



Equipped with AEM<sup>®</sup> Dryflow<sup>™</sup> Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

### PART NUMBER: 21-8109

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2001-2003	MAZDA	B4000	V6-4.0L	C.A.R.B. E.O. # D-392-27
2001-2003	FORD	Ranger	V6-4.0L	C.A.R.B. E.O. # D-392-27

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

## PARTS LIST

Description	Qty.	Part Number
Hose, Adapter 3.25/2.75x3"	1	5-328
Hose, Hump 2.75/3.00x3.00"	1	5-573
1/2" Bnd. Hose Clamp, 2.90"-3.75"	2	9452
1/2" Bnd. Hose Clamp, 2.31-3.25"	2	9444
Hose Clamp, 1 1/16" Narrow	2	4093-6
Inlet Pipe	1	2-81091
Heat Shield	1	20-8109
Stand, Aluminum	2	2-670
Bolt, Hex/Flange M6-1 X 20	4	1-2038
Bolt, Hex M6-1 X 35mm	2	1-2002
Nut, M6 Hex Serrated	6	444.460.04
Washer, 6mm Soft Mount	4	08160
Adapter, MAF	1	2-689
Gskt., MAF	2	2-9207
Edge Trim, 9"	1	8-4009
Air Filter Assy. 6.00 X 5" Reg/Top Dry	1	21-209EDK
Hose; 5/8"ID X 2"L	1	5-7002
1/2" Bnd. Hose Clamp, 4.125-7.00"	1	94104

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.

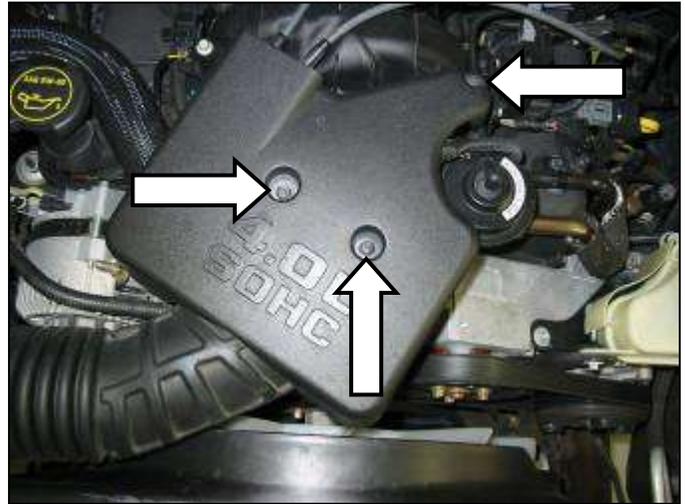
### 1. Preparing Vehicle

- 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 all negative battery terminals.
- e. Do not discard stock components after removal of the factory system.

### 2. Removal of stock system



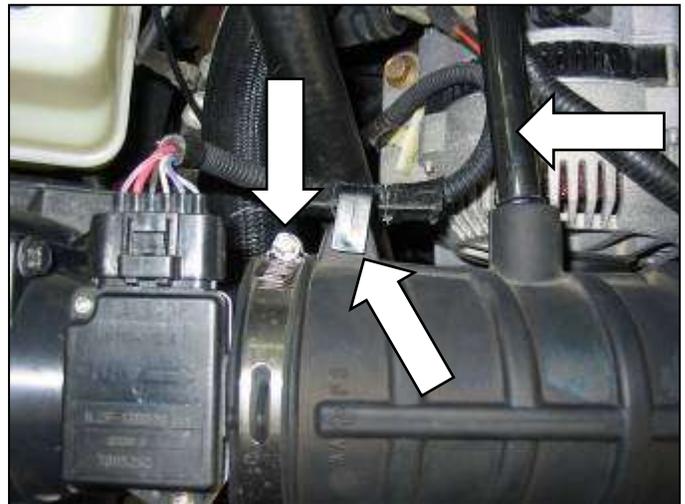
a. Factory air box system installed.



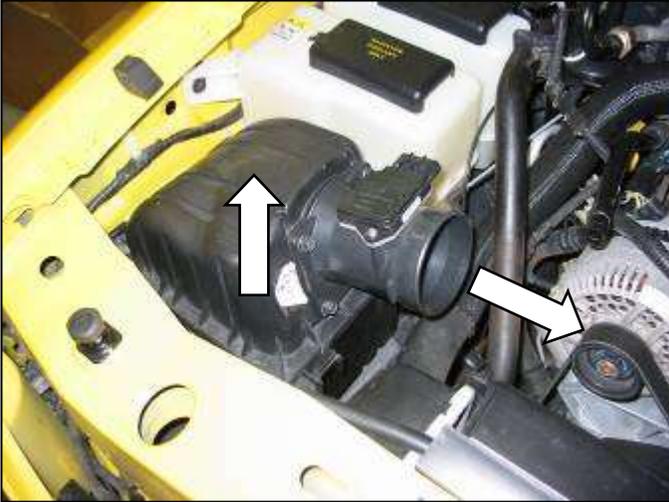
b. Remove the three screws that secure the throttle body cover. Remove the throttle body cover.



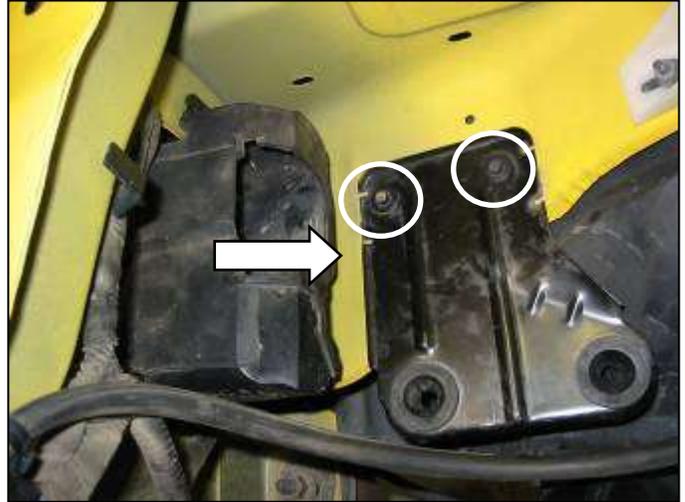
c. Loosen the hose clamp at the throttle body.



d. Unplug the Mass Airflow (MAF) sensor and loosen the hose clamp. Release the retaining clip and pull the breather hose from the inlet pipe.



e. Remove the inlet pipe. Remove the air box by first pulling it up and then towards the center of the vehicle.



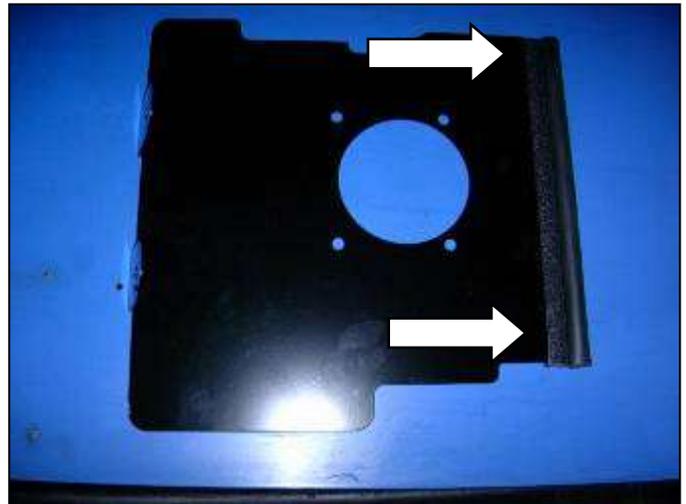
f. Remove the silencer behind the headlight. Remove the air box support plate.

### 3. Installation of AEM® intake system.

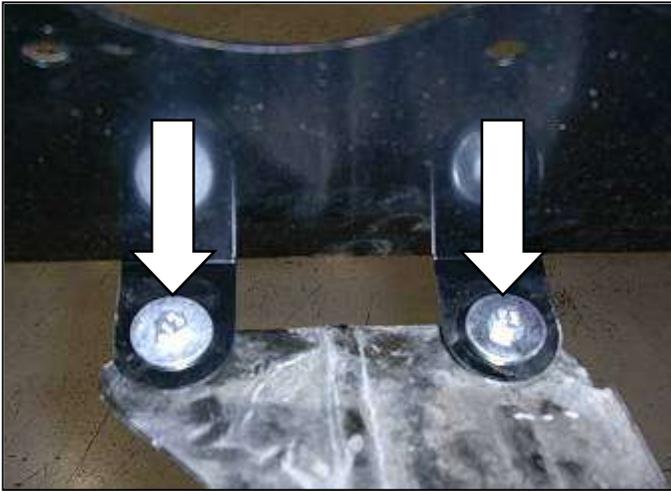
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



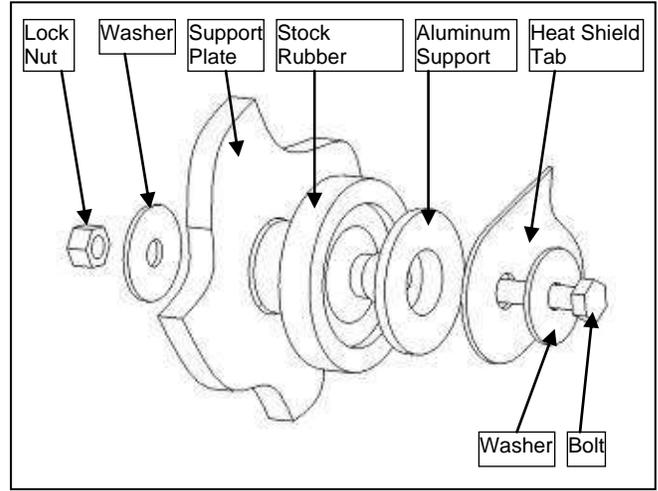
b. Place coupler over the throttle body as shown. Align the worm screw of the large hose clamp **AWAY** from the throttle body cable pulley. Tighten the large clamp.



c. Install the gasket material to the top of the heat shield.



d. Secure the air box support plate to the heat shield with the supplied hardware. Refer to step 'e'.



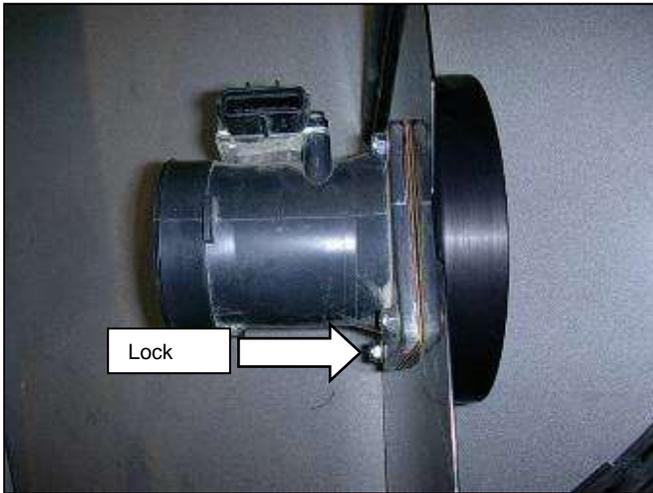
e. Proper heat shield hardware alignment.



f. Remove the MAF sensor from the air box.



g. Place one of the supplied gaskets onto each side of the large hole in the heat shield.



h. Secure the MAF sensor and MAF sensor adapter to the heat shield with the supplied bolts and lock nuts.



i. Install the AEM<sup>®</sup> air filter onto the MAF sensor adapter as shown.



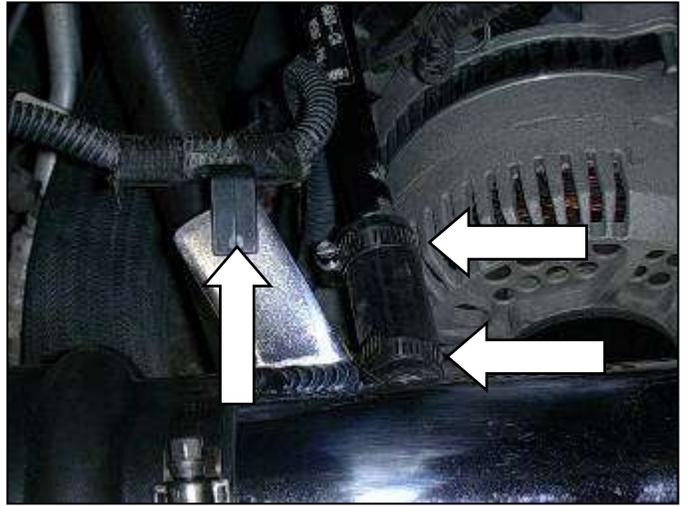
j. Place the heat shield/air filter/MAF sensor in the engine bay. Secure it to the chassis with the original bolts.



k. Install the large end of the hump hose over the MAF sensor housing as shown.



l. Place the inlet pipe in the engine bay as shown.



m. Secure the breather hose to the inlet pipe with the supplied hose and hose clamps. Install the MAF sensor wiring harness support into the tab on the pipe.



n. Plug the wiring harness into the MAF sensor. Install the throttle body cover.

#### 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 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<sup>®</sup> 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)**

For technical inquiries e-mail us at sales@aemintakes.com or call us at 800.992.3000
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## AEM Air Intake System Warranty Policy

AEM<sup>®</sup> 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.