



Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 21-632

2004	SATURN	Ion-1	L4-2.2L	C.A.R.B. E.O. # D-670-2
2004	SATURN	Ion-2	L4-2.2L	C.A.R.B. E.O. # D-670-2
2004	SATURN	Ion-3	L4-2.2L	C.A.R.B. E.O. # D-670-2

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

PARTS LIST

Description	Qty.	Part Number
Element Parts Kit 2.50 X 5" Dry Ele.	1	21-201DK
Inlet Pipe	1	2-547
Mount, Rubber 5/8" X 6mm	1	1228598
Mount, Rubber 1" X 6mm	1	1228599
Grommet, 1/2"	1	784634
Washer, 6mm Soft Mount	3	08160
Nut, M6 Hex Serrated	3	444.460.04
Hose; 1/2"ID X 8"L	1	5-5008
1/2" Bnd. Hose Clamp, 2.31-3.25"	1	9444
1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448
1/2' Bnd. Hose Clamp, 2.15-3.00"	1	9440
Hose Clamp, 1"	2	08407
Elbow, 3.00/2.50 90 Deg5	1	5-305

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.

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.

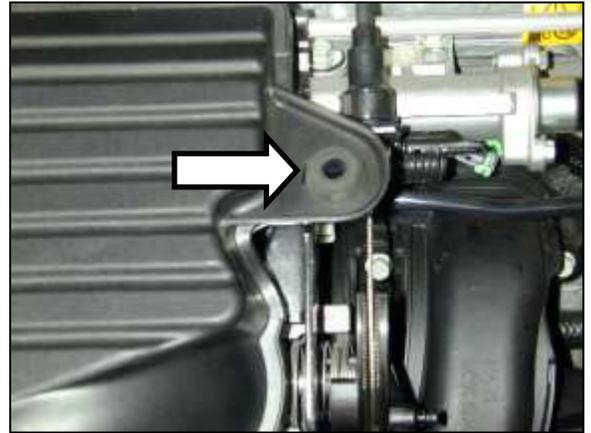
1. Preparing Vehicle

- 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. 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 passenger side wheel.
- f. Do not discard stock components after removal of the factory system.

2. Removal of stock system



a. Stock intake system.



b. Remove plastic retainer.



c. Loosen hose clamp at the throttle body.



d. Release the spring clamp on the breather hose and pull hose off of the valve cover.



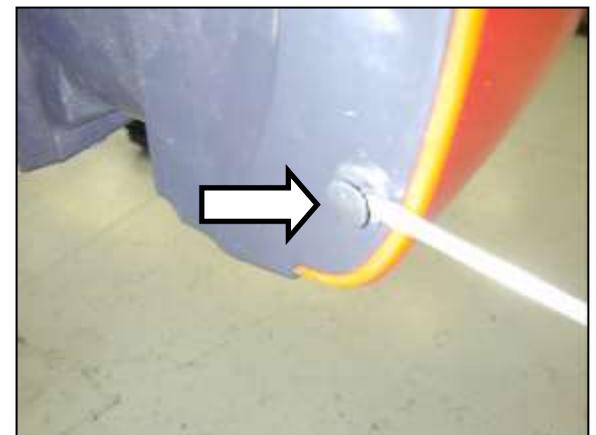
e. Gently pull out the inlet air temp (IAT) sensor from the rubber grommet.



f. Remove the nut located behind headlight.



g. Remove the upper air box from vehicle.



h. Remove the fender liner by first releasing plastic retainers and screws.



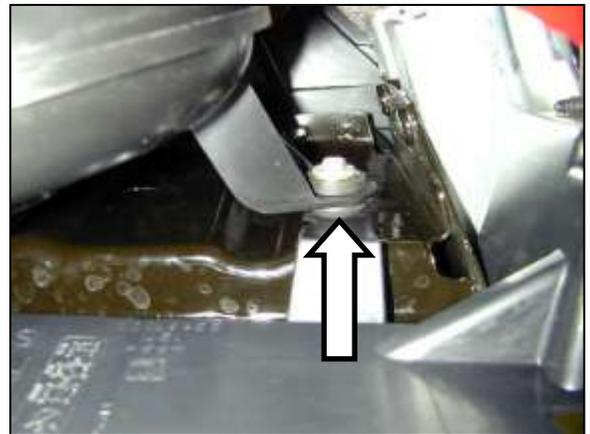
i. Release all the retainers and remove the fender liner from the fender well.



j. Release the upper retainer of the lower air box.



k. Remove the lower retainer of the lower air box.



l. Loosen and remove the bolt securing the lower air box to the vehicle.



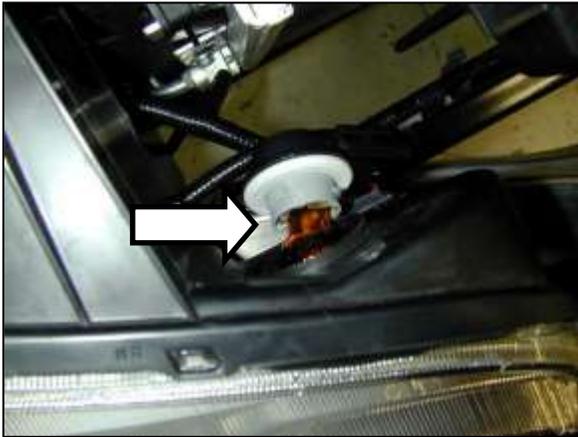
m. Remove the lower air box from the vehicle.

3. Installation of AEM® intake system.

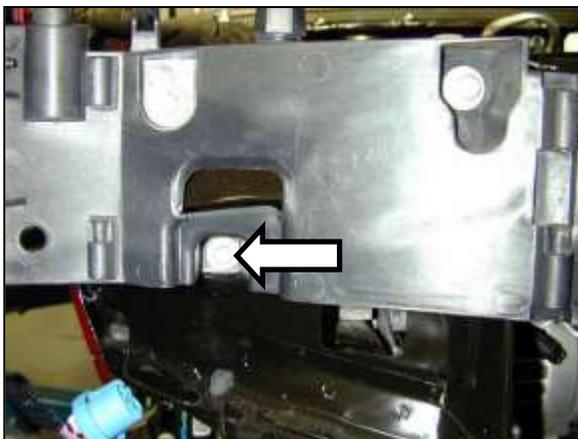
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



b. Install the 5/8" rubber mount to the lower mounting tab as shown. Secure it with a supplied washer and lock nut.



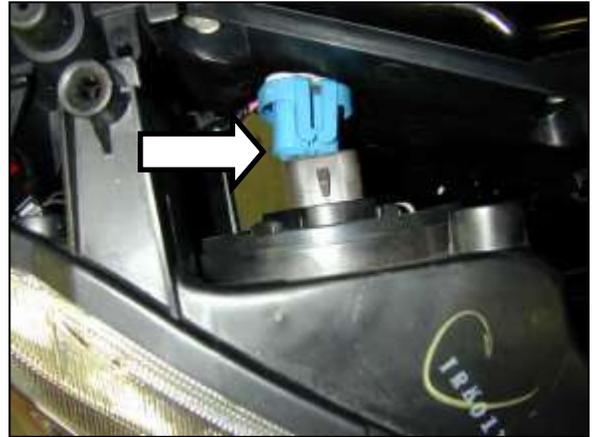
d. Remove the parking light bulb by first rotating it a quarter of a turn.



f. Loosen and remove the lower bolt on the plastic member shown.



c. Release headlight by removing the two pins shown.



e. Release the blue connector on the rear of the headlight. Remove headlight from the vehicle.



g. Install the 1" rubber mount from inside the engine bay, as shown.



h. Install the rubber elbow onto the throttle body. Use the size 48 clamp at the throttle body. **Do not tighten the clamp.**



i. Insert supplied grommet into inlet pipe.



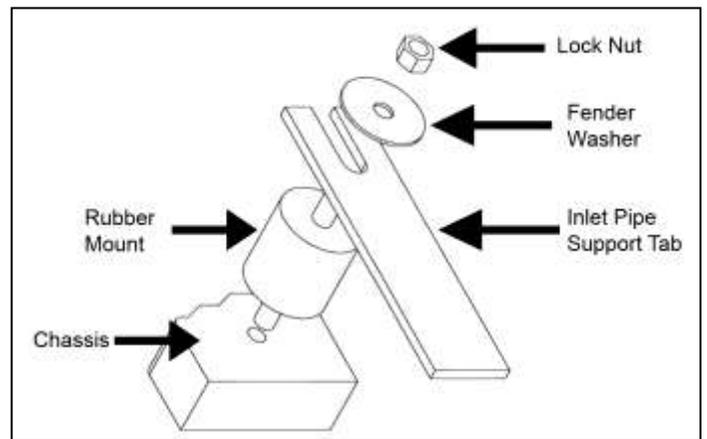
j. Install the intake pipe in engine bay as shown. Route the pipe up through the fender well into the engine bay.



k. Place the inlet pipe support tab under washer as shown. Refer to step '3l' for proper installation.



l. Place the lower support tab under the fender washer.



m. Proper rubber mount installation assembly.



n. Install the supplied breather hose between the inlet pipe and valve cover. Secure it with the supplied 1" hose clamps.



o. Insert IAT sensor through the grommet in the inlet pipe. Be careful not to push the grommet into the pipe.



p. Install the air filter onto the end of the pipe.



q. If an AEM[®] bypass valve is installed, install the bypass valve as shown. The intake pipe will require some modification to accommodate the AEM bypass valve. Follow the instructions included with the bypass valve for proper installation.



Factory air box system installed.



AEM[®] intake system installed

4. Reassemble Vehicle

- a. **Headlight:** Install the headlight and any necessary hardware that was removed in prior steps.
- b. **Fender liner:** Install the fender liner and any hardware that was removed in steps 2h through 2i.
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.
- c. **Wheel:** Install the passenger side wheel using the factory torque specification (see owner's manual).
- 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).**

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.