



COLD AIR INTAKE SYSTEM

Installation Instructions for:
Part Number 21-452
2004 Ford Focus 2.3L Inline 4
2005 Ford Focus 2.0L Duratec

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Instruction Part Number: 10-7050
2004 Ford Focus C.A.R.B. E.O. Pending
2005 Ford Focus 2.0L Duratec C.A.R.B. E.O. #Pending

AEM Cold Air Intake Systems that are pending CARB approval are illegal in California except on racing vehicles which may never be used on public highways.

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Congratulations! You have just purchased the finest Air Induction & Filtration system for your car at any price!

The **AEM** Cold Air System is the result of extensive development on a wide variety of cars. Each system is engineered for the particular application. The **AEM** Cold Air System differs from all others in several ways. We take the inlet air from outside of the engine compartment where the inlet air is considerably cooler than the hot under hood air. The cooler inlet air temperature translates to more power during the combustion process because cool air is denser than warm air. **AEM** has conducted extensive inlet air temperature studies and we have seen temperature reductions of up to 50 degrees by pulling air from outside of the engine compartment. The air mass flow to the engine is increased because of the increased airflow *and* reduced inlet temperature, which translates to more power. The **AEM** Cold Air Systems are **50 states Street Legal** (some model and years still pending) and come with complete instructions for ease of installation.

Our system is constructed of lightweight aluminum and then painted with a zirconia based powder coat for superior heat insulating characteristics. The aluminum will not crack in extended use like plastic and it is actually lighter than plastic. The tube diameter and length are matched for each engine to give power over a broad rpm range. Unlike the plastic systems that use a continually diverging cross section, we take advantage of the acoustical energy in the duct to promote cylinder filling during the intake valve-opening event.

Bill of Materials for: 21-452

Quantity	Part Number	Description
1	2-582	04 FORD FOCUS UPPER PIPE
1	2-583	04 FORD FOCUS LOWER PIPE
1	5-323	HOSE,ADAPTER 3.25/3.00 X 2.25" BLK
2	103-BLO-4820	HOSE CLAMP,3.00"
1	103-BLO-5220	HOSE CLAMP,3.25"
1	103-BLO-4420	HOSE CLAMP,2.75"
1	5-273	HOSE,ADAPTER 2.75/3.00 X 3" BLK
1	21-203	AIR FILTER ASMBLY 3.00 5" SHORT
2	1-2038	BOLT,HEX/FLANGE M6 X 20
1	1228599	MOUNT,RUBBER 1" X 6MM
2	559999	WASHER,6MM SOFT MOUNT
2	444.460.04	NUT,NYLOK 6MM
1	10-7050	INSTRUCTIONS FOR 21-452
2	10-922S	DECAL,AEM LARGE SILVER
1	10-400W	LIC PLATE FRAME,WHITE
1	10-922EV	EMBLEM,CAS/SRS VINYL

Read and understand these instructions **BEFORE** attempting to install this product.

1) Getting started

- a) Make sure vehicle is parked on a level surface.
- b) Set parking brake.
- c) **Disconnect both battery terminals.**
- d) If engine has run within the past two hours let it cool down.
- e) Chock rear wheels, jack up front of vehicle and place on properly rated jack stands.
- f) Remove front left wheel and fender liner.

2) Removing the stock air inlet system



a) Stock intake system.



b) Release the fitting on the inlet pipe nipple. Loosen the hose clamp at the throttle body.



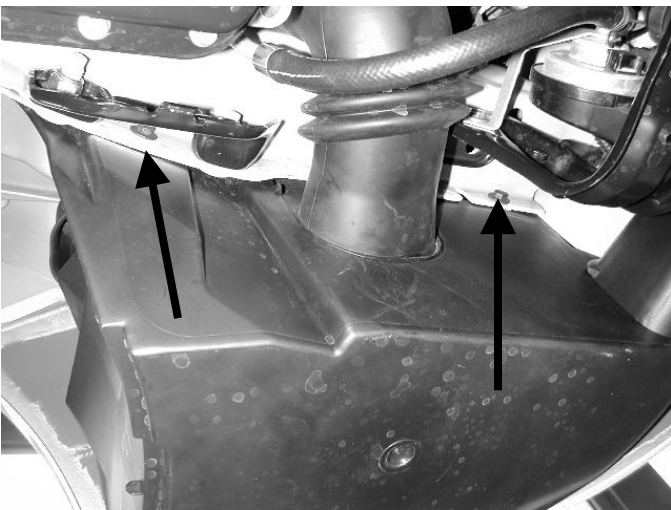
c) Loosen the two bolts that secure the upper air box.



d) Remove the upper air box and the bolt in the frame rail. Release the metal clamp from the Mass Air Flow (MAF) sensor housing.



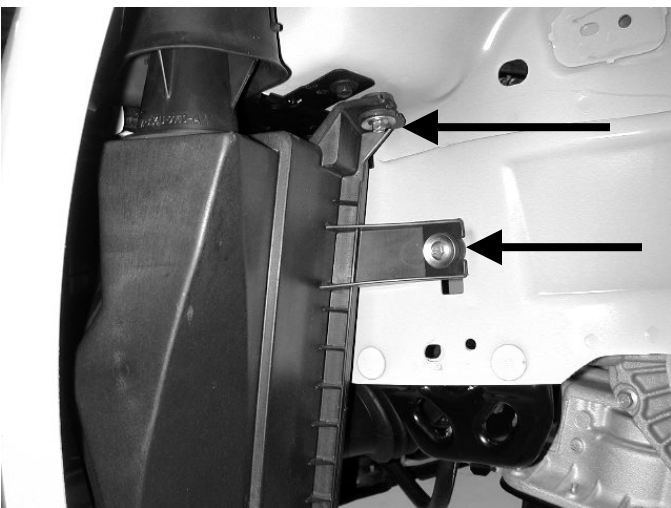
e) Unplug the MAF sensor. Loosen hose clamp at the bottom of the MAF housing.



f) Remove the MAF housing. Confirm that the air straightener is still attached to the lower opening.



g) From underneath the vehicle, remove the two screws that secure the splash shield.



h) Pull the air snorkel from the splash shield and remove the splash shield.

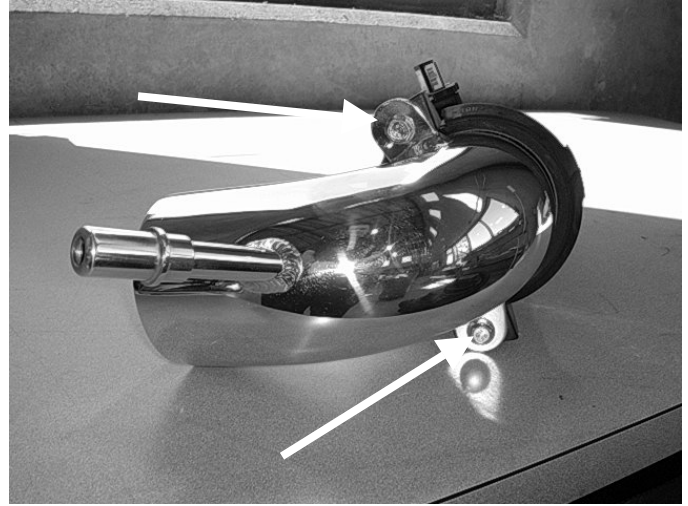


i) Remove the two screws at the upper rear section of the lower air box.

j) Remove the screw at the upper front section of the lower air box. Remove the lower air box.

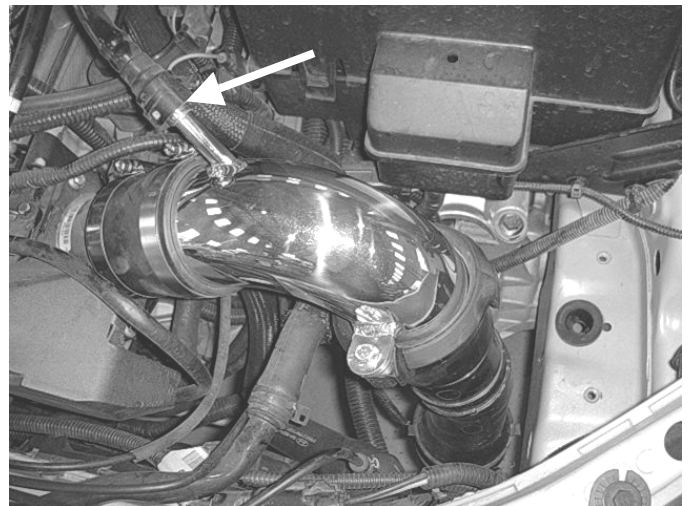
3) Installation of the AEM Cold Air Intake System

a) When installing the Cold Air Intake System, DO NOT tighten mounting tab hardware or hose clamps until instructed to do so later in these instructions.



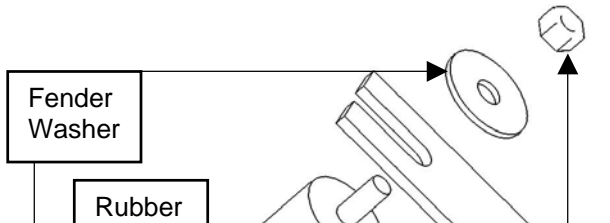
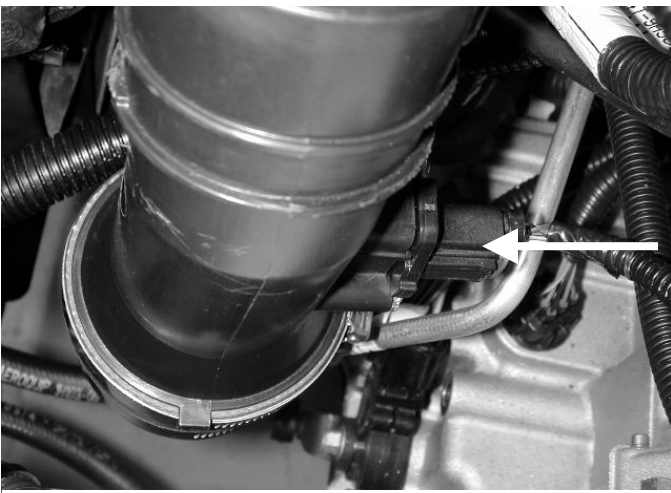
b) Place the rubber reducer and hose clamps onto the throttle body.

c) Secure the upper inlet pipe to MAF housing with the supplied bolts.



d) Place the silicone reducer onto the MAF housing.

e) Install the upper pipe onto the throttle body. Attach the breather hose to nipple on the pipe.

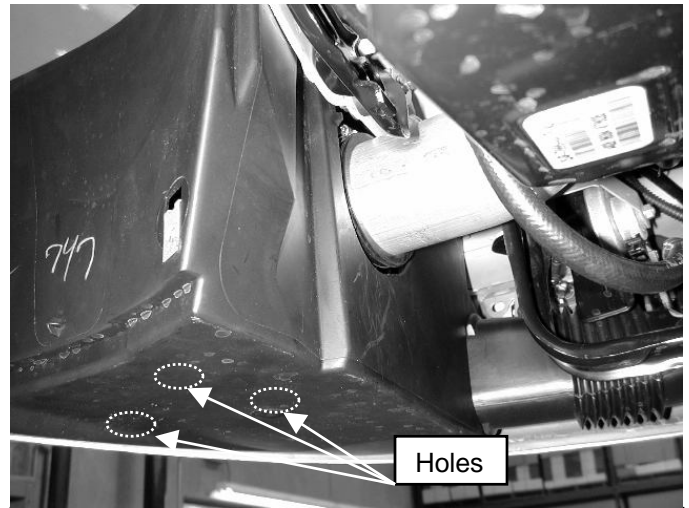


h) Proper rubber mount installation.



i) Secure the AEM air filter onto the end of the pipe.

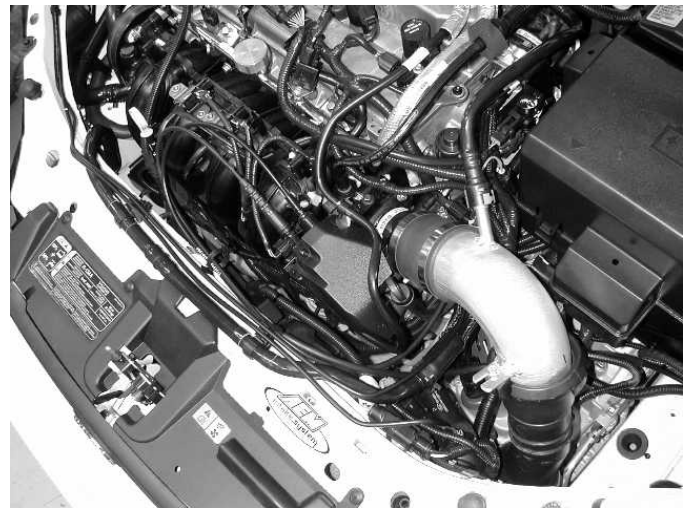
i) Install the lower inlet pipe into the lower coupler on the MAF housing and the rubber mount on the frame.



k) Reinstall the splash shield. If you live in a region that experiences significant rainfall, you may want to drill 1/2" holes in the bottom of the splash shield to facilitate water drainage. **Even with the holes, hydrolocking of the engine may still occur.**



l) Affix the AEM decal and CARB E.O. number (if applicable) to the front of the vehicle.



m) AEM Cold Air Intake System installed.

- a) Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- b) Position the pipe so that it does not touch any other surface and tighten the hose clamps and lock nuts.
- c) Reconnect battery terminals.
- d) Reinstall wheel and fender liner.
- e) Torque lug nuts to 85 lb-ft.
- f) Start engine and perform a final inspection before driving the vehicle.

5) Service Information and Optional Accessories

- a) Service your AEM filter element with AEM's Filter Cleaning System (Part # 21-100) at least every 50,000 miles or 30 months to maintain optimum performance.
- b) If you anticipate traveling through water that is deep enough to completely submerge the air filter, replace the AEM Cold Air Intake system with the stock intake, as this system cannot accept a bypass valve.

For Technical Inquiries
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