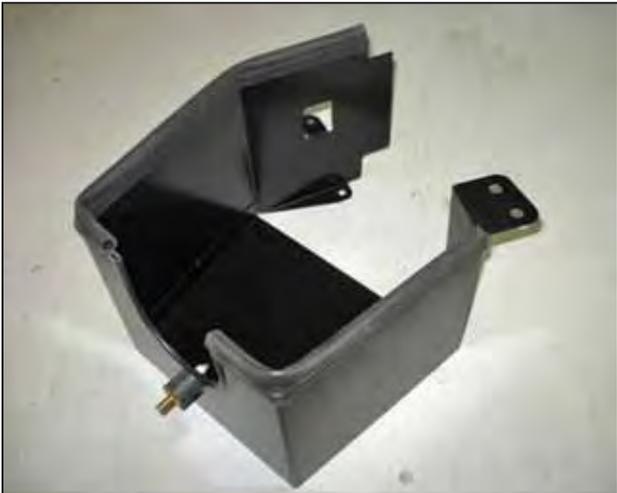
i. Remove transmission breather hose from the airbox.



j. Remove the airbox mounting bolts. Also remove the two bolts from the radiator support.

### 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.



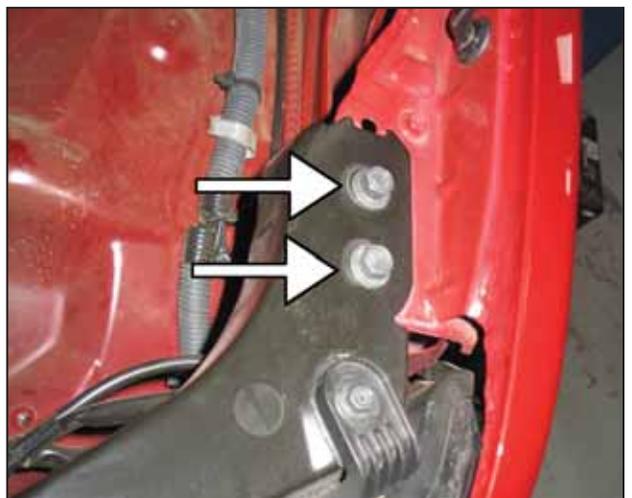
b. On the heat shield, install the rubber mount using the supplied washer and nut. Install the rubber edge trim #8-3010 around the intake pipe opening, also install the edge trim #8-4017 on the top edges of the heat shield.



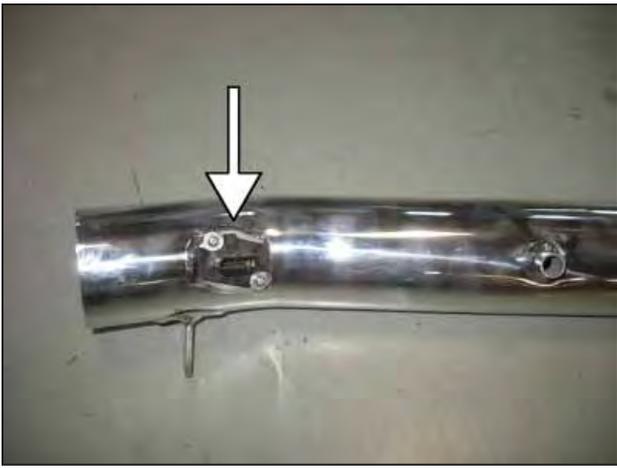
c. Insert the heat shield into the engine bay.



d. Secure the heat shield on both tabs as shown.



e. Secure the tab at the radiator support with the stock bolts as shown.



f. Insert the MAF sensor and secure with the factory hardware as shown.



g. Insert the inlet pipe into the coupler, but do not completely secure the hose clamps.



h. Line up the inlet pipe's bracket with the rubber mount installed on the heat shield. Ensure the inlet pipe has proper clearance, then secure the hose clamp at the throttle body.



i. Secure the bracket to the rubber mount with provided washer and nut.



j. Plug in the MAF sensor harness into the MAF sensor. Secure the MAF sensor wire harness to the heat shield as shown.



k. Attach the crankcase breather hose to the inlet pipe and secure with the factory spring clamp.



l. Attach and secure the other end of the breather hose to the crankcase vent, secure with the factory clamp.



m. Attach the air filter and secure. Check for clearance around the air filter.



n. 2WD vehicles: Reinstall the engine cover and proceed to section 4.  
4WD vehicles: Proceed to step 3(o).



o. Secure the transmission breather hose to the heat shield with the zip tie and mount as shown.



Factory airbox system installed



AEM® intake system installed

#### 4. Reassemble Vehicle

- a. 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.
- b. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- d. 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.