



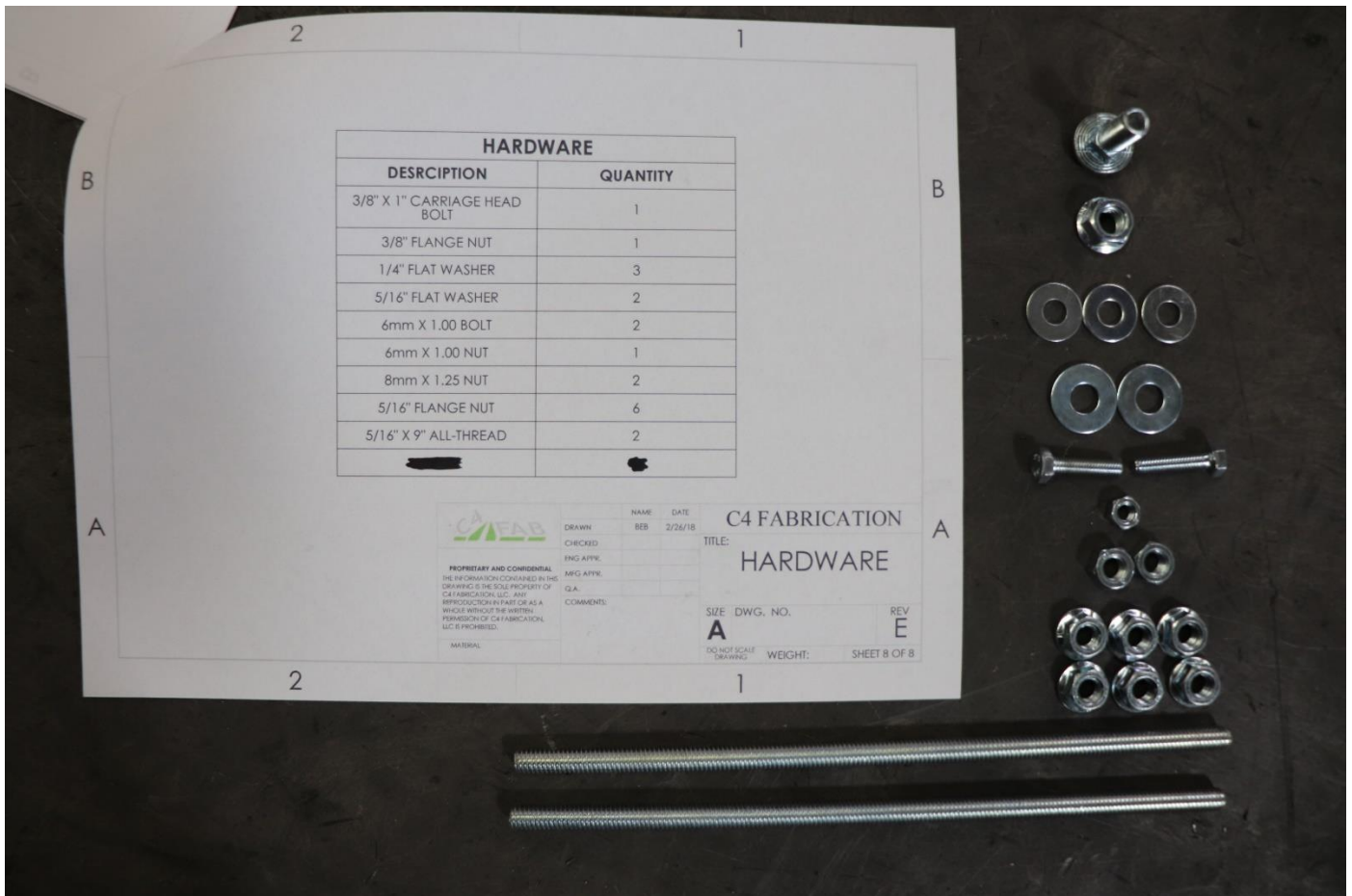
## **2014+ 4Runner/2010-2014 FJC Spare Battery Tray Installation Guide**

Tools Needed: Flat blade screw driver, 10mm wrench, 12mm wrench or socket, 13mm socket, ½” wrench, 9/16” wrench.

Parts Included: Battery Tray, “L” shaped support bracket, Battery hold down clamp.

**Be sure to have your tray, “L” bracket and hold down clamp, painted or powder coated before installation.**

## Hardware Included:



- 1) working in the passenger rear area of the engine compartment, use a flat blade screw driver to remove the large electrical connector from the fender, Pry up on the clip to pop it loose from the fender.



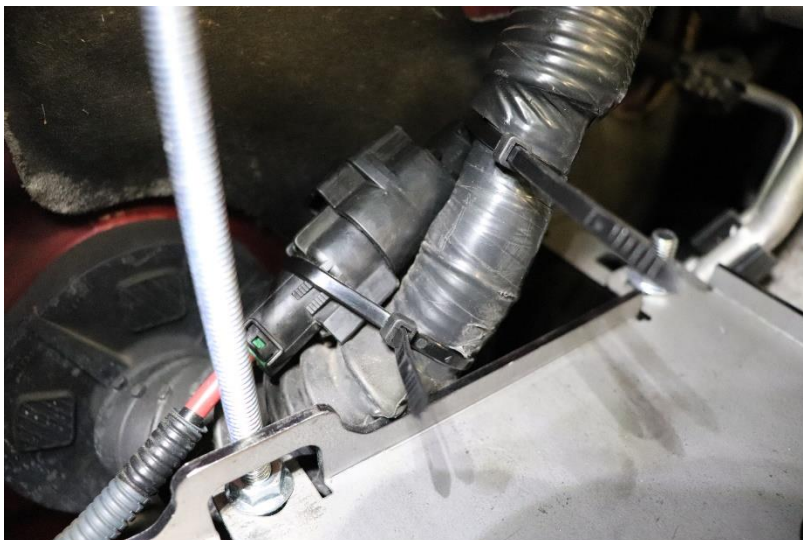
- 2) Using the flat blade screwdriver, pry open the clip that holds the large round electrical connector to the metal mounting bracket.



- 3) Un plug the electrical connection. Route the connection behind the large rubber wiring harness



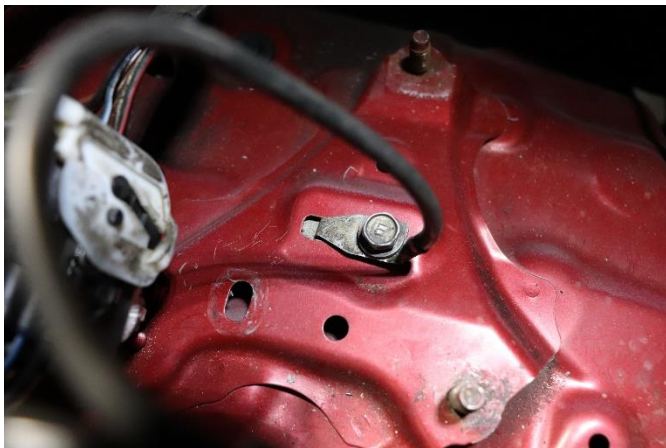
boot coming through the firewall. Secure the wire and connector in place with cable ties.



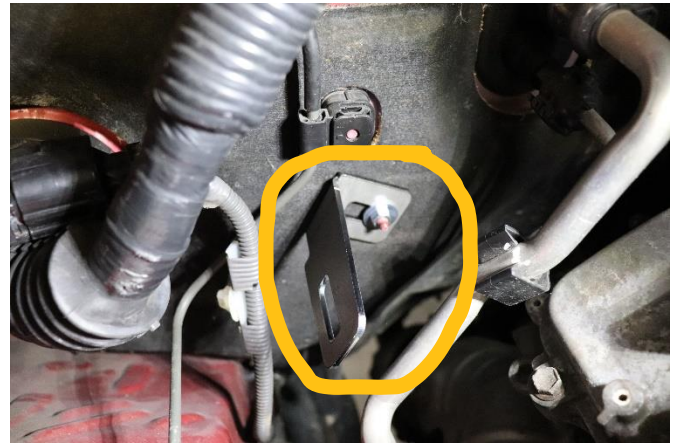
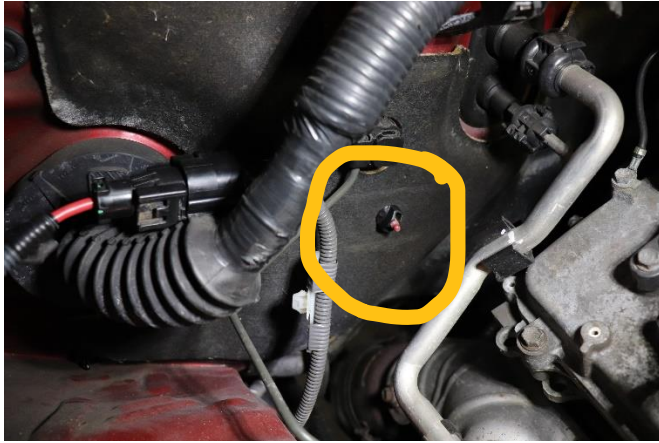
- 4) Use a 12mm wrench or socket to remove the nut holding the metal bracket to the fender. This bracket will not be needed. **This metal bracket is slightly different on newer 4runners but the bracket still needs to be removed and the wire with large connector gets relocated also.**



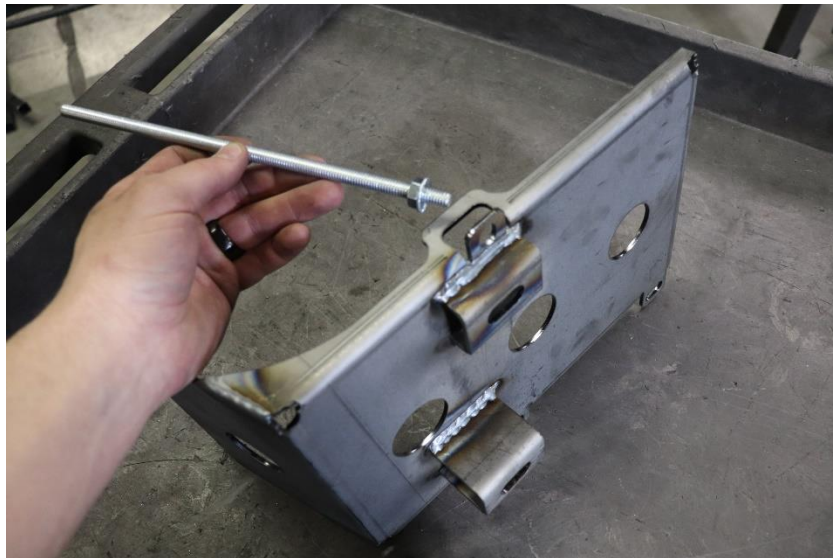
- 5) Use a 10mm wrench or socket to loosen the bolt holding the ground cable in place. Rotate the cable 90 degrees clockwise so it matches the image. Tighten the bolt to hold the cable in position.



- 6) Remove the plastic nut from this 6mm stud on the firewall. Loosely install the “L” bracket to the firewall using one ¼” flat washer and the 6mm nut.



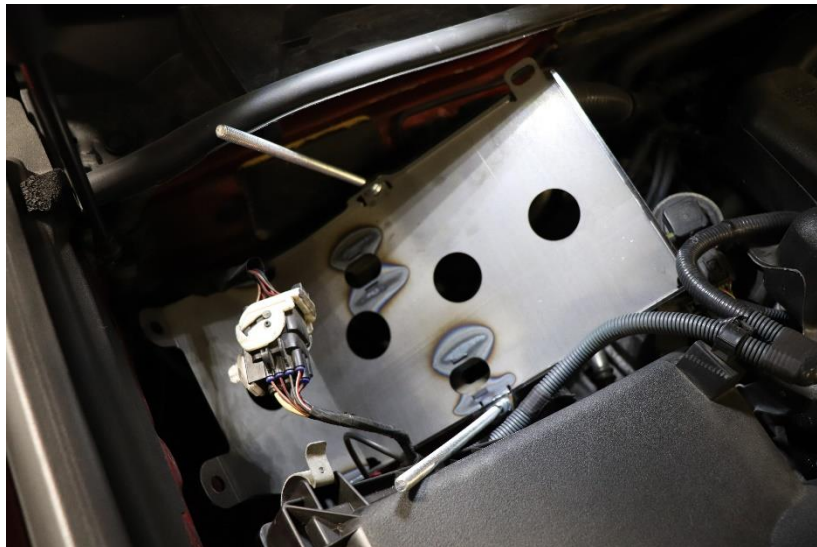
- 7) Now attach the all thread studs to the battery tray. Thread one 5/16” flange nut onto the stud upside down. Leave about a ½” of thread exposed past the nut. Push the stud through the hole on the battery tray. Install another flange nut on the other side and tighten down both nuts.



- 8) Repeat this process on the other side of the tray so both studs are installed.

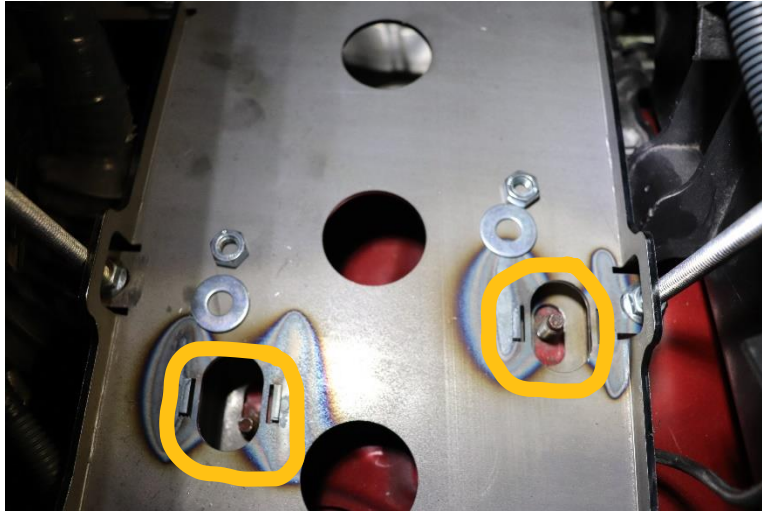


- 9) Now install the tray into the engine compartment. Tip and rotate the tray to get it into position. Slope the tray so that the vertical portion can go in first and fit under the wiring harness with the large square plug. **On some newer models of 4runners the wires with large square plug can be left in position where they are attached to the side of the fender area and the tray will fit around the large connection.**

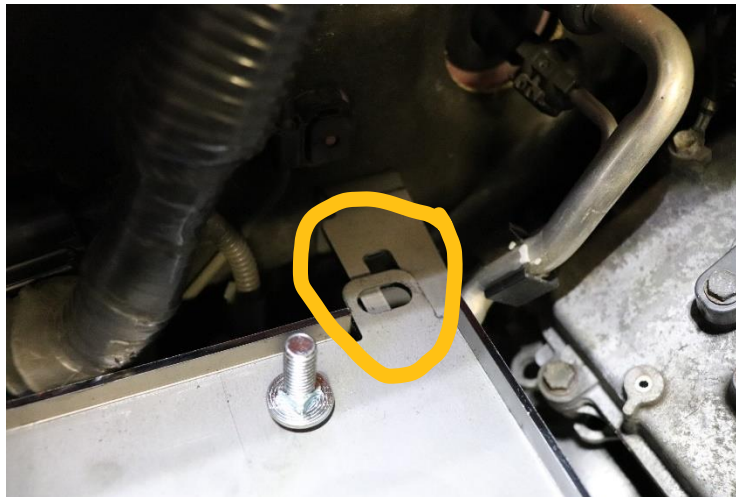


10) Line up the tray with the 8mm studs that are on the fender. Set the tray in place down onto the studs. Loosely install one 5/16" washer and 8mm nut onto each stud.

**Be sure to check that the small ground cable is not getting pinched anywhere between the tray and fender well while installing the tray.**



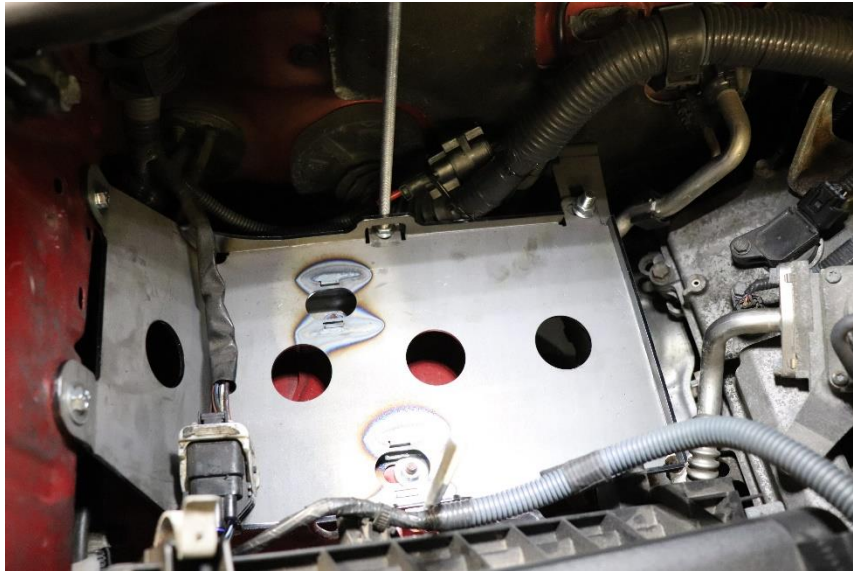
11) Install the 3/8" carriage head bolt through the "L" bracket and the tab at the corner of the tray. Loosely install the 3/8" flange nut onto the bolt.



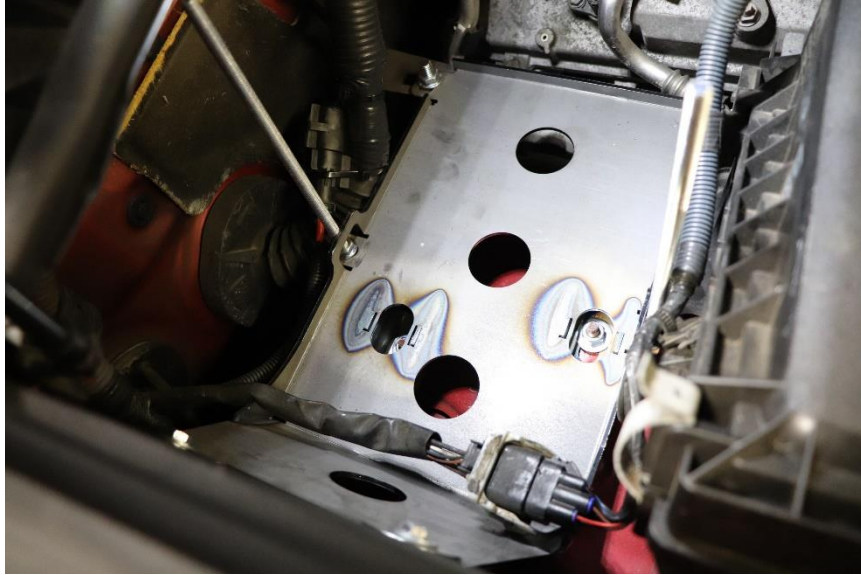
12) Install the 6mm bolts with 1/4" washer into the two threaded holes in the side of the engine compartment above the fender.



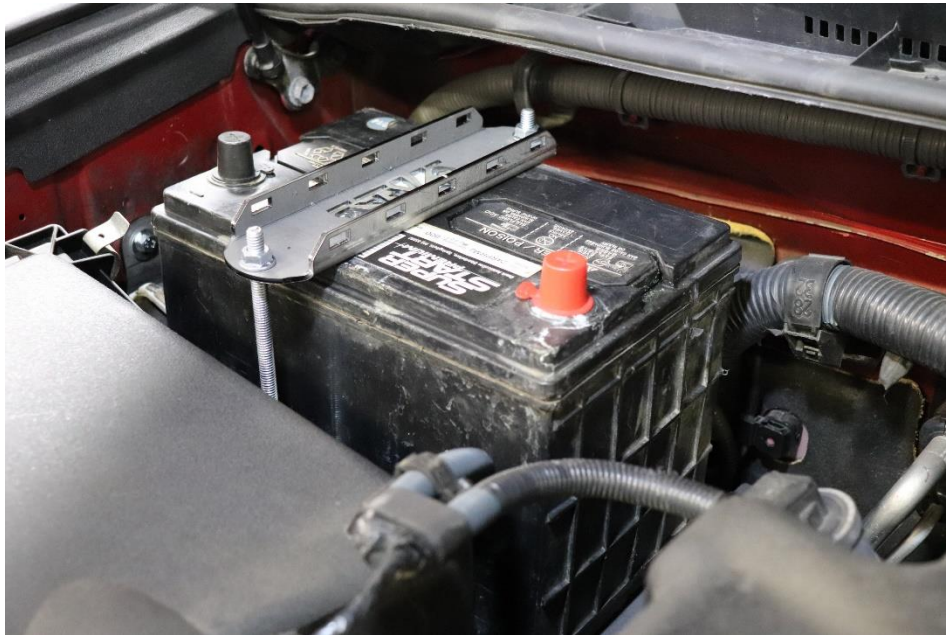
13) Now that all the hardware is loosely installed, adjust the tray so that it sits level. Tighten all hardware to hold the tray in place. Your tray should look like this once everything is tight and in position.



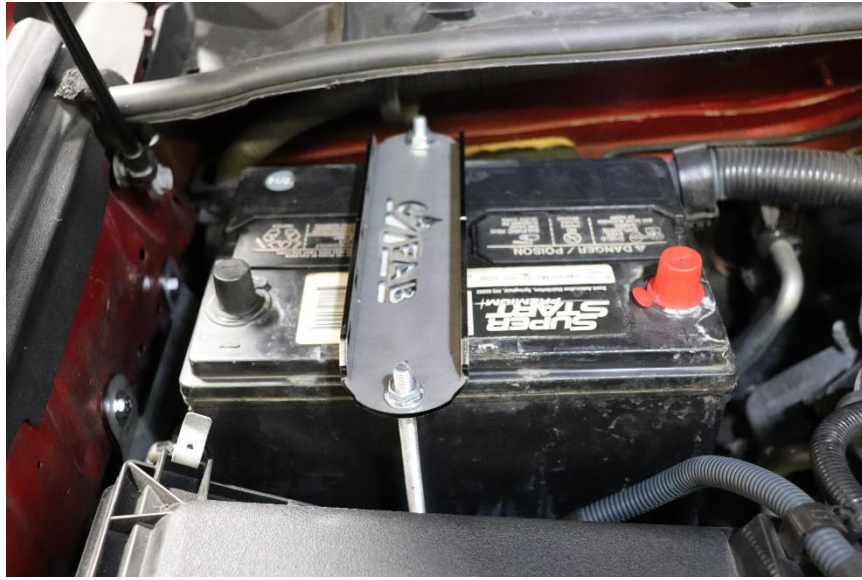




- 14) Once the tray is secure, the battery can be installed. Set the battery into the tray and position it so that it does not sit on top or pinch the wiring harness with the large square plug. Set the battery hold down clamp down on top of the battery while fitting the all thread studs through the holes at each end of the clamp at the same time.



- 15) Tighten the nuts evenly so the clamp sits flat on the top of the battery and puts even pressure across the top of the battery. Push and pull on the battery to make sure the nuts are tight enough to hold the battery in place under rough driving conditions. **Be sure not to tighten the clamp nuts more than what is necessary to hold the battery in place.**



Double check to make sure no wires are pinched or rubbing anywhere on the tray or battery.

**Your battery tray installation is now complete!**