2011 -

PERFORMANCE AIR INTAKE 2.5L I-4

Preparation

Part Number: PTR03-21140

#### **Kit Contents**

Item #	Qty.	Service Part #	Description
	1	PTR03-21140-AA	TRD Air Horn Kit
1	1		TRD Air Horn
2	1		Spacer
3	1		Washer
4	1		Bolt
5	1		Zip tie
6	1	PTR43-00084	TRD Air Filter
7	1	PTR03-21140-AB	TRD Upper Air Box
	1	PTR03-21140-AC	Coupler Kit
8	1		Coupler
9	2		#48 Hose clamp

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### **Additional Items Required For Installation**

Item#	Quantity Reqd.	Description
None		

### **Conflicts**

NA

### **Recommended Tools**

<b>Safety Tools</b>	Notes	
Vehicle Protection	Blankets or Fender Covers	
Special Tools	Notes	
None Required		
<b>Installation Tools</b>	Notes	
Nut Driver or Socket	8mm or 5/16"	
10mm Socket		
Drive Ratchet		
Drive Extension		
Pliers		
Torque Wrench	In.lb. (0-120 in.lb.)	
Phillips Screw Driver	#3	
<b>Special Chemicals</b>	Notes	
None		

## **General Applicability**

**Torque Specifications** 

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Hardware	SAE Torque in.lb	Metric Torque Nm		
Type				
M6	40 <u>+</u> 5.0	4.5 <u>+</u> 0.6		
Hose Clamp	30 + 5.0	3.4 + 0.6		

Please see Page 14 for important "Care and Maintenance" information!

#### **Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Reqd.	Description

#### Legend



**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.



<u>CAUTION:</u> A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.



<u>TOOLS & EQUIPMENT:</u> Used in Figures calls out the specific tools and equipment recommended for this process.



<u>REVISION MARK:</u> This mark highlights a change in installation with respect to previous issue.



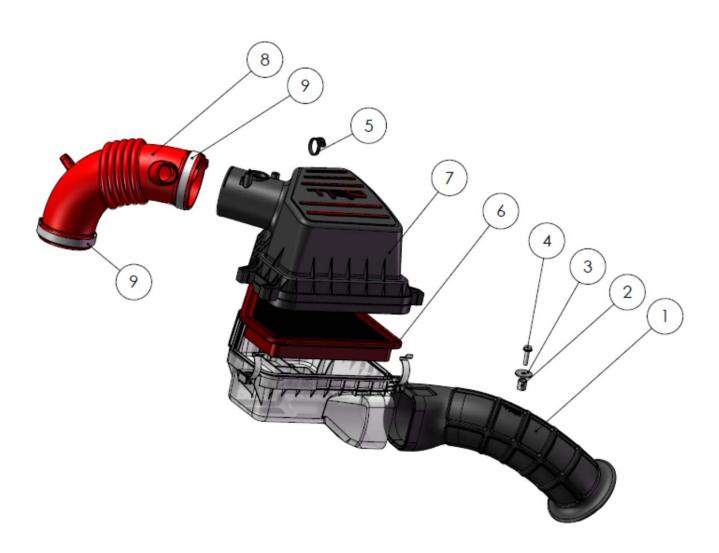
7 SAFETY TORQUE: This mark indicates that torque is related to safety.

### **Emissions Compliance Information:**

A new process has been implemented. The Emissions Label is No Longer included in the Performance Air Intake Kit.

If your state requires an Emissions Compliance Label, one may be ordered through your Scion dealer or the Toyota Materials Distribution Center (MDC) 310-468-9800 or MDC@toyota.com

This TRD Performance Air Intake Kit has received 50-State Emissions Compliance via the California Air Resources Board (CARB). Not all states require the Emissions Compliance Label but TRD does recommend ordering one. To receive the proper Emissions Compliance Label for this TRD Performance Air Intake Kit, please order MDC part number 00602-21150. Proof of ownership may be required.



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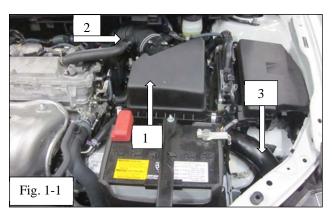
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Toyota dealer for a copy of this document.

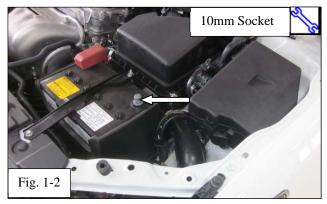


# 1. Vehicle and Parts Preparation

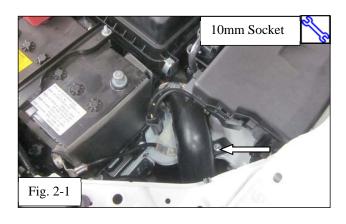
- (a) Check the kit for complete contents and any damage.
- (b) Open the hood.
- (c) Completely familiarize yourself with the installation and components before beginning (Fig. 1-1).
  - (1) OEM Air Box
  - (2) Air Intake Bellows
  - (3) Air Box Inlet Tube.
- STOP
- (d) Apply vehicle protection to prevent damage to painted surfaces.
- (e) Prior to installation, make sure all parts of the Performance Air Intake are clean and free of debris.
  - (1) Blow out the inside of the tube and air box with compressed air.



(f) Loosen the M6 bolt securing the negative battery cable to the battery terminal and remove the cable (Fig. 1-2).



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# 2. Remove Factory Components

(a) Remove the M6 bolt securing the OEM air box inlet tube to the inner fender apron (Fig. 2-1).



(b) Remove the OEM air box inlet tube (Fig. 2-2).

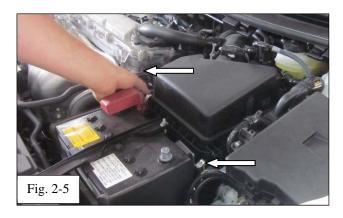


(c) Unplug the MAF sensor and unclip the wiring harness from the OEM air box lid (Fig. 2-3).

Procedure



(d) Loosen the hose clamp at the neck of the air box (Fig. 2-4).



(e) Unclip the two air box clips (Fig. 2-5).



(f) Lift and remove the upper air box (Fig. 2-6).

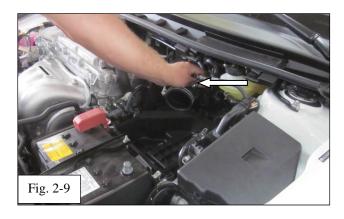
Procedure



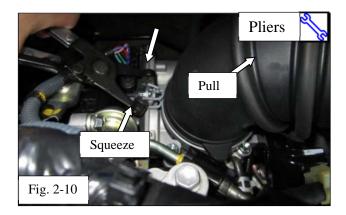
(g) Remove the OEM air filter (Fig. 2-7).



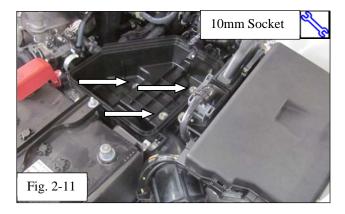
(h) Disconnect the crankcase vent hose from the air intake bellows (Fig. 2-8).



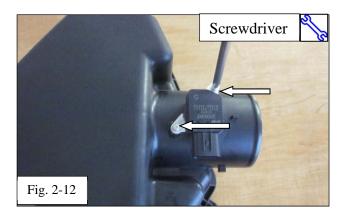
(i) Remove the VSV from the air intake bellows by pulling it up and out of the rubber mount (Fig. 2-9).



- (j) Disconnect the OEM inlet hose from the throttle body by squeezing the clamp with a pair of pliers and pulling up on the hose (Fig. 2-10).
  - (1) Remove the OEM inlet hose.



- (k) Remove the 3 M6 bolts securing the OEM lower air box (Fig. 2-11).
  - (1) Leave the lower air box in place and loose for now.

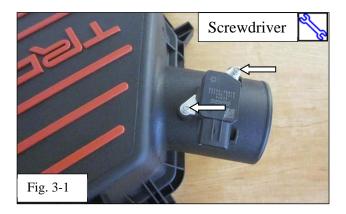


- (l) On a table or bench away from the vehicle, remove the MAF sensor from the OEM air box by removing the two screws (Fig. 2-12).
  - (1) Keep the screws and MAF sensor for later use.

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(m) On a table or bench away from the vehicle, remove the plastic PCV connector from the OEM coupler (Fig. 2-13).

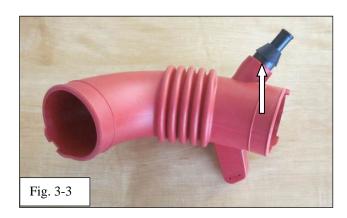


## 3. Install TRD Air Intake

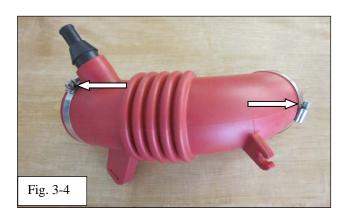
- (a) On a table or bench away from the vehicle, install the MAF sensor in the TRD air box (Fig. 3-1).
  - (1) Secure the sensor using the screws removed in Step 2(l) (Fig. 3-1).



(b) On a table or bench away from the vehicle, install the tree mount zip tie to the rear of the air box (Fig. 3-2).



(c) On a table or bench away from the vehicle, install the plastic PCV connector into the TRD coupler (Fig. 3-3).



(d) On a table or bench away from the vehicle, install the hose clamps loosely, but do not tighten them at this point (Fig. 3-4).



(e) On a table or bench away from the vehicle, install the spacer into the air horn until it is flush with the bottom of the boss (Fig. 3-5).

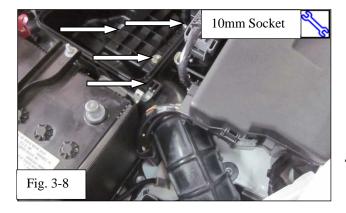
Procedure



(f) Lower the TRD air box inlet tube into position behind the driver side headlight as shown (Fig. 3-6).



- (g) Rotate the TRD air box inlet tube and route it underneath the wiring harness between the fuse box and battery (Fig. 3-7).
  - (1) The TRD logo should be facing up.
  - (2) The bushing installed in Fig. 3-5 should align with the mounting hole.



- (h) Engage the TRD air box inlet tube with the OEM lower air box as shown (Fig. 3-8).
  - (1) Secure the OEM lower air box with the three M6 bolts removed in Step 2(k) (Fig 2-11). Torque to 4.5Nm (40in-lb).

**Torque: 4.5Nm (40 in-lbf)** 



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(i) Secure the TRD inlet hose with the provided M6 bolt and large washer (Fig. 3-

9). Torque to 4.5Nm (40in-lb).

Torque: 4.5Nm (40 in-lbf)



(j) Install the TRD air filter (Fig 3-10).



- (k) Install the TRD coupler loosly on the throttle body and align it with the filter as shown (Fig 3-11).
  - (1) Make sure that the coupler is all the way down on the throttle body.



(l) Insert the VSV bracket into the slot in the TRD coupler (Fig. 3-12).

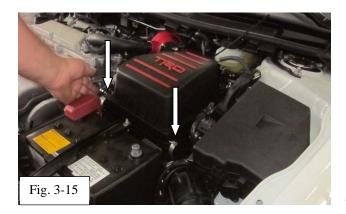


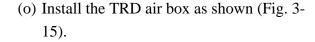
(m) Install the crankcase vent to the TRD coupler and secure it with the spring clamp (Fig 3-13).



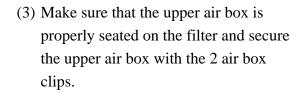
- (n) Insert the neck of the TRD air box into the coupler but do not secure it at this time (Fig 3-14).
  - (1) Make sure that the cut out in the coupler aligns with the stops on the air box.

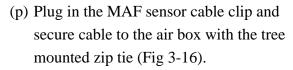
Procedure

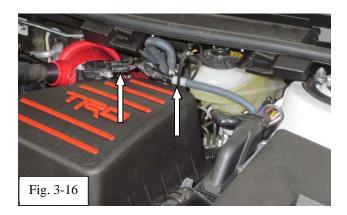




- (1) Guide the rear mounts of the upper air box into the catches on the OEM lower air box.
- (2) Lower the front of the air box down.











(q) Tighten the coupler hose clamps at the throttle body and air box (Fig 3-17). Torque to 3.4 Nm (30 in.-lbf).

Torque: 3.4Nm (30 in-lbf)



(r) Secure the vacuum hose using the clip on the back of the coupler (Fig. 3-18).



(s) Do a final check to ensure all wires and hoses are secure. Re-connect the negative battery cable to the negative battery terminal (Fig 3-19). Torque to 5.4 Nm (48 in-lbf).



Torque: 5.4Nm (48 in-lbf)

### Care and Maintenance

Caring For the Finish on Your TRD Cold Air Intake

- TRD Intake Systems have a natural finish on the couplers and air filter housing.
- 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.
- It is recommended that you service your TRD air filter every 50,000 miles with a TRD Filter Service Cleaning Kit, part number PTR43-00088, for optimum performance.

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Checklist - these points **MUST** be checked to ensure a quality installation.

Check:	Look For:	
Accessory Function Checks		
Inspect the torques.	Lower Air Box: 4.5Nm (40 in-lbf) TRD Inlet Hose: 4.5Nm (40 in-lbf) Coupler Hose Clamps (Throttle Body & Air Box): 3.4Nm (30 in-lbf) Battery Negative Terminal: 5.4Nm (48 in-lbf)	
Start the vehicle. If you encounter a Malfunction Indicator Lamp (MIL) after starting the vehicle or while driving, check the items to the right.	Full engagement of the MAF sensor connector.  Tightness of all clamps Correctly installed valve cover breather hose.  Over-oiled air filter.	
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.	
Vehicle Appearance Check  After accessory installation and removal of protective cover(s), perform a visual inspection.	Ensure no damage (including scuffs and scratches) was caused during the installation process.	

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