



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-477

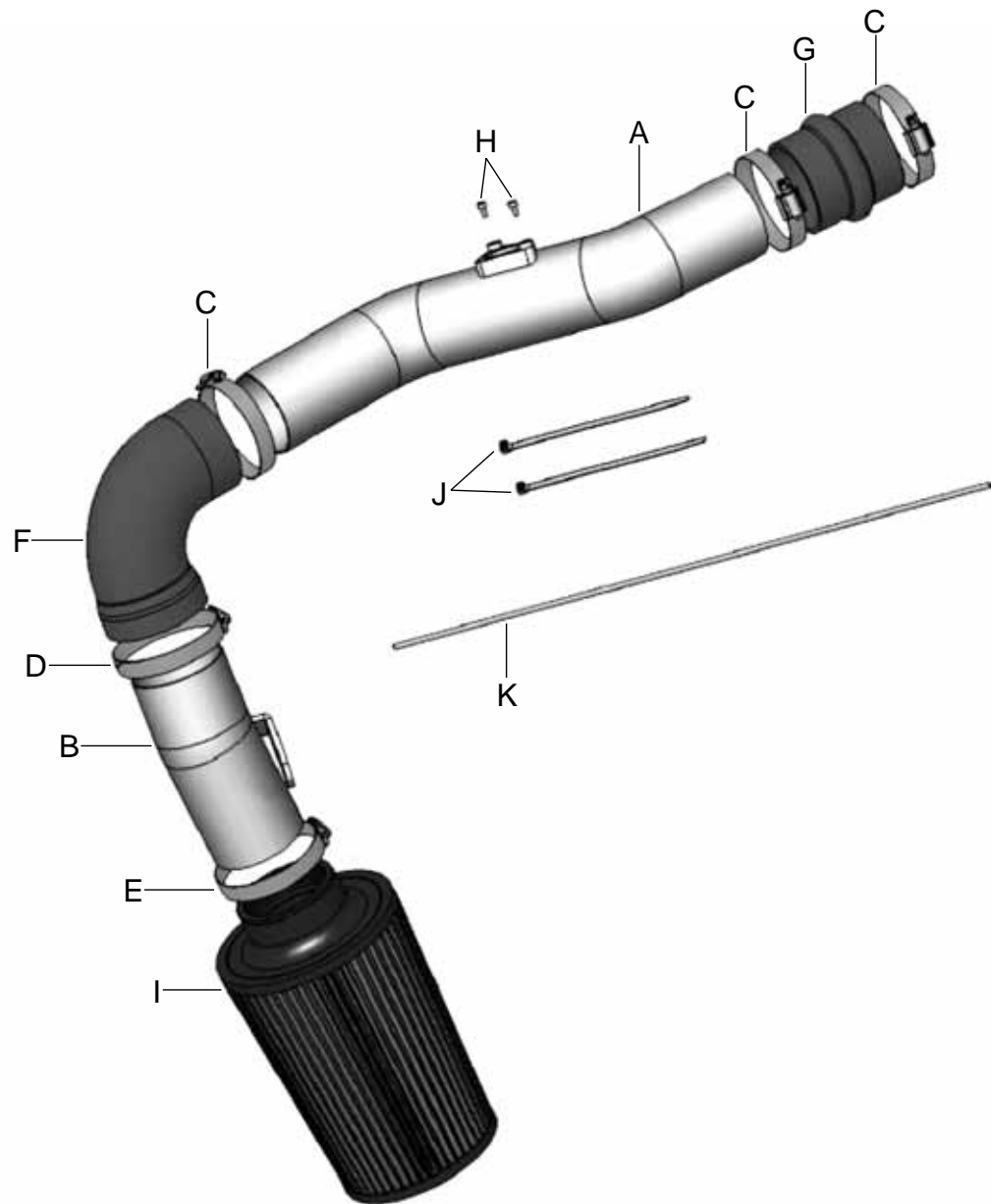
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2007	SUBARU Impreza WRX STi H4 2.5L Turbo	SEE * NOTE
2006-2007	SUBARU Impreza WRX H4 2.5L Turbo	C.A.R.B. E.O. # D-670
2004-2006	SUBARU Impreza WRX STi H4 2.5L Turbo	C.A.R.B. E.O. # D-670
2006	SAAB 9-2X H4 2.5L Turbo	SEE * NOTE
2004-2005	SUBARU Forester XT H4 2.5L Turbo	SEE * NOTE

**\* 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	2-748
B	Lower Pipe	1	2-749
C	1/2" Bnd. Hose Clamp, 2.31-3.25"	3	9444
D	1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448
E	1/2" Bnd. Hose Clamp, 2.90"-3.75"	1	9452
F	Elbow, 3.00/2.75 90 Deg.	1	5-492
G	Hose, Hump 2.75/2.75 x 3.00"	1	5-575
H	Bolt, Socket 8-32 x 5/16 SS	2	1-2023
I	Air Filter Assy. 3.00 x 8" Dry Element	1	21-2038DK
J	Zip-Tie, 6"	2	1-113
K	Rubber Edge Trim 12"	1	102466



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 all negative battery terminals.
- e. Do not discard stock components after removal of the factory system.

## 2. Removal of stock system



a. Stock air box system installed.



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



c. Remove the two mounting bolts holding the air inlet scoop and remove the scoop from the vehicle.

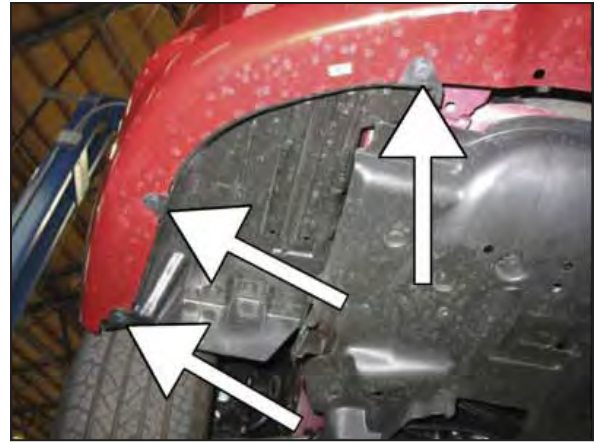


d. Loosen the two hose clamps on the stock air inlet tube and remove it.





e. Down on the frame rail, on either side of the air box, are the bolts that hold the air box in place. Remove the two bolts and gently lift out the air filter box assembly.



f. 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.**

Remove the three plastic clips holding the wheel well liner to the underside of the vehicle's passenger side bumper.



g. With the front wheels turned all the way to the right, locate the plastic clips just forward of the suspension holding the liner to the passenger side wheel well and remove them.



h. Move the wheel well liner to expose the lower resonator. Remove the lower nut securing the resonator to the chassis.



i. From the engine bay, remove the remaining nut securing the lower resonator.



j. Locate the threaded stud behind where the lower resonator was mounted. Remove the nut on the stud and set it aside as it will be reinstalled later.



k. Remove the MAF sensor from the factory air filter housing.



l. 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 hump hose coupler onto the stock turbo inlet tube and secure using a #44 hose clamp.



c. Using the two supplied 8-32 bolts, install the MAF sensor into the upper intake pipe.



d. Install the upper intake pipe into the coupler on the turbo inlet. Rotate the pipe such that the filter end is centered in the hole in the inner fender. Secure the pipe using a #44 hose clamp.



e. Install the rubber edge trim around the hole in the inner fender where the factory intake system was routed.



f. Install the 90 degree coupler by routing it through the inner fender hole and sliding it over the end of the upper pipe. Secure the coupler using a #44 hose clamp.



g. Install the lower intake pipe with the shorter side going into the 90 degree coupler. Rotate the pipe until the mounting bracket is aligned with the stud in the frame rail. Secure the pipe using a #48 hose clamp.



h. Install the previously removed factory M8 nut to secure the lower pipe. Align the lower pipe until the 90 degree coupler is centered in the inner fender hole and fully tighten the nut at this time.



i. Install the air filter onto the end of the lower intake pipe. Push the air filter over the pipe until the stop in the air filter is reached. Use a #52 clamp to secure the filter onto the intake pipe.





j. Plug the MAF sensor into the wiring harness.



k. Secure the two rubber hoses to the rubber AC hose using the supplied 6" zip-tie. Trim excess plastic.



l. Secure the two rubber hoses to the steel brake tube using the supplied 6" zip-tie. Trim excess plastic.



Stock air box system installed



AEM® intake system installed

#### 4. Reassemble Vehicle

- a. **Fender Liner:** Install the passenger side fender liner and plastic clips that were removed in the steps 2f and 2g.
- 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 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.