

Equipped with AEM<sup>®</sup> Dryflow<sup>™</sup> Filter No Oil Required!

# INSTALLATION INSTRUCTIONS PART NUMBER: 21-8111

2005-2009

**FORD** 

Mustang

V6-4.0L

C.A.R.B. E.O. # D-670-6

\* 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. 2.75 X 8" Dry Ele.	1	21-2028BF
Heat Shield	1	20-8111
Inlet Pipe	1	2-81111
Hose, Adapter 2.75/3.00 X 3" Bl.	1	5-273-R
Mount, Rubber 1" X 8mm	1	1228560
Zip Tie, 6 Long	2	1-113
Wrench; Torx T20 T/R, L-Key	1	69801
Rubber Edge Trim 20"	1	8-3020
Bracket, Heat Shield	1	32-3038
Bolt, Hex/Flange M6-1 X 20	2	1-2038
Bolt, Socket M4-0.7 X 10mm	2	1-2109
Washer, 8mm Soft Mount	2	559960
Washer, 6mm Soft Mount	2	08160
Nut, M6 Hex Serrated	1	444.460.04
Nut, M8 Hex Serrated	2	444.460.08
1/2" Bnd. Hose Clamp, 2.31-3.25"	1	9444
1/2" Bnd. Hose Clamp, 2.56"-3.50"	2	9448
Convoluted Slit, 1/4" X 9"L Hi-Temp	1	3-2009

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.

## 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.



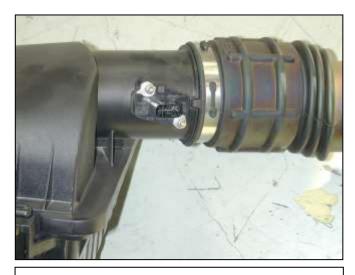
b. Unplug the wire harness from the mass air flow (MAF) sensor.



c. Loosen the hose clamp on the throttle body attached to the stock intake hose. Unplug the plastic breather hose connected to the intake hose. This is done by sliding the green retaining clip until the hose is free from the nipple.



d. Remove the bolt securing the stock air box to the vehicle. Lift up on the stock air box until it is free from the vehicle.



e. Remove the two screws retaining the MAF sensor with the supplied Torx tool and then carefully remove the MAF sensor.



f. If your vehicle is not equipped with ABS, proceed to Step 3. Remove the ABS wire harness from the ABS control unit. This is done by pushing in on the locking button and rotating the latch mechanism toward the engine.



g. Move the harness out of the way and remove the upper and lower bolts securing the ABS unit to the chassis as shown. Set these bolts aside for now, they will be used during the AEM<sup>®</sup> intake system installation.



h. Stock air box system removed.

## 3. Installation of AEM<sup>®</sup> 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 supplied rubber mount onto the AEM® heat shield using one of the supplied washers and locknuts. Install the rubber edge trim around the pipe opening as shown.



c. Install the heat shield into the engine compartment by carefully sliding it under the AC lines and aligning the two mounting arms with the holes in the fender and upper ABS mount. Secure using the previously removed bolt for the ABS housing and supplied M6 bolt and washer.

NOTE: For non-ABS vehicles use the supplied M8 washer, bolt and nut in area circled above.

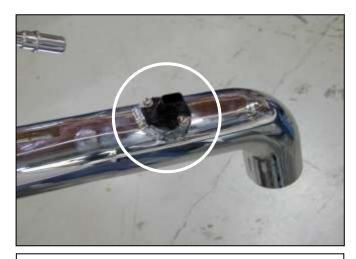


d. Install the lower heat shield mount by using the previously removed lower ABS mount bolt. Use the supplied M6 bolt, nut, and washer to secure the lower mount to the heat shield.

NOTE: For non-ABS vehicles use the supplied M8 washer, bolt and nut in area circled above.



e. Plug in the ABS wiring harness back into the ABS control module.



f. Ensure that the AEM<sup>®</sup> intake pipe is clear of debris. Install the MAF sensor using the supplied mounting screws. Use caution to avoid damaging the o-ring.



h. Insert the inlet pipe into the coupler installed on the throttle body as shown.



g. Install the supplied adapter hose onto the throttle body as shown using the #48 hose clamp.



i. Align the mounting bracket with the rubber mount on the heat shield. Install the M8 washer and serrated nut onto the rubber mount. Leave slightly loose for adjustment.



j. Attach the stock plastic breather hose by pushing it over the aluminum nipple on the AEM<sup>®</sup> intake pipe until it snaps into place.



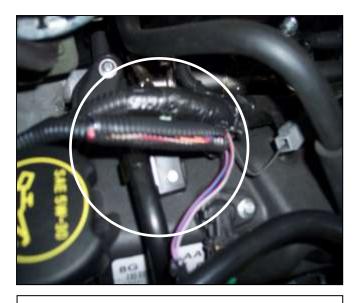
I. Remove the wires from the convoluted slit and cut the electrical tape to locate MAF sensor wires.



k. Install the AEM<sup>®</sup> air filter onto the end of the intake pipe. Push the air filter over the intake pipe until the stop in the air filter is reached. Secure the air filter onto the intake pipe with the supplied hose clamp.



m. Pull MAF sensor plug towards MAF sensor.



n. Place the factory convoluted slit covering over the wires as indicated in the picture above.



o. Place supplied convoluted slit covering over the remaining two wires as indicated in the picture above.



p. Wrap the factory convoluted slit covering with electrical tape to secure the wiring from potential damage.



q. Wrap the supplied convoluted slit covering with electrical tape to secure the second group of wires.



r. Plug in the wire harness into the MAF sensor.



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, 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 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.

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.