

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

# INSTALLATION INSTRUCTIONS PART NUMBER: 21-9221

2007-2009 DODGE Ram 3500 Pickup L6-6.7L DSL C.A.R.B. E.O. # D-670-2 2007-2009 DODGE Ram 2500 Pickup L6-6.7L DSL C.A.R.B. E.O. # D-670-2

## **PARTS LIST**

	Description	Qty.	Part Number
Α	Air Filter Assy. 5.00 X 9" DSL Oval Dry	1	21-2279DK
В	Inlet Tube	1	9-82211
С	Heat Shield	1	20-8211
D	Insert, Diesel A/F Assy. 5"	1	5-2279
E	Edge Trim, 12"	1	8-4012
F	Zip Tie, 8" Tree Push-Mnt.	1	1-127
G	Rubber Edge Trim 20"	1	8-3020
Н	Mount, Rubber 1" X 8mm Male/Fem.	2	1228559
1	Bracket, Pipe/HS	1	32-3057
J	Bracket, Heat Shield	1	32-3048
K	Bolt, Hex/Flange M6-1 X 20	3	1-2038
L	Bolt, Btn. Hd. M8-1.25 X 10mm	2	1-2046
М	Bolt, Socket M47 X 16mm	1	1-2097
N	Bolt, Socket M4-0.7 X 10mm	2	1-2109
0	Bolt, Hex/Flange M6-1.0 X 12	2	1-2110
Р	Washer, 1/4 X 1-1/4 Fender	4	1-3027
Q	Washer, 8mm Soft Mount	4	559960
R	Washer, 6mm Soft Mount	2	08160
S	Nut, M6 Hex Serrated	3	444.460.04
Т	Nut, M8 Hex Serrated	2	444.460.08
U	Hose Clamp,4.75-5.50"	1	103-BLO-8020N

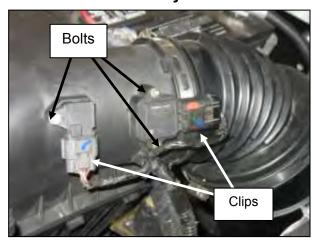


Read and understand these instructions <u>BEFORE</u> attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine.

## 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



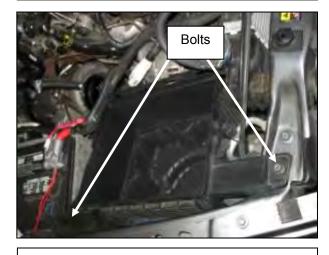
a. Unplug the factory MAF and IAT sensor connectors. Loosen the bolts that secure them to the air filter lid, and remove them. Place the sensors in a clean safe place to avoid damage.



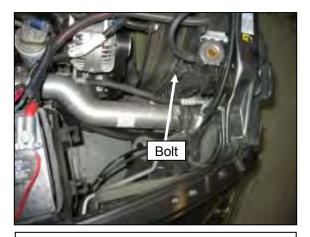
c. Loosen the hose clamp securing the factory inlet hose to the turbocharger. Remove the inlet hose.



b. Loosen the hose clamp securing the air filter lid to the inlet hose. Unclip the air filter lid and remove it.



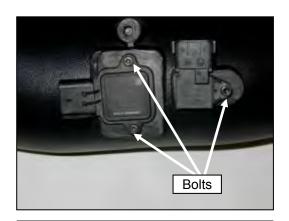
d. Loosen the bolts securing the air filter base to the inner fender and radiator support; remove the air filter base from the vehicle.



e. Remove the indicated bolt from the radiator fan shroud.

# 3. Installation of AEM<sup>®</sup> Intake System

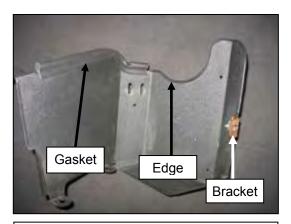
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



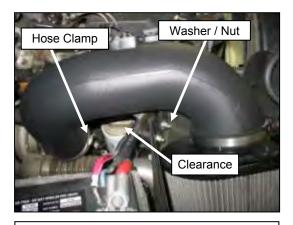
b. Using the included bolts, secure the MAF and IAT sensors to the supplied intake tube as shown. Do not over tighten.



c. Install the intake tube bracket and rubber mounts onto the intake tube using the included bolts and washers. Do not over tighten.



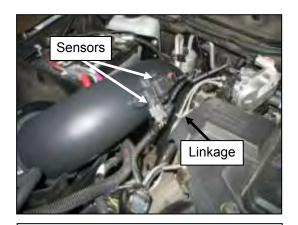
d. Install the included rubber gasket and edge trim onto the heat shield as shown. Also install the heat shield bracket onto the heat shield with the supplied hardware as shown.



f. Loosely install the AEM® air filter onto the intake tube. Install the intake tube assembly onto the factory turbo inlet while positioning the air filter to properly fit inside the heat shield. Align the rubber mounts of the intake tube bracket into the heat shield holes. Secure each rubber mount to the heat shield with a washer and nut as shown. Make sure there is clearance between the battery cable and the intake tube bracket assembly.

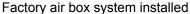


e. Install the heat shield into the engine bay, aligning the heat shield bracket with the exposed bolt hole on the radiator fan shroud. Secure the bracket with the factory bolt removed in step 2e. Secure the heat shield tab to the radiator support with the factory bolt removed in step 2d.



g. Connect the MAF and IAT connectors to their respective sensors. Secure the wiring harness away from the throttle linkage using the included zip tie. Adjust the intake tube for maximum clearance; once proper fitment is achieved secure all hardware.







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<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<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

## **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.

7 10-82210