

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

# INSTALLATION INSTRUCTIONS PART NUMBER: 21-570

2006 SCION xA L4-1.5L SEE \* NOTE 2004-2006 SCION xB L4-1.5L SEE \* NOTE

# **PARTS LIST**

Description	Qty.	Part Number
Air Filter Assy. 2.25 X 5" Dry Ele.	1	21-200DK
Upper Pipe	1	2-707
Lower Pipe	1	2-537
Elbow, 2.25" 90 Degree	1	5-229
Hose; 5/8"ID X 13"L	1	5-7013
BPV Kit, 2.25" W/Clip No Box	1	20-400ST
1/2" Bnd. Hose Clamp, 2.56"-3.50"	2	9448
Helical Bundling Wrap; 1/2" X 9"L	1	8-8009
Helical Bundling Wrap; 1/2" X 3"L	1	8-8003
Helical Bundling Wrap, 1" X 4" Blk.	1	8-504
Spacer, .812 OD X .413 ID X .1	1	2-684
Bolt, Hex M58, 12mm	1	1-2098
Bolt, Socket 8-32 X 5/16 SS	2	1-2023
Bolt, Hex M10x1.25x70mm	1	1-2094
Washer, M10 X 20mm X 2mm	1	1-3022
Washer, M5 Split Lock SS	1	1-3046
1/2' Bnd. Hose Clamp, 2.15-3.00"	2	9440

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<sup>®</sup> 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.

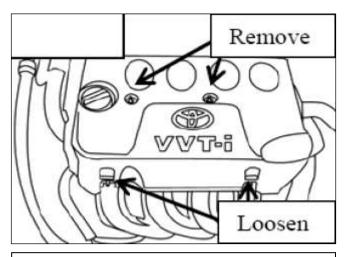
# 1. Preparing Vehicle

- 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 all negative battery terminals.
- 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.

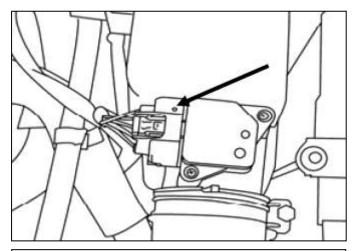
#### **NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS.**

f. Do not discard stock components after removal of the factory system.

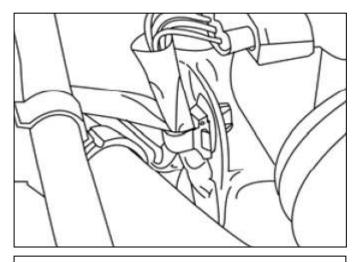
# 2. Removal of stock system



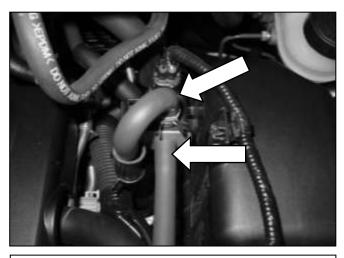
a. Remove the engine cover by removing top two nuts and loosening the lower nuts.



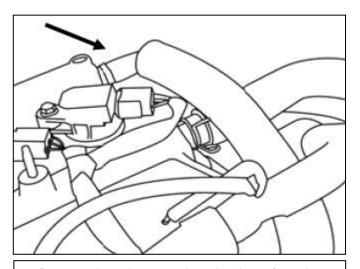
b. Unplug the mass air flow (MAF) connector from the sensor.



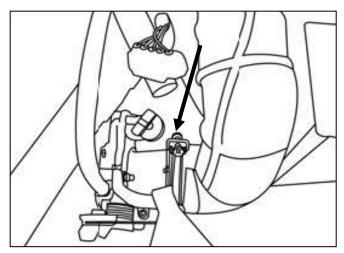
c. Release the wire harness tie from the bracket it is secured to.



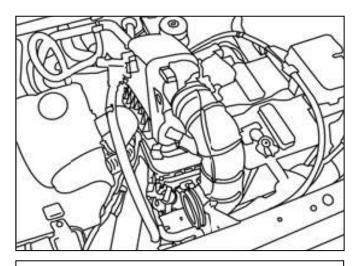
d. Remove the hose clamp on top of the VSV, then pull free. Also remove the second hose from the front of the VSV.



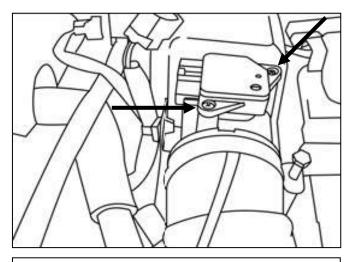
e. Remove the valve cover breather hose from the valve cover and the filter box lid.



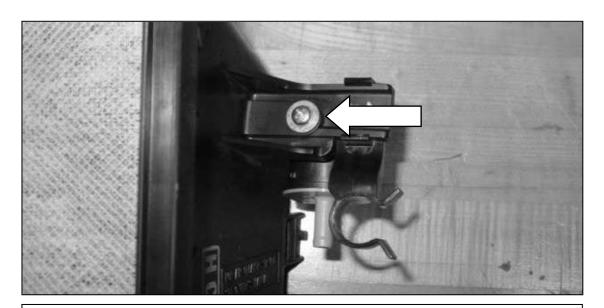
f. Loosen the rubber elbow to the throttle body clamp at the throttle body.



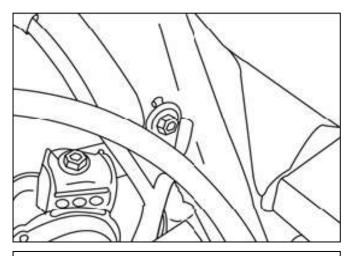
g. Release the two clips holding the air box assembly together. Remove the top air box assembly and filter element.



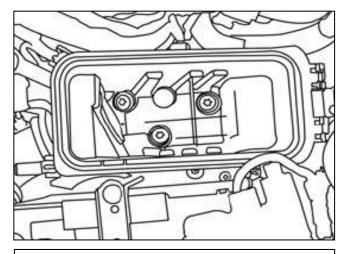
h. Remove the MAF sensor from the stock inlet tube by removing the two screws holding it in place. NOTE: Be sure the o-ring remains on the sensor and is not left on the tube.



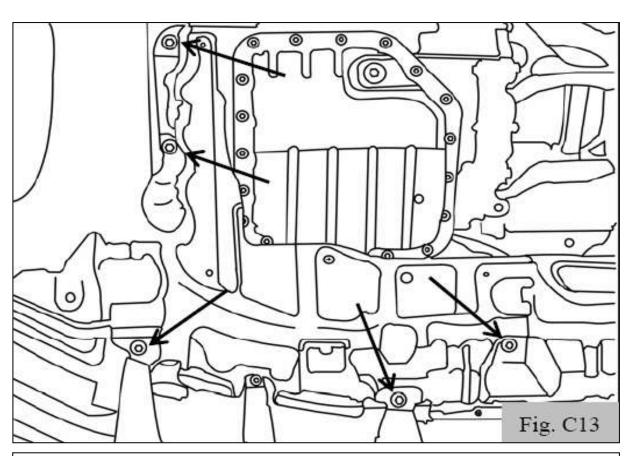
i. Turn over the air filter lid, and remove the VSV by removing the one screw holding it in place.



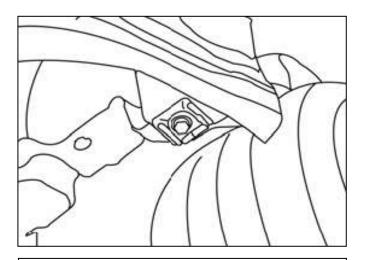
j. Remove the intake tube mounting bolt. The bolt is located on the core support in front of the battery.



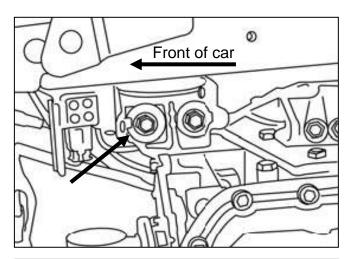
k. Remove the 3 bolts holding down the air filter box, then remove the air filter box from the vehicle.



I. Remove splashguard from the left side of the vehicle. Arrows in the picture above illustrate the location of all the nuts and bolts that need to be removed for splashguard removal.



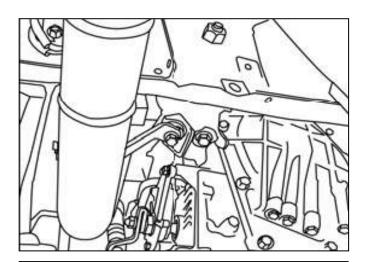
m. Remove the bolt securing the left side of the fender liner.



n. Remove the transmission mounting bolt closest to the front of the vehicle.

# 3. Installation of AEM<sup>®</sup> intake system.

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



b. Secure the lower intake pipe's bracket to the bolt hole exposed from removing the transmission bolt in step 2n. Secure the bracket with the supplied transmission bolt, washer and spacer as illustrated in the diagram, Fig. 1.

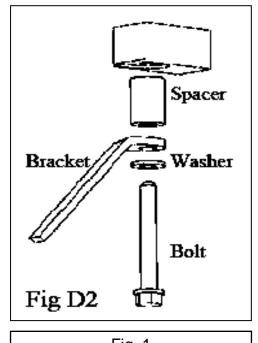
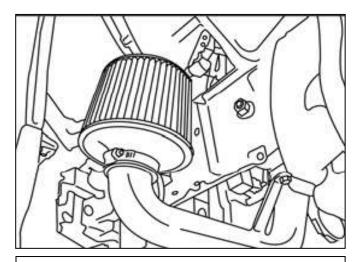


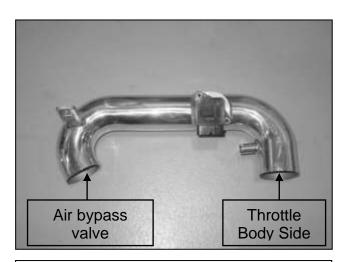
Fig. 1



c. Install the air filter onto the lower intake tube.



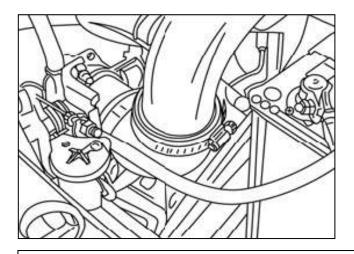
d. Disconnect the side marker lamp. Wrap the wires with the supplied helical wrap, then reconnect the side maker lamp.



e. Install the mass air flow sensor onto the upper intake pipe using the supplied bolts.



f. Install the air bypass valve on the lower intake pipe.





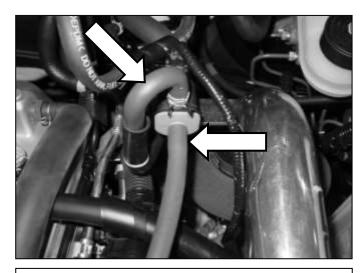
g. Install the 90-degree rubber elbow onto the throttle body with the supplied hose clamps. Install the upper intake pipe, securing the upper section of the intake pipe into the rubber elbow and the lower section of the pipe to the air bypass valve.



h. Attach the MAF sensor connector to the sensor installed in the intake pipe. Install the supplied hose between the valve cover and the breather nipple on the intake pipe using the factory clamps.



i. Attach the VSV to the bracket on the intake pipe using the supplied bolt and washer. Wrap the fuel line with helical wrap as shown.



j. Reconnect hoses to VSV.

#### 5. Reassemble Vehicle

a. **Fender liner and splashguard:** Install the fender liner, lower splash guard and any hardware that was removed in steps 2m through 2n.

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. 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.
- c. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- d. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- e. Reconnect negative battery terminals and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 6. Service and Maintenance

- a. It is recommended that you service your AEM<sup>®</sup> Dryflow<sup>™</sup> 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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