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1 STAR	★☆☆☆☆	EASY - No tools required
2 STARS	**☆☆☆	BASIC - Requires standard tools, basic mechanical knowledge and understanding
3 STARS	★★★☆☆	MODERATE - Requires standard tools. Some drillling and/or cutting.
4 STARS	****	ADVANCED - Requires speciality tools. Drilling, cutting, and/or welding
5 STARS	****	EXPERT - Professional installation recommended.

#### **DISCLAIMER**

Expedition One is not responsible for any damages to vehicle or injury. We always recommend professional assistance when installing our vehicle products.

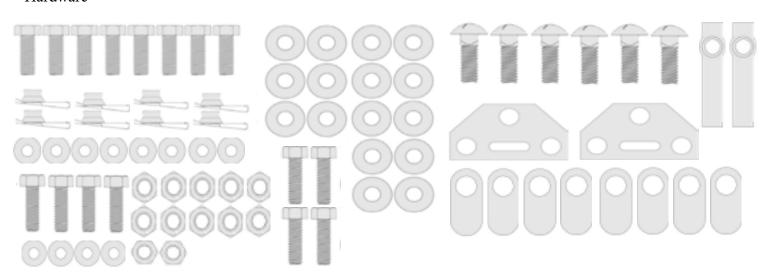
Always follow safety procautions including the use of safety gear and devices.

## **BUMPER HARDWARE**

#### NOT TO SCALE FRONT BUMPER HARDWARE Front Bumper Hardware 5/16"-18 X 3/4" Hex Cap Bolt 8 5/16"-18 Clip Nut 8 5/16" USS Washer 8 3/8"-16 X 1 1/4" Hex Cap Bolt 4 3/8" USS Washer 4 3/8"-16 Nyloc Nut 4 1/2"-13 X 1 1/4" Carriage Bolt 6 Pressed into 3Hole Bracket (2) Mounting Bracket 1 1/2"-13 X 1 1/2" Hex Cap Bolt 4 1/2"-13 Nyloc Nut 10 1/2" USS Washer 16 M12 - 1.25 X 30 Hex Cap Bolt 2 Oval Offset Spacer 8 **Bolt Retainer** 2 Mounting Bracket 2 **Light Port Mounts** 2 + with spacers Corner Lights 2 **Light Connectors**

Hardware

**GX Skid Plate** 



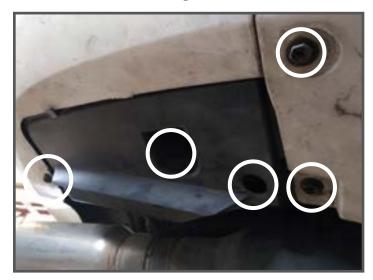
Sensor Bezels

4

# **BUMPER REMOVAL**

#### REMOVE OEM BUMPER HARDWARE

Remove the front bumper OEM hardware from the front wheelwells on each side of the vehicle.





### 2 ENGINE BAY TRIM PANEL REMOVAL

Remove the OEM hardware from the engine bay panel as circled below. Save the panel and hardware as it will be reused.

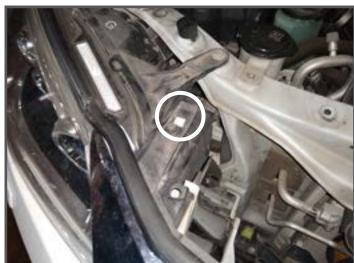


## 3 UPPER BUMPER HARDWARE REMOVAL

With the panel removed, unbolt all the OEM hardware as circled below. Save the hardware as it will be reused.







### 4 HEADLIGHT WASHER DISASSEMBLY

Start by draining the washer fluid reservoir or staging the area for fluid draining as hoses will be disconnected. Remove the hoses connected to the headlight washer assembly as shown below. Also disconnect the wire harness and other connections. Repeat for both sides. Dont break any connections and save all associated hardware as it will be reused.









### 5 SENSORS AND WIRING CONNECTIONS

Disconnect the parking sensors from the bezels. Be care to not break any clips or parts of the bezel as they will be reused in the new bumper. Remove the bezels if reusing them once the bumper is removed in step . Unplug all OEM connectors for the front bumper at this time. Check for any connections before removing the bumper.





### **6** BUMPER REMOVAL

Check for any remaining hardware connecting the bumper. Remove the bumper by pulling it away from the corner near the wheelwells.

### 7 HEADLIGHT WASHER REMOVAL

With the bumper removed pull the clip and plastic holding the washer assembly in place. Once removed pull the assembly through the opening and pull the cover. Push the clips in at the bottom of the assembly to remove. Dont break any connections and save all hardware.





## **BUMPER TRIMMING**

## 8 WIRING LOOM AND WASHER FLUID LINE REMOVAL

Once the bumper is off the vehcile, remove all wiring and washer fluid lines from the bumper. The wiring will need to be unclipped from the grill and detached at the fog lights. Remove the washer lines.

### 9 BUMPER TRIMMING

Measure 3" from the top of the bumper corner and mark the location. Use this point to create a line around the bumper to the grill area. Mask the cutting line with tape for a guide line and to protect the edge during cutting. The grill will need to be removed to cut along this line and the grill itself (Remove the grill by undoing the clips and hardware holding it in place.

#### CUT ALONG THE BOTTOM OF THE TAPE









Cut the inside section of the bumper out on both ends.



Trim back the ends (circled) to allow bracket and bumper clearance.



Once cut, notch out the area below the corners to allow clearance for fitting the bumper.

## 10 HEADLIGHT WASHER TRIMMING

With the bumper trimmed youll need to cut out the area where the original headlight washer sat. Cut the area below up to and even with the top of the washer area. Repeat for the other side.





## 11 FRONT MODIFICATIONS

Removal the plastic trim surrounding the front radiator area. Also remove the original frame cross member by unbolt the OEM hardware as circled. Save all cross member hardware as it will be reused.







Unbolt the plastic on the center frame section



Bend back the bracket in the center

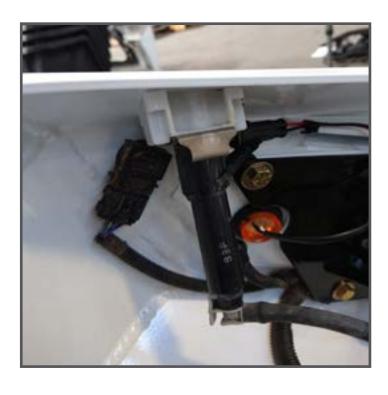
## 12 WIRING HARNESS

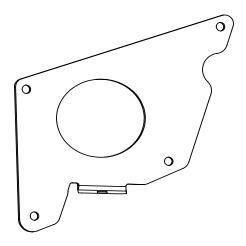
Reinstall the wiring harness into the new bumper. Place all wiring out of the way of mounting points snag points, or hardware locations. If mounting a winch, position out of the way to of the winch itself and the cable. Check that the wiring loom connectors match there original points of connection per each side of the vehicle. Reattach all bezels and sensors. When using the provided replacement rubber bezels use WD40 and align the flat edge directional to the pointed surface when

## 13 LIGHT PORT MOUNTS AND WASHER FLUID LINES

Install the provided light ports using the 5/16" hardware. At this point the corner lights will need to be installed. Use the connects and plug to attach the OEM turn lights portion of the harness to the new lights. Connect them together after everything is installed as wires may not normally match per color.

Reinstall the headlight washers into the new bumper using the reverse of STEP 7 - reattach all washer lines so as not to interfer with mounting points





Front Bumper Hardware

5/16"-18 X 3/4" Hex Cap Bolt 4

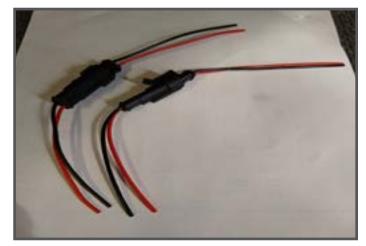
5/16" USS Washer 4

5/16"-18 Clip Nut Attached to the Bumper

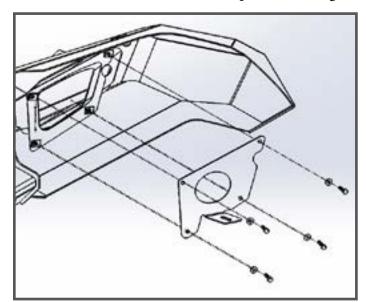
#### MOUNTING AFTERMARKET LIGHTS

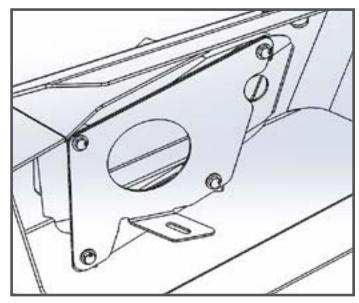
Attach any aftermarket lights to the light ports at this time. Use the provided spacers to raise the light.





Using the provided connectors, attach the corner lights and harnesses together. Repeat for adding to the OEM wiring harness.





Attach the provided clip nuts to the bumper light cutouts.

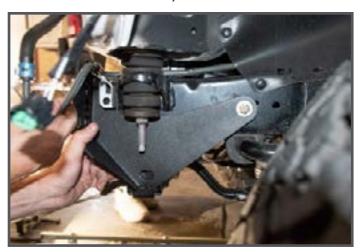
Mount the light bracket using the 5/16" hardeware.

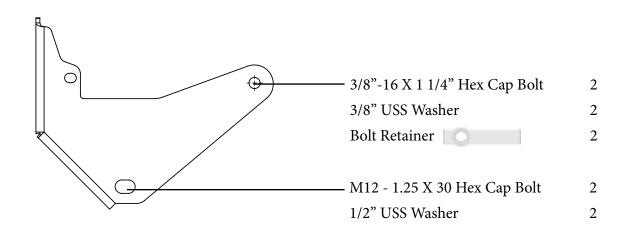
## MOUNTING BRACKETS

### 14 MOUNTING BRACKETS TO FRAME

Mount the brackets as shown to the sides of the frame. The bracket will mount at the top hole using the provided bolt retainer and 3/8" hardware. The hole at the bottom of the bracket will mount to the OEM hole using the provided M12 hardware. Leave all hardware loose for adjustment.



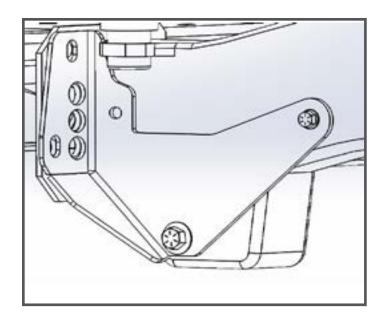


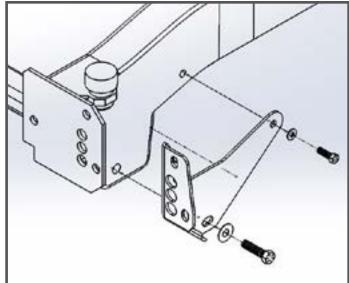


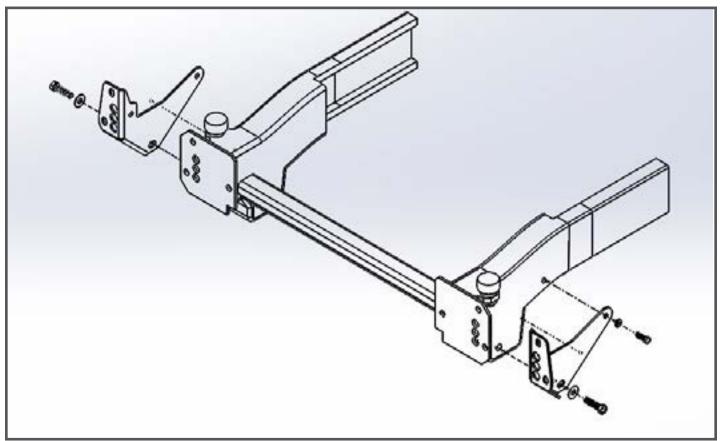
#### NOTES ABOUT 3/8" HARDWARE LOCATION

If equipped with KDSS, the passsenger side will not use this location due to frame changes.

The driver side may have a cover in this location that will need to be removed.







## 15 MOUNTING BRACKETS

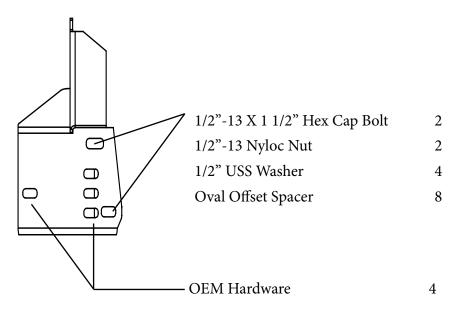
Mount the brackets as shown to. The bracket holes will align and mount in the center positions using the OEM hardware from the original cross memeber. Use the provided 1/2" hardware for both the top and the bottom side hole locations. Spacers are provided for adjusting the bracket. The hose may need to be moved out of the way for mounting. Leave all hardware loose for adjustment.

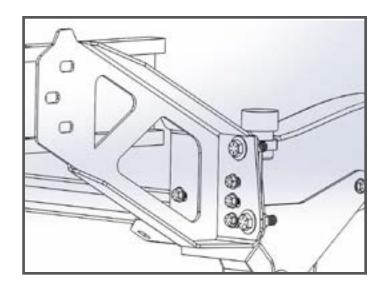


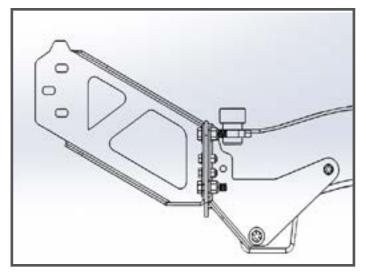


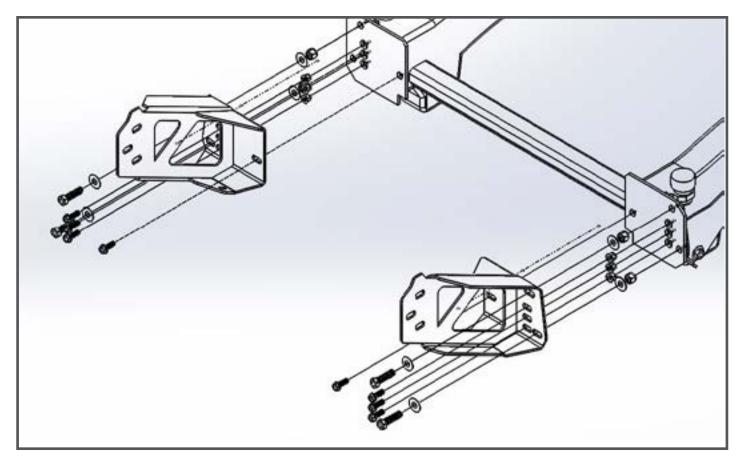












# **BUMPER INSTALLATION**

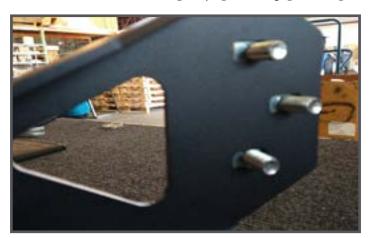
## 16 OEM BUMPER MOUNTING

Reattach the oem bumper and mount using the original hardware from step 3. Mask the edges with tape to protect them when placing the new bumper into place.

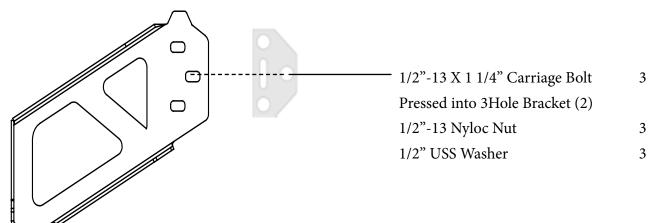


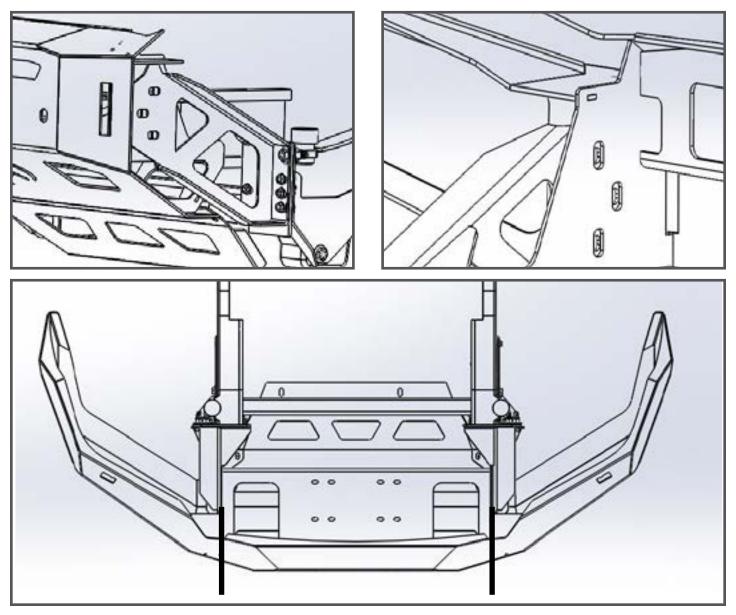
### 17 BUMPER MOUNTING

Mount the bumper by tilting in slighty downward angle, tilting it up into place. Mount using the provided 3 Hole bracket with carriage bolts and 1/2" hardware. Once complete align and center the bumper with the vehicle. Even and equally space all gaps and spaces with the vehicle. <u>Tighten all hardware.</u>





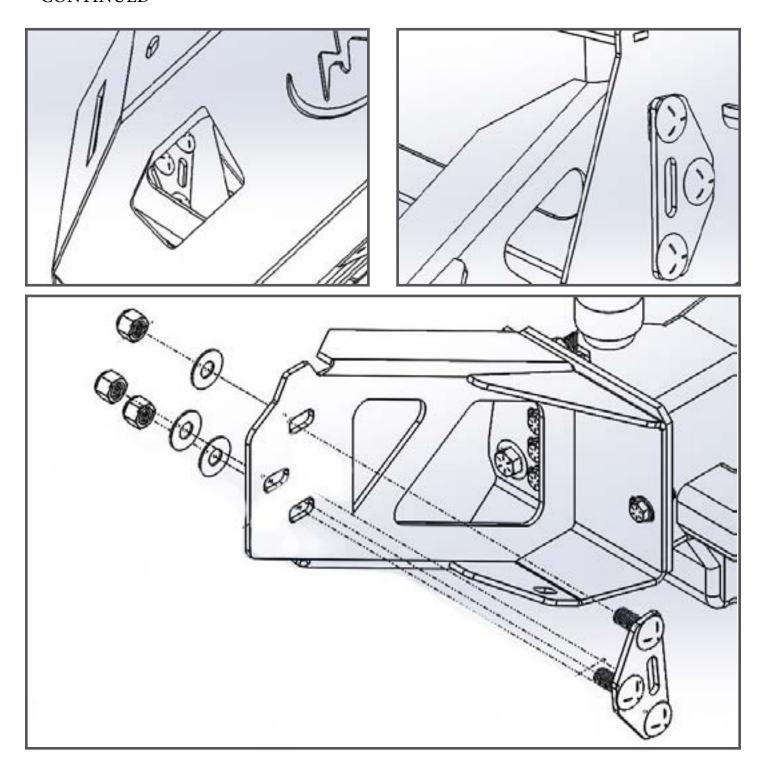




The brackets will sit on the outside of the bumper frame.

#### **MOUNTING NOTES**

When mounting the bumper the grill and winch hardware if applicable may require being held out of the way or mounted loosely to fit the bumper if running a hoop or bullbar due to its shape.



## 18 CONNECT WIRING AND WASHER FLUID LINES

Reconnect the parking sensors and wiring harness to the vehicles electronics. Reattach all washer fluid line connections. Test both to make sure they are functioning before driving.

## 19 SKID PLATE INSTALLATION

Mount the skid plate as shown underneath the bumper using the hardaware as shown.



