



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-8304

---

1991-1995 JEEP Wrangler L4-2.5L

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 |
|--------------------------------------|------|-------------|
| Air Filter Assy. 3.50 X 9" Dry Ele.  | 1    | 21-2049DK   |
| Heat Shield                          | 1    | 20-8304     |
| Upper Pipe                           | 1    | 2-83041     |
| Lower Pipe                           | 1    | 2-83042     |
| Elbow, 3.00/2.50 90 Deg.             | 1    | 5-305       |
| Hose, Adapter 3.00/3.50x3 Blk.       | 1    | 5-353       |
| Hose; 5/8"ID X 15"L                  | 1    | 5-7015      |
| Edge Trim, 14"                       | 1    | 8-4014      |
| Hose; 3/8"ID X 14"L - Power Steering | 1    | 6-1014      |
| Mount, Rubber 1" X 8mm               | 1    | 1228560     |
| Rubber Edge Trim 12"                 | 1    | 102466      |
| Zip Tie, 6 Long                      | 1    | 1-113       |
| Zip Tie, 8" Tree Push-Mnt.           | 1    | 1-127       |
| Spacer, 1.00 OD .256 ID X 1"         | 2    | 2-658       |
| Bolt, Hex/Flange M6-1 X 40           | 2    | 1-2075      |
| Bolt, Hex 1/4-20 X 3/4               | 2    | 1-2014      |
| Washer, 8mm Soft Mount               | 2    | 559960      |
| Washer, 1/4 SAE Flat                 | 2    | 1-3028      |
| Washer, 6mm Soft Mount               | 4    | 08160       |
| Nut, M6 Hex Serrated                 | 2    | 444.460.04  |
| Nut, 1/4-20 Nylock                   | 2    | 1-2074      |
| Nut, M8 Hex Serrated                 | 2    | 444.460.08  |
| Hose Clamp, 3/4"                     | 2    | 4093-5      |
| 1/2' Bnd. Hose Clamp, 2.15-3.00"     | 1    | 9440        |
| 1/2" Bnd. Hose Clamp, 2.56"-3.50"    | 2    | 9448        |
| 1/2" Bnd. Hose Clamp, 3.15"-4.00"    | 2    | 9456        |
| Hose Clamp, 1 1/16" Narrow           | 2    | 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. Do not discard stock components after removal of the factory system.

## 2. Removal of stock system



a. Factory air box system installed.



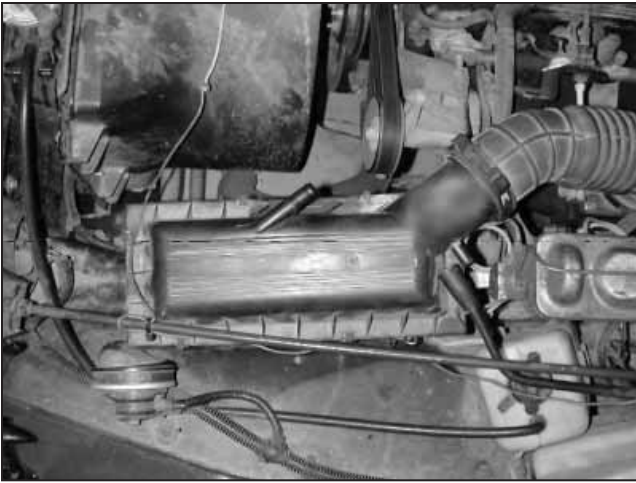
b. Loosen the plastic hose clamps on the rubber intake tube attached to the throttle body. Do this by pulling the two plastic tabs on the hose clamp apart. Disconnect the intake tube from the throttle body.



c. Disconnect the charcoal canister breather hose from the air filter housing.



d. Remove the breather hose connecting the valve cover to the air filter housing.



e. Unstrap the three hooks holding the air filter housing to the chassis. Lift the air filter housing and intake tube from the vehicle.



f. Remove the inlet air duct from below the headlight housing.



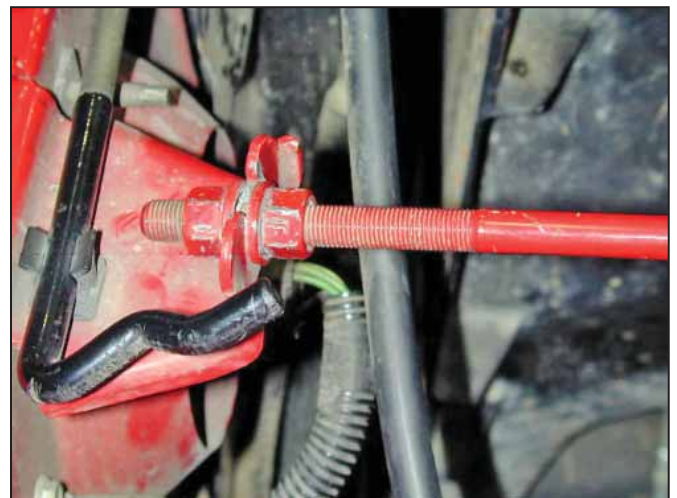
g. Remove the two rubber grommets from the air filter housing mount.



h. If equipped with power steering, remove the two bolts securing the reservoir.



i. Remove the two bolts securing the fan shroud to the radiator support on the driver side.



j. Loosen the nuts on the radiator support brace and lift brace off of mount. Rotate the brace out of the engine compartment.

### 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 elbow with the smaller, 2.5" side on the throttle body.



c. Attach elbow using the supplied #44 Hose clamp.



d. Prepare the heat shield for installation by first installing the rubber mount into the slot as shown.



e. Install the plastic zip-tie mount by pressing it into the hole on the heat shield tab.



f. Install the heat shield by sliding the two tabs behind the radiator shroud. Install the two bolts previously removed in step 2i to secure.



g. Install the two bolts, two nuts, and four washers to secure the bottom of the heat shield. Tighten until the nut is snug but do not over tighten. For vehicles not equipped with power steering, proceed to step 3m.



h. Remove power steering hose connected to the hard line attached to the chassis.



i. Secure the supplied power steering hose with a hose clamp.



j. Secure the other side of the hose to the reservoir with supplied hose clamp. Mock up power steering reservoir using supplied spacers, bolts, and nuts.



k. Check for clearance of power steering line under the heat shield. If the hose hits the heat shield gently bend the power steering hard line down.



l. After clearance is checked tighten power steering reservoir to heat shield using supplied spacers, bolts, and nuts.



m. Install the upper intake pipe into the elbow on the throttle body. The nipple should be pointing upward.



n. Install the AEM® air filter into the space behind the headlight. This will make the installation of the lower intake pipe much easier.



o. Install the AEM® lower intake pipe. Align the bracket with the rubber mount on the heat shield and slide the air filter on.



p. Slide the lower intake pipe to the coupler attached to the upper intake pipe and secure with a #56 hose clamp.



q. Install the washer and nut onto the rubber mount to capture the intake bracket.



r. Push the air filter over the inlet pipe until the stop in the filter is reached, then install the #56 hose clamp to secure the filter onto the inlet pipe. Once fitment is checked, tighten the hose clamp.



s. Install the supplied 5/8" breather hose between the intake pipe nipple and the valve cover elbow using two 1" hose clamps.



t. Attach the factory charcoal canister breather line to the lower intake pipe by sliding it over the nipple.



u. Ensure that the air filter is not making contact with any part of the vehicle. Position the AEM® intake system for best fitment. Be sure that the pipe or any other component is not in contact with any part of the vehicle. Tighten the hose clamps at the throttle body and silicone coupling. Tighten the nut on the mounting bracket. Re-adjust pipe if necessary. Install rubber edge trim to the top of the heat shield



v. Swing the radiator support brace back to its original location and secure. Wrap the heat shield zip-tie mount around the brace and secure the heat shield to the brace.



w. Zip-tie the radiator overflow hose to the wiring harness on the top of the inner fender as shown.





Factory air box system installed



AEM® intake system installed without Power Steering



AEM® intake system installed with Power Steering

#### 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® 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.