



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-478

---

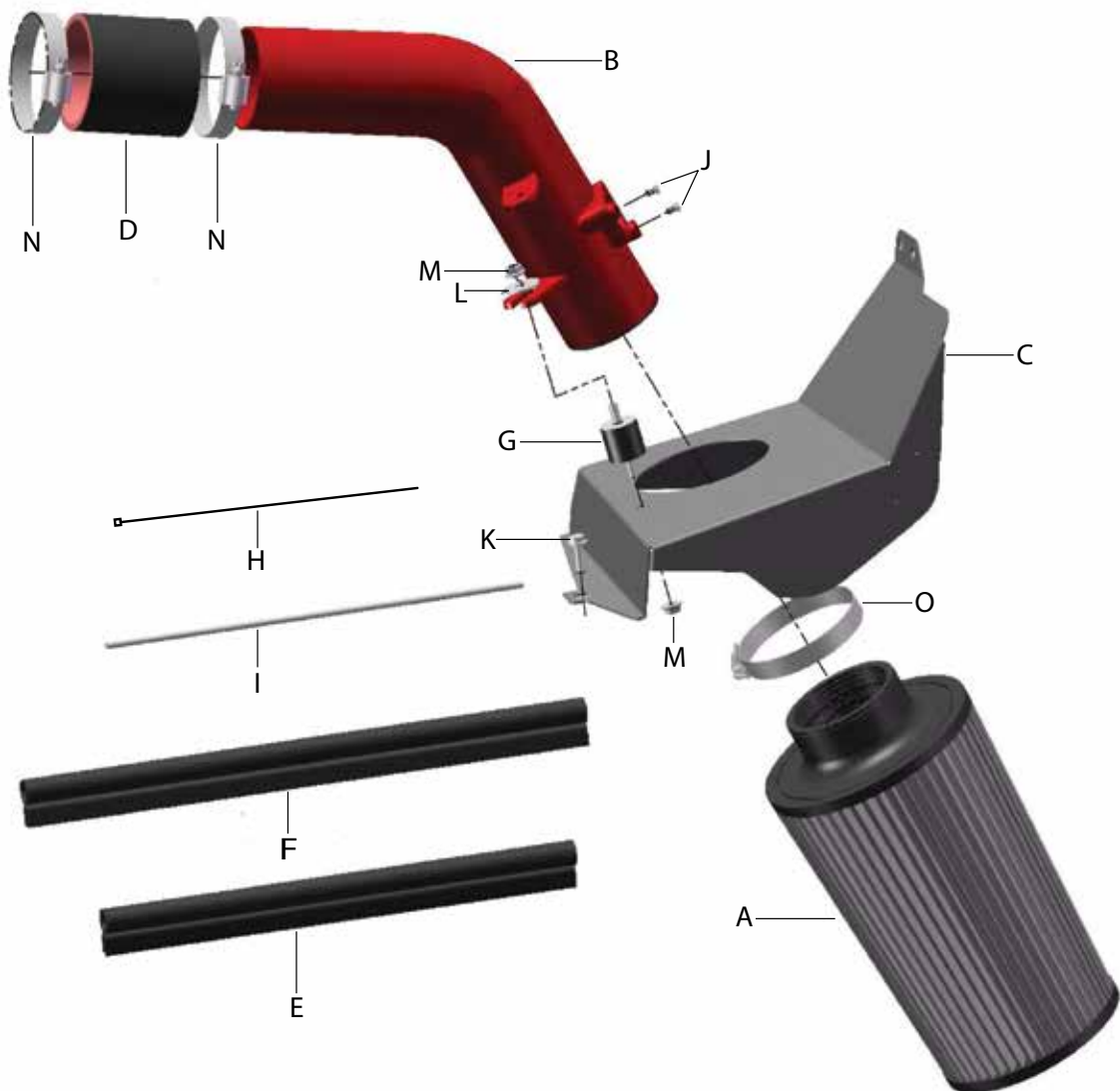
2011-2014	SUBARU	WRX STI	H4-2.5L Turbo	
2008-2010	SUBARU	WRX STI	H4-2.5L Turbo	C.A.R.B. E.O. # D-670-6
2011-2014	SUBARU	WRX	H4-2.5L Turbo	
2008-2010	SUBARU	WRX	H4-2.5L Turbo	C.A.R.B. E.O. # D-670-6

**SOME INTAKE SYSTEMS ARE NOT LEGAL FOR  
SALE OR USE ON ANY POLLUTION CONTROLLED  
MOTOR VEHICLE IN CALIFORNIA OR STATES  
ADOPTING CALIFORNIA EMISSION PROCEDURES.**

See [aemintakes.com](http://aemintakes.com) for CARB status on each part for a specific vehicle

## PARTS LIST

	Description	Qty.	Part Number
A	Air Filter Assy 2.75 X 9" Dry Ele.	1	21-2029DK
B	Inlet Pipe	1	2-478
C	Heat Shield	1	20-478
D	Hose, Silicone 2.75x3" Blk.	1	5-275
E	Edge Trim, 13"	1	8-4013
F	Edge Trim, 15.5"	1	8-4155
G	Mount, Rubber 1" X 6mm	1	1228599
H	Zip Tie, 8" Tree Push-Mnt.	1	1-127
I	Rubber Edge Trim 11.5"	1	102466
J	Bolt, Btn. Hd. M4-0.7 X 6mm	2	1-2051
K	Bolt, Hex/Flange M6-1 X 20	1	1-2038
L	Washer, 6mm Soft Mount	1	08160
M	Nut, M6 Hex Serrated	2	444.460.04
N	1/2" Bnd. Hose Clamp, 2.31-3.25"	2	9444
O	1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448



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. Remove the two plastic clips and the factory fresh air inlet duct.



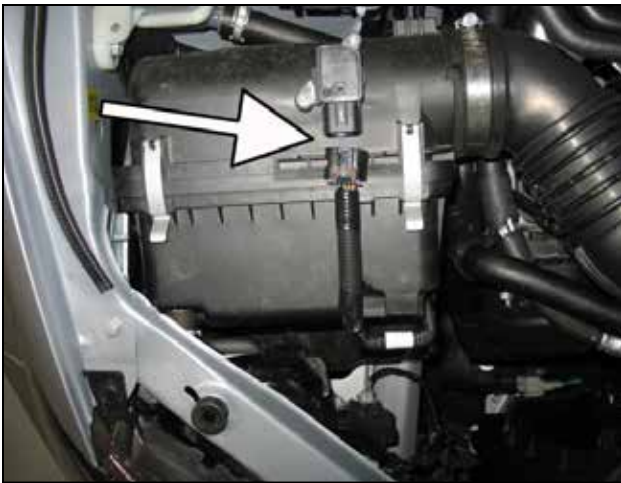
b. Loosen the nut securing the factory air box mounting bracket, but **DO NOT** remove the nut.



c. Remove the two nuts securing the factory air box. Save these nuts for later use.



d. Remove the bolt securing the bottom of the factory air box.



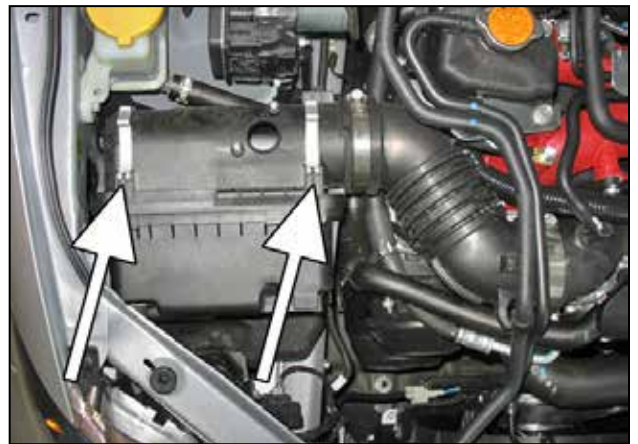
e. Unplug the MAF sensor wire harness.



f. Remove the MAF sensor from the air box by removing the two screws. Set the MAF sensor aside in a safe area for later use.



g. Loosen the hose clamp securing the factory air box inlet to the compressor inlet tube.



h. Unclip the air box clips and remove the rear half of the factory air box assembly.



i. Remove the remaining half of the factory air box.



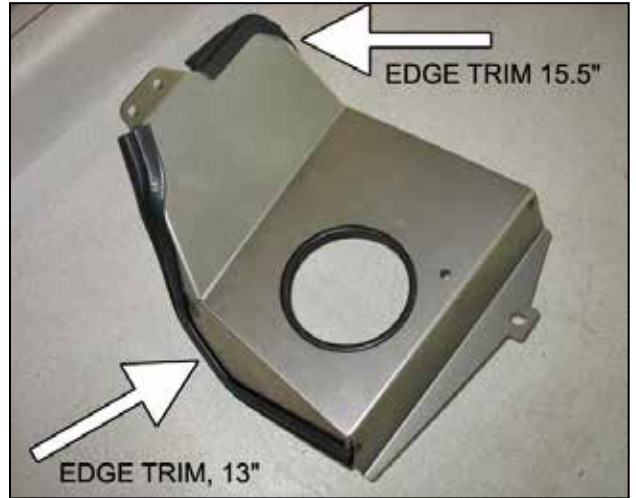
j. Remove the headlight access cover by twisting it counter clockwise. Save the cover for later use.

### 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 edge trim on the heat shield as shown.



c. Install the edge trim on the heat shield as shown.



d. Install a M6 rubber mount onto the heat shield, secure with supplied M6 nut.



e. Insert the MAF sensor into the AEM® intake pipe with the supplied M4 screws.



f. Insert the AEM® intake pipe through the heat shield's inlet hole.



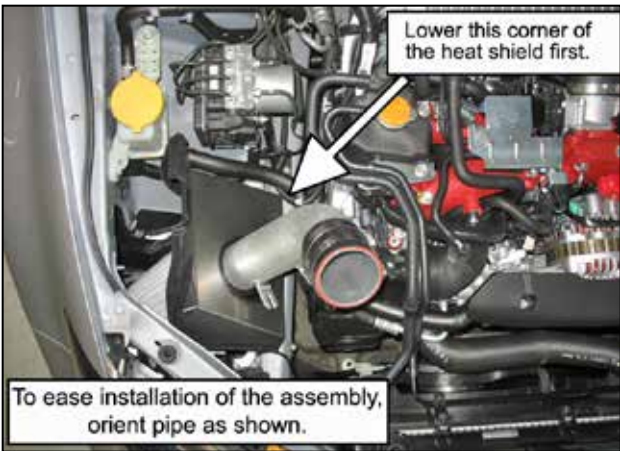
g. Slide the air filter and #48 hose clamp onto the end of the intake pipe. Slide the air filter onto the intake pipe until the pipe hits the pipe stop.



h. Orient the hose clamp as shown in the picture, then tighten.



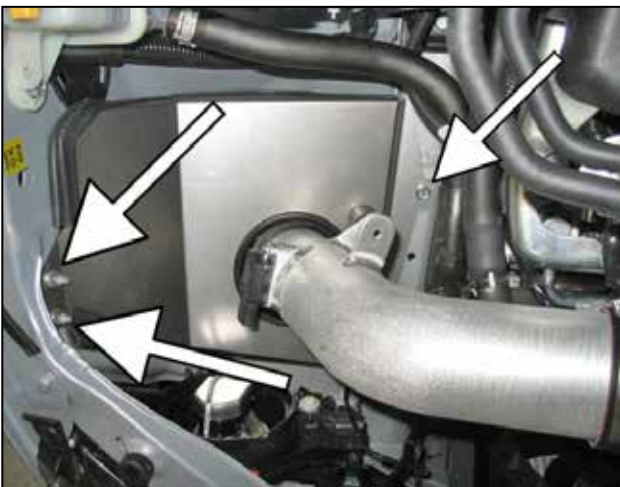
i. Install the silicone coupler and two #44 hose clamps onto the intake pipe. Orient the hose clamps as shown but do not completely tighten.



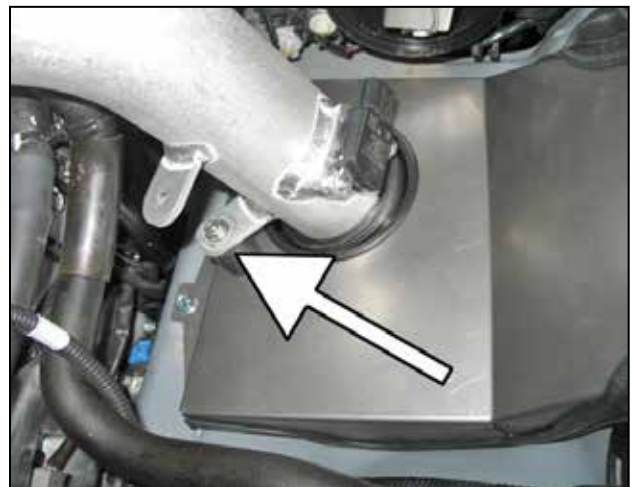
j. Carefully maneuver the AEM® intake pipe assembly into position. Ensure the slotted bracket on the intake pipe is seated on the rubber mount stud.



k. Slide the silicone coupler onto the compressor inlet pipe. Orient the hose clamps on the compressor inlet as shown and tighten securely.



l. Secure the heat shield with the supplied M6 bolt and two factory M6 nuts removed in step 2c. Tighten all 3 fasteners.



m. Secure the inlet pipe to the rubber mount with the supplied fender washer and M6 nut, but do not completely tighten.



n. Align the intake pipe so it is centered within the heat shield's inlet hole. Tighten the M6 nut to secure the rubber mount assembly.



o. Hold the intake pipe in position and tighten the final hose clamp on the silicone coupler.



p. Replace the headlight access cover that was removed in step 2j.



q. Route the MAF sensor wiring harness under the intake pipe and then secure to the MAF sensor. Secure the MAF sensor wiring to the intake pipe's bracket with the tree-mount zip tie.



Factory air box system installed



AEM® intake system installed

#### 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 (if applicable), 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 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 state 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.**

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.

**SOME INTAKE SYSTEMS ARE NOT LEGAL FOR  
SALE OR USE ON ANY POLLUTION CONTROLLED  
MOTOR VEHICLE IN CALIFORNIA OR STATES  
ADOPTING CALIFORNIA EMISSION PROCEDURES.**

See [aemintakes.com](http://aemintakes.com) for CARB status on each part for a specific vehicle