

INS-1002 REV 7-14

# **INSTALLATION INSTRUCTIONS**

# 2012-2015 Jeep JK Battery Box/Wiring Protection Kit #010456

Designed to protect your wiring connections and battery box from damaging heat

#### KIT CONTENTS:

- 2 Aluminum Faced Heat Shields, 10 x 10
- $\mathbf{2-Zinc}\ \mathbf{Plated}\ \mathbf{6mm}\ \mathbf{Stand}\ \mathbf{Offs}$
- 2 6mm x 1 nyloc nuts
- 4 6mm flat washers
- 3 Plastic Rivets
- 6 Plastic Push Locks

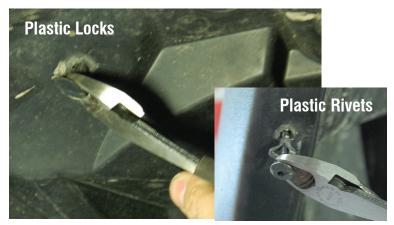
| TOOLS:      | Side Cutters             | 10 mm Socket and Ratchet |
|-------------|--------------------------|--------------------------|
| Floor Jack  | Pliers                   | Rivet Gun (optional)     |
| Jack Stand  | Lug Wrench               | Cleaner and paper towels |
| Wheel Chock | 10 mm Combination Wrench |                          |
|             |                          |                          |

Be sure to always wear the proper safety equipment. Design Engineering Inc. WILL NOT BE HELD LIABLE FOR IMPROPER INSTAL-LATION OR USE OF THIS PRODUCT. Please follow all instructions provided. If you are unsure of any installation procedure, please contact a certified technician.

### Image A



### Image B





# Thank you for purchasing from Design Engineering Inc

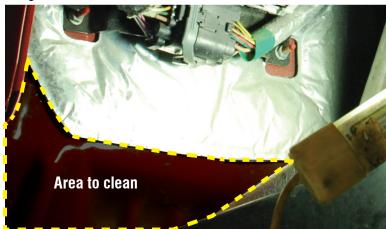
- 1. Park your Jeep on a hard flat surface
- 2. Chock rear wheels and set parking brake
- 3. Disconnect the battery
- 4. Jack up passenger side front wheel off the ground and secure on jack stand.
- 5. Remove lug nuts and passenger side wheel
- 6. Remover inner fender well. (Image A) New hardware is included in the kit for easy reinstallation.
- 7. Remove the 10mm head bolts at the front of the wheel well
- 8. Using side cutters, remove the 6 push in Plastic Locks and the 3 Plastic Rivets. (Image B)

### Image C



9. Remove the inner fender well. (Image C)

Image D



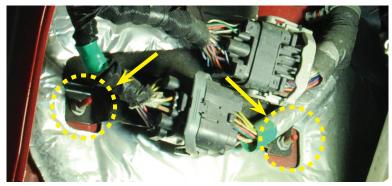
10. Using spray cleaner (window cleaner works well) clean the area below the factory heat shield and wire harness connectors on the fire wall. (Image D)

Image E



11. Clean the plastic battery case on the side facing the engine and bottom. These areas must be clean and dry for the adhesive to stick. (Image E)

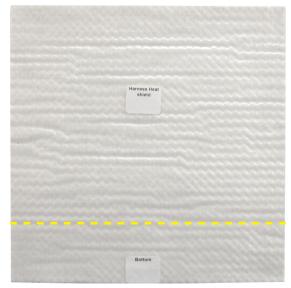
Image F



12. Find the two 6mm x 1 studs on the fire wall next to the wire harness connectors. (Image E)

13. Screw the two zinc plated 6mm Stand Offs onto these studs and tighten using the 10mm combination wrench.

Image G



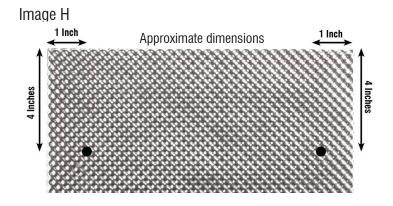
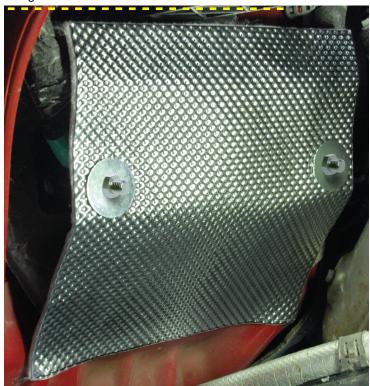


Image I



14. Locate the Heat Shield marked (Harness Heat Shield) (Image G). The bottom portion of the protective backing film has been pre-cut. This will attach to the fire wall just below the harness connectors.

15. Before peeling the protective backing film, prefit the shield in place. The bottom portion will attach to the fire wall then bend the shield to contact the Stand Off Studs. Push the shield firmly into the Studs to mark the position for the hole that will need to be made.

16. Once in place push on the shield directly on each stud to force the stud through the shield or use an awl to make the appropriate size hole. This will not take much pressure as the aluminum on the shield is soft.

17. Once the holes are made and you are satisfied with fit, remove the shield. The holes should be approximately 4" from the top of the shield and 1" from each side. (Image H)

18. Place one 6mm washer on each stud, then peel the protective backing film from the bottom portion of the shield, it will uncover about 1" of the pressure sensitive adhesive. (Image I)

Place the shield over the studs and apply pressure to the bottom to stick the shield to the fire wall.
(Image I)

20. Install the remaining two washers and 6mm nuts onto the studs and tighten to a snug fit. Do not over tighten (Image I)

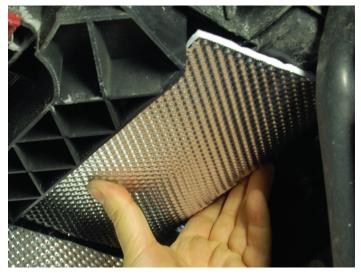
21. The shield can be formed slightly for the best fit.

Image J



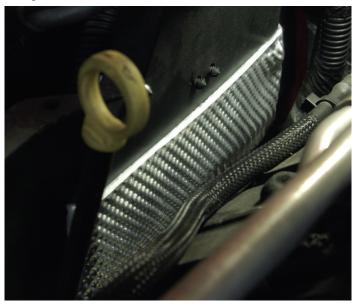
22. Locate the remaining heat shield marked "Battery Heat Shield". This will be used to protect the side and bottom of the Plastic Battery Box. (Image J)

Image K



23. Before peeling the protective backing film, pre-fit the shield by sliding it from the bottom of the battery box up the side and bending the bottom 90 degrees until it meets the edge of the box. (Image K)

Image L



24. Once you are satisfied with the fit remove the protective backing film and stick into place. (Image L)

### Image M



Image N



### Image O



Image P



25. You can now reinstall the inner fender using the supplied hardware and factory bolts. (Image M & Image N)

26. Use rivet gun to install Plastic Rivets. (Image 0)

## DEI Top Tip:

If you do not have a rivet gun you can use a box end wrench and pair of pliers. (Image P) Slide the wrench over the rivet and push on the head. Use the pliers to pull the stem until you seat the rivet. Know cut the stem flush using side cutters.

27. Reinstall your wheel and torque to the factory specification.

28.For further questions contact Customer Service at 440-930-7940