

Equipped with AEM® *Dryflow™ Filter*No Oil Required!

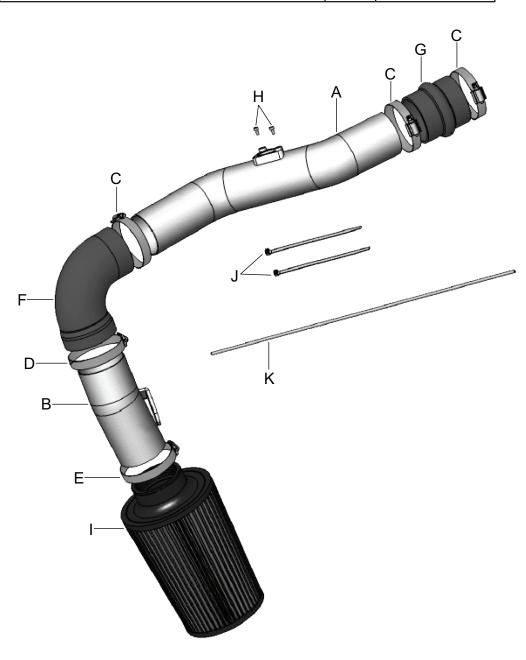
# **INSTALLATION INSTRUCTIONS**

PART NUMBER: 21-477

-	2006-2007	SUBARU	Impreza WRX	H4 2.5L Turbo	C.A.R.B. E.O. # D-670-15			
	2004-2007	SUBARU	Impreza WRX STi	H4 2.5L Turbo	C.A.R.B. E.O. # D-670-15			
	2004-2005	SUBARU	Forester	H4 2.5L Turbo	C.A.R.B. E.O. # D-670-15			
	2006	SAAB	9-2X	H4 2 5l Turbo	CARBEO # D-670-15			

**PARTS LIST** 

	Description	Qty.	Part Number
Α	Upper Pipe	1	2-748
В	Lower Pipe	1	2-749
С	1/2" Bnd. Hose Clamp, 2.31-3.25"	3	9444
D	1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448
Е	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
Н	Bolt, Socket 8-32 x 5/16 SS	2	1-2023
Ι	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 <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.

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.

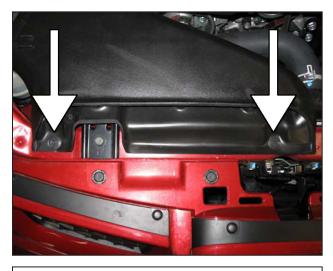
### 1. Preparing Vehicle

- 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. Stock air box system installed.



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



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



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



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



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.



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.



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.



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



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



I. 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 so that the filter end is centered in the hole in the inner fender. Secure the intake pipe using a #44 hose clamp.



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



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



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



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



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 air filter onto the intake pipe.



j. Plug the MAF sensor into the wiring harness.



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



Stock air box system installed



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



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 any 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 terminal 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. 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.
- b. Use window cleaner to clean your powder coated AEM® intake tube.

NOTE: DO NOT USE aluminum polish on powder coated AEM® intake tubes.