



Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 21-8504

2011-2012	NISSAN	Frontier	V6-4.0L		SEE * NOTE
2011-2012	NISSAN	Pathfinder	V6-4.0L		SEE * NOTE
2011-2012	NISSAN	Xterra	V6-4.0L		SEE * NOTE
2007-2009	NISSAN	Frontier	V6-4.0L		C.A.R.B. E.O. # D-670-6
2006	NISSAN	Frontier	V6-4.0L	Auto Trans.	C.A.R.B. E.O. # D-670-6
2005	NISSAN	Frontier	V6-4.0L		C.A.R.B. E.O. # D-670-6
2005-2009	NISSAN	Pathfinder	V6-4.0L		C.A.R.B. E.O. # D-670-6
2007-2009	NISSAN	Xterra	V6-4.0L		C.A.R.B. E.O. # D-670-6
2005-2006	NISSAN	Xterra	V6-4.0L	Auto Trans.	C.A.R.B. E.O. # D-670-6

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 tube side only.



b. Loosen the hose clamp on the air box side.



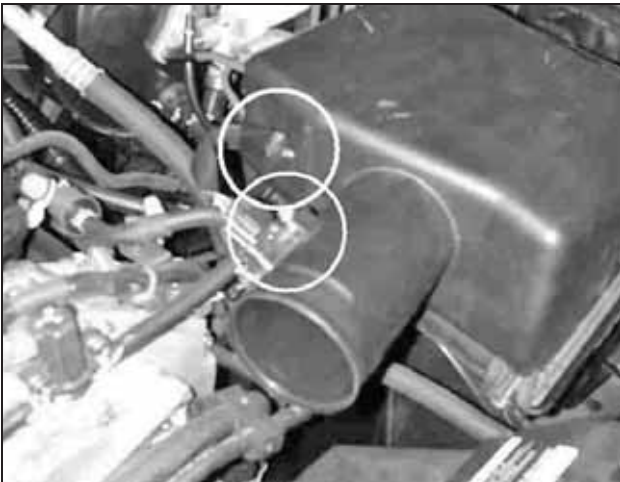
c. Loosen and remove the bolts to the engine cover; remove engine cover from vehicle.



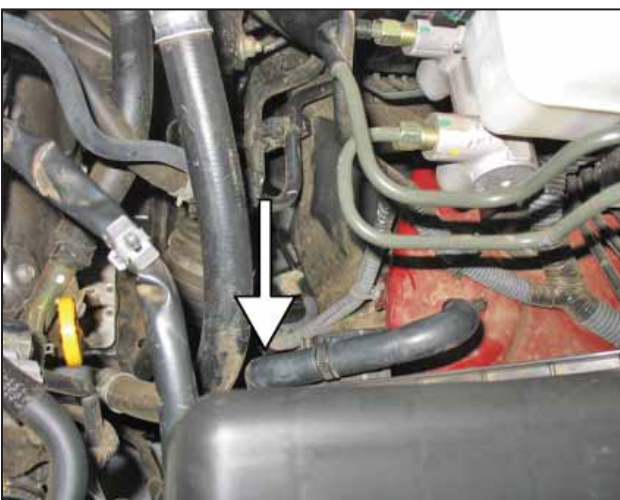
d. Remove the crank case breather tube from the valve cover; save the spring clamp for later use.



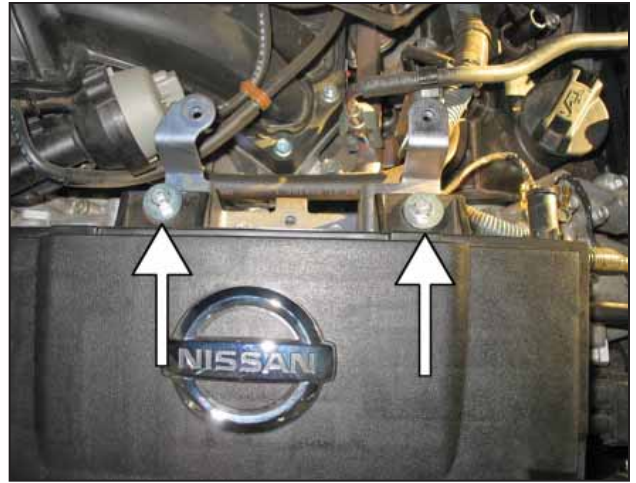
e. Unclasp the spring clamp and remove the breather hose from the air inlet tube. Save the spring clamp for later use.



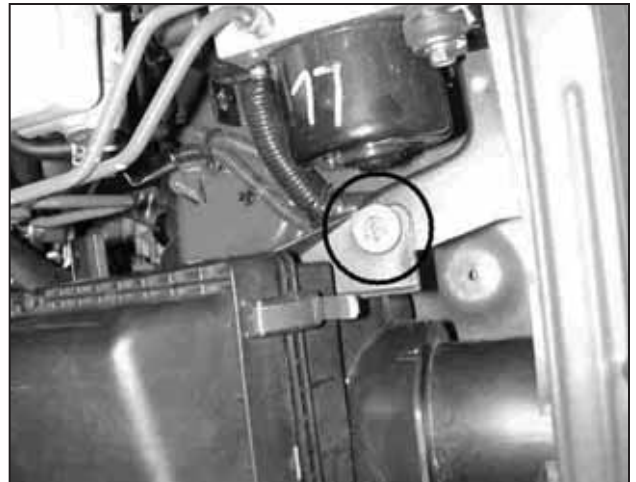
g. Unplug the MAF sensor and remove the MAF sensor harness.



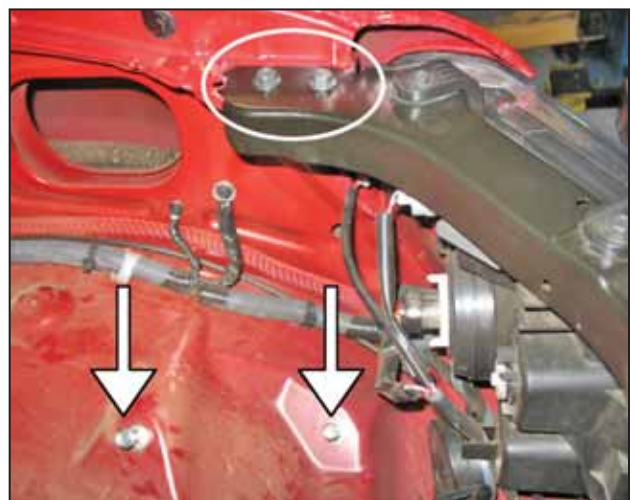
i. Remove the transmission breather hose from the air box.



f. Remove the remaining bolts securing the air inlet tube, then remove the air inlet tube from the vehicle.



h. Remove the rear mounting bolt to the air box. Remove the air box from the engine bay.
2WD Vehicles: Go to step 2(j).
4WD Vehicles: Proceed to step 2(i).



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

3. Installation of AEM® intake system.

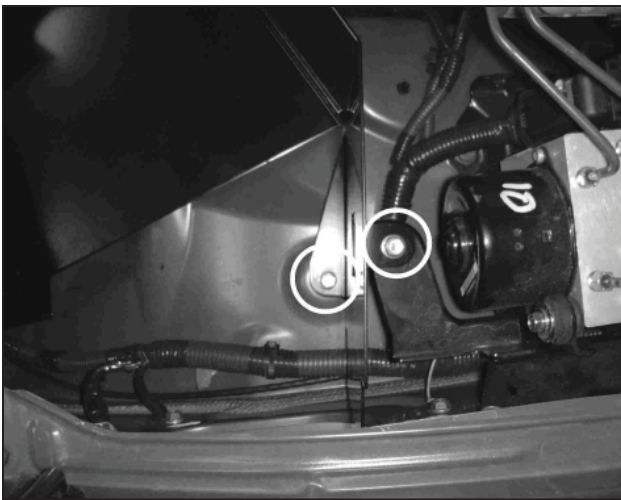
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



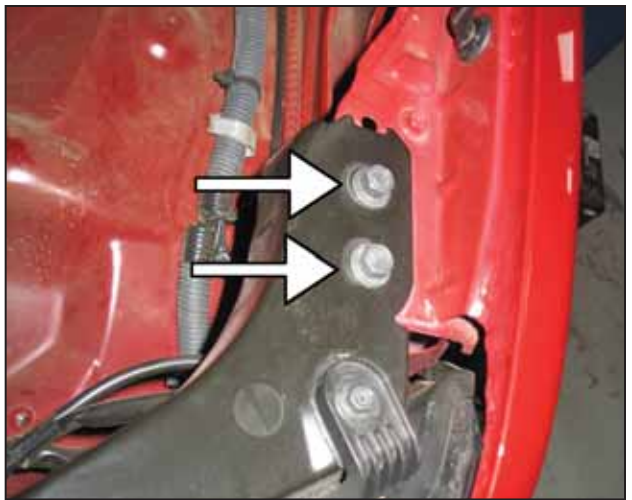
b. Install the rubber mount on the heat shield, using the supplied washer and nut. Install the rubber edge trim (#8-3010) around the intake pipe opening. Also install the edge trim (#8-4017) on the top edges of the heat shield.



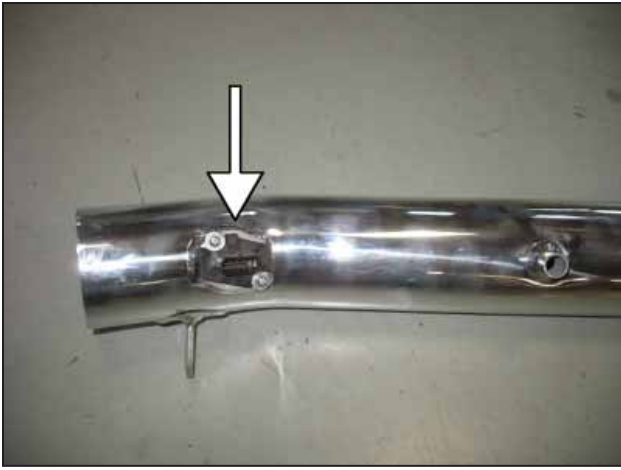
c. Insert the heat shield into the engine bay.



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.



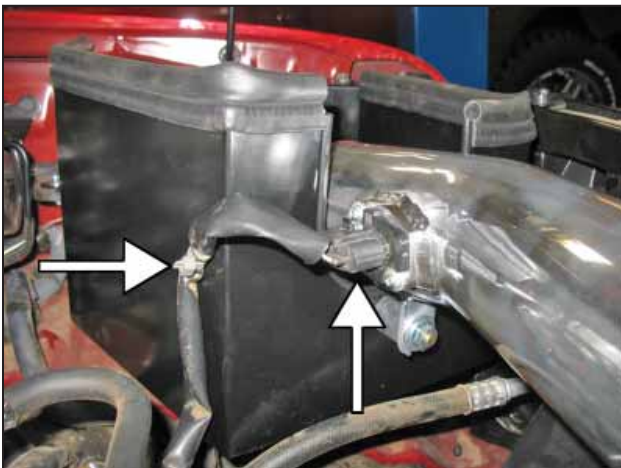
g. Insert the intake pipe into the coupler, secure in place, but do not completely tighten the hose clamps.



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



i. Secure the bracket to the rubber mount with the 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 crank case breather hose to the intake pipe and secure with the factory spring clamp.



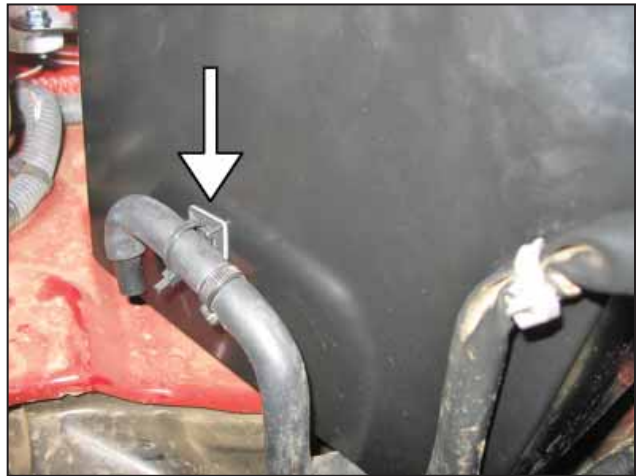
l. Attach and secure the other end of the breather hose to the crank case vent, secure with the factory hose clamp.



m. Attach the air filter and secure to the intake pipe. 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 air box 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 any rubber mounts, 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 the negative battery terminal 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. AEM Induction Systems requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 99-0624 and follow the easy instructions.
- b. Use window cleaner to clean your powder coated AEM® intake tube.

NOTE: DO NOT USE aluminum polish on powder coated AEM® intake tubes.