



3651 N Highway 89 • Chino Valley, AZ 86323  
(928) 636-7080 • www.p-a-g.net

# JEEP WRANGLER, RUBICON, UNLIMITED (JK) QUARTER ARMOR KIT INSTALLATION INSTRUCTIONS

- 84330 07-12 JK 2Dr. W/LED**
- 84331 07-12 JK 2Dr. "RAW" W/O LIGHT HOLES**
- 84332 07-12 JK 2Dr. W/RAIL BAR & W/LED**
  
- 84340 07-12 JK 4Dr. W/LED**
- 84341 07-12 JK 4Dr. "RAW" W/O LIGHT HOLES**
- 84342 07-12 JK 4Dr. W/RAIL BAR & W/LED**

**⚠ WARNING**  
Before you install this kit, read and understand all instructions, warnings, cautions, and notes in this instruction sheet and in the vehicle owner's manual.

**⚠ CAUTION**  
Proper installation of this kit requires knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

**⚠ WARNING**  
Always wear eye protection when operating power tools.

**⚠ WARNING**  
Before you install this kit, block the vehicle tires to prevent the vehicle from rolling.

## Before Starting Installation

**NOTE**  
Kit parts are prefaced by the word *kit* and appear in bold print.

1. Carefully read all warnings and instructions completely before beginning.
2. Verify all parts have been received in this kit by checking the parts list at the end of this document.

**NOTE**  
If parts are missing from kit, please be prepared to provide the following information:

1. **Name** of purchase location
2. **Bar Code** on side of box
3. **Date** above bar code
4. **Date** inside box cover
5. **Inspector #** from inside box cover

3. **Only install this kit on the vehicle for which it is specified.** If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (928) 636-7080.
4. Special tools needed:
  - a. Drill with 1/4" - 3/8" - 9/16" drill bits
  - b. Center punch
  - c. Allen Tool Set
  - d. C-clamp Vice Grip "wide Jaw"
  - e. Electrical Crimp Tool
  - f. Test Light

**Recommend purchasing *kit* 2dr Rocker Armor (84310) and installing this *kit* prior to quarter armor install. This will insure proper alignment and fitment of quarter armor.**

**\*\*Use a light amount of oil on *kit* button head bolts when installing bolts into rivet to help prevent thread damage\*\***

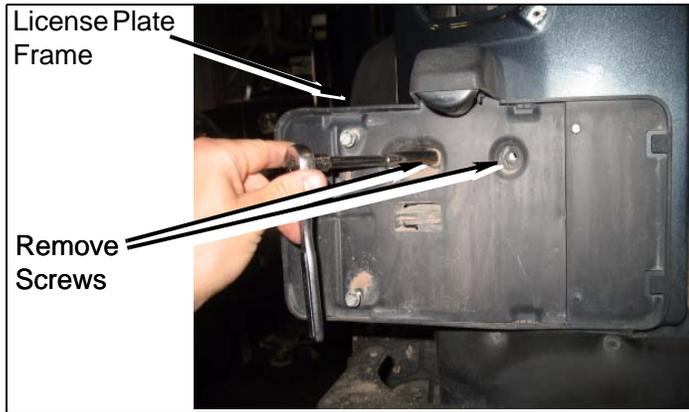
5. Park vehicle on a clean, dry, flat, level surface and block tires so vehicle cannot roll in either direction.

## Engine Compartment

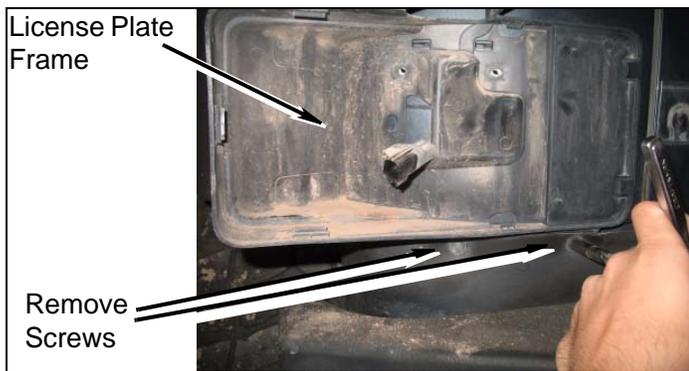
1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.

# Remove Rear Trim

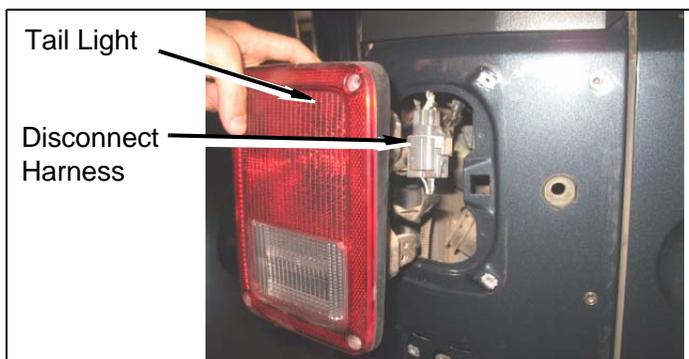
1. Remove rear license plate frame from vehicle.
  - a. Using a wrench or screw driver remove licence plate.
  - b. Using an 8mm socket; remove two screws from inside liner, followed by removing the inside liner holding the licence plate light and harness.



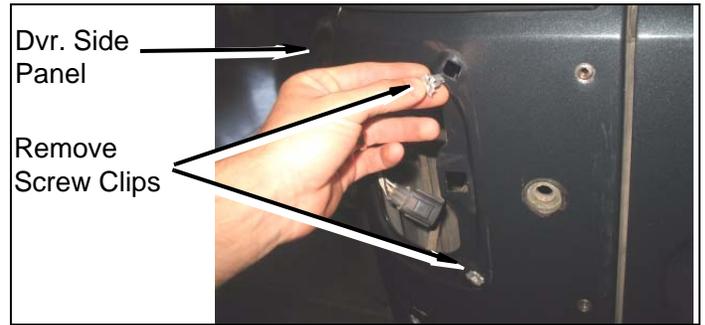
- c. Disconnect license plate harness.
  - d. Using an 8mm socket, remove two screws from lower licence plate frame and remove licence plate frame from rear quarter panel.



2. Remove rear tail lights from vehicle.
  - a. Using a screw driver; remove two inner screws from each tail light housing.
  - b. Disconnect tail light harness and remove tail lights from rear quarter panel.

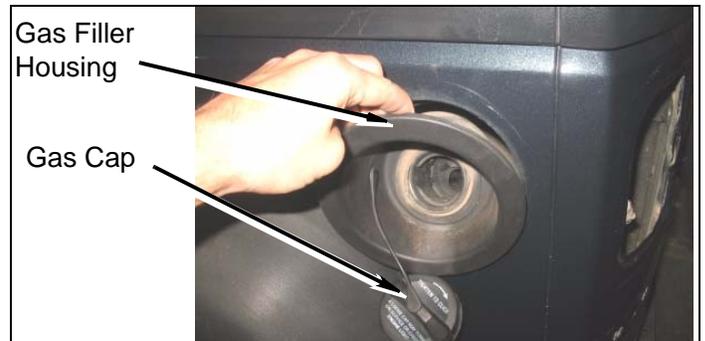


- c. Remove screw clips from vehicle panel.

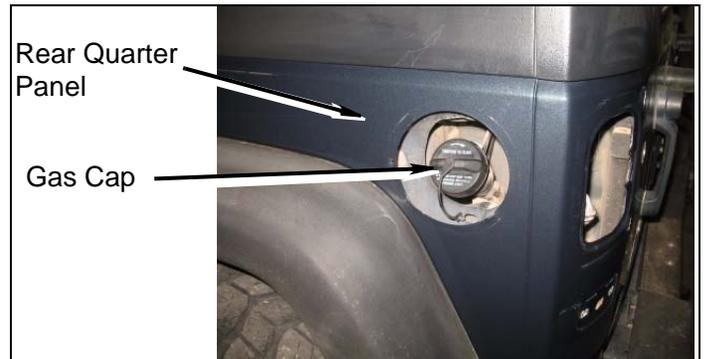


- d. Remove gas cap from filler neck.
  - e. Gently pry gas filler housing away from sheet metal quarter without distorting sheet metal around gas filler housing.

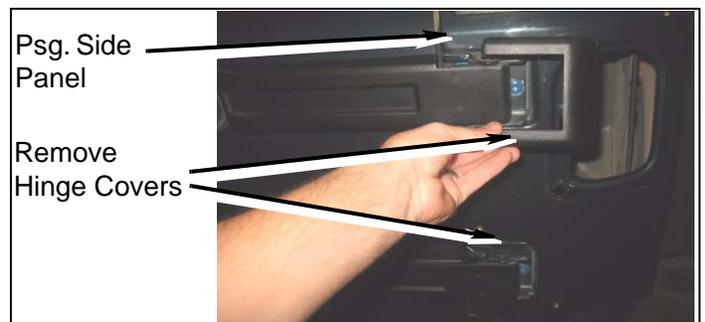
**Note:** Don't worry if you brake a clip while removing gas filler housing; they can be removed in a later step of these instructions.



- f. Reinstall gas cap to prevent any particles from entering the filler tube.



- g. Remove passenger rear hinge trim cover from hinge mounts.



# Prepare to Install Kit

## 1. Prepare mounting points.

- a. Using an assistant, hold kit **armor** in place and use C-clamps around the outside of the panel to hold kit armor into place. (**Note:** Aligning the rear upper edge of *kit armor* an 1/8" below body line radius and centered with gas door hole. The bottom edge of *kit armor* should line up square with the radius of the lower edge. The front of the *kit armor* should be aligned so that it provides proper clearance for door operation. See notes below)
- b. When aligning *kit armor* to door line edge; be sure to square *kit armor* up to the exact lines of the door line. Make sure you have a 1/8" gap between the *kit armor* and the door line. The top edge of the *kit armor* should have a 1/4" gap between the *kit armor* and the top body line near the front edge of the door.

**Note:** Be sure to align 2dr. *kit armor* correctly you must follow this procedure due to the slight cone/offset shape in the body lines. It is **highly** recommended to install *kit 2dr. rocker panel armor (84310)* prior to installing *kit 2dr. quarter armor* to insure proper alignment and fitment of armor. These steps will help prevent mounting the *kit armor* to high on the body of the Jeep.

### 2 Dr. Front Upper Section Measurement



### 2 Dr. Front Door Section Measurement



- c. Once kit armor is properly placed and aligned, mark all appropriate holes for drilling
- d. **2 Door:** Dvr. side *kit armor* will require 15 - holes drilled to 3/8" & 1 - tail light hole drilled to 9/16" for clearancing *kit LED Light* bolt & nut assembly.
- e. **2 Door:** Psg. side *kit armor* will require 15 - holes drilled to 3/8" & 1 - tail light hole drilled to 9/16" for clearancing *kit LED Light* bolt & nut assembly.

**NOTE:** *Kit 2 door armor w/rail bar* will only require 14 - holes drilled to 3/8" due to *kit rail bar* location. The arrow circled below will not be marked or drilled during install.

### Dvr Side 2 Door Panel



### Psg. Side 2 Door Panel



- f. **4 Door:** Dvr. side *kit armor* will require 12 - holes drilled to 3/8" & 1 - tail light hole drilled to 9/16" for clearancing *kit LED Light* bolt & nut assembly.
- g. **4 Door:** Psg. side *kit armor* will require 11 - holes drilled to 3/8" & 1 - tail light hole drilled to 9/16" for clearancing *kit LED Light* bolt & nut assembly.

**NOTE:** *Kit 4 door armor w/rail bar* will only require 11 - holes on Dvr. side & 10 - holes on Psg. side drilled to 3/8" due to rail bar location. The arrow circled below will not be marked or drilled during install.

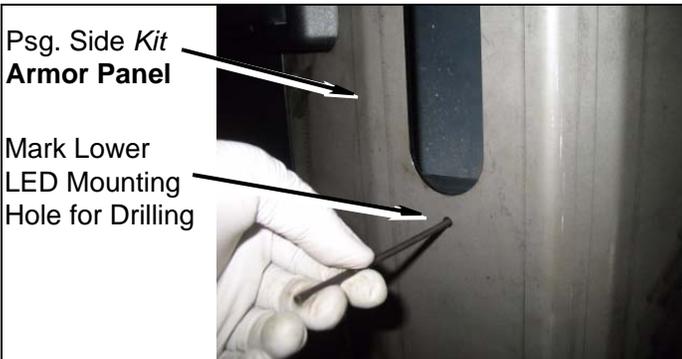
**Dvr Side 4 Door Panel**



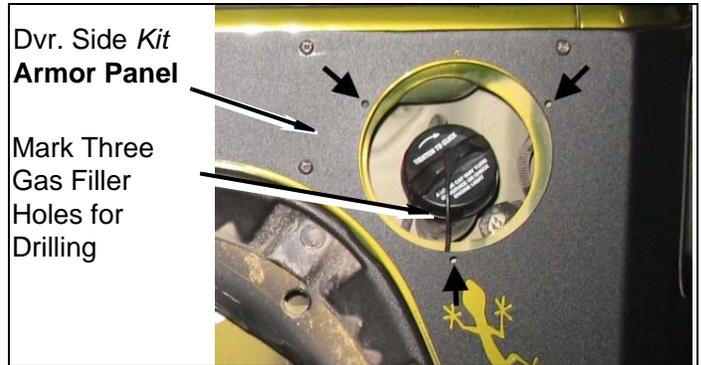
**Psg Side 4 Door Panel**



**h.** Mark both lower LED mounting holes for drilling out to 9/16" once you have removed *kit armor* panels.



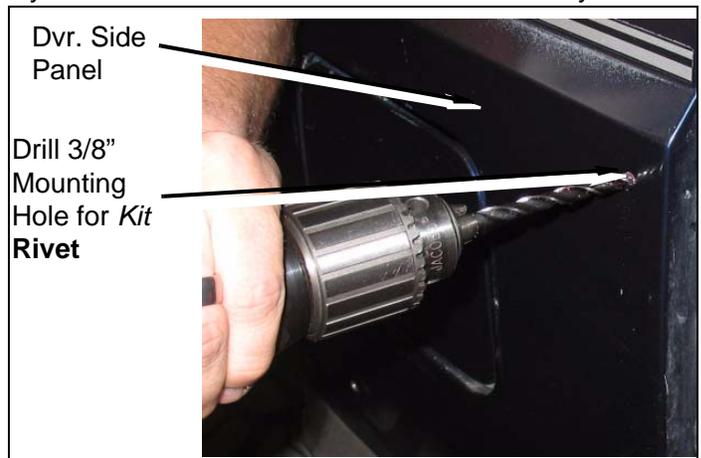
**i.** Mark three holes surrounding the gas filler hole for drilling out to 1/4" once you have removed *kit armor* panels.



**j.** Once all *kit armor* is marked correctly for drilling; remove *kit armor* and prepare to drill all mounting holes.

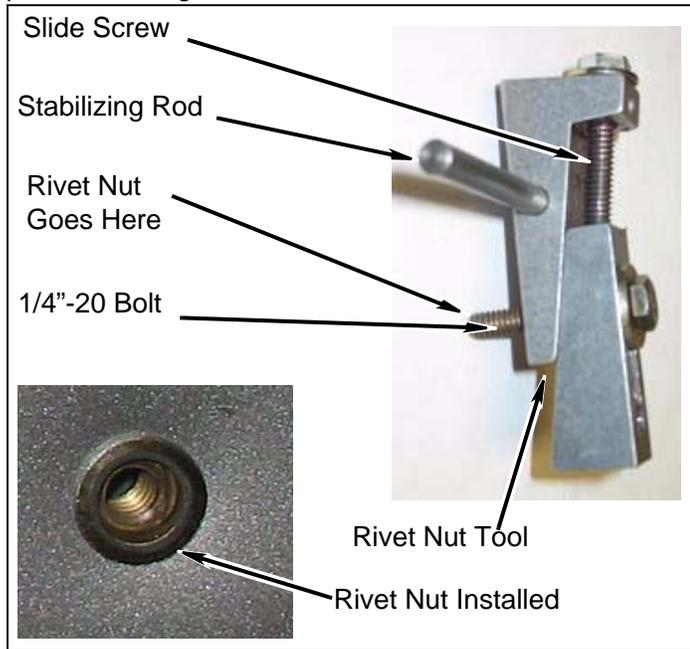
**k.** Drill all marked holes using a 3/8" in **only** the 15 rear holes marked in the 2-Dr. and 10-11 rear holes marked in the 4-Dr. (per side) as shown in the figure below. **DO NOT** drill deeper than 1" anywhere in the body.

**NOTE:** Some hole will need to be drilled through two layers for the rivet to slide in flush with the body.



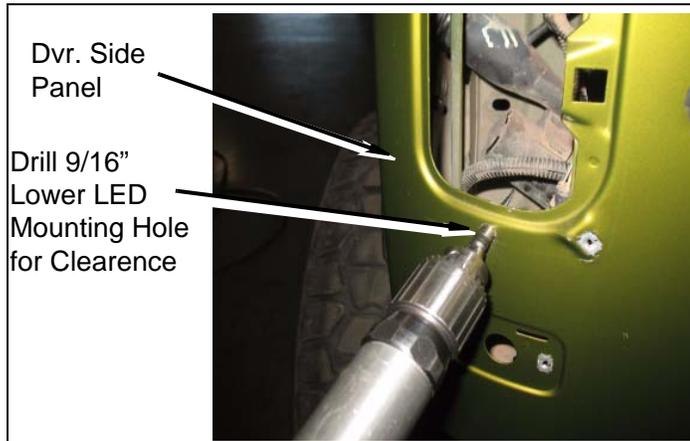
**l.** Install rivet nuts into the 3/8" holes as follows: Completely retract the slide and install rivet nut finger tight on the stud. Place the stabilizing rod in the provided hole. Insert rivet nut into the drilled hole and tighten the slide screw to draw the slide up the ramp. A light coating of grease on the ramp and a drop of oil on the tightening screw will ease the operation of the tool. Typically, you will need to loosen the slide screw and screw the 1/4"-20 bolt finger tight again repeat at least twice until the rivet nut is tight and won't spin. This will set the rivet nut.

**NOTE:** Be sure not to over tighten the rivet, doing so will prevent damage to the rivet's threads.



m. Once you have finished installing all of the *kit rivets*; be sure to clean / tap each rivet threads to prevent cross threading from occurring.

n. Drill a 9/16" hole through both lower LED mounting hole marks for bolt & nut clearance.

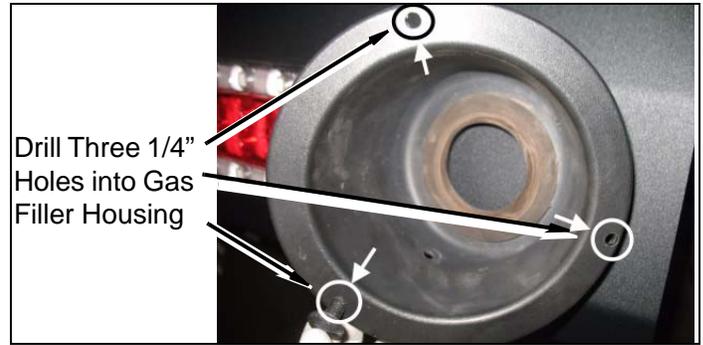


**\*STEP 2 need only be performed if clips are damaged**

**2. Drilling gas filler housing.**

a. Using a pair of pliers, gently remove all four clips surrounding gas filler housing.

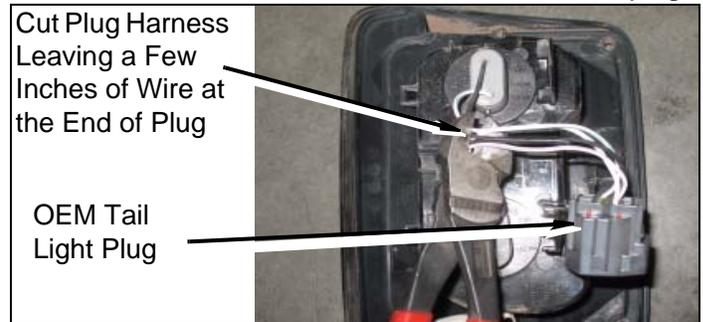
b. Using pin on gas filler housing as an alignment tool; center housing onto Dvr. side *kit armor*. Mark and drill three 1/4" holes into gas filler housing.



**3. Wire *Kit LED Tail Light Plugs* (Harness).**

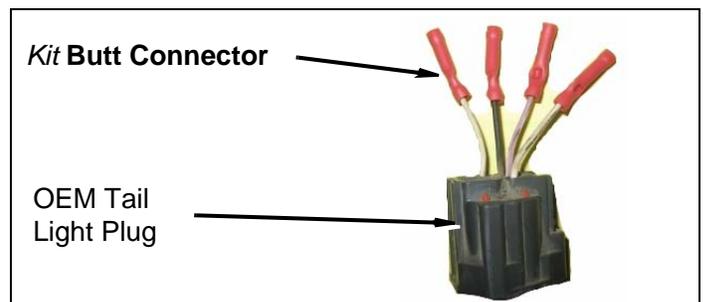
a. Locate OEM tail light and remove plug from tail light housing using a pair of wire cutters.

**NOTE:** Leave a few inches of wires at the end of the plug.



b. Using OEM tail light plug, take a pair of wire strippers and remove a small amount of insulation to expose the tip of all four wires at the end of the OEM plug for each *kit butt connector*.

c. Using four *kit butt connectors*; take a pair of crimpers and crimp one *kit butt connector* to the end of each OEM plug wire.

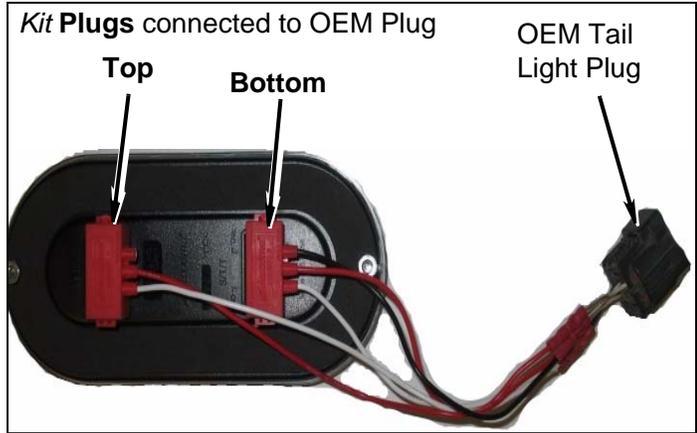


d. Install two *kit plug* harnesses into each insert on the back of *kit LED light*.

e. Prep both *kit plug* harness to be connected to OEM plug with *kit butt connectors*.

**NOTE:** *Kit "Top Plug"* will not use the black wire on plug.  
**OEM Plug** --- **Kit Plug**

(Ground) Black	---	(Top/Bottom) White
(Backup) White/Green	---	(Top) Red
(Tail) White/Purple	---	(Bottom) Black
(Stop&Turn) White/Yellow	---	(Bottom) Red

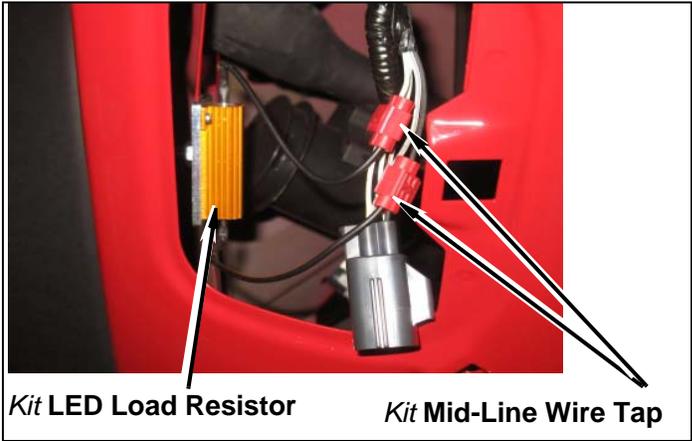
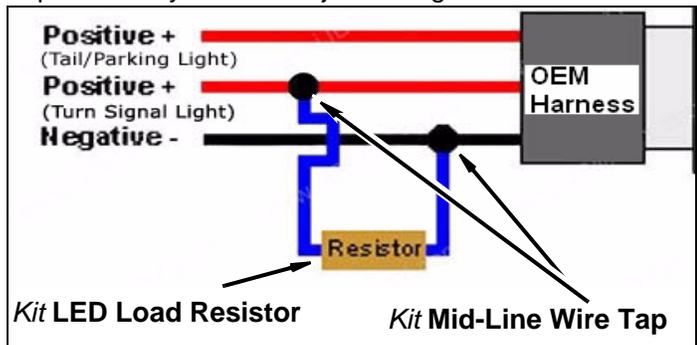


**\*\*Repeat processes to each tail light harness\*\***

**4. Install *kit* LED load resistor**

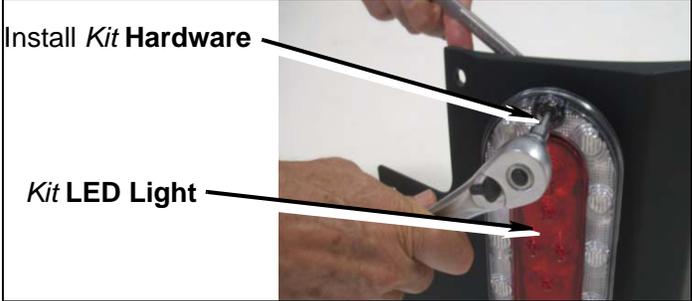
- a. Find the correct turn signal / stop wire in the tail light harness; on the Jeep OEM side. The wire color should be White / Yellow stripe. Connect one end of *kit resistor* to wire using a *kit mid-line wire tap*. Connect the other end of *kit resistor* to the black ground wire in the same harness using another *kit mid-line wire tap*. (**Note:** Repeat process to each tail light harness.)
- b. Once you have connected your *kit resistor* in-line to your OEM light harness; mount your *kit resistor mounting plate* using *kit 1/4" hardware* into inside sheet metal by drilling 1/4" hole and mounting *kit resistor plate* to sheet metal with *kit 1/4" bolt, nut & washers*.

**\*WARNING\*** Use extreme caution when installing *kit LED load resistors mounting plate / resistor*. Mount resistor away from any fuel lines, plastics, wires or carpet to prevent any minor / major damage to vehicle.



**Install Kit Armor**

1. Install *Kit LED Tail Lights* onto *Kit Armor*.
  - a. Install *kit LED light* onto *kit armor* using two *kit socket cap screws, washers, and nylon nuts* through *kit armor* to fasten light onto armor.



Be sure to install *kit plug* harnesses onto *kit LED light* prior to installing *kit armor*.

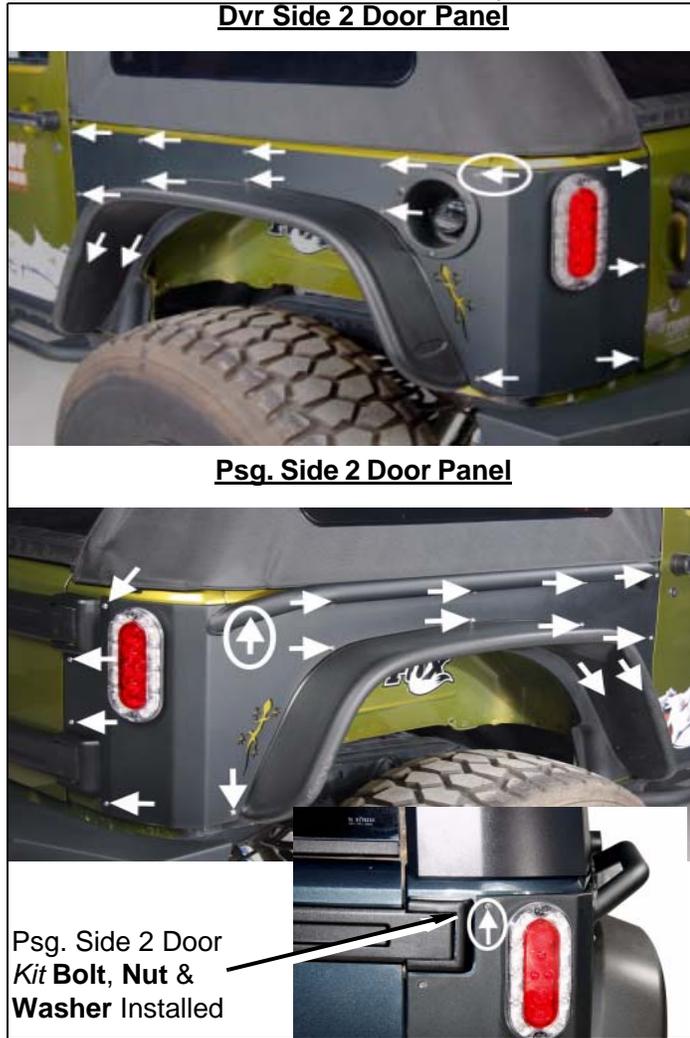
**-Check all leads to harness prior to installing *kit Armor Panels*-**

2. Install *Kit Rear Armor*.
  - a. Using an assistant, hold *kit armor* in place and use C-clamps around the outside of the panel to hold it into place. (**NOTE:** Aligning the upper edge of *kit armor* with body line. The bottom edge of *kit armor* should line up with the radius of the lower edge. The front of the *kit armor* should be aligned so that it provides proper clearance for door operation.)
  - b. Once *kit armor* is properly placed and aligned, start installing *kit 1/4" hardware* and plug *kit LED plug harness* into OEM tail light harness.
  - c. **2 Door:** Dvr. side *kit armor* will require 15 - *kit button head bolts (1/4-20x3/4")* for bolting up *kit rear armor*.

- d. **2 Door:** Psg. side *kit armor* will require 15 - *kit button head bolts (1/4-20x3/4")*, 1 - *flange nut (1/4-20")* & *flat washer (Large)* for bolting up *kit rear armor*. (Note: One *kit bolt, nut & washer* will be installed through top left corner of *kit armor*, near the top tail gate hing mount, and mount through the small top tail light mounting hole.)

- f. **4 Door:** Psg. side *kit armor* will require 12 - *kit button head bolts (1/4-20x3/4")*, 1 - *flange nut (1/4-20")* & *flat washer (Large)* for bolting up *kit rear armor*. (Note: One *kit bolt, nut & washer* will be installed through top left corner of *kit armor*, near the top tail gate hing mount, and mount through the small top tail light mounting hole.)

**NOTE:** *Kit 2 door armor w/rail bar* will only require 14 - **bolts, nuts & washers** installed due to *kit rail bar* location. The arrow circled below will not require hardware.



**\*\*Align and tighten all the *kit button head bolts*\*\***

- e. **4 Door:** Dvr. side *kit armor* will require 13 - *kit button head bolts (1/4-20x3/4")*, 1 - *flange nut (1/4-20")* & *flat washer (Large)* for bolting up *kit rear armor*. (Note: One *kit bolt, nut & washer* will be installed through top center right corner of *kit armor*, near the top tail light mount, and mount through the small top tail light mounting hole.)

**NOTE:** *Kit 4 door armor w/rail bar* will only require 12 - on Dvr. side & 11 - holes on Psg. side; **bolts, nuts & washers** installed due to *kit rail bar* location. The arrow circled below will not require hardware.



**\*\*Align and tighten all the *kit button head bolts*\*\***

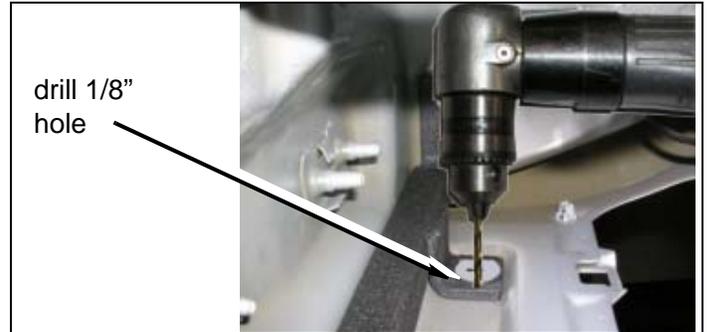
**\*\*Using a light amount of oil on *kit button head bolts* when installing into rivet to prevent cross-threading\*\***

**--Access hole at bottom of rear quarter panel may be used for access to rear tail light harness and bolts by removing the inside foam liners--**

- b. Align and tighten all the kit **button head bolts**.

## ORF Tire Carrier Modifications

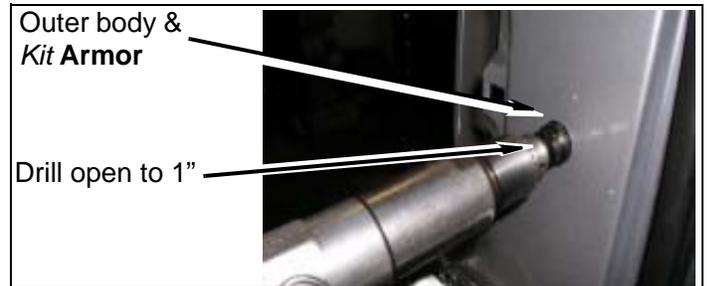
1. Installing landing block over driver side armor.
  - a. From under-inside of body center punch remaining bracket hole on the rear inner body and drill a 1/8" pilot hole.



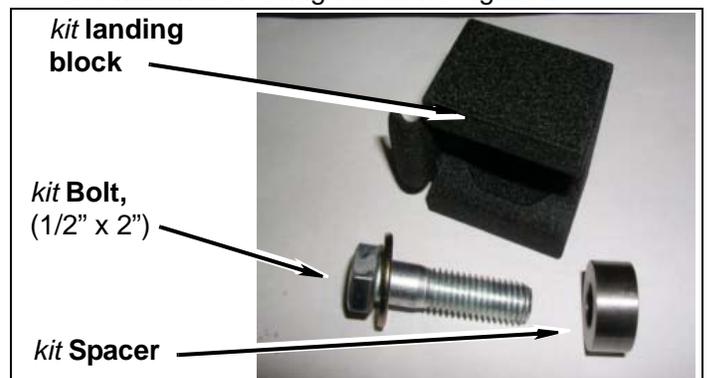
### ⚠WARNING

Careful to keep drilling straight through as you will drill two layers of body. An angle drill is highly recommended.

- b. With your pilot hole drilled through outside of body & armor, use 1" hole saw through **kit armor** and only first layer of body.



2. Install **kit landing block** to new hole in body support bracket with **kit bolt** (1/2" x 2"), **spacer** (1/2" x 1"), and **hardware**. Snug but do not tighten.



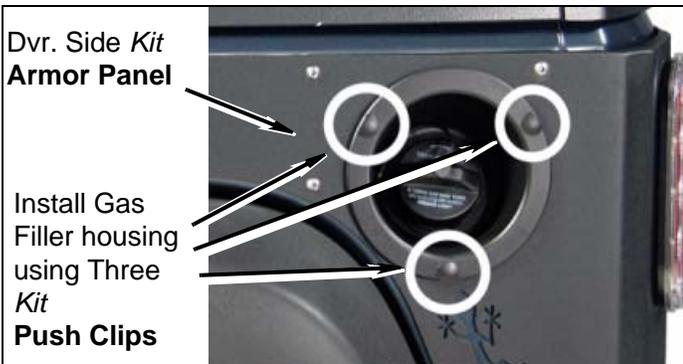
### ⚠NOTE

Use RTV silicone sealer around spacer to make watertight seal to body.

### Psg Side 4 Door Panel

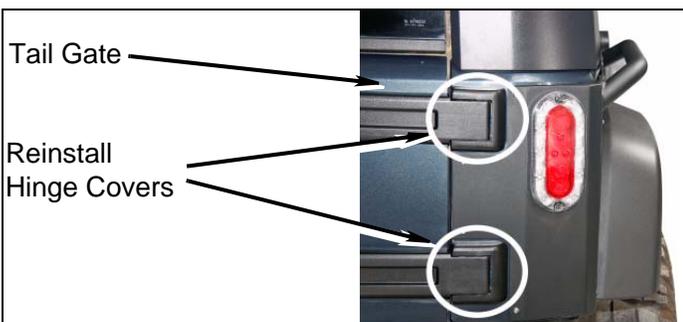


3. Install gas filler housing.
  - a. Using three **kit push clips** (1/4") through gas filler housing and into armor.

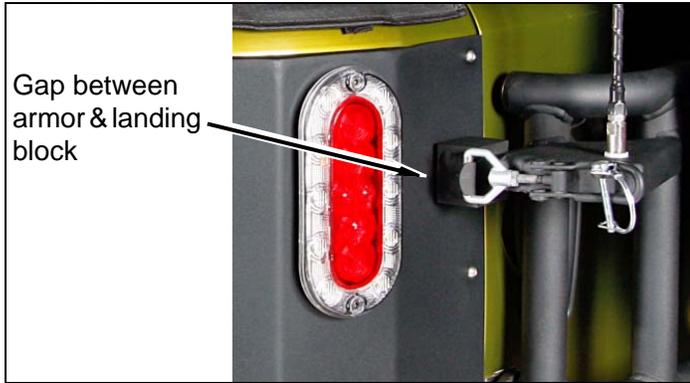


- b. Reinstall gas cap once filler housing is seated into place onto **kit armor**.

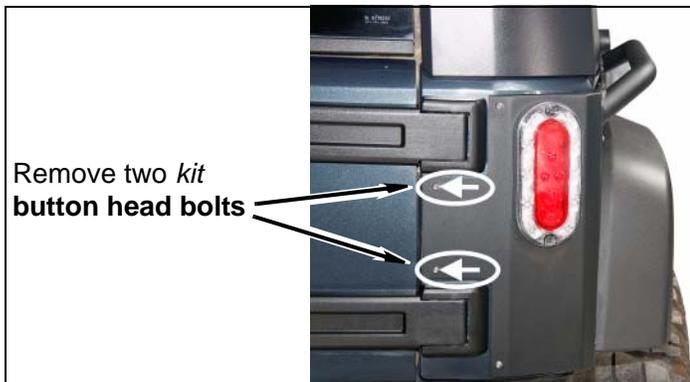
4. Install Hinge Caps.
  - a. Reinstall rear tail gate hinge caps on passenger side hinges.



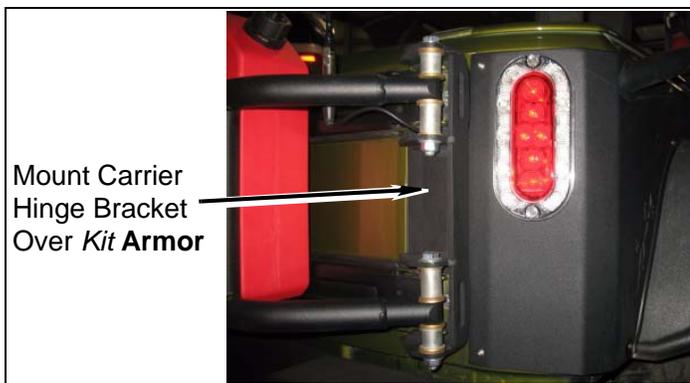
**NOTE:** The minor gap between the *kit armor* and the landing block is required due to the contours of the body. This gap will help the rack align properly.



3. Installing hinge bracket over passenger side armor.
  - a. Remove two *kit button head bolts* (1/4 - 20 x 3/4") from *kit armor*, between both hinge mounts.



- b. Place carrier hinge mount over the top of *kit armor*, pinching the *kit armor* in between both the body and the carrier mount.



## After Completing Installation

### Finish Installation

1. Relocate license plate
  - a. Find a good visible area on the back of your vehicle to relocate your license plate and light.

- b. **OR-Fab** offers two options for relocating your license plate with kits: **87035** for your T-Handle or **87037** for your OEM tail gate. Also recommend using **ORO LitePLATE** for a license plate light.

### Engine Compartment

1. Connect both battery cables. Connect positive cable first, then negative cable.

### Miscellaneous

1. Check all fasteners to ensure they are tight.
2. Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.

#### **⚠WARNING**

Retorque all fasteners after 500 miles and after off road use. All armor components should be visually inspected and fasteners retorqued during routine vehicle servicing.

#### **NOTE**

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the vehicle owner. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to the vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

## Accessories

The following accessories are also available:

**Kit 87035: T-Handle License Plate Relocation**

**Kit 87037: Tail Gate License Plate Relocation**

**Kit 87036: Tail Gate Vent Plate**

**Kit 85209: Rotopax Tire Carrier**

**Kit 87321: 2Dr. Quarter Armor Liner**

**Kit 87322: 4Dr. Quarter Armor Liner**

**Kit 84310: 2Dr. Rocker Armor**

**Kit 84320: 4Dr. Rocker Armor**

# Kit Parts List

Qty.	Description
1	Quarter Panel Armor (Drivers side)
1	Quarter Panel Armor (Passenger side)
2	LED Light
4	LED Plug (Wire Harness)

## 2 DOOR HARDWARE BAG

32	Bolt (1/4" x 3/4")
1	Nut, Flange (1/4")
31	Rivet Nut (1/4")
1	Washer, Fender (5/16")
3	Ratchet Fastener (1/4")
4	Socket Cap Screw (#10)
4	Nylon Jam Nut (#10)
4	Washer (#10)
8	Butt Connector

## 4 DOOR HARDWARE BAG

26	Bolt (1/4" x 3/4")
1	Nut, Flange (1/4")
24	Rivet Nut (1/4")
1	Washer, Fender (5/16")
3	Ratchet Fastener (1/4")
4	Socket Cap Screw (#10)
4	Nylon Jam Nut (#10)
4	Washer (#10)
8	Butt Connector

## Rivet Nut Tool Bag

2	Washer, Hardened (1/4")
1	Bolt, Grade 8 (1/4" x 1-1/2")
1	Bolt, Grade 8 (1/4" x 1-3/4")
1	Stabilizer Pin
1	Base Ramp
1	Slide

## Resistor Kit Bag

2	LED Resistor (Resistor w/ Mounting Plate)
2	Bolt (1/4")
2	Nut, Lock (1/4")
4	Washer (1/4")
4	Tap (Mid-Line Wire Tap)

### NOTE

Depending on the vehicle and kit configuration (2 Door or 4 Door), some parts may not be used.