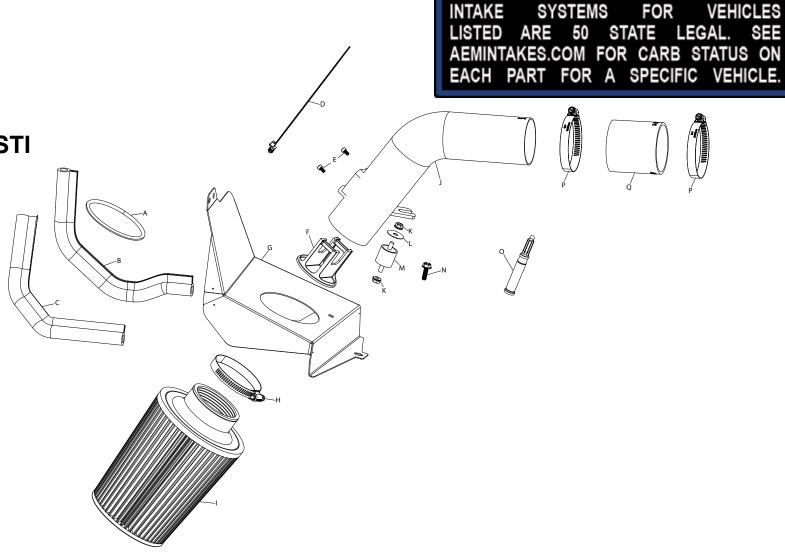


# **INTAKE SYSTEM**

# **INSTALLATION INSTRUCTIONS**

21-478C SUBARU 2008-14 WRX STI 2008-14 WRX

2008-14 WR H4-2.5L



### PARTS LIST:

|   | Description     | Qty. | Part #  |   | Description             | Qty. | Part#      |   | Description             | Qty. | Part #  |
|---|-----------------|------|---------|---|-------------------------|------|------------|---|-------------------------|------|---------|
| Α | EDGE TRIM; 12"L | 1    | 102466  | G | HEAT SHIELD             | 1    | 20-478     | М | MOUNT, RUBBER           | 1    | 1228599 |
| В | EDGE TRIM; 17"L | 1    | 102469  | Н | HOSE CLAMP; 1/2"        | 1    | 9448       | Ν | BOLT; M6-1 X 20         | 1    | 1-2038  |
| С | EDGE TRIM; 13"L | 1    | 8-4013  | 1 | AIR FILTER              | 1    | 21-2029D   | 0 | SUPER GLUE              | 1    | 409     |
| D | ZIP TIE; 8"     | 1    | 1-127   | J | INLET PIPE;             | 1    | 2-478CI    | Р | HOSE CLAMP; 2.31"-3.25" | 2    | 9444    |
| Ε | BOLT; M47 X 6MM | 2    | 1-2051  | K | NUT; M6                 | 2    | 444.460.04 | Q | HOSE; 2.75" X 3"        | 1    | 5-275   |
| F | MAF INSERT      | 1    | 9-21070 | 1 | WASHER: 1"D X 1/4" HOLE | 1    | 08160      |   |                         |      |         |

If you need any assistance please call 1-800-858-3333 to speak with a representative in our Customer Service Center before returning the product.

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.

### TO START:

1. Turn off the ignition and disconnect the negative battery cable.

NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied with your owner's manual. In the event your vehicles anti-theft code cannot be recovered, contact an authorized dealership to obtain your vehicles anti-theft code.



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



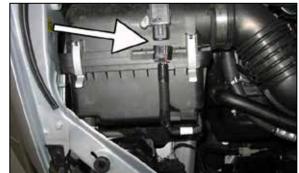
3. Loosen the nut securing the factory airbox mounting bracket but DO NOT remove the nut.



4. Remove the two nuts securing the factory airbox. Save these nuts for later use.



5. Remove the bolt securing the bottom of the factory airbox.



6. Unplug the MAF sensor wiring.

## **Continued**

## **INSTALLATION INSTRUCTIONS**



7. Remove the MAF sensor from the airbox by removing the two screws. Set the MAF sensor aside in a safe area for later use.



8. Loosen the hose clamp securing the factory airbox inlet to the compressor inlet tube.



9. Unclip the airbox clips and remove the rear half of the factory airbox assembly.



10. Remove the remaining half of the factory airbox.



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



12. Install the rubber edge trim on the heat shield as shown.



13. Install the rubber gasket trim on the heat shield as shown.



14. Install a M6 rubber mount on the heat shield and secure with supplied M6 nut.



15. Install the MAF sensor in the AEM® intake pipe with supplied M4 screws.



16. Apply four drops of the provided super glue around the lip of the Maf insert and then insert the maf insert into the intake tube so that it aligns with the maf sensor as shown.



17. Insert the AEM® intake pipe through the large hole in the heat shield.



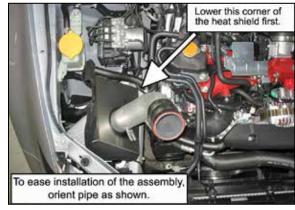
18. Slide the air filter and #48 hose clamp onto the end of the pipe until the pipe hits the intake pipe stop.



19. Orient the hose clamp as shown in the picture, and tighten.



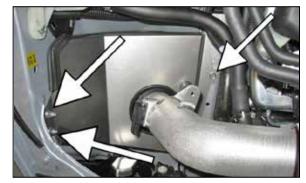
20. Install the silicone coupler and two #44 hose clamps onto the intake pipe. Orient the hose clamps as shown but do not completely tighten.



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



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



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

### **Continued**

### **INSTALLATION INSTRUCTIONS**



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



25. 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.



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



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



28.Route the MAF sensor wiring under the intake pipe, then secure the MAF sensor connector. Secure the MAF sensor wiring to the intake pipe's bracket with the tree-mount zip tie.



29. Factory airbox configuration



30. AEM® intake system installed

#### Reassemble Vehicle

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. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened. Reconnect negative battery terminal and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### **CARB Sticker Placement**

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.

### **Service and Maintenance**

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 AEM-1-1000 and follow the easy instructions. Use window cleaner to clean your powder coated AEM® intake tubes.

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

NOT LEGAL FOR SALE OR USE ON ANY POLLUTION CONTROLLED MOTOR VEHICLE IN CALIFORNIA OR STATES ADOPTING CALIFORNIA EMISSION PROCEDURES

See aemintakes.com for CARB status on each part for a specific vehicle

### **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.