



Equipped with AEM® Dryflow™ Filter
No Oil Required!

INSTALLATION INSTRUCTIONS

PART NUMBER: 21-567

2006	SCION xB	L4-1.5L	
2004-2005	SCION xB	L4-1.5L	C.A.R.B. E.O. # D-670-2

AEM® bypass valves are not compatible with this intake system (part number 21-567)
DO NOT attempt to install an AEM bypass valve on this intake system!

**LEGAL IN CALIFORNIA ONLY FOR RACING VEHICLES
WHICH MAY NEVER BE USED, REGISTERED
OR LICENSED FOR USE UPON A HIGHWAY.**

See aemintakes.com for CARB status on each part for a specific vehicle

PARTS LIST

Description	Qty.	Part Number
Air Filter Assy. 2.25 x 5" Dry Ele.	1	21-200DK
Inlet Pipe	1	2-554
Elbow, 2.25" 10 Degree	1	5-221
Hose; 5/8"ID x 14"L	1	5-7014
Mount, Rubber 1" x 6mm	1	1228599
Nipple,.625 OD x .65wL x 1.5"	1	7-7016
Bracket, VSV Mt.	1	7-7201
Bracket, Rub. Mt.	1	7-7202
Bolt, Socket 8-32 x 5/16 SS	2	1-2023
Washer, 6mm Soft Mount	2	08160
Nut, M6 Hex Serrated	2	444.460.04
Hose Clamp, 2.25	2	9436
Hose Clamp, 1 1/4" Narrow	1	08420
1/2' Bnd. Hose Clamp, 2.15-3.00"	1	9440

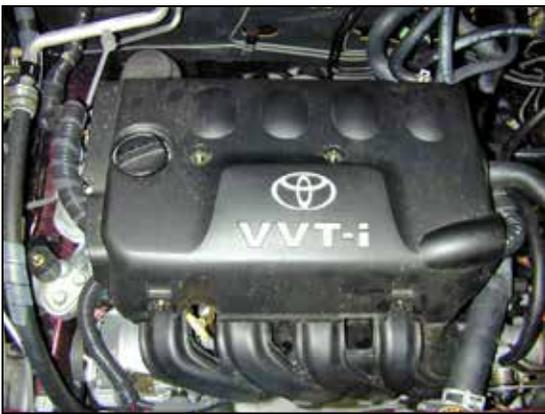
Read and understand these instructions **BEFORE** attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine.

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

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

2. Removal of stock system



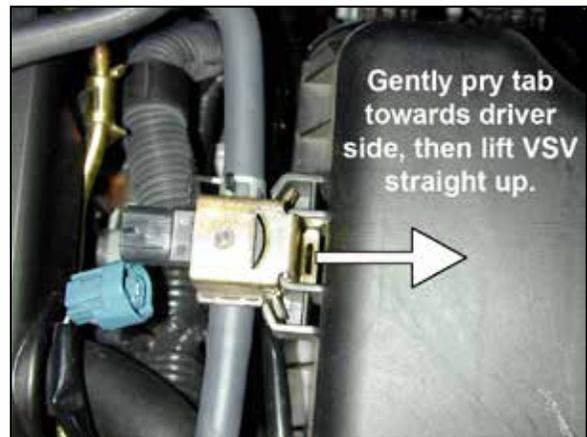
a. Remove the four nuts securing the plastic engine cover to the valve cover. Remove the plastic engine cover from the engine bay.



b. Disconnect the wire harness connected to the mass-air flow (MAF) sensor.



c. Release the wire harness from the air cleaner cover by squeezing the plastic clip from the top and bottom. Carefully remove the plastic clip to allow the MAF and VSV connector harnesses to be routed separately. Remove the breather hose from the vehicle by squeezing the spring clamps on both the intake tube and at the valve cover. Save the spring clamps for use later in the installation.



d. Remove the vacuum switching valve (VSV) from the air cleaner cover by gently prying the tab with a slotted screwdriver and then lifting straight up. Be careful not to over extend the vacuum hoses or wire harness going to the VSV. It is not necessary to disconnect the vacuum lines or wire harness.



e. Loosen the hose clamp at the throttle body. Release the two spring clips at the front edge of the air cleaner cover. Remove the air cleaner cover, intake tube, and MAF sensor from the engine compartment.



f. Loosen the three bolts that retain the lower air cleaner housing in the engine bay.



g. Remove the bolt retaining the lower intake air duct. This bolt and duct are located between the radiator support and the battery. Remove the lower air cleaner housing and lower intake air duct from the engine bay.



h. Remove the MAF sensor by loosening the two Phillips head screws. Save the screws for use if the vehicle is ever returned to stock condition. Handle the MAF sensor with care to avoid damage.



i. 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.** Remove the bolts and plastic rivets that secure the fender liner. Pull the fender liner back to gain access to the area behind the front bumper.

3. Installation of AEM® intake system.

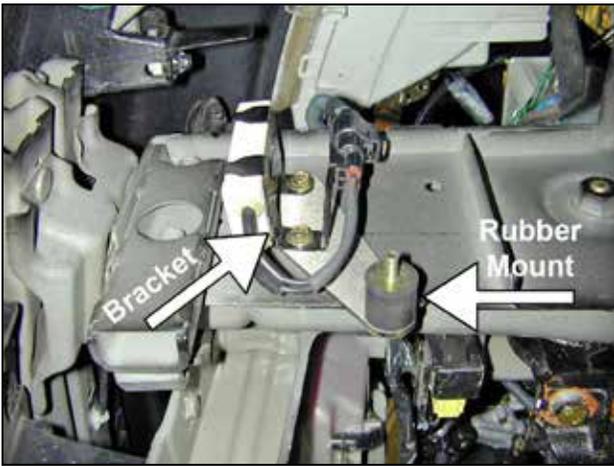
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



b. Install the MAF sensor into the AEM® intake pipe. Use the supplied 8-32 cap head screws. Use care to avoid damaging the o-ring.



c. Remove the two bolts securing the resistor ballast beneath the driver's side headlight.



d. Install the supplied rubber mount bracket as shown and secure the resistor ballast using the original bolts. Install the supplied rubber mount using one fender washer and one lock nut.



e. Loosely install the coupler onto the throttle body using the two #36 hose clamps. Orient the nipple so that it is pointed approximately 45° back towards the firewall. This will be adjusted later in the installation.



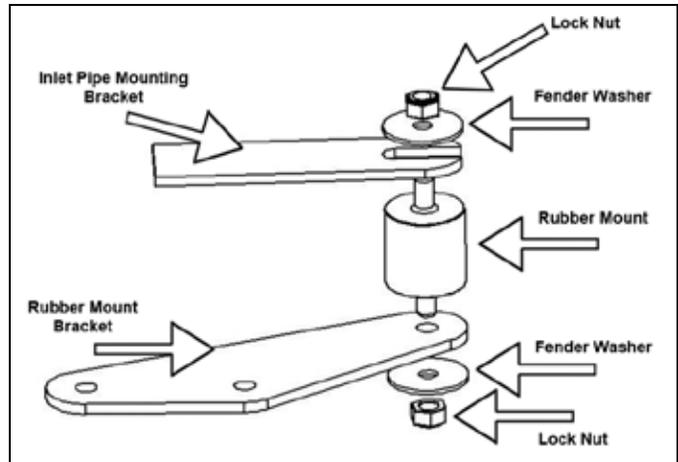
f. Install the AEM® intake pipe from underneath the vehicle. Insert the end near the MAF sensor into the coupler on the throttle body. The mounting bracket on the intake pipe should line up with the rubber mount installed in step 3d.



g. Loosely secure the mounting bracket with the remaining fender washer and lock nut. Refer to the diagram below for proper rubber mount installation.



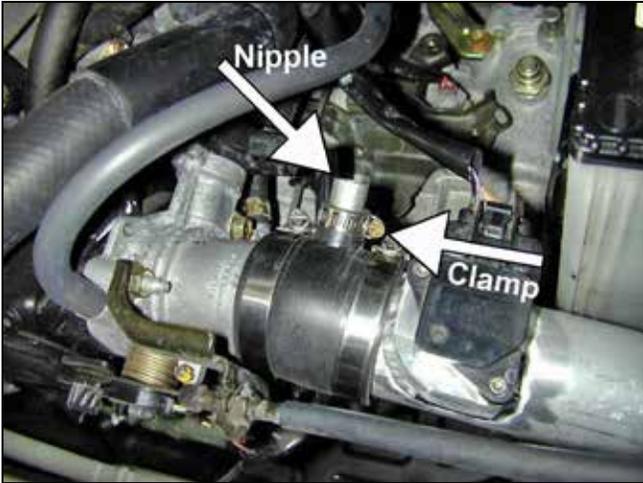
h. Install the AEM® air filter onto the end of the intake pipe.



i. Rubber mounting bracket diagram.

- j. Adjust the inlet pipe and coupler for best fitment. Make sure the AEM® intake system does not come into contact with the vehicle anywhere. Adjust coupler at throttle body to ensure that both the throttle body and the AEM® inlet pipe are seated flush up to the lip inside the coupler. Tighten the hose clamps and lock nut on the rubber mount.
- k. Reinstall lower splashguard and plastic fender liner using the original factory hardware. Remove jack stands and lower vehicle.

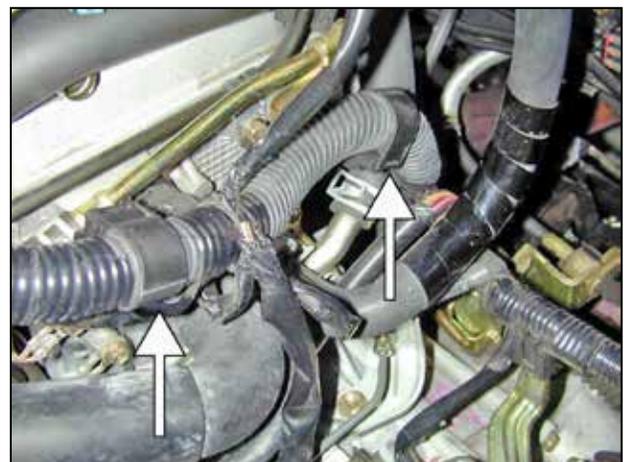
NOTE: Failure to install the plastic splashguard and fender liner will result in diminished performance and increase the potential for engine damage due to water ingestion in rainy conditions.



l. Install the supplied vacuum nipple into the throttle body coupler. Secure the nipple with the supplied hose clamp.

m. Install the supplied breather hose between the nipple on the throttle body coupler and the valve cover. Secure the hose with the original spring clamps.

NOTE: Due to manufacturing variances, it is sometimes necessary to adjust the main engine wiring harness to allow the harness to reach the MAF sensor. If there is any tension on the MAF sensor wires at all, follow the instructions below. If there is a sufficient amount of slack in the harness, skip ahead to step 3q.



n. Gently pry back the plastic tab and remove the plastic clip on the wire harness from the metal bracket next to the valve cover. The clip will lift straight up off of the bracket.

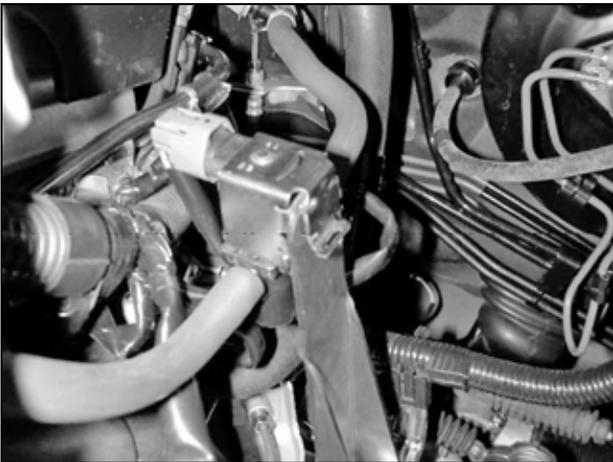
o. Repeat for the next plastic clip on the wire harness towards the firewall.



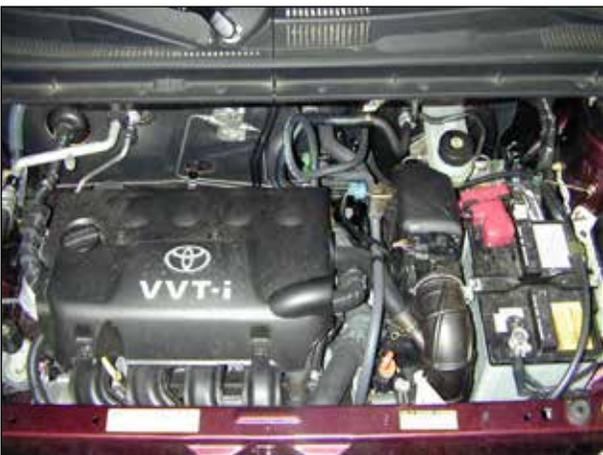
p. Place a small screwdriver in the slot of the clip and gently pry downwards. Split the housing of the clip open. Slide the clip down the wire harness a couple of convolutions to free up more harness towards the MAF sensor. Repeat for the second wire harness clip. Reinstall both clips to the bracket on the engine. Plug in the MAF sensor wire harness and make sure the wires are not stretched.



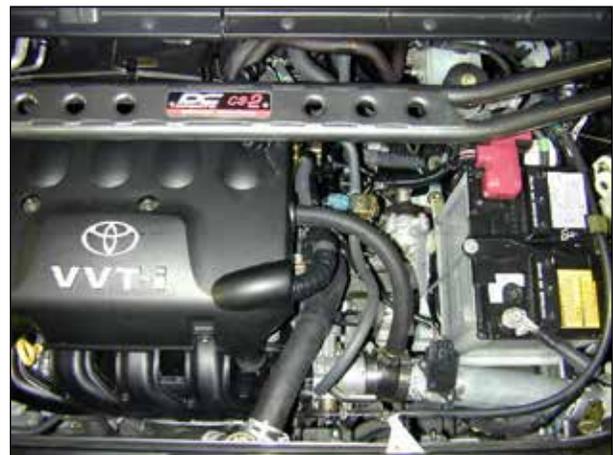
q. Install the VSV mounting bracket using one of the factory air box bolts as shown.



r. Clip the VSV on to the bracket. If the VSV does not clip on tightly, gently bend the tab on the VSV to increase the tension.



Factory air box system installed



AEM® intake system installed

4. Reassemble Vehicle

- a. Position the intake 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.

NOTE: If vehicle was started without the VSV or the MAF sensor connected, the “Check Engine” light may come on. If this happens turn the engine off and disconnect the battery for one minute. Reconnect the battery and restart the engine.

- e. Please note that AEM® bypass valves will not work with this application (part number 21-567). The use of a bypass valve could have adverse effects on the performance of the system.

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 state 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.

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