

Installation Instructions
Part Number 510-624
Poweraid Spacer For
2007-09 Toyota FJ Cruiser
2005-14Toyota Tacoma
2005-09 Toyota 4Runner
4.0L V-6

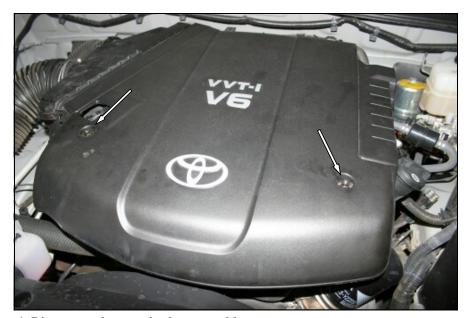
## **Packing List:**

#1	Poweraid Spacer	x1
#2	Fiber Gasket	x1
#3	6mmx75mm Bolt	x4
#4	6mm Flat Washer	x9
#5	6mmx20mm Bolt	x2
#6	6mmx25mm Bolt	x1
#7	6mmx40mm Bolt	x1
#8	6mmx12mm Bolt	x1
#9	1" Extension Plate (No C'Snk)	x3
#10	5/16" Thick Spacer 1/4" Hole	x1
#11	3/4" Thick Spacer 1/4" Hole	x1

## **Tools Required For Installation:**

4mm, 10mm Sockets Ratchet and Extension Pliers Flat Blade Screwdriver

Thank you for purchasing the Poweraid Throttle Body Spacer. Please read the instruction manual carefully before proceeding with the installation. Contact AIRAID @ (800) 498-6951 8:00 AM - 5:00 PM MST Weekdays for questions regarding fit or instructions that are not clear to you. Your Poweraid Throttle Body Spacer was carefully inspected and packaged. Check that no parts are missing, or were damaged during shipping. If any parts are missing, please contact AIRAID.



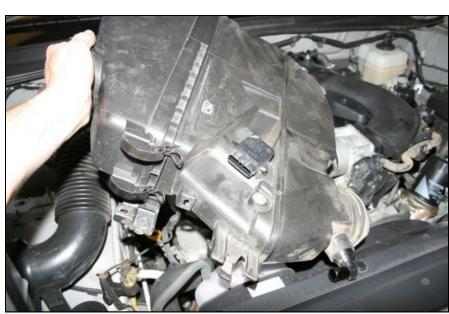
**1. Disconnect the negative battery cable.**Using a 10mm socket, remove the two nuts that secure the factory beauty cover to the engine. Remove the beauty cover and save it for reinstallation later.



- **2. A**.) Using a 4mm socket, remove the two studs that secure the beauty cover to the engine.
- **B.)** Squeeze the tab on the Mass Air Flow sensor wiring connector and disconnect it from the Mass Air Flow sensor.
- **C.)** Using a 10mm socket, remove two bolts that secure the resonator/airbox to the engine.



- **3. A.)** Using a 10mm socket, loosen two hose clamps, one at the throttlebody, and one where the fresh air tube connects to the resonator/airbox.
- **B.)** Disconnect the crankcase breather hose on the front of the resonator/airbox, and the small vacuum line on the back. (*not shown*)
- **C.)** Using a flat blade screwdriver, pry two wiring harness anchors from the resonator/airbox.



**4.** Remove the complete resonator/airbox assembly from the vehicle.



**5.** Using a 10mm socket, remove the 4 bolts that hold the throttlebody to the intake manifold.



7. Install one 1" extension plate (#9) using a 6mm x 20mm bolt (#5) and flat washer (#4) on the valve cover with the long end of the spacer facing the right fender. Repeat this procedure on the top of the intake manifold at the location shown above.

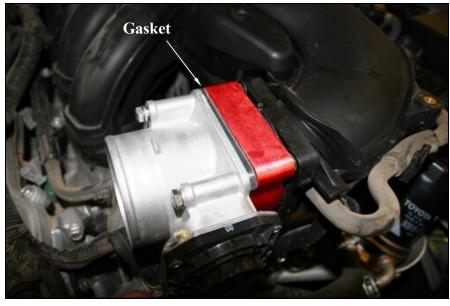


**9.** Install the 3/4" long round spacer (#11) on top of the threaded hole where the stud was removed on the intake manifold as shown and proceed to the next step.

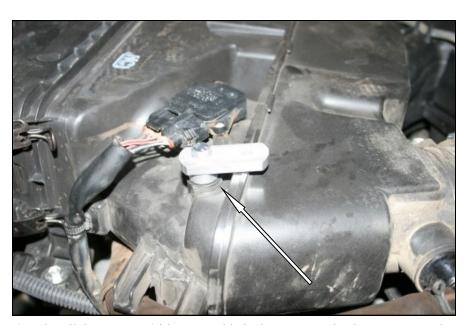
## 11. Double check your work!

Make sure there is no foreign material in the intake path. Make sure all clamps, hoses, bolts, and screws are tight.

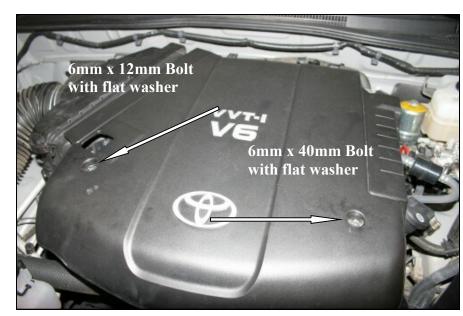
## Reconnect the negative battery cable!



**6.** Slide the Poweraid Spacer (#1) and gasket (#2) between the intake manifold and the throttlebody. Make sure the "Flow" arrow on the spacer is pointing towards the intake manifold, and the gasket is next to the throttlebody. Install the 4 supplied 6mm x 75mm bolts (#3) and flat washers (#4) thru the throttlebody, gasket, spacer, into the intake manifold and tighten evenly to the vehicle manufacturer's specifications.



**8.** Reinstall the resonator/airbox assembly in the reverse order that you removed it using the factory bolts. Make sure to reconnect all breather and vacuum hoses, and the Mass Air sensor electrical connector. Install one 1" extension plate (#9) using the 5/16" thick round spacer (#10) and 6mm x 25mm bolt (#6), with flat washer (#4) in the threaded hole where the stud was removed on the resonator/airbox, with the extension plate facing the throttlebody as shown.



**10.** Gently reinstall the beauty cover on the engine and use one 6mm x 12mm bolt (#8) with flat washer (#4) on the passenger side, and one 6mm x 40mm bolt (#7) with flat washer (#4) on the driver's side.



The sound of power...The "whistle" means its working!

Contact your nearest Airaid dealer for an Airaid Intake System for your car, truck or SUV.

Instructions Revision Date: 01.22.14