



Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 21-8112

2005-2006 FORD Mustang GT V8-4.6L

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

* **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. 3.25 X 9" Dry Ele.	1	21-2109DK
Upper Pipe	1	2-81121
Lower Pipe	1	2-81122
Heat Shield	1	20-8112
Hose, Adapter 3.50/3.25x2.50	1	5-352
Hose, Adapter 3.50 To Oval EPDM	1	5-354
Zip Tie, 6 Long	2	1-113
Wrench; Torx T20 T/R, L-Key	1	69801
Mount, Rubber 1" X 8mm	1	1228560
O-Ring, Size 2-145	2	1-3045
TB Spacer	1	2-9007
Isolator, Mustang GT HC Trap	1	6-413
Rubber Edge Trim 20"	1	8-3020
Nipple, Ford 04+, Weld On	1	2-693BLK
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	4	559960
Nut, M6 Hex Serrated	1	444.460.04
Nut, M8 Hex Serrated	2	444.460.08
Hose Clamp, 4.00-5.00"	1	103-BLO-7220N
1/2" Bnd. Hose Clamp, 3.15"-4.00"	3	9456
1/2" Bnd. Hose Clamp, 2.90"-3.75"	1	9452

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.

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.

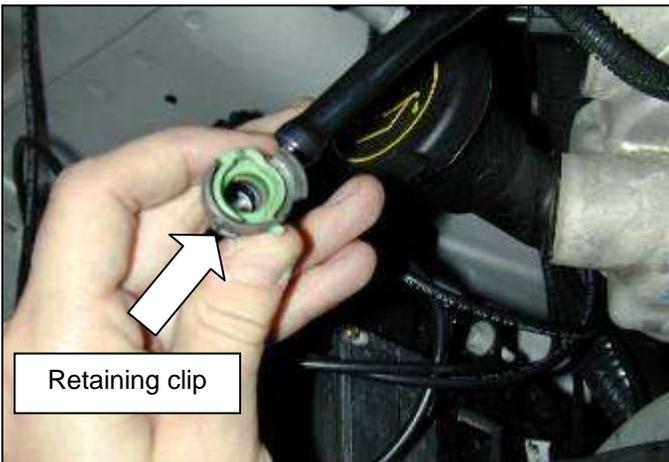
2. Removal of stock system



a. Factory air box system installed.



b. Unplug the wire harness from the Mass Air Flow (MAF) sensor.



Retaining clip

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 and carefully remove the MAF sensor.



f. 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 as they will be used during installation.



h. Unplug the throttle plate control motor and the throttle position sensor as shown.



i. Remove the two upper bolts and two lower nuts securing the throttle body to the intake manifold. Set the throttle body aside.



j. Separate the stock intake tube from the air box by loosening the hose clamp securing them. Look inside of the air intake tube to see if there is a carbon trap present and if so proceed to next step. Otherwise proceed to step 21.



k. This carbon trap is on 2005 model year Mustangs with air induction system part numbers 4-R33-9C662-BJ (4.6L3V M/T) and 4R33-9C662-CF (4.6L 3v A/T) Remove the carbon trap by using a flat head screwdriver and gently prying it out of the stock intake tube.



l. Factory 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.

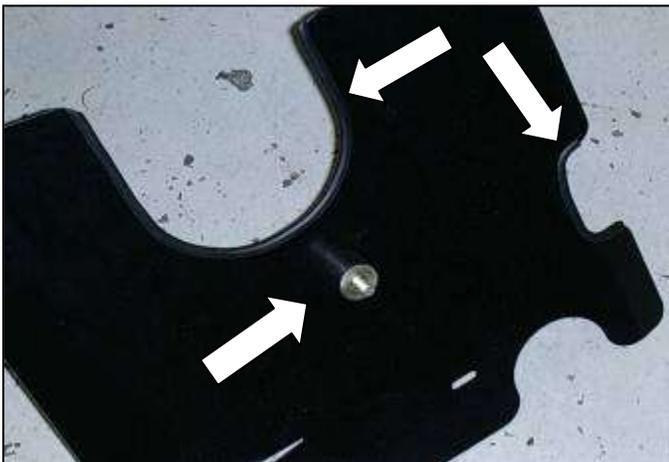


b. Install the two supplied o-rings into the throttle body spacer. Dab a small amount of grease into the groove to hold the o-rings in place during assembly.



c. Install the throttle body spacer onto the two studs on the intake manifold with the two o-rings facing outward. Install the throttle body using the two previously removed nuts and bolts. Tighten to 84 inch pounds (7.0 ft-lbs).

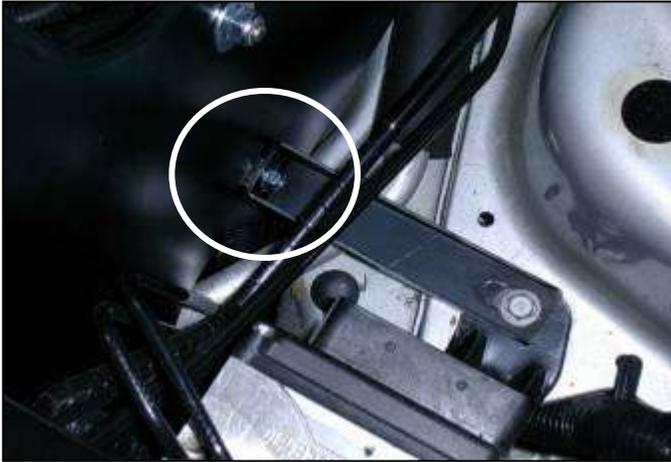
NOTE: Do not over tighten!



d. Install the supplied rubber mount onto the AEM® heat shield using the supplied washers and locknuts. Install the rubber edge trim around the pipe openings as shown.



e. 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 one supplied M6 bolt.



f. 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.



g. Plug the ABS wiring harness back into the ABS control module.



h. Check to be sure that the AEM® intake pipe is clear from debris. Install the MAF sensor using the original mounting screws. Use caution to avoid damaging the o-ring.



i. Install the aluminum nipple into the EPDM throttle body adapter coupler. This is done by pushing the nipple into the bung from inside the coupler. Next, pull the nipple through until it locks into place.



j. Install the adapter coupler onto the throttle body using the #72 hose clamp.



k. Attach the stock plastic breather hose by pushing it over the aluminum nipple until it snaps into place.



l. Check the inside of the AEM® upper intake pipe to ensure it is clear of any debris. Install the pipe with the bend side into to the previously installed coupler. Secure using a # 56 hose clamp as shown.



m. Vehicles not equipped with the carbon trap proceed to step 3o. Vehicles equipped with a carbon trap: Install the carbon trap into the supplied rubber isolator. The carbon trap is non-directional and can be installed in the isolator freely.



n. Slide the carbon trap into the end of the upper intake pipe until it reaches the flange on the rubber isolator.

NOTE: Soapy water may ease installation.



o. Install the rubber reducing coupler onto the upper intake pipe. Secure using the supplied #56 hose clamp.



p. Install the lower intake pipe by sliding it into the previously installed coupler. Align the bracket with the rubber mount on the heat shield.



q. Install the M8 washer and nylok nut onto the rubber mount. Leave slightly loose for adjustment.



r. Install the AEM[®] air filter onto the end of the inlet tube. Push the air filter over the inlet pipe until the stop in the air filter is reached. Install one hose clamp to secure the air filter onto the inlet pipe.



s. Plug in the MAF sensor on the pipe, the throttle position sensor and the throttle plate control motor on the throttle body. Zip tie TPC motor harness to MAF sensor harness.



Factory air box intake system



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 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.