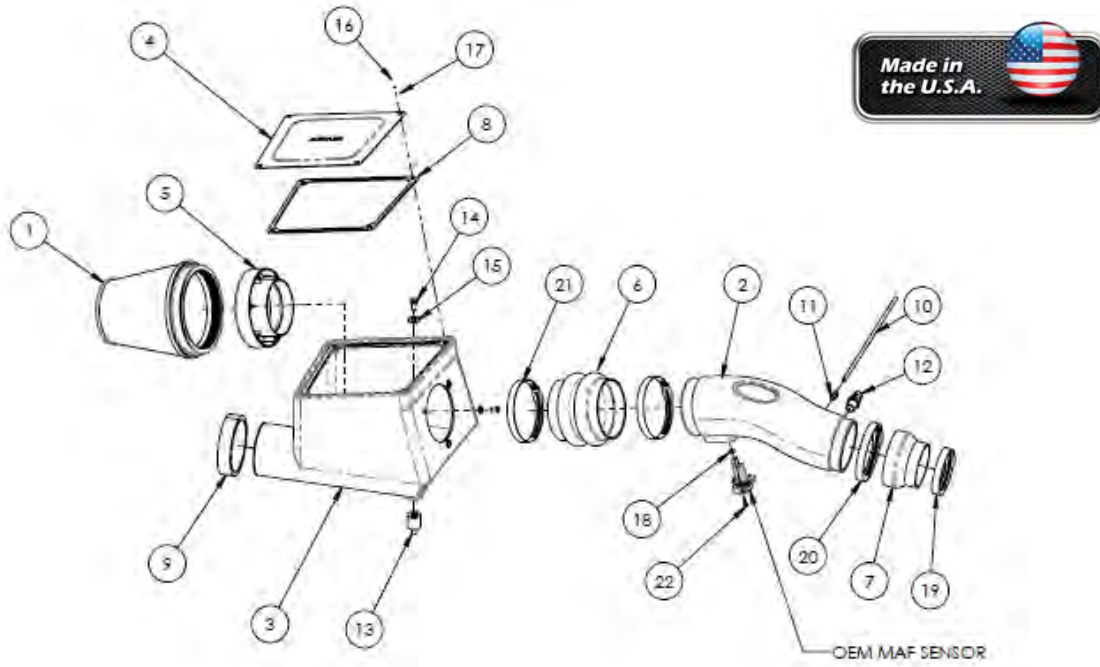




## INTAKE SYSTEMS



**Installation Instructions**  
**Part Number 511-302**  
**2010-2012 Toyota 4 Runner**  
**2010-2013 FJ Cruiser**  
**4.0 L V6**

### Packing List:

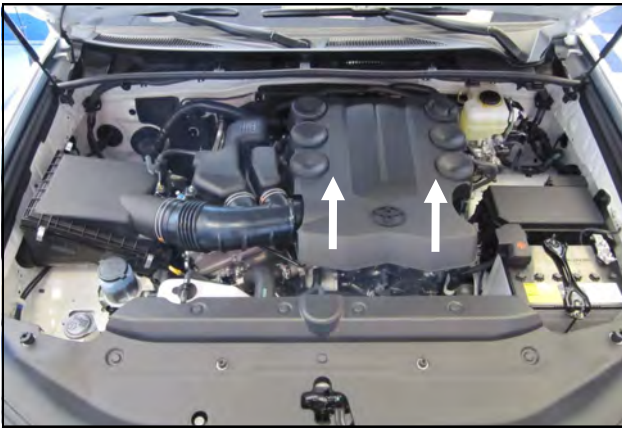
|     |               |                                    |    |
|-----|---------------|------------------------------------|----|
| #1  | 701-462       | Airaid Premium Filter              | 1  |
| #2  | KIT302T       | Airaid Intake Tube                 | 1  |
| #3  | KIT301CAB     | Cold Air Box                       | 1  |
| #4  | KIT301LID     | Air Box Lid                        | 1  |
| #5  | KIT1121MAFADA | Filter Adapter                     | 1  |
| #6  | KITHUMPHS33   | Hump Hose                          | 1  |
| #7  | KITRDCR22     | Reducing Coupler                   | 1  |
| #7  | KIT302HPS     | <b>Hardware &amp; Instructions</b> | 1  |
| #8  | -KIT301G      | Airbox Gasket                      | x1 |
| #9  | -KITWSTRIP06  | Foam Weather Strip                 | x1 |
| #10 | -KITHOSE07    | 1/8 x 17" Vacuum Line              | x1 |
| #11 | -KITFITTING19 | 1/8 NPT Barbed Fitting             | x1 |
| #12 | -KITFITTING30 | 3/8 NPT Barbed Fitting             | x1 |
| #13 | -KIT301MOUNT  | M8 CAB Mount                       | x3 |
| #14 | -KIT20CSCZ160 | 8 mm x 1.25 x 16 Bolt              | x3 |
| #15 | -KIT31NWUSPZ  | 5/16 Flat Washer                   | x3 |
| #16 | -KIT15DHC3050 | 1/4-20 x 1/2 Button Head Bolt      | x7 |
| #17 | -KIT09FWZ019  | 1/4 Flat Washer                    | x7 |
| #18 | -KITSPACER01  | #8 spacer                          | x2 |
| #19 | -KITHS48      | #48 Hose Clamp                     | x1 |
| #20 | -KITHS64      | #64 Hose Clamp                     | x1 |
| #21 | -KITHS68      | #68 Hose Clamp                     | x2 |
| #22 | -KIT10SHCP    | 8-32 Socket Head Screw             | x2 |

### Tools Required:

Standard and Phillips tip Screw Driver. Ratchet and Extension. 8mm, 10mm, 12mm and 13mm sockets. Standard Allen wrench set.

Full color instructions can be viewed on our web site at [Airaid.com](http://Airaid.com). Use the **Product Search** function to find your part number, and click **View Details**.

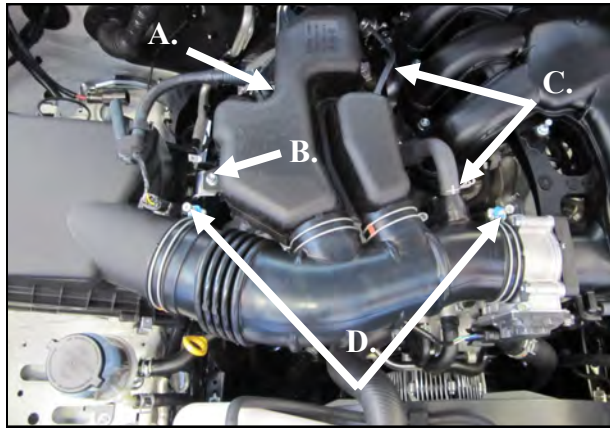
**Note: Installation of this intake system requires some minor trimming of the engine cover if it is to be reused.**



### Disconnect The Negative Battery Terminal.

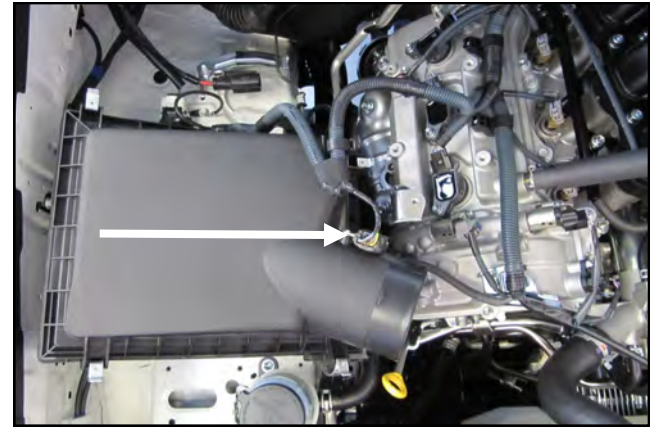
#### 1. Remove the engine cover.

Lift up on the front of the engine cover to unseat the mounting grommets and remove it from the vehicle.

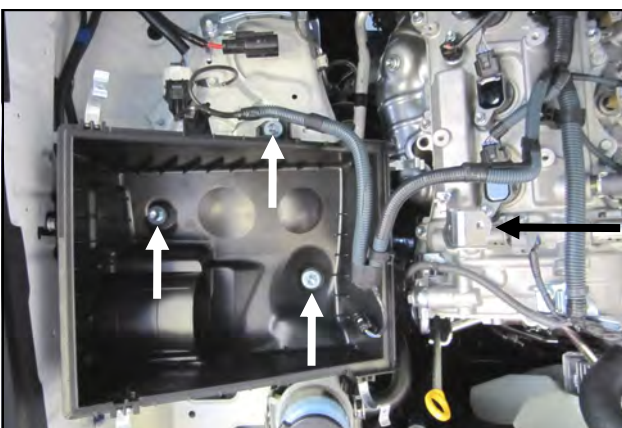


#### 2. Remove the factory intake.

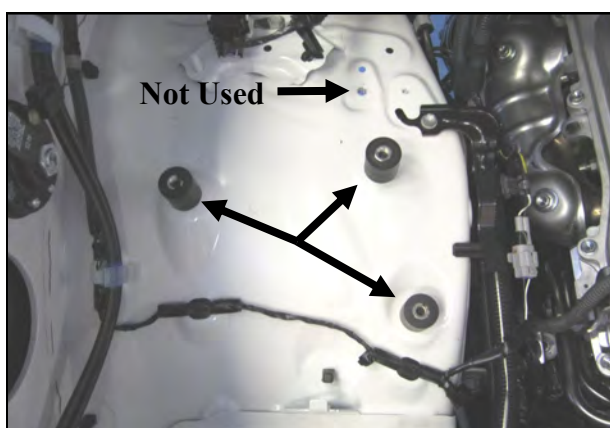
- A.) Pry the wire harness anchor from the intake resonator chamber
- B.) Remove the 6mm anchor bolt from the resonator.
- C.) Disconnect the crankcase breather and fuel pressure regulator lines.
- D.) Loosen the clamps on both ends of the intake tube and remove the entire intake/resonator assembly.



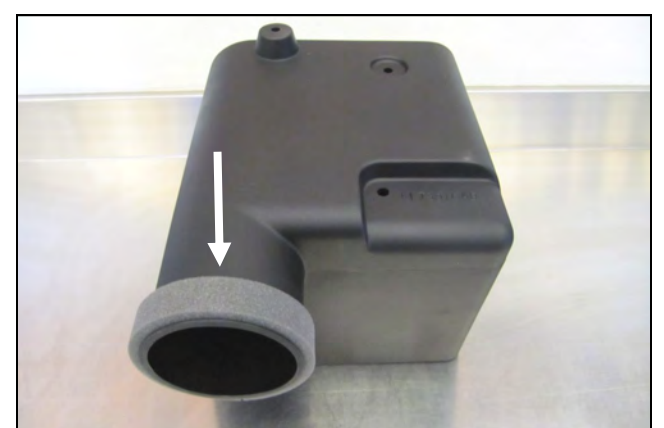
#### 3. Disconnect the Mas Air Flow sensor and remove the factory airbox top and air filter.



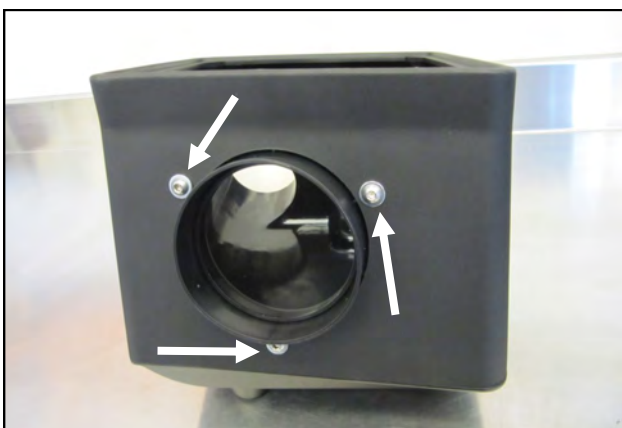
4. Pry the wire harness anchor from the airbox. Remove the three anchor bolts in the lower half of the airbox and remove it from the vehicle. Remove the factory intake tube bracket from the valve cover. It will not be reused.



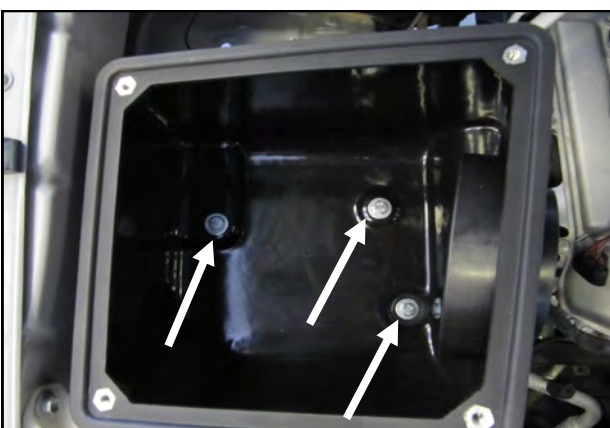
5. Install the three M8 CAB Mounts (#13), hand tight, into the weld nuts on the inner fender as shown. Note: One of the original air box mounting holes is not re used.



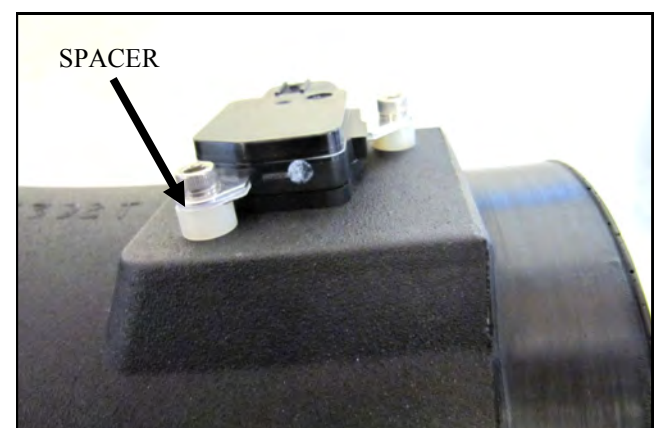
6. Apply the self adhesive, Foam Weatherstrip (#9) onto the air inlet on the Cold Air Box (#3).



7. Mount the Filter Adapter (#5) to the Cold Air Box, as shown, using three 1/4-20 x 1/2" Button head Bolts (#16) and 1/4" Flat Washers (#17).



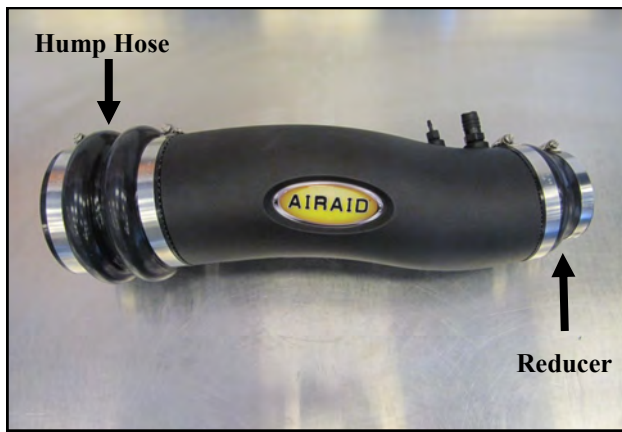
7. Mount the Cold Air Box onto the CAB Mounts using the three 8mm Bolts (#14) and 5/16 Flat Washers (#15).



8. Transfer the Mass Air Flow sensor from the factory airbox, into the Airaid Intake tube and secure using the two #8 Spacers (#18) and 8-32 Socket Head screws (#22). **Do not use the factory screws.**



9. Install the 1/8" and 3/8" barbed fittings (#s 11 and 12) into the Airaid Intake Tube as shown.



10. Slide the Hump Hose (#6), and two #68 Hose Clamps (#21), onto the Intake Tube as shown. Slide the Reducing Coupler (#7) and the #48 (#19) and #64 Clamps (#20) on the other end of the Intake Tube. Leave the Clamps loose for now.



11. Install the Airaid Intake Tube onto the Cold Air Box and the throttle body, align and tighten all four of the Clamps. Reconnect the Mass Air Flow sensor.



12. Connect the factory crank case breather line to the 3/8 Barbed Fitting on the Intake Tube and replace the OEM vacuum line on the fuel pressure regulator with the supplied 17" 1/8" line. Connect the 1/8" line to the second Fitting on the Intake tube.



13. Place the engine cover back on top of the motor and note the location where it comes in contact with the Airaid Intake Tube. Remove the cover and trim the edge approximately 1/8" and reinstall.



14. Install the Airaid Premium Filter (#1) onto the Filter Adapter.



15. Place the Gasket (#8) onto the underside of the Air Box Lid (#4) and peel off the protective film. Mount the lid on the Air Box using four 1/4-20 x 1/2" Button Head Bolts (#16), and 1/4" Flat washers (#17).



**16. 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. Double check the hood clearance!  
**Reconnect the negative battery cable!**



**Pre Filter Option- Part Number 799-445**  
For maximum protection in the harshest of environments Airaid offers a slip on Pre Filter.  
- Prolongs Cleaning Intervals  
- Water Repellant  
- Free Flowing Protection

**Before!**



*SynthaMax*

**Do Not Oil**

**After!**



Synthamax Air Filters do not require oil. Service air filter as needed by cleaning with common non-petroleum all-purpose household cleaner and water. Simple Green®, Formula 409® or equivalent works great. Apply cleaner to outside of air filter and allow to soak. Then flush filter clean from the inside out with a garden hose and repeat steps if necessary. Do not apply high pressure water or air to clean filter. Allow filter to air dry and reinstall.



Thank you for purchasing the Airaid Intake System. 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 Airaid Intake System was carefully inspected and packaged. Check that no parts are missing, or were damaged during shipping. If any parts are missing, contact Airaid. The air filter element is protected from direct exposure to water and debris; care should be taken not to drive through deep water. WATER INGESTION IS THE DRIVERS RESPONSIBILITY! The air filter is reusable and should be cleaned periodically.