

# AIRRAID®

## INTAKE SYSTEMS

### # 400-166 INSTALLATION INSTRUCTIONS

#### 2005 Ford Expedition 5.4L

Thank you for purchasing the Airaid Intake System. Please read the instruction manual carefully before proceeding with the installation. Contact Airaid at (800) 498-6951 8:00 AM - 5:00 PM MST weekdays for questions regarding fit or instructions that are not clear to you. Your Airaid Intake System was carefully inspected and packaged. Check that no parts are missing, or were damaged during shipping. If any parts are missing, contact Airaid. The air filter element is protected from direct exposure to water and debris; care should be taken not to drive through deep water. WATER INGESTION IS THE DRIVERS RESPONSIBILITY! The air filter is reusable and should be cleaned periodically using the Airaid Filter Tune-Up Kit.

*Thank you for selecting Airaid.*



#### Packing List:

700-469	Airaid Premium Filter	1
KIT166MAFC	MAF Panel Black	1
KIT166BPC	Bottom Panel Black	1
KIT1121MAFADA	Black Filter Adapter	1
KIT14T	Airaid Intake Tube	1
KIT140DSTBC	Driver Side Bracket	1
KIT140PSTBC	Passenger Side Bracket	1
KITWSTRIP02	Weather Strip 25"	1
KITHUMPHS05	Urethane Hump Hose	1
KIT166HP	Hardware & Instructions	1
-KIT15DHC3050	1/4-20x1/2" Bolt	6
-KIT6C31MXPPZ	6-32 Screw	4
-KIT6CNKEPZ	6-32 Keps Nut	4
-KIT6NWSAPZ	#6 Flat Washer	4
-KIT114B	Bushing	4
-KITFITTING05	Aluminum Fitting	1
-KIT15BHC3038	8-32 x 3/8" Button Screw	2

#### Packing List (cont'd):

-KIT60C250HCS	M6-1 x 25 Hex Bolt	3
-KIT60CNFHPZ	M6 Nut	2
-KIT09FWZD19	1/4" Flat Washer	9
-KITGRMT05	Rubber Grommet	2
-KIT166B	Bracket	1
-KITGRMT03	Grommet	1
-KIT115B	Bracket	1
-KITFITTING01	1/4"NPT x 3/8" Barb	1
-KIT131MOUNT	Plastic Hose Mount	2
-KITHS72	#72 Hose Clamp	2

#### Tools Required for this Installation:

8mm, 10mm, 13mm, 9/16" Wrench  
#20 Torx Bit  
5/32" Allen Wrench  
3/32" Allen Wrench  
Phillips & Flat Screwdriver

## Installation Instructions. Read Me!



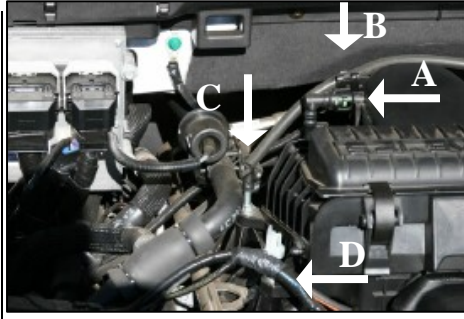
1. Disconnect negative battery cable. Grasp intake tube and sharply lift up and away from airbox



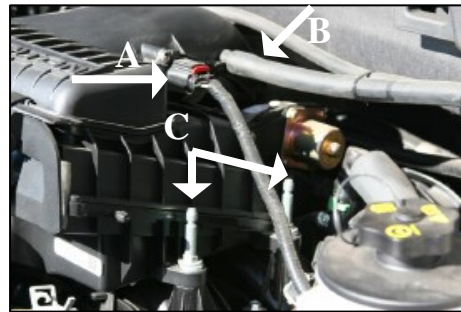
2. Grasp large oval section of intake tube and pull up and away from inner fender well, and remove entire intake tube. (Note: Intake tube is held in with rubber grommets, no bolts.)



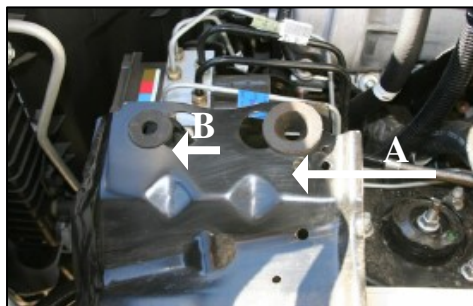
3. Remove 13mm nut on power steering reservoir bracket. Install Airaid intake tube support bracket, replace nut, and leave slightly loose. (Nut will be tightened after final adjustments.)



4. A.) Remove breather line by pushing up on green lever and pulling fitting away from airbox. B.) Remove vacuum line from clip. C.) Pull up on, and remove heater control valve from tower bolt. D.) Pull up on, and remove wiring harness from tower bolt.



5. A.) Unhook the mass air flow sensor by pulling out the red plastic tab first, and then remove the plug. B.) Unhook the vacuum line. C.) Remove all four tower bolts and remove air box. (Save tower bolts for reinstallation.)



6. A.) Remove the two factory grommets by sliding sideways. B.) Install the two supplied grommets in reverse order.

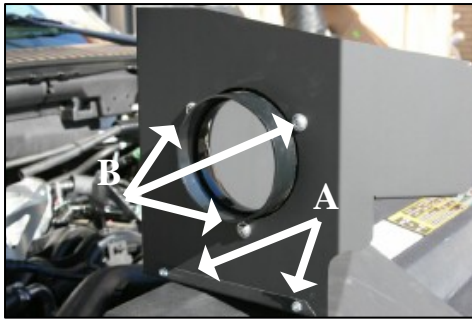


7. Remove the factory rubber seal from the airbox, and install it on the Airaid intake tube.



8. Remove the mass air sensor from the stock airbox using the #20 torx tool. A.) Using the supplied 8/32 screws install the mass air sensor in the Airaid intake tube. B.) Install the 3/8" plastic hose fitting. **Do not over tighten!** C.) Install the supplied grommet, and then the supplied aluminum fitting, rounded end first.





9. A.) Assemble the Cool Air Dam using the four 6-32 screws and locknuts. B.) Install the air filter adapter using three 1/4-20 Allen bolts and washers.



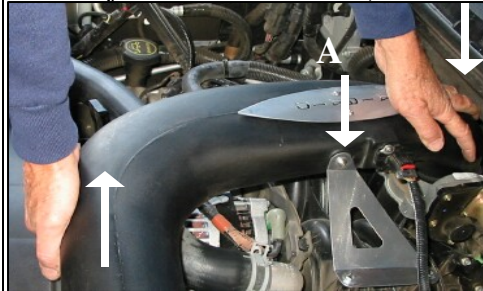
10. Mount the Airaid Cool Air Dam assembly to the vehicle using the supplied metric bolts and washers. The bolt on the right goes into the factory threaded hole. The two bolts on the left go thru the CAD, the grommets, and then the supplied bracket, with the nuts on the bottom. (Note: The mounting bracket must be on the bottom of the grommets.)



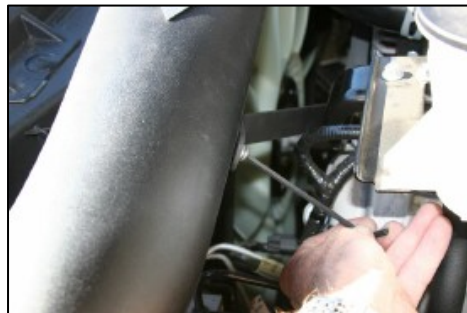
11. Install the urethane hump hose and two #72 hose clamps. (Leave loose until final adjustments are made.)



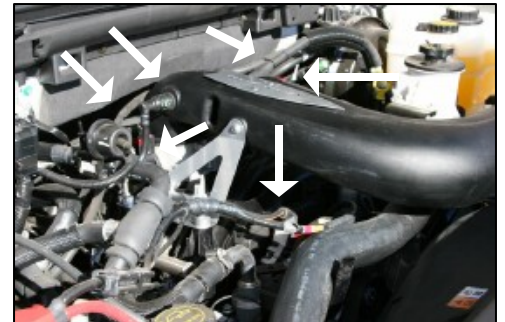
12. Install the two Airaid intake tube brackets on the top of the intake manifold, using the four aluminum spacers on top of the bracket and the four tower bolts. (Leave loose until final adjustments are made.)



13. Install the Airaid intake tube over the throttle body, and into the hump hose. A.) Install the two 1/4-20 Allen bolts and washers thru the brackets and into the tube. Push down on the throttle body end, and lift up on the curve of the tube. **Make sure the tube is seated all the way down on the throttle body!** Tighten the Allen bolts, and then the tower bolts.



14. Install a 1/4-20 Allen bolt and flat washer thru the bracket at the back of the tube, and tighten. Tighten the nut at the bottom of the bracket. Tighten the hose clamps on the hump hose.



15. Reconnect the Mass Airflow Sensor and vacuum hose. Reconnect the breather line, and vacuum line in the clip. Reinstall the wire harness, and heater control valve on the tower bolts.



16. Install the Airaid Premium Filter inside the cold air dam.



17. Install the weather strip on top of the cool air dam. (Hint: Start at one end and work towards the other for an easier fit.) Spread the two hose mounts over the radiator overflow hose, and insert one in each hole at the ends of the cool air dam.

18. Check for foreign materials in the intake, recheck your work. Check nuts, bolts, and clamps for tightness. **Reconnect the negative battery cable.**

Included with your Airaid Intake System is a sticker with a California Air Resources Board (C.A.R.B.) Executive Order (EO) number. This sticker must be placed in plain view inside of the engine compartment. Failure to do so may prevent you from passing a smog inspection.

*Before*



*After*



## Don't Forget Your AIRAID Filter Tune-Up Kit!



**P/N 790-550**

Instructions Revision  
Date: 11/08/07