### **SCION xB**

Section I – Installation Preparation



## PERFORMANCE AIR INTAKE 2.4L I-4

Part Number(s): PTR03-52110

1 art (vumber (8). 1 1 Rus-32110						
Kit Contents						
Item #	Quantity	Description				
	Reqd.					
1	1	TRD Inlet Tube				
2	1	TRD Upper Air Box with HC Trap				
3	1	Hump Hose Coupler				
4	1		Hose Coupler with hose clip			
5	1	TRD Air Box Inlet Tube				
6	1	TRD Air Filter (P/N: PTR43-00084)				
	are Bag C					
Item #	Quantity Reqd.	Description				
7	3	#48 Hc	#48 Hose Clamp			
8	1	#44 Hose Clamp				
9	1	Bolt, M6 X 1.0 X 25mm				
10	1	Washe	Washer, M6 Fender			
11	1	Nylon '	Tie Strap, Tree Mount			
12	1	Gromn	net			
	ure Bag C					
Item #	Quantity Reqd.	Descrip	ption			
1	1	Instructions				
2	1	C.A.R.	C.A.R.B. E.O. Decal			
Recomi	mended T	ools				
Safety 7	<b>Fools</b>					
Vehicle Protection			Blankets or Fender Covers			
Special						
None Rec						
	tion Tools	<u> </u>				
Nut drive			8mm or 5/16"			
10mm socket						
Drive ratchet						
Drive extension			12" long			
Phillips head screwdriver		iver	#3			
Pliers						
Torque wrench			in. lbf. (0 – 120 in. lbf.)			
Special	Chemical	S				
Glass cleaner						
Silicone spray lubricant		nt				

Addition	al Ite	ems R	Require	d Fo	or Installation				
Item #	Quai Requ		Description						
Addition	al Ite	ems R	Require	d Fo	or Installation				
Item #	Quai Requ	-	tity Description						
Recomm	<b>Recommended Sequence of Installation</b>								
Item#		essory							
					•				
					*Mandatory				
Legend					•				
STOP		STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.							
			OPERATOR SAFETY: Use caution to avoid risk of injury						
			RITICAL PROCESS: Proceed with aution to ensure a quality installation.						
		GENERAL PROCESS: This highlights specific processes to ensure a quality installation.							
<b>5</b>		TOOLS & EQUIPMENT: This calls out the specific tools and equipment required for this process							
Please se	e nag	re 15	for im	orts	ant "Care and				
Please see page 15 for important "Care and Maintenance" information!									
Torque S	Speci	ficati	ons						
Hardware		SAE T			Metric Torque				
Type		in lbf	1		Nm				
M8		$60 \pm 5$	.0		$6.7 \pm 0.6$				
M6		$40 \pm 5$	.0		$4.5 \pm 0.6$				
M4	1	10 ± 2			$1.1 \pm 0.2$				
Hose Clam	p	$30 \pm 5$			$3.4 \pm 0.6$				
	- !								



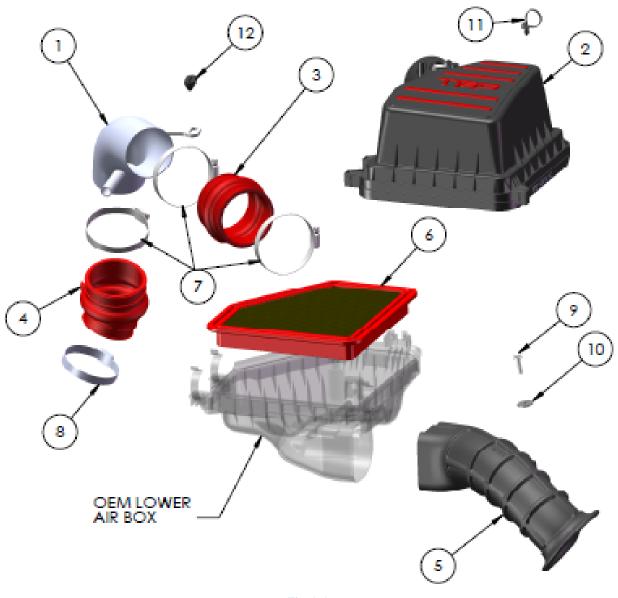


Fig. A 1

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#### PERFORMANCE AIR INTAKE 2.4L I-4

#### A. Check Kit Contents

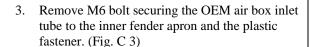
1. Check kit for contents and damage. (Fig. A 1)

#### **B.** Vehicle and Parts Preparation

- 1. Completely read instructions and familiarize yourself with the installation before beginning.
- 2. Open hood
- 3. Apply vehicle protection to prevent damage to painted surfaces.
- 4. Prior to installation, make sure all parts of the Performance Air Intake are clean and free of debris.
  - i. Blow out the inside of the tube and air box with compressed air.



- 1. Remove M6 bolts securing the battery and the battery terminals. (Fig. C 1)
  - i. Remove negative terminal
  - ii. Remove positive terminal
- iii. Remove the battery brace
- 2. Remove the battery from the engine compartment. (Fig. C 2)



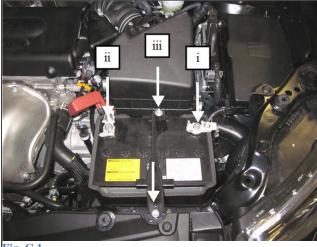


Fig. C 1



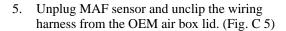
Fig.  $\overline{C}$  2

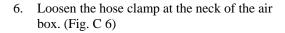


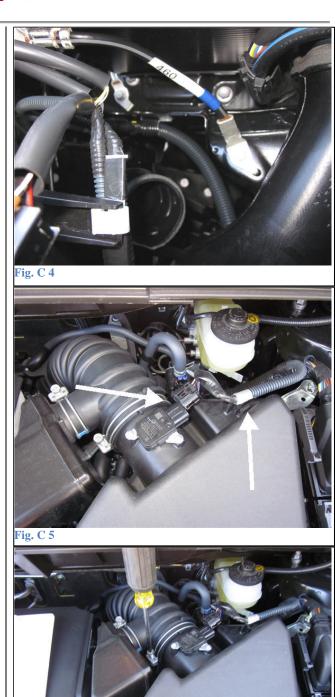
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- 4. Remove OEM air box inlet tube. (Fig. C 4)
  - i. Remove the top section before removing the main tube.









7. Remove the MAF sensor from the OEM air box by removing the two screws set aside for later use. (Fig. C 7)

8. Remove the MAF sensor and set it aside for later use. (Fig. C 8)

9. Unclip the three air box clips. (Fig. C 9)

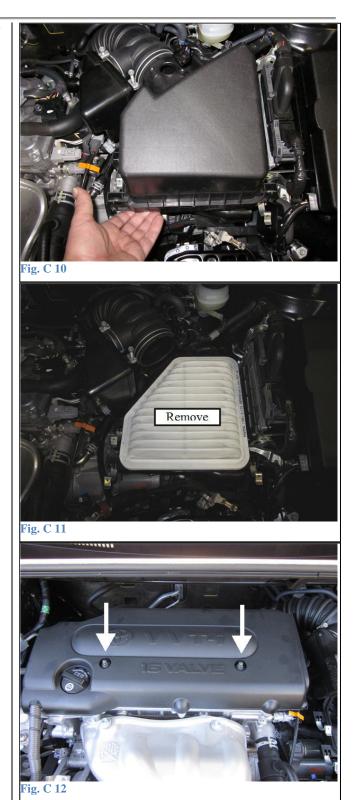




10. Lift and remove the OEM upper air box. (Fig. C 10)

11. Remove the OEM air filter. (Fig. C 11)

- 12. Remove the M6 bolts on the engine cover. Remove the engine cover. (Fig. C 12)
  - i. Set the OEM bolts and engine cover aside for reinstallation later.



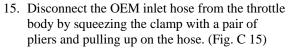
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## PERFORMANCE AIR INTAKE 2.4L I-4



- 13. Disconnect the crank case vent hose from the inlet hose. (Fig. C 13)
  - i. Do not remove the spring clip from the hose.

- 14. Remove the VSV from the OEM inlet hose by pulling it up and out of the rubber mount. (Fig. C 14)
  - i. Unclip the vacuum hose from the rubber inlet hose near the throttle body and retain for later use.



i. Remove the OEM inlet hose.









#### D. Install TRD Air Intake

1. Lower the TRD air box inlet tube into position behind the headlight as shown. (Fig. D 1)

- 2. Rotate the TRD air box inlet tube and route it underneath the wiring harness between the fuse box and battery. (Fig. D 2)
  - i. The TRD logo should be facing up

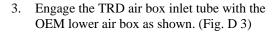




Fig. D 1



Fig. D 2



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4. Secure the TRD inlet hose with the M6 bolt and large washer provided. (Fig. D 4)

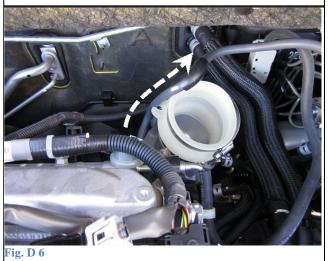


5. Install the TRD air filter. (Fig. D 5) Service part number PTR43-00084.



Fig. D 5

- 6. Install the TRD coupler with hose clip on the throttle body using the #44 hose clamp at the throttle body and the #48 at the inlet tube..
  - i. Route the VSV line through the wire restrainer on the coupler as shown. (Fig. D
  - ii. Make sure that the coupler is all the way down on the throttle body





7. Secure the coupler to the throttle body by tightening the #44 hose clamp. (Fig. D 7)



8. Install the supplied grommet into the TRD inlet tube as shown. (Fig. D 8)

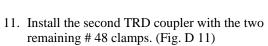


9. Install the TRD inlet tube as shown. (Fig. D 9) i. Leave the # 48 hose clamp loose for now





10. Insert the VSV bracket into the grommet installed in step D-8. (Fig. D 10)



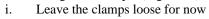
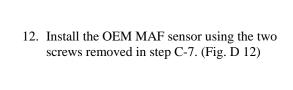






Fig. D 11







- 13. Install the TRD upper air box as shown. (Fig. D
  - i. Insert the neck of the air box into the coupler.
  - ii. Guide the rear mounts of the upper air box, into the catches on the OEM lower air box
  - Lower the front of the upper air box down iii. into place).



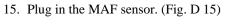


- 14. Secure the TRD upper air box with the three OEM air box clips. (Fig. D 14)
  - i. Make sure that the upper air box is properly seated on the filter



Fig. D 14











16. Secure the MAF sensor wiring to the air box using one of the supplied tree mount tie straps (Fig. D 16)



- 17. Install the crankcase vent hose onto the nipple as shown, using clip removed in c 12. (Fig. D 17)
  - i. Make sure that the nipple is inserted at least 0.75in into the hose.
  - ii. Tighten all hose clamps.





18. Reinstall the engine cover removed from step C-12. (Fig. D 18)



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#### PERFORMANCE AIR INTAKE 2.4L I-4

- 19. Reinstall the battery removed from step C-2. (Fig. D 19).
  - i. Install battery brace
  - ii. Install positive terminal
  - iii. Install negative terminal
  - iv. Tighten all bolts to 36 in. lbf.  $\pm$  4 in. lbf.  $(4.0\text{Nm} \pm 0.4\text{ Nm})$ .

- 20. Do a final check over, and ensure that all hoses and wires are secure. (Fig. D 20)
- 21. **Installer** The instruction manual contains important "Care and Maintenance" information. Place the entire instruction manual in the glove box for the owner's future reference.



Fig. D 19



#### Section III – Care and Maintenance

### E. Caring For The Finish On Your TRD Cold Air Intake.

- TRD Intake Systems have a natural finish on the couplers and air filter housing.
- The TRD intake tube has a powder coated finish.
- To clean your TRD intake system, simply spray with window cleaner and wipe with a soft, clean terry-cloth towel.
- NEVER use harsh chemicals or metal polish on TRD intake systems. Harsh chemicals and metal polishes will permanently damage the finish.



### **SCION xB**

Section IV – Trouble Shooting



## PERFORMANCE AIR INTAKE 2.4L I-4

Check:	Look For:			
Accessory Function Checks  Start the vehicle.  If after you start the vehicle, or while driving, you encounter a Malfunction Indicator Lamp (MIL), check the following.	<ul> <li>Full engagement of MAF sensor connector.</li> <li>Tightness of all clamps.</li> <li>Correctly installed valve cover breather hose.</li> <li>Over-oiled air filter.</li> </ul>			
Over-oiled Air Filter	<ul> <li>Clean the air filter as indicated in the TRD Filter</li> <li>Cleaning Kit and apply the proper amount of oir</li> <li>Replacement (non-warrantable) of the MAF ser may be required.</li> </ul>	i1.		
Vehicle Function Checks				
Start the vehicle If the lamp will not go off even after checking and/or repairing any of the above.	Contact your Toyota dealer as soon as possible.			