



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-9021

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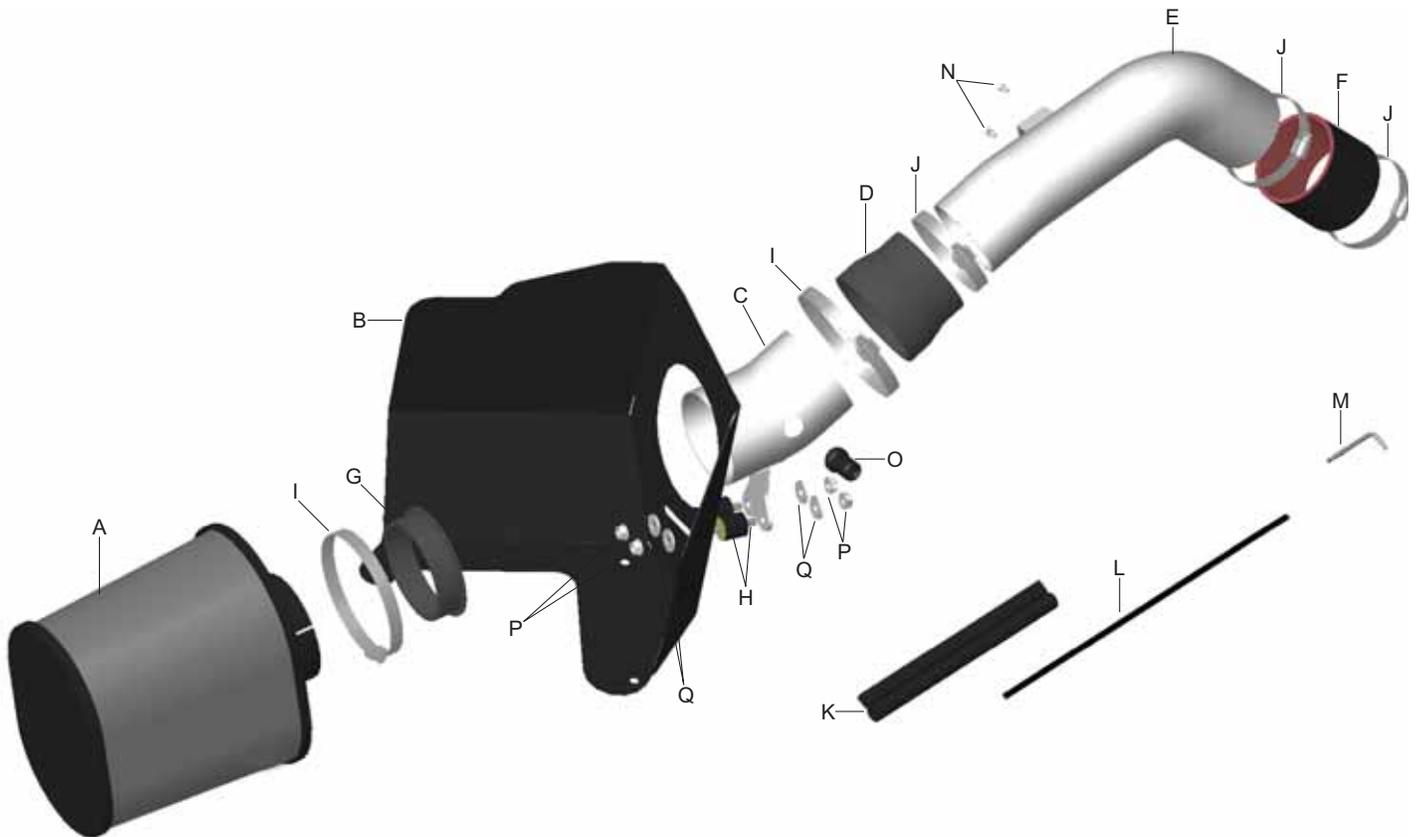
2004.5	CHEVROLET	Silverado 3500	V8-6.6L DSL LB7	C.A.R.B. E.O. # D-670
2004.5	CHEVROLET	Silverado 2500 HD	V8-6.6L DSL LB7	C.A.R.B. E.O. # D-670
2004.5	GMC	Sierra 3500	V8-6.6L DSL LB7	C.A.R.B. E.O. # D-670
2004.5	GMC	Sierra 2500 HD	V8-6.6L DSL LB7	C.A.R.B. E.O. # D-670
2001-2003	CHEVROLET	Silverado 3500	V8-6.6L DSL	C.A.R.B. E.O. # D-670
2001-2003	CHEVROLET	Silverado 2500 HD	V8-6.6L DSL	C.A.R.B. E.O. # D-670
2001-2003	GMC	Sierra 3500	V8-6.6L DSL	C.A.R.B. E.O. # D-670
2001-2003	GMC	Sierra 2500 HD	V8-6.6L DSL	C.A.R.B. E.O. # D-670

**21-9021 will only fit on vehicles will LB7 engine types. Make note that only 2004.5 model year vehicles are equipped with the LB7 engine. 2004.5 model year vehicles with the LB7 engine type can be identified with the VIN. The 8th number of the VIN will be 1 on 2004.5 model year vehicles with the LB7 engine type.**

**\* NOTE: Legal in California only for racing vehicles which may never be used upon a highway**

## PARTS LIST

Description	Qty.	Part Number
A Element Parts Kit 4.00x 9" DSL Oval Dry	1	21-2259DK
B Heat Shield	1	20-8021
C Inlet Pipe, Lower Duramax	1	2-80212
D Hose, Adapter 4.00/3.50x3" Blk.	1	5-435
E Inlet Pipe, Upper Duramax	1	2-80211
F Hose, Silicone 3.50x3" Blk.	1	5-350
G Insert, Diesel A/F Assy. 4"	1	5-2259
H Mount, Rubber 1" X 8mm	2	1228560
I 1/2" Bnd. Hose Clamp, 3.56"-4.50"	2	9464
J 1/2" Bnd. Hose Clamp, 3.15"-4.00"	3	9456
K Edge Trim, 18"	1	8-4018
L Rubber Edge Trim 20"	1	8-3020
M Wrench; Torx T20 T/R, L-Key	1	69801
N Bolt, Socket 8-32 X 5/16 SS	2	1-2023
O Adapter, Filter Minder Gauge	1	8-164
P Nut, M8 Hex Serrated	4	444.460.08
Q Washer, 8mm Soft Mount	4	559960



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. Stock air box system.



b. Unplug the mass air flow (MAF) sensor wiring harness.



c. Lift up on the intake resonator to pop it off the mount. Loosen the hose clamps on both ends of the inlet tube.



d. Remove the inlet tube and resonator from the engine bay.



e. The air filter housing is held in place by two grommets on the mounting plate. Gently lift up on the air filter housing and remove it from the engine bay.



f. Remove the five bolts securing the air filter housing mounting plate to the vehicle chassis.



g. Remove the mounting plate from the vehicle.



h. Remove the factory air filter restriction gauge.



i. Using the supplied tamper-proof torx key, remove the two bolts securing the MAF sensor to the air filter housing. Carefully remove the MAF sensor from the housing.



j. Stock air box system removed.

### 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 supplied rubber edge trim around the edge of the hole in the heat shield. Trim to fit.



c. Install the previously removed MAF sensor into the upper intake pipe using the two supplied 8-32 bolts.



d. Install the heat shield in the engine bay, aligning the holes with the mounting plate bolt locations. Secure it using three of the bolts removed in step 2f.



e. Install the 3.50" coupler onto the turbo inlet. Loosely secure the coupler with the supplied #56 hose clamps.



f. Install the reducing coupler onto the upper intake pipe as shown. Slide the coupler all the way onto the intake pipe with a #56 hose clamp; do not tighten the hose clamp.



g. Install the two supplied rubber mounts into the slot on the heat shield using two M8 nuts and washers. Secure the mounts with just enough slack for the mounts to slide in the slot.



h. Install the rubber adapter into the inlet of the intake pipe as shown.



i. Install the previously removed air filter restriction gauge into the rubber adapter in step 3h.



j. Slide the air filter into the heat shield with the filter neck facing the engine. This will ease installation, as the air filter cannot easily be installed if the lower intake pipe is already installed.



k. Attach the reducing coupler to the lower intake pipe. Install the lower intake pipe into the upper intake pipe's coupler while also aligning the mounting bracket holes with the two rubber mounts attached to the heat shield. Loosely secure the intake pipe in place with a #64 hose clamp.



l. Slide the lower intake pipe and reducing coupler down from the upper intake pipe until the mounting bracket face is flush with the rubber mounts. Install the remaining M8 washers and nuts to secure the lower pipe's mounting bracket.



m. Slide the hose clamp onto the air filter's neck and attach the air filter assembly onto the filter adapter. Ensure the air filter is completely seated onto the adapter and the hose clamp is aligned with the filter adapter's lip. Once the hose clamp is properly aligned, secure the hose clamp, ensuring the filter neck's tabs compress and engage the filter adapter. Ensure the air filter does not make contact with any part of the vehicle and has adequate clearance.



n. Plug the MAF sensor into the wiring harness. Be sure that the harness is not in contact with any hot part of the engine.



Factory air box system installed



AEM® intake system installed

#### 4. Reassemble Vehicle

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

- 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

- 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.
- 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.