

# AIR RAID®

## INTAKE SYSTEMS

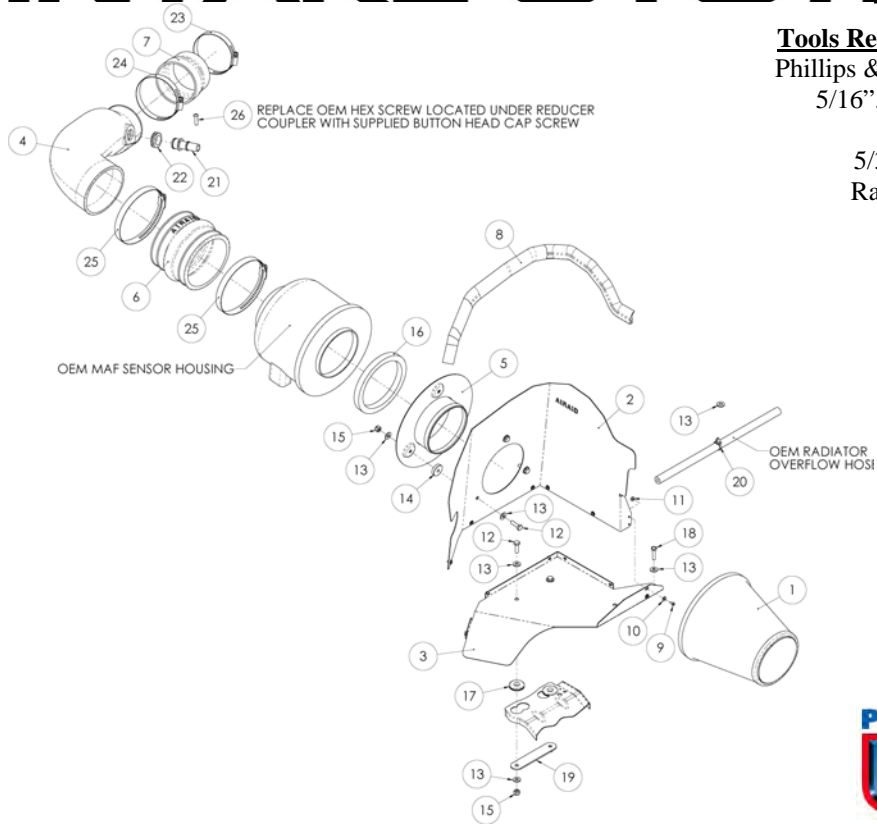
**Installation Instructions**  
**Part Number 401-217**  
**2007-08 Ford F-150 4.6L V-8**

### Packing List:

#1	701-445	Airaid Premium Filter	1
#2	KIT1411MAFC	MAF Panel	1
#3	KIT1411BPC	Bottom Panel	1
#4	KIT217T	Airaid Intake Tube	1
#5	KIT114FAC	Filter Adapter	1
#6	KITHUMPHS08	Urethane Hump Hose	1
#7	KITRDCR01	Reducer Coupler	1
#8	KITWSTRIP02	Weather Strip 24 3/4"	1
	KIT217HPS	Hardware & Instructions	1
#9	KIT6C31MXPPZ	6-32 x 5/16" Screw	7
#10	KIT6NWSAPZ	#6 Flat Washer	7
#11	KIT6CNKEPZ	6-32 Keps Nut	7
#12	KIT25C87HCSS	1/4 - 20 x 7/8" Bolt	5
#13	KIT09FWZ019	1/4" Flat Washer	12
#14	KIT114B	Bushing	3
#15	KIT25CNNES	1/4 - 20 Locknut	5
#16	KIT114G	Gasket 4 1/2"	1
#17	KITGRMT05	Rubber Grommet	2
#18	KIT60C250HCS	M6 - 1 x 25 Hex Bolt	1
#19	KIT115B	Long/Narrow Bracket	1
#20	KIT131MOUNT	Black Plastic Hose Mount	1
#21	KITFITTING15	Aluminum Fitting	1
#22	KITGRMT10	Rubber Grommet	1
#23	KITHS48	#48 Hose Clamp	1
#24	KITHS52	#52 Hose Clamp	1
#25	KITHS80	#80 Hose Clamp	2
#26	KIT20BHC3060	M6x1x20 Button Head Bolt	1

### Tools Required For Installation:

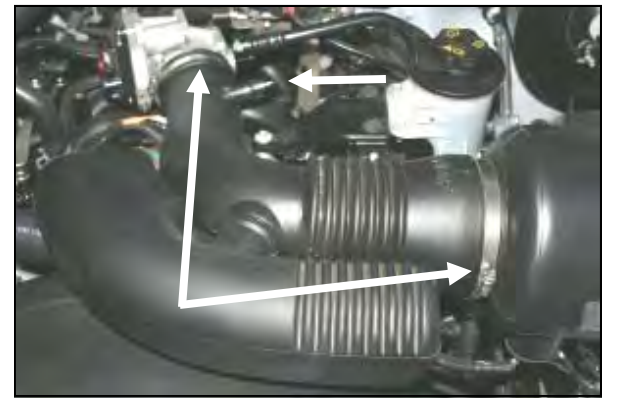
Phillips & Flat Blade Screwdrivers  
 5/16", 7/16", 10mm Socket  
 7/16" wrench  
 5/32" Allen Wrench  
 Ratchet & Extension



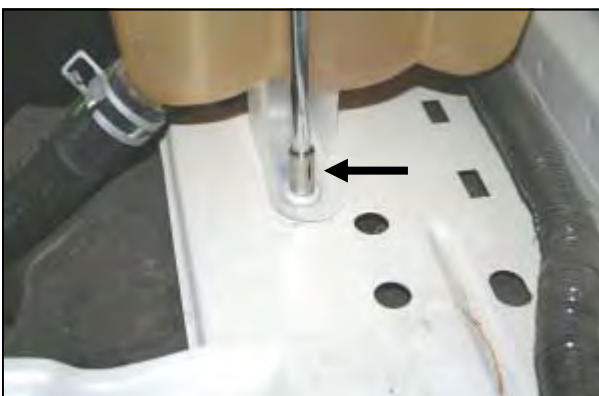
**1. Disconnect the negative battery cable.**  
 Unclip the factory airbox from the factory Mass Air Flow (MAF) sensor housing.



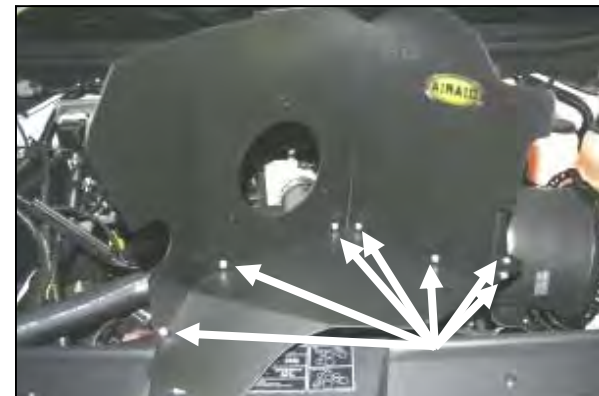
**2. Remove the factory air filter and airbox from the vehicle.** Pull straight up on the airbox, to release it from the grommets, and then remove the airbox inlet from the drivers side fender.



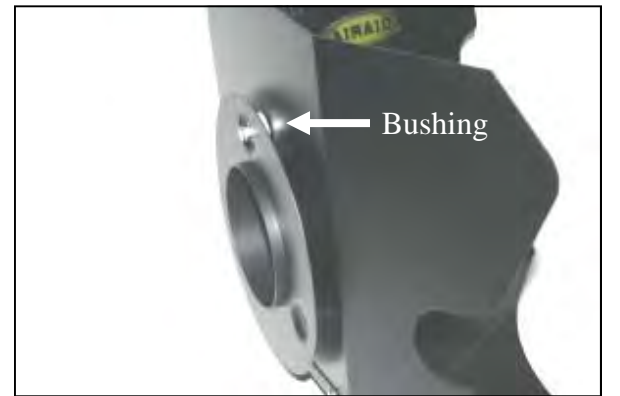
**3. Slide the green tab on the factory breather hose, and remove it from the factory intake tube.** Using a 5/16" socket, loosen the hose clamps on each end of the factory intake tube and remove it from the engine.



**4. Using a 5/16" socket, ratchet and extension, remove one bolt from the factory coolant reservoir mount.**



**5. Assemble the Airaid Cool Air Dam (CAD) panels (#2, #3) using seven 6-32 x 5/16" screws (#9), #6 flat washers (#10), and 6-32 keps nuts (#11).**



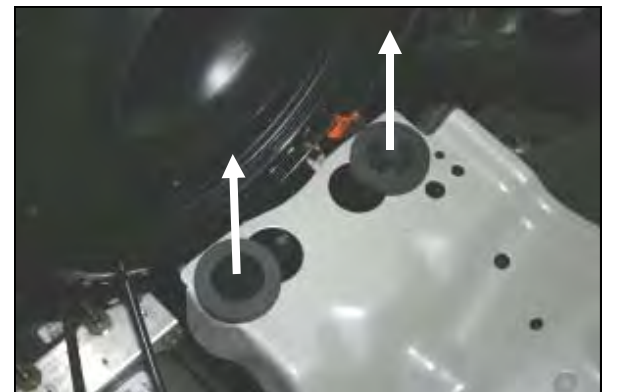
**6. Insert three 1/4-20 x 7/8" bolts (#12), and 1/4" flat washers (#13) through the CAD. Place one bushing (#14) at each hole between the CAD and the filter adapter (#5). Next, secure the assembly using three 1/4" flat washers (#13), and 1/4-20 locknuts (#15).**



**7. Install the gasket (#16) onto the filter adapter.**

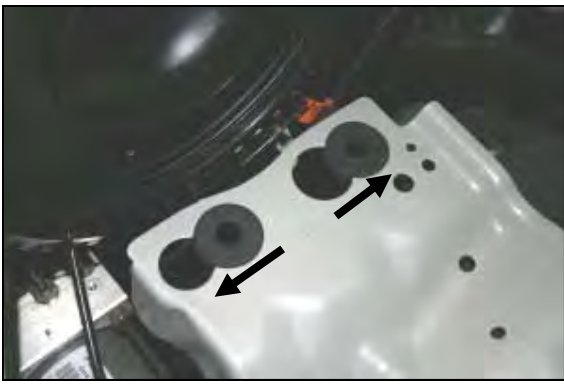


**8. Install the rubber grommet (#22), and aluminum fitting (#21) into the Airaid Intake Tube (#4).**



**9. Remove the two factory grommets from the factory airbox mounting plate.**





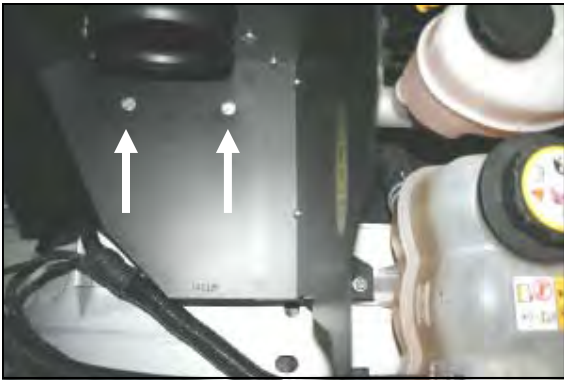
**10.** Slip two rubber grommets (#17) into the large holes in the factory airbox mounting plate, and then slide them sideways into the small holes as shown.



**11.** Install the CAD assembly into the vehicle. First, align the filter adapter with the factory MAF sensor housing, then, secure it with the factory clamp.



**12.** Align the hole in the CAD with the hole in the factory coolant reservoir mount. Insert one M6-1x25 hex bolt (#18) and 1/4" flat washer (#13) through the hole in the CAD, through the coolant reservoir mount, and into the speed nut below it.



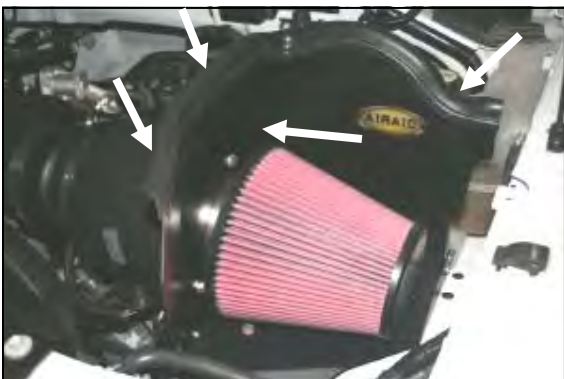
**13.** Insert two 1/4 - 20 x 7/8" bolts (#12) and 1/4" flat washers (#13) through the holes in the CAD and thru the grommets. On the underside of the factory airbox mounting plate, align the long/narrow bracket (#19), two 1/4" flat washers (#13), and two 1/4 - 20 locknuts (#15) with the 1/4-20 x 7/8" bolts. Tighten the assembly securely.



**14.** Using a 10mm socket, remove one factory bolt from under the throttle body. Using a 5/32" allen wrench, install the M6x1x20 button head bolt (#26) in its place. Install the urethane hump hose (#6) and two #80 hose clamps (#25) onto the factory MAF sensor housing. (Leave the clamps loose for now).



**15.** Install the reducer coupler (#7) onto the Airaid Intake Tube (#4) using one #48 hose clamp (#23) on the small end of the coupler, and one #52 hose clamp (#24) on the big end. Slide the tube into the hump hose first, and then over the throttle body. Adjust for fit, and tighten the clamps. Reconnect the factory breather hose.



**16.** Install the Airaid Premium Filter (#1) onto the CAD and tighten the clamp. Install the weather strip (#8) onto the top edge of the CAD as shown. (Hint: start at one end and work your way around to the other.)



**17.** Slip the black plastic hose mount (#20) over the radiator overflow hose. Next, place one 1/4" flat washer (#13) over the hole on the inner drivers side fender. Slide the hose mount prongs thru the fender and thru the washer.

**18. Double check your work!**  
Make sure there is no foreign material in the intake path. Make sure all clamps, hoses, bolts, and screws are tight.

**19. Reconnect the negative battery cable!**

**Before!**



**After!**



Thank you for purchasing the Airaid Intake System. Contact Airaid @ (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!

**SynthaMax**

**Do Not Oil**

Synthamax Air Filters do not require oil. Service air filter as needed by cleaning with common non-petroleum all-purpose household cleaner and water. Simple Green®, Formula 409® or equivalent works great. Apply cleaner to outside of air filter and allow to soak. Then flush filter clean from the inside out with a garden hose and repeat steps if necessary. Do not apply high pressure water or air to clean filter. Allow filter to air dry and reinstall.

