

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

# **INSTALLATION INSTRUCTIONS** PART NUMBER: 21-568

2005-2006

SCION tC

L4-2.4L

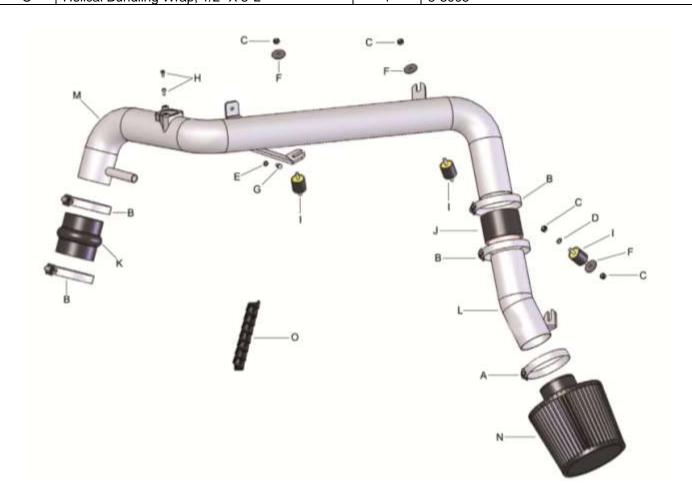
SEE \* NOTE

Please note that intake system 21-568 does not include an AEM® bypass valve

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

## **PARTS LIST**

	Description	Qty.	Part Number
Α	1/2" Bnd. Hose Clamp, 2.31-3.25"	1	9444
В	1/2' Bnd. Hose Clamp, 2.15-3.00"	4	9440
С	Nut, M6 Hex Serrated	4	444.460.04
D	Washer, M6 Ext.	1	1-3041
Е	Washer, M5 Split Lock SS	1	1-3046
F	Washer, 6mm Soft Mount	3	08160
G	Bolt, Hex M58, 12mm	1	1-2098
Н	Bolt, Socket 8-32 X 5/16 SS	2	1-2023
I	Mount, Rubber 1" X 6mm	3	1228599
J	Hose, Silicone 2.50x2" Black	1	5-252
K	Hose, Hump 2.50/2.50x3.0" Blk.	1	5-525
L	Lower Pipe	1	2-564
М	Upper Pipe	1	2-712
N	Air Filter Assy. 2.50 X 5" Dry Ele.	1	21-201DK
0	Helical Bundling Wrap; 1/2" X 5"L	1	8-8005



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<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.

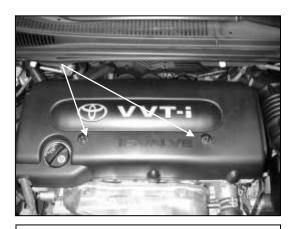
### 1. Preparing Vehicle

- 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.

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

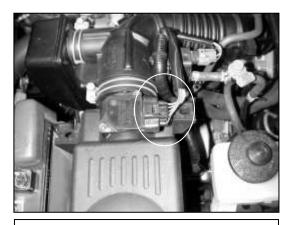
#### 2. Removal of stock system



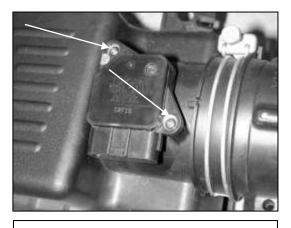
a. Remove the two nuts securing the plastic engine cover to the valve cover. Remove the plastic engine cover from the vehicle.



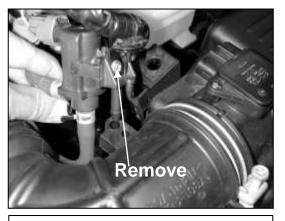
b. Pull the EVAP purge hose free from the two rubber clips on the intake hose. Remove the crankcase breather hose from the intake tube. Save the factory clamp for use later in the installation.



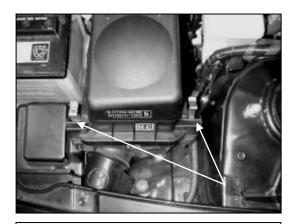
c. Unplug the mass air flow (MAF) sensor connector.



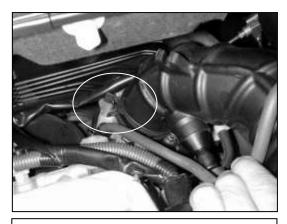
e. Remove the two screws securing the MAF sensor. Remove the sensor, use care to avoid damaging it.



d. Free the EVAP vacuum switching valve (VSV) from the intake tube by pulling straight up. Remove the screw that secures the mounting bracket to the wire harness clip and to the VSV itself.



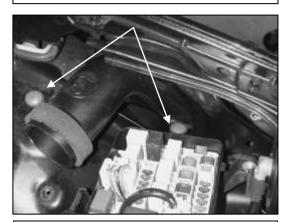
f. Release the two upper airbox clips.



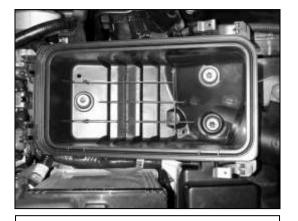
g. Squeeze the spring clamp securing the inlet tube to the throttle body. Remove the inlet tube and upper airbox as one assembly.



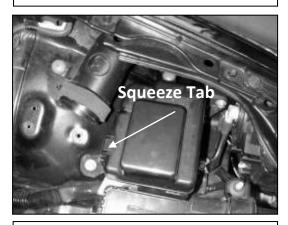
i. Free the wire harness loom clip by gently squeezing the sides in. Remove the lower airbox from the engine bay.



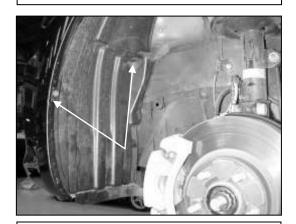
k. Remove the two plastic rivets securing the lower air duct. Remove the lower air duct from the engine bay. Replace the fuse box cover.



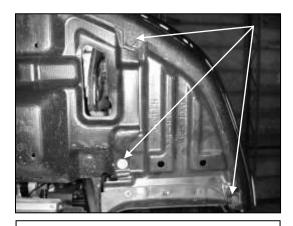
h. Remove the air filter element to expose the lower airbox mounting bolts. Remove the three bolts and lift the lower airbox.



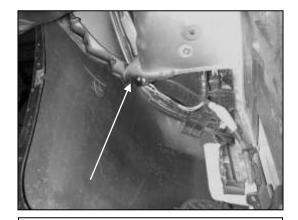
j. Remove the fuse box cover by squeezing the tab and lifting upwards.



I. Remove the self-tapping screw and plastic rivet from the plastic fender liner.



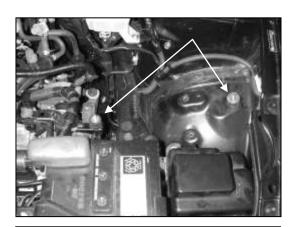
m. Remove the three self-tapping screws from the underside of the fender liner. Pull the liner back and tuck it behind the brake rotor.



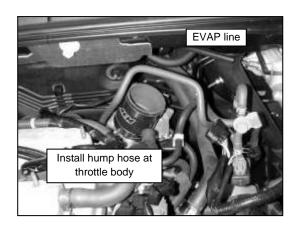
n. Remove the ground strap bolt located beneath the driver's side headlight.

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

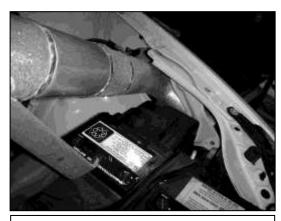
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



b. Install two of the supplied rubber mounts into the threaded holes as shown in the image.



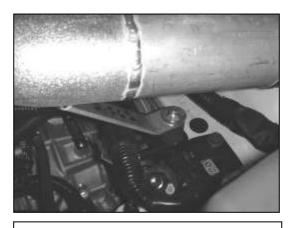
c. Install the rubber hump hose onto the throttle body. Loosely secure the #40 hose clamps on each end. Wrap the supplied helical plastic wrap around the EVAP line where it will pass over the upper intake pipe.



d. Insert the 90 degree bend of the upper intake pipe (the long one) into the fender from the engine bay.



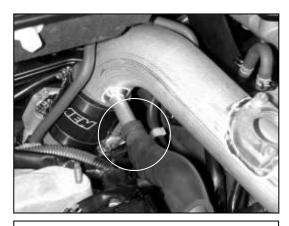
e. Install the upper intake pipe into the coupler on the throttle body. Leave the hose clamps loose for adjustment.



f. The pipe's bracket will line up with one of the rubber mounts installed in step 3b. Loosely secure the bracket to the rubber mount with a washer and nut.



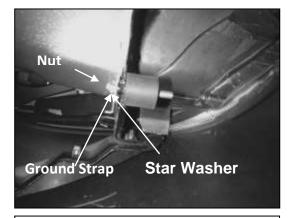
g. Loosely secure the second bracket to the rubber mount with a washer and nut.



h. Connect the breather hose to the upper intake pipe's nipple.



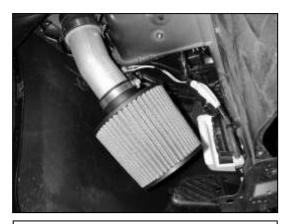
j. Attach the supplied coupler to the lower end of the upper intake pipe (located in the fender well). Loosely secure two of the provided hose clamps onto the coupler.



i. Install the remaining rubber mount into the hole that was exposed when the ground strap bolt was removed in step 2n. Install the star washer and ground strap terminal onto the backside rubber mount stud. Secure the rubber mount to the frame rail with a locknut as shown.



k. Install the lower intake pipe into the coupler. The bracket will line up with the rubber mount installed in step 3i. Loosely secure the bracket to the rubber mount with a washer and locknut.



I. Install the AEM<sup>®</sup> air filter onto the end of the lower intake pipe. Once proper fitment is achieved, secure the air filter to the lower intake pipe with a supplied hose clamp.



m. Secure the MAF sensor to the AEM<sup>®</sup> intake pipe with the supplied 8-32 bolts. Use care to avoid damaging the o-ring.



n. Plug in the MAF sensor wire harness connector back into the MAF sensor. Mount the EVAP VSV to the bracket on the upper intake pipe using the supplied M5 screw and washer. Insert the screw through the wire harness clip and through the intake pipe bracket so it threads into the VSV. Adjust the wires so that they are not in tension.

#### 4. Reassemble Vehicle

- a. Install the plastic engine cover.
- b. **Fender liner and splashguard:** Install the fender liner, lower splash guard and any hardware that was removed in steps 2l through 2m.
  - 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 driver 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. 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.