Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 41-1101

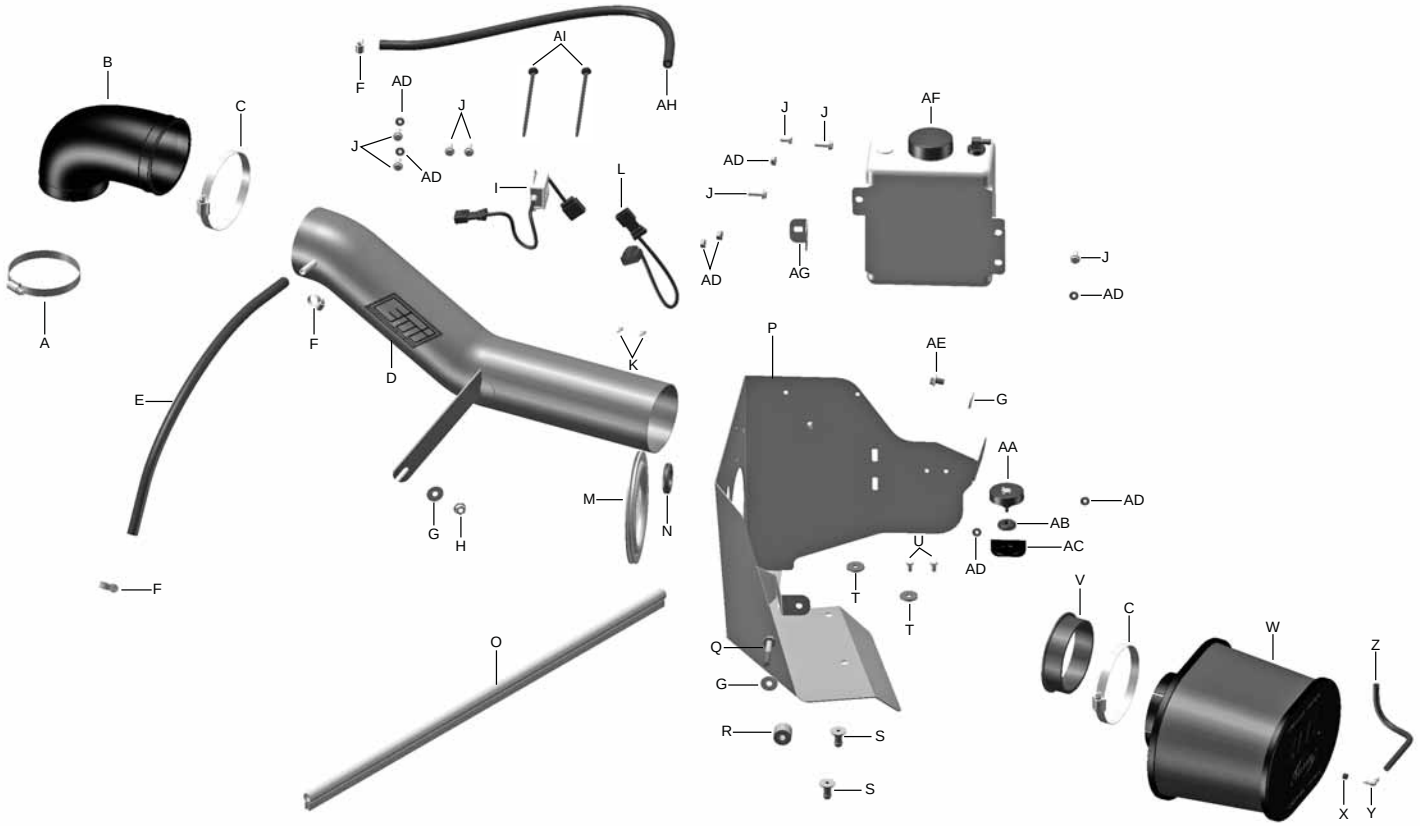
2010 FORD F-150 V8-5.4L SEE * NOTE

*** NOTE: Legal in California only for racing vehicles which may never be used upon a highway**

PARTS LIST

	Description	Qty.	Part Number
A	1/2” Bnd. Hose Clamp, 3.15”-4.00”	1	9456
B	Hose; 4” To 3-1/2” 90° Angled Molded	1	5-1049
C	1/2” Bnd. Hose Clamp, 3.56”-4.50”	2	9464
D	Tube	1	2-1429
E	Hose; 3/8”ID X 22”L	1	5-1022
F	Hose Clamp, 5/8”	3	4093-3
G	Washer, 8mm Soft Mount	3	559960
H	Nut, M8 Hex Serrated	1	444.460.08
I	Eti Module	1	40-1101-002
J	Bolt, Hex/Flange M6-1 X 20	8	1-2038
K	Bolt, Socket M4-.7 X 8mm	2	1-2105
L	MAF Extension Harness	1	21780
M	Edge Trim, 17”	1	8-4017
N	Grommet, 1”	1	784640
O	Edge Trim, 28”	1	8-4028
P	Heat Shield	1	20-8512
Q	Bolt, Hex M8-1.25 X 60mm, Fully Threaded	1	1-106
R	Spacer,1.00 OD X .335 ID X .79	1	2-648
S	Nipple, Heat Shield Mount Pres.	2	8-186
T	Washer; 1”D X 1/4 Hole Fender	2	08160
U	Bolt, Hex M6-1 X 12mm	2	1-2065
V	Insert, Diesel A/F Assy 4”	1	5-2259
W	Element Parts Kit 4.00 X 7” Dsl Oval Dry	1	21-2257DK
X	Grommet, 1/8”	1	784631
Y	Elbow, Plastic 5/32” 90°	1	8-152
Z	Hose; 5/32”ID X 36”L	1	5-3036
AA	Filter Minder, 20”	1	35-80321
AB	Grommet, 1/2”	1	784634
AC	Bracket; Support Filter Minder	1	32-3017
AD	Nut, M6 Hex Serrated	8	444.460.04
AE	Bolt, Hex/Flange M8-1.25 X 12	1	1-2108
AF	Overflow Bottle	1	9-0379
AG	Bracket, Overflow Tank	1	32-3080
AH	Hose; 5/16ID X 32”L	1	5-2032
AI	Zip Tie, 8” Tree Push-Mnt.	2	1-127

Kit Illustration



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

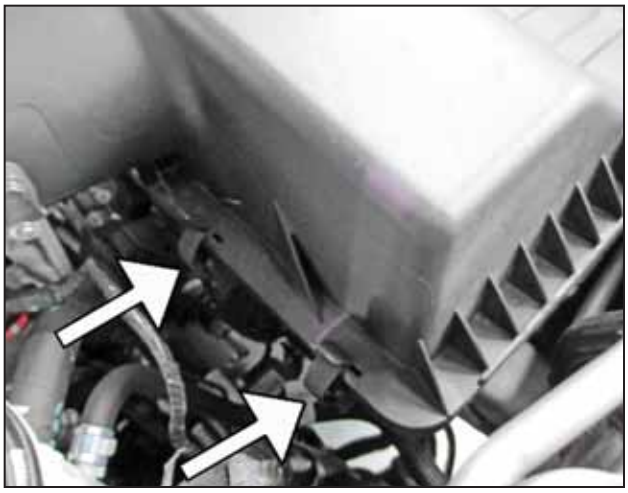
a. Make sure vehicle is parked on level surface.
b. Set parking brake.
c. If engine has run in the past two hours, let it cool down.
d. Disconnect negative battery terminal.
e. Do not discard stock components after removal of the factory system.

2. Removal of stock system

a. Stock air box system installed.

b. Loosen the hose clamp connecting the inlet tube to the intake plenum.

c. Disconnect the mass air flow sensor.



d. Unclip the 2 clips securing the air box lid to the lower air box.

e. Remove the air box lid/inlet tube assembly.

f. Disconnect the PCV hose connected to the valve cover.

g. Remove the 4 bolts securing the intake plenum to the intake manifold.

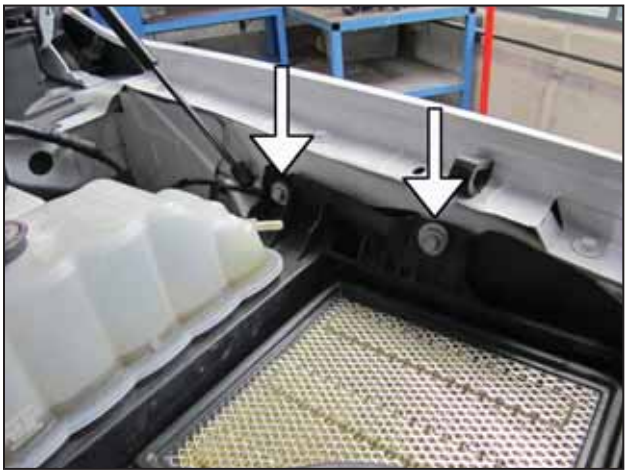
h. Unclip the zip tie secured to the rear corner of the intake plenum near the fire wall.

i. Remove the intake plenum along with the attached PCV hose.

j. Intake plenum and PCV hose removed from vehicle.

k. Disconnect the overflow hose from the overflow tank.

l. Pull the overflow hose out as shown.



m. Remove the two bolts securing the air box and the overflow tank assembly.

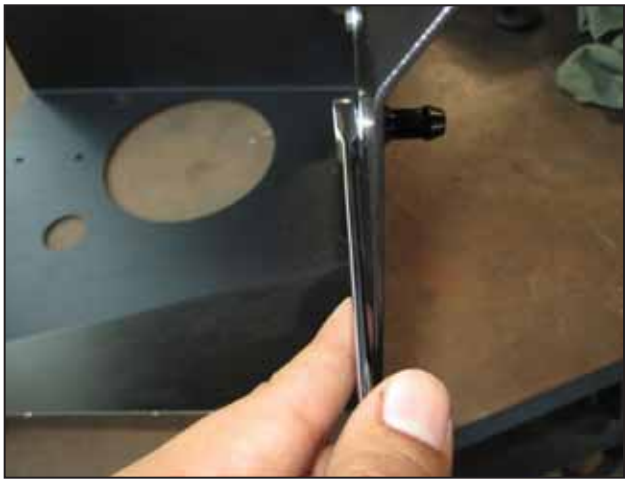
n. Remove the air box and the overflow tank assembly.
NOTE: Drain the overflow tank's coolant into a clean container.

o. Remove the radiator bolt from the radiator support.

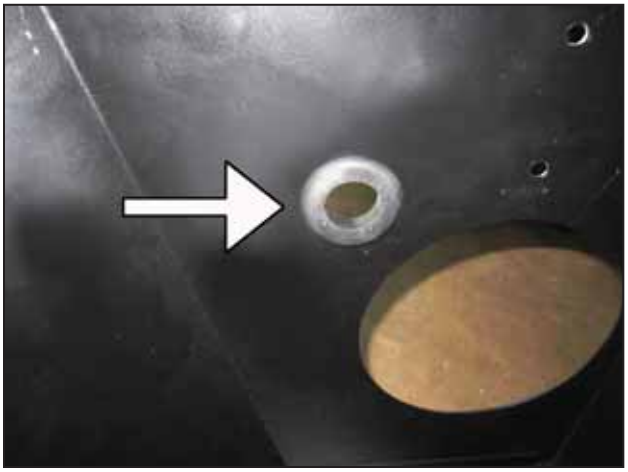
3. Installation of AEM® Intake System

a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.

b. Install the 90° coupler on the throttle body with the supplied #56 hose clamp on the throttle body side and a #64 hose clamp on the inlet pipe side.

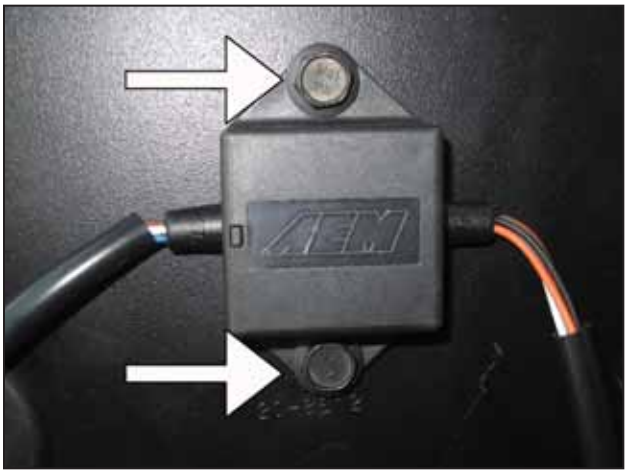


c. Install the two black heat shield mounts with the supplied M6 bolts and washers.



d. Install the supplied grommet in the heat shield hole as shown.

e. Insert the male connector of the ETI module through the grommet as shown.

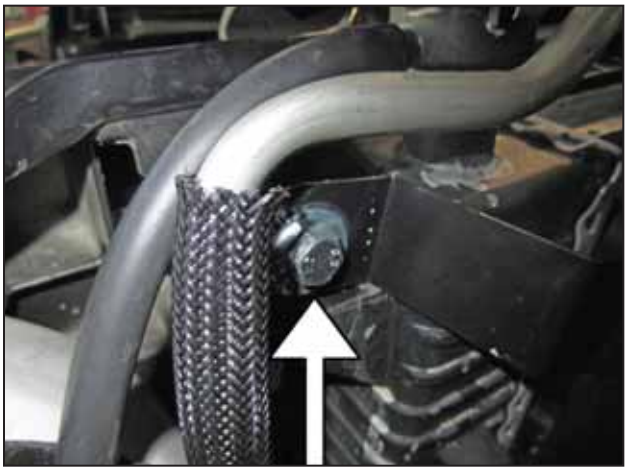


f. Attach the ETI module to the heat shield using the supplied bolts and nuts.

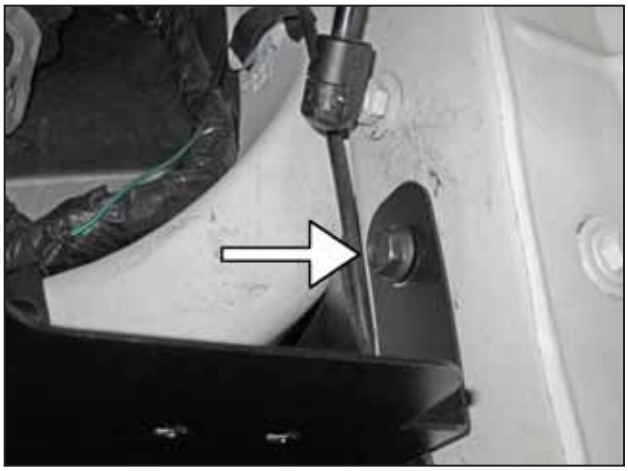
g. Attach the supplied bracket to the heat shield with the supplied bolt, washer and nut.

h. Install the heat shield into the vehicle, aligning the heat shield mounts with the stock grommets.

i. Install the aluminum spacer onto the radiator support where a bolt was previously removed in step 2o.



j. Secure the heat shield tab to the spacer on the radiator support. Secure in place with the supplied bolt and washer.



k. Install the supplied bolt, securing the heat shield to the fender as shown.

l. Install the supplied washers, bolts, and nuts to secure the AEM® overflow tank to the heat shield.

m. Install the supplied bolt, washer and nut on the other side of the AEM® overflow tank.

n. Insert the intake pipe through the heat shield inlet hole as shown.

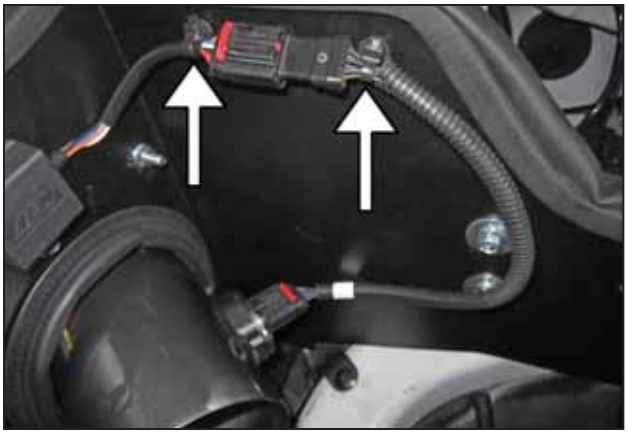
o. Install the MAF sensor into the intake pipe and secure it with the supplied bolts.

p. Align the bracket with the vehicle stud as shown.

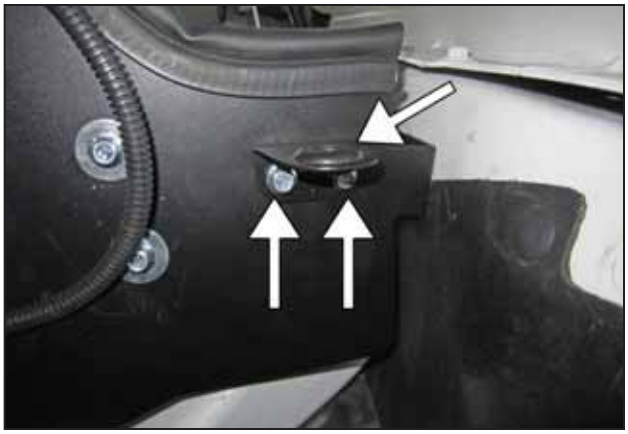
q. Insert the intake pipe into the 90° coupler. Also secure the intake pipe bracket to the stud with the supplied washer and nut.

r. Connect the factory female connector to the ETI module.

s. Connect the ETI female connector to the male connector on the extension harness.



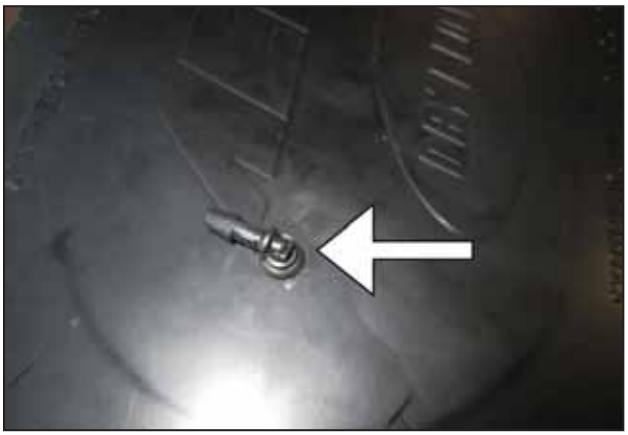
t. Connect the extension harness to the MAF sensor. Insert the two tree mount zip ties into the small cavities in the heat shield. Secure the extension harness to the heat shield with the tree mount zips. Tighten zip ties and trim excess plastic.



u. Secure the supplied bracket to the heat shield with the provided hardware. Install the supplied grommet into the bracket's hole as shown.

v. Connect the supplied hose to the filter minder gauge.

w. Route the hose through the grommet and install the filter minder gauge into the bracket that was installed in step 3u.
NOTE: Applying soapy water to the grommet may ease the installation of the filter minder gauge.



x. Drill a ¼" hole into the top of the air filter and install the supplied ¼" grommet into the air filter cap. Insert the small 90° degree elbow into the grommet.

y. Slide the #64 hose clamp around the air filter neck and then insert the rubber filter adapter into the air filter inlet.

z. Connect the small hose to the 90° degree elbow.

aa. Install the air filter assembly onto the end of the intake pipe. Ensure the air filter is completely seated onto the adapter and the hose clamp is aligned with the filter adapter's lip. Once the hose clamp is properly aligned, secure the hose clamp, ensuring the filter neck's tabs compress and engage the filter adapter. Ensure the air filter does not make contact with any part of the vehicle and has adequate clearance.

ab. Remove the stock overflow hose.

ac. Install the supplied overflow hose onto the radiator.

ad. Route the overflow hose to the AEM® overflow tank and install the hose clamp.

ae. Fill the AEM® overflow tank with the coolant drained from the stock overflow tank.

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. 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.