

Equipped with AEM[®] *Dryflow*™ *Filter* No Oil Required!

INSTALLATION INSTRUCTIONS PART NUMBER:

21-450B (Blue Finish)

21-450C (Gun Metal Grey Finish)

21-450P (Vacuum Metalized Chrome-VMC)

21-450R (Red Finish)

2000-2003 FORD Focus L4-2.0L C.A.R.B. E.O. # D-670-15

PARTS LIST

| Description | Qty. | Part Number |
|--------------------------------------|------|-------------|
| Element Parts Kit 2.50 X 5" Dry Ele. | 1 | 21-201DK |
| Upper Pipe | 1 | 2-451 |
| Lower Pipe | 1 | 2-452 |
| Hose, Silicone 2.50x3" Blk. | 1 | 5-250 |
| Hose; 5/8"ID X 30"L | 1 | 5-7030 |
| Elbow, 3.15/2.5 90 Deg. | 1 | 5-301 |
| Mount, Rubber 5/8" X 6mm | 1 | 1228598 |
| Mount, Rubber 1" X 6mm | 1 | 1228599 |
| Wrench; Torx T20 T/R, L-Key | 1 | 69801 |
| Washer, 6mm Soft Mount | 3 | 08160 |
| Nut, M6 Hex Serrated | 3 | 444.460.04 |
| 1/2" Bnd. Hose Clamp, 2.31-3.25" | 1 | 9444 |
| 1/2" Bnd. Hose Clamp, 3.15"-4.00" | 1 | 9456 |
| 1/2' Bnd. Hose Clamp, 2.15-3.00" | 3 | 9440 |
| Hose Clamp, 1" | 2 | 08407 |

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.

The AEM[®] intake system is a performance product that can be used safely during mild weather conditions. During harsh and inclement weather conditions, you must return your vehicle to stock OEM air box and intake tract configuration. Failure to follow these instructions will void your warranty.

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. Remove the battery cover and disconnect negative battery terminal.
- e. Raise the front of the vehicle with a jack. Refer to your owner's manual for proper jack and jack stand placement to properly support vehicle. Support your vehicle using properly rated jack stands before wheel removal or while working under the vehicle.

NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS.

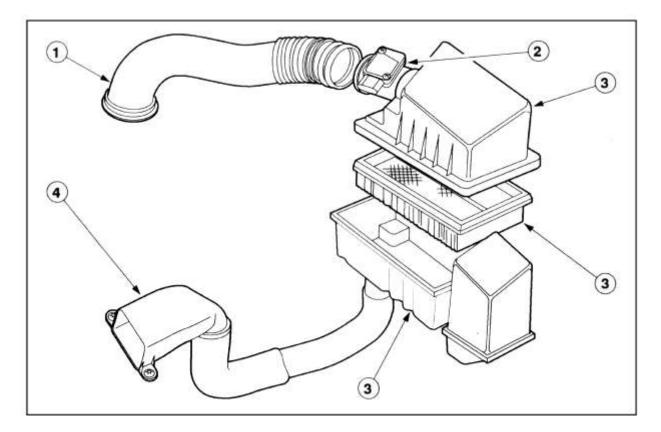
- i. Remove the lower front splashguard.
- ii. Remove the driver side wheel and remove the inside splashguard (inner fender liner).
- f. Do not discard stock components after removal of the factory system.

2. Removal of stock system

- a. Loosen the hose clamps attaching the primary stock intake pipe to the throttle body and the primary stock intake pipe to the mass air flow sensor.
 - i. Remove the primary stock intake pipe.
- b. Disconnect the wiring harness from the mass air flow sensor.
- c. Remove the mass air flow sensor from the stock intake piping using the supplied torx tool and set aside as it will be used in the installation of the AEM[®] intake. Be careful not to damage the mass air flow sensor.
- d. Remove the breather hose from the valve cover to the air cleaner housing.
- e. Remove the air cleaner housing from the vehicle. This is done by pulling straight up on the housing. There are no bolts holding the housing in.
- f. Unfasten the battery by removing the battery strap.
- g. Carefully lift the battery out of the car and place in a safe place.
- h. Remove the battery tray.

i. NOTE: Be sure to disconnect any harnesses that may be attached to the tray.

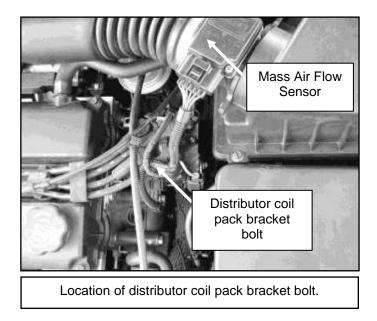
- i. Remove the two plastic hold downs from the secondary intake tube.
- j. Remove the secondary intake tube from the engine mount by lifting straight up.
- k. Remove the secondary intake tube through the front of the vehicle.



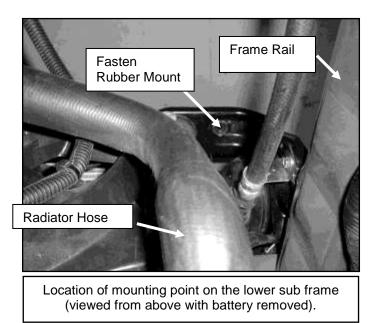
| 1. Primary stock intake piping | 3. Air cleaner housing assembly | |
|--------------------------------|----------------------------------|--|
| 2. Mass air flow sensor | 4. Secondary stock intake piping | |

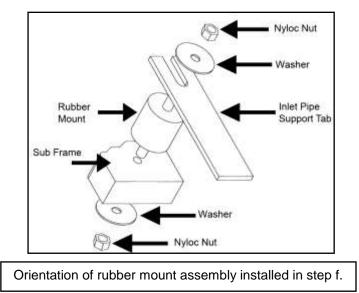
3. Installation of AEM[®] intake system.

- a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.
- b. On page 8 of the instructions are pictures of the AEM[®] intake system installed on the Ford Focus to help assist with the installation process.
- c. Install the mass air flow sensor on the AEM[®] intake piping using the factory bolts.
- d. Install the large end of the 90° reducer hose onto the throttle body.
 - i. Install the supplied 3.5" and 2.75" hose clamps over the respective sections of the 90° reducer hose.
- e. Remove the 10mm bolt from the distributor coil pack bracket and install a rubber soft mount.
 - i. If your vehicle has an automatic transmission, then use one of the 1" long rubber mounts.
 - ii. If your vehicle has a manual transmission, then use the 5/8" long rubber mount.



f. Mount a 1" long rubber mount (manual or auto trans) onto the **upper portion** of the lower sub frame using the supplied nyloc nut and washer. See the picture below for locations and orientation.





- g. Mock up the upper AEM[®] inlet pipe to determine the final position of the 90° reducer hose. The end of the inlet pipe that is closest to the mass air flow sensor goes towards the throttle body.
- h. Loosely fasten the upper AEM[®] intake pipe support tab to the soft mount on the coil pack bracket using the supplied washer and nyloc nut.
- i. Install the supplied rubber connecting hose onto the end of the upper AEM inlet pipe, and then loosely fasten two hose clamps on it.
- j. Install the lower AEM[®] inlet pipe. The pipe should be installed from underneath the vehicle. Insert the pipe from underneath the front bumper area, just in front of the front wheel.
 NOTE: On automatic transmission cars, the pipe is designed to go above the two transmission Cooler lines, and below the power steering cooler line.
- k. Insert the end of the lower pipe into the rubber connector hose that was installed on the end of the upper pipe. Loosely tighten the hose clamps.
- I. Loosely fasten the lower AEM[®] intake pipe support tab to the sub frame using the supplied washer and nyloc nut.
- m. Install the supplied 5/8" breather hose from the breather nipple on the valve cover to the AEM[®] inlet pipe. Install the two 1" hose clamps on the breather hose. Route the hose in such a fashion that it does not rub any sharp objects or that it doesn't get pinched between any two objects.
- n. Install the AEM[®] air filter onto the end of the inlet tube. Push the air filter on around 2 inches over the inlet pipe and install one hose clamp to secure the air filter onto the inlet pipe. Once fitment is checked, you can either push the air filter onto the inlet pipe more or less depending on clearances. Tighten the hose clamp after this is done.
- o. Plug in the mass air flow sensor wiring harness to the mass air flow sensor on the AEM[®] intake pipe.
- p. Check the placement of the air inlet tube for proper alignment. Make sure that the tube does not contact any component along its route nor should it interfere with the function of any other accessory. Make sure that the inlet pipe does not rub the transmission mount.
- q. Tighten all hose clamps and fasteners.

4. Reassemble Vehicle

a. Fender liner and splashguard: Install the fender liner, lower splash guard and any hardware that was removed.

NOTE: Failure to install the fender liner will result in diminished performance and increase the potential for engine damage due to water ingestion in rainy conditions.

- b. Wheel: Install the driver side wheel using the factory torque specification (see owner's manual).
- c. Battery: Install the battery tray, battery, battery strap and battery cover that were removed in steps 2f-2g. Be sure to reconnect any wire harnesses that were removed from the battery tray.
 NOTE: When the battery has been disconnected and reconnected, some abnormal drive symptoms may occur while the vehicle relearns its adaptive strategy. The vehicle may need to be driven 10 miles or more to relearn the strategy.
- d. 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.
- e. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- f. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- g. 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).





