



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-496

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|           |      |    |               |                       |
|-----------|------|----|---------------|-----------------------|
| 2006-2008 | AUDI | A3 | L4-2.0L Turbo | C.A.R.B. E.O. # D-670 |
|-----------|------|----|---------------|-----------------------|

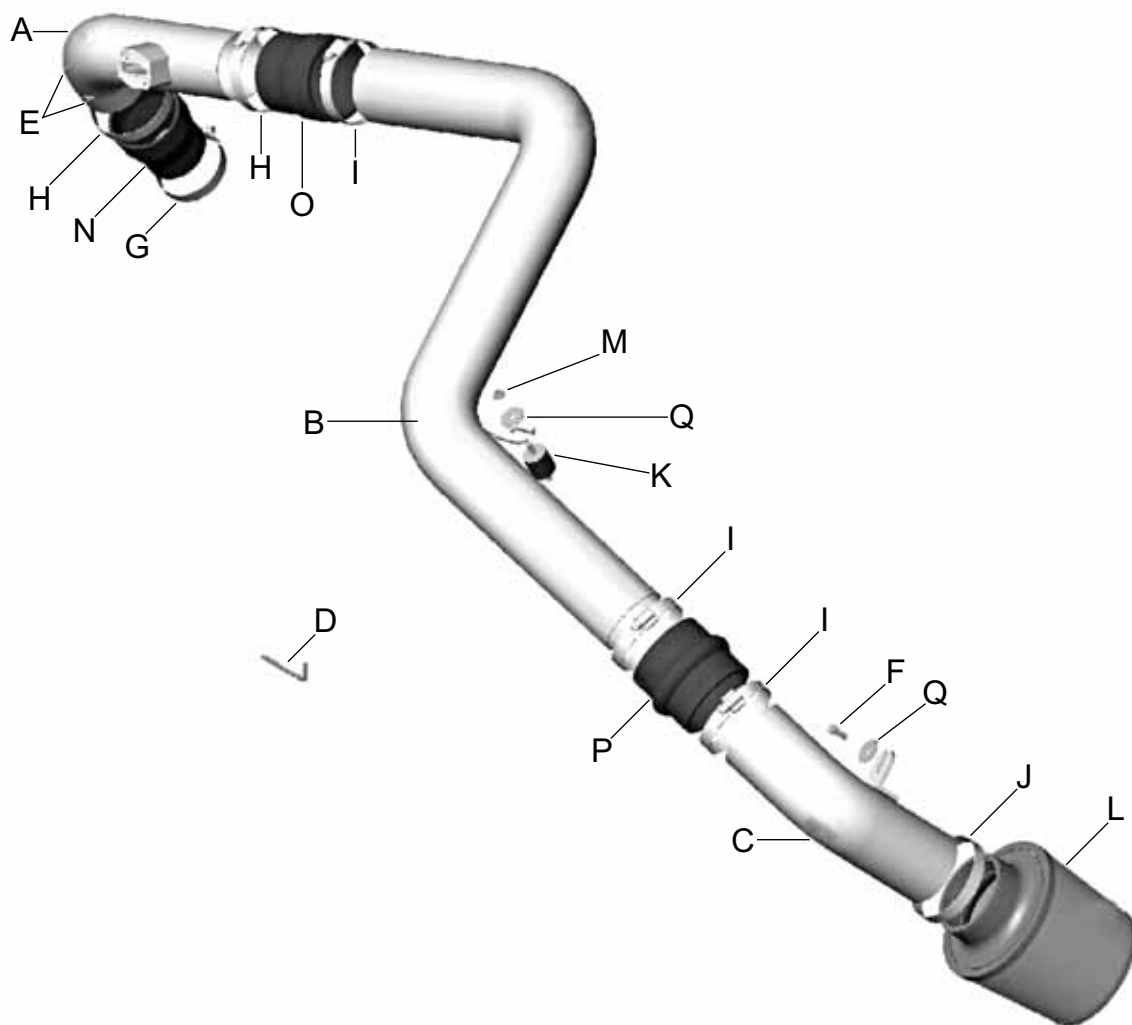
**Excludes 2008 MY LEV II SULEV 8AD XV02.03PA L4-2.0L model year vehicles**

|      |            |     |               |                       |
|------|------------|-----|---------------|-----------------------|
| 2006 | VOLKSWAGEN | GTI | L4-2.0L Turbo | 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 | Upper Pipe                          | 1    | 2-738       |
| B | Middle Pipe                         | 1    | 2-739       |
| C | Lower Pipe                          | 1    | 2-740       |
| D | Wrench; Torx T20 T/R, L-Key         | 1    | 69801       |
| E | Bolt, Socket 8-32 X 5/16 SS         | 2    | 1-2023      |
| F | Bolt, Hex M6 X 1.0 X 16mm           | 1    | 1-2030      |
| G | 1/2' Bnd. Hose Clamp, 2.15-3.00"    | 1    | 9440        |
| H | 1/2" Bnd. Hose Clamp, 2.31-3.25"    | 2    | 9444        |
| I | 1/2" Bnd. Hose Clamp, 2.56"-3.50"   | 3    | 9448        |
| J | 1/2" Bnd. Hose Clamp, 2.90"-3.75"   | 1    | 9452        |
| K | Mount, Rubber 1" X 6mm              | 1    | 1228599     |
| L | Air Filter Assy. 3.00 X 5" Dry Ele. | 1    | 21-203DK    |
| M | Nut, M6 Hex Serrated                | 1    | 444.460.04  |
| N | Hose, Adapter 2.25/2.75"x3" Blk.    | 1    | 5-227       |
| O | Hose, Adapter 2.75/3.00 X 3" Bl.    | 1    | 5-273-R     |
| P | Hose, Hump 3.00/3.00x3.0" Blk.      | 1    | 5-530       |
| Q | Washer, 6mm Soft Mount              | 2    | 559999      |



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.

The AEM® intake system is a performance product that can be used safely during mild weather conditions. During harsh and inclement weather conditions, you must return your vehicle to stock OEM air box and intake tract configuration. Failure to follow these instructions will void your warranty.

## 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. Factory air box configuration.



b. Unclip the MAF sensor harness from the engine cover. Unplug the harness from the sensor.



c. Remove the two torx-head screws securing the inlet duct to the radiator support. Remove the first screw shown above.



d. Remove the remaining screw securing from the inlet duct as shown.



e. Unhook the two metal retaining clips securing the turbo inlet hose to the engine cover. Pull the inlet hose out of the engine cover. This may take a little effort as the O-ring is a tight fit.



f. There are four rubber grommets securing the cover to the engine. Forcefully pull up on the engine cover to remove it and the inlet duct from the engine bay.



g. Compress the spring clamp securing the turbo inlet hose to the turbo. With the clamp compressed, gently pull up on the hose and remove it from the engine bay.



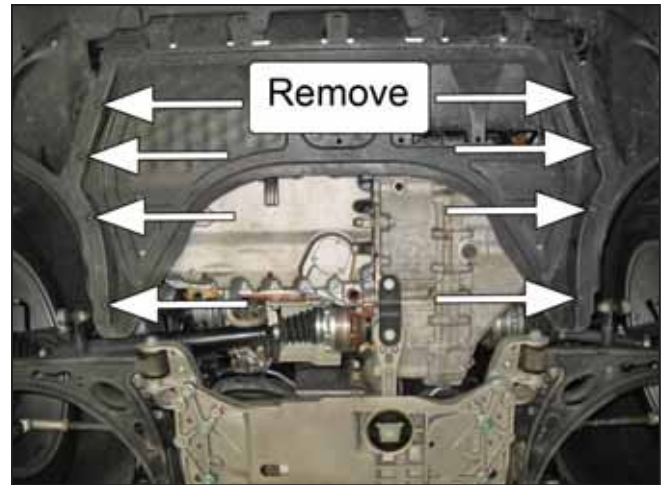
h. Remove the two torx screws securing the mass air flow (MAF) sensor to the engine cover with the supplied T20 torx tool.

**NOTE: Be careful not to damage the sensor.**





- i. Remove the 10mm bolt on the inner fender behind and below the driver's side headlight.  
**NOTE: On Audi A3 models, the bolt illustrated is a T30 torx bolt instead of a 10mm bolt.**



- j. 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.**  
 From underneath the vehicle, remove the 8 torx bolts securing the underbody splash shield to the chassis. Remove the splash shield and set it aside as it will be reinstalled.

### 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 2.75/3.0 coupler onto the upper pipe (2-738) using a #44 hose clamp.



- c. Carefully install the MAF sensor in the AEM® intake pipe with the two supplied 8-32 bolts.



d. Install the 2.25/2.75 coupler onto the turbo inlet and secure it using a #40 hose clamp.



e. Install the upper pipe into the previously installed coupler on the turbo inlet. Secure the pipe using a #44 hose clamp. Plug the MAF sensor that was disconnected in step 2b. into the wiring harness.



f. **NOTE: Steps 3f. and 3g. are specific to Audi A3 models. All Volkswagen GTI owners proceed to step 3h.**

Remove the battery from the battery box by removing the clamp holding it to the battery tray. Then remove the plastic battery box wall by gently lifting it up and out.



g. Remove the three bolts securing the battery tray to the chassis. Remove the battery tray from the engine bay. Be careful not to pull on any of the battery wires. After step 3i. reinstall the battery tray, box wall, and battery by reversing these steps.



h. Thread the supplied M6 bolt with a washer into the hole exposed in step 2i. Do not thread the bolt in very far, allowing enough space for the pipe mounting bracket to slide in. Install the lower inlet pipe (2-740) by routing it through the hole in the inner fender behind the headlight. Align the mounting bracket with the M6 bolt.



i. Align the lower pipe so that it is not in contact with any part of the vehicle. This may require the rubber ear on the headlight housing seal to be trimmed (see picture). Once aligned, tighten the bolt down fully to secure pipe in place.

**NOTE: Audi A3 models: Reinstall the battery tray, box wall, and battery that were removed in the 3f. and 3g.**



j. Thread the provided rubber mount into the threaded post on the battery tray corner.



k. Slide the provided hump hose coupler and two #48 hose clamps completely onto the end of the middle pipe (2-739) as shown.





l. Slide the middle pipe into the coupler on the upper pipe (2-738). Rotate the pipe down until the mounting bracket on the pipe is aligned with the stud on the rubber mount. Using a #48 hose clamp secure the pipe to the coupler but do not fully tighten.



m. The bracket on the pipe should be aligned as shown. Install the remaining flat washer and M6 nut onto the mounting bracket.



n. Align the middle pipe with the lower pipe. There will be a gap between the two pipes. Slide the hump hose coupler down the middle pipe onto the lower pipe until the hump is over the gap between the two pipes. Secure the coupler with the previously installed #48 hose clamps.



o. From under the vehicle, install the AEM® Dry Flow™ air filter onto the end of the lower pipe. Push the air filter over the lower pipe until the stop in the air filter is reached. Install the remaining #52 hose clamp to secure the air filter onto the intake pipe.

#### 4. Reassemble Vehicle

- a. **Splash shield:** Install and secure the splash shield that was removed in step 2j.
- b. 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.
- c. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- d. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- e. 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 state 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.