



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

# INSTALLATION INSTRUCTIONS

## PART NUMBER: 21-8215

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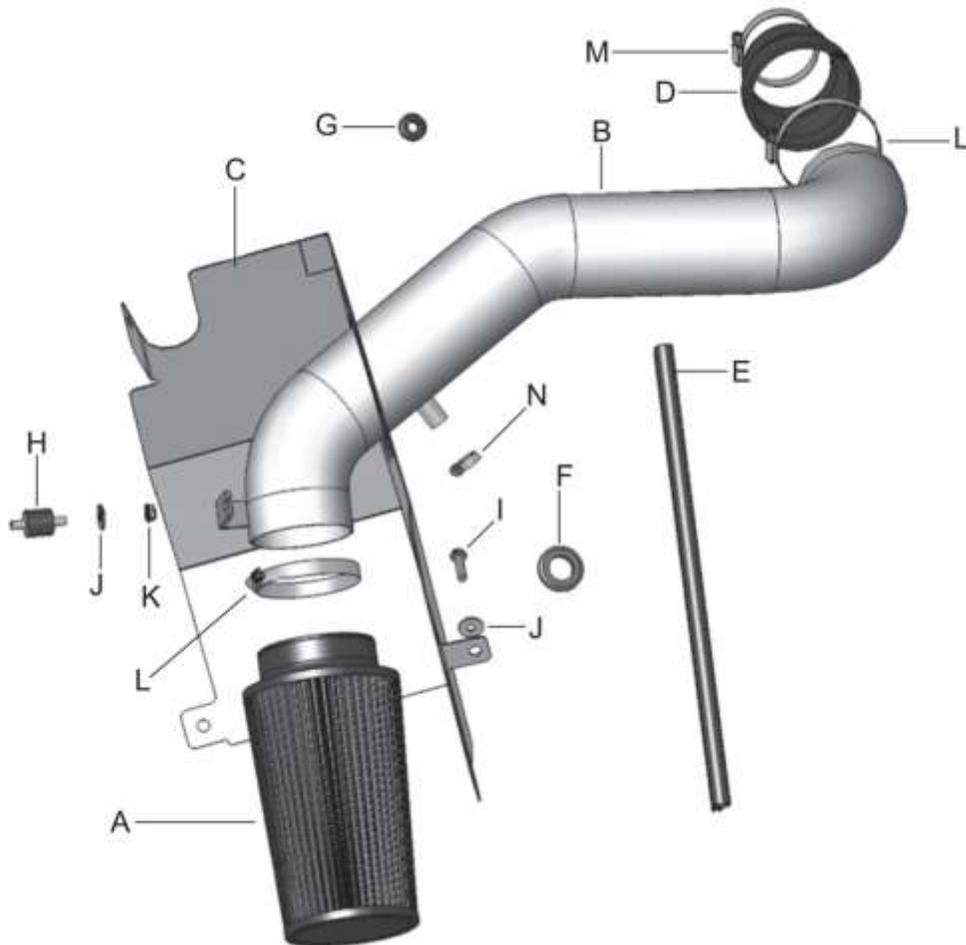
2005-2006 DODGE RAM 1500 Pickup V8-4.7L

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
A	Air Filter Assy. 4.00 X 9" Dry Ele.	1	21-2059DK
B	Inlet Pipe	1	2-82151
C	Heat Shield	1	20-8212
D	Hose, Adapter 3.25/4.00 X 3" Bl.	1	5-324
E	Edge Trim, 22"	1	8-4022
F	Grommet, 1/2"	1	784634
G	Grommet, 1"	1	784640
H	Mount, Rubber 1" X 8mm	1	1228560
I	Bolt, Intake Plenum	1	1-2082
J	Washer, 8mm Soft Mount	2	559960
K	Nut, M8 Hex Serrated	1	444.460.08
L	1/2" Bnd. Hose Clamp, 3.56"-4.50"	2	9464
M	1/2" Bnd. hose Clamp, 2.90"-3.75"	1	9452
N	Hose Clamp, 1 1/16" Narrow	1	4093-6



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. 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.**

- f. Do not discard stock components after removal of the factory system.

### 2. Removal of stock system



a. Factory air box system.



b. Unplug the Inlet Air Temperature Sensor located on the back of the resonator. And remove the bolt securing the resonator to the engine.



c. Remove the second bolt holding down the resonator



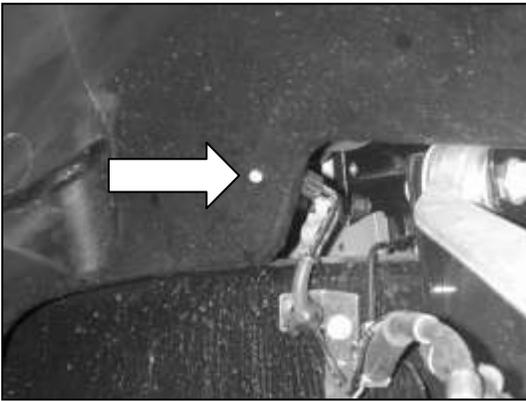
d. Loosen the hose clamp connecting the intake tube to the air filter lid. Then pull off the resonator and the hose connected to the air filter lid.



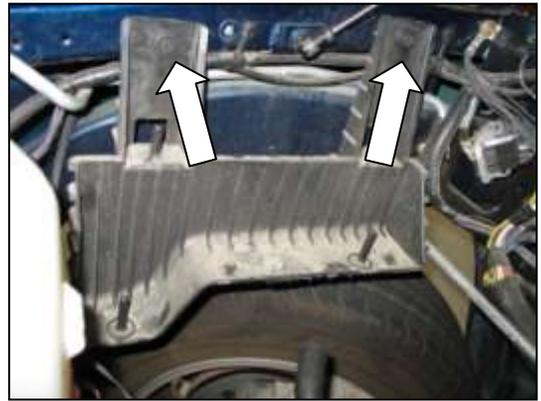
e. Remove the coupler on the throttle body by loosening the hose clamp.



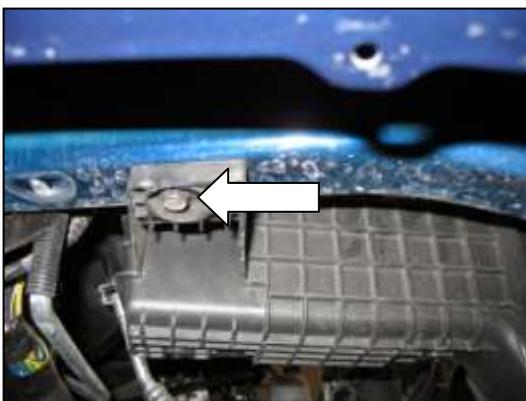
f. Disconnect the breather hose connected to the filter lid. Pull up on the air filter box and remove it from the engine bay.  
**NOTE: There is nothing securing the air filter box to the truck other than rubber grommets.**



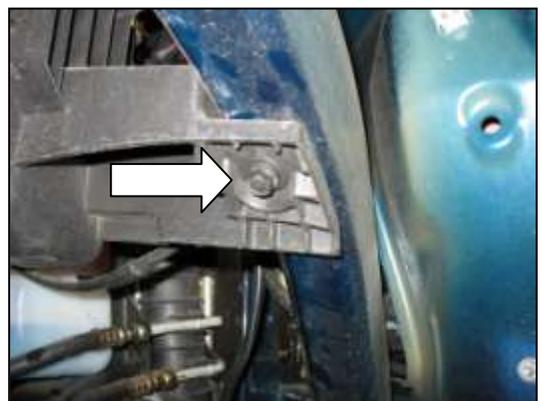
g. From inside the passenger side fender well, release the ABS wire holder if equipped. Push the wire holder through the hole, towards the engine. Remove the plastic fender liner by removing the eight self-tapping screws.



h. Remove the two bolts securing the securing the air box holder. Keep one bolt for later use.



i. Remove the bolt securing the air box holder, located in the fender well.



j. Remove the last bolt securing the air box holder.



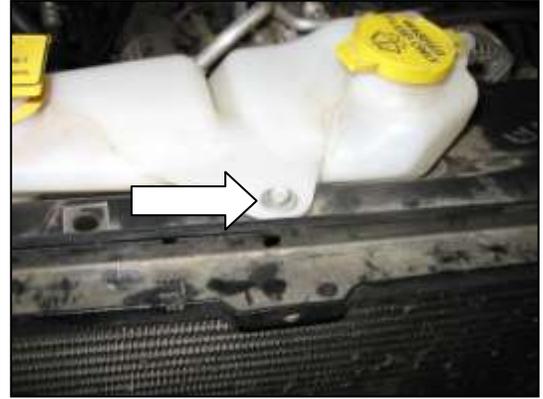
k. Disconnect both wiring harnesses connected to the radiator overflow and the windshield wiper fluid tank.



m. Remove the second bolt securing the radiator overflow and windshield washer tank.



o. Finally, remove the bolt attaching the fan shroud the radiator exposed by the previous step. Keep the bolt, it will be used to install the heat shield.



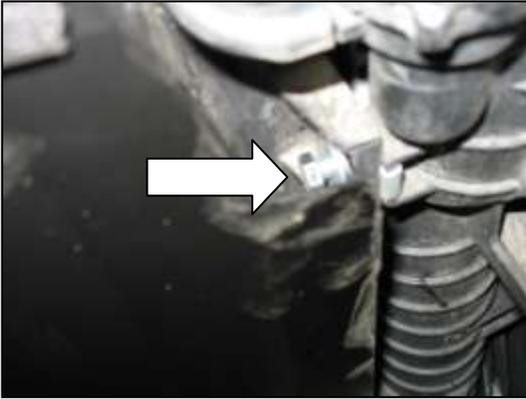
l. Remove the front bolt securing the radiator overflow and the windshield wiper fluid tank.



n. When performing the following step Please be sure your vehicle has cooled down. Carefully disconnect the overflow hose to the overflow tank and lean the tank toward the engine as seen in the picture.

### 3. Installation of AEM® intake system.

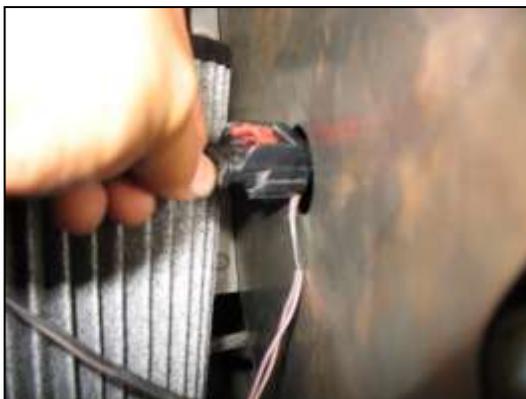
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



b. Align the heat shield with the hole exposed from step 2(o). Use the supplied bolt and washer to secure the heat shield in place.



d. Use the stock bolt removed from step 2(j) to secure the final tab on the heat shield.



f. Route the wiring harnesses disconnected in step 2(k) through the hole located in the heat shield. Route them one at a time as shown.



c. Use the stock bolt removed in step 2(h) to secure the heat shield on the passenger side fender.



e. Pull the tank back toward the front of the truck and re-secure the tank back to the radiator with the two stock bolts. Reconnect the over flow hose.



g. Pass the wiring harnesses through the supplied 1" grommet one at a time.



h. Install grommet on heat shield as shown.



j. Screw in the supplied rubber mount in the threaded hole as shown.



l. Install the Dryflow™ air filter using the supplied hose clamp. Ensure the wires are running through the heat shield go above the air filter. After doing so, install the fender liner that was removed in step 2(g).



i. Reconnect both wiring harnesses.



k. Secure the supplied reducing coupler to the throttle body using the supplied hose clamp



m. Install rubber grommet and Inlet Air Temperature sensor (IAT) in the intake pipe.



n. Route the intake pipe through the heat shield and line up the bracket with the rubber mount installed earlier. Loosely tighten the supplied washer and serrated nut on the rubber mount securing the bracket.



o. Now insert the intake pipe into the already installed reducer coupler. Loosely secure with the supplied hose clamp.



p. Attach the stock breather hose to the nipple on the pipe and secure with the supplied 3/4" hose clamp.



q. Reconnect the IAT sensor wiring harness to the IAT sensor.



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 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<sup>®</sup> 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<sup>®</sup> 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
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#### 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.