



## **PART # JT0020**

### **JT HIGH CLEARANCE REAR BUMPER**



#### **ESTIMATED INSTALLATION TIME**

**1-2 hours**

#### **REQUIRED SKILLS**

- General Mechanics Skills

#### **REQUIRED TOOLS & SUPPLIES**

- 21mm Socket
- 15mm Socket
- 13mm Socket
- 18mm wrench
- 15mm wrench
- Ratchet
- 3/16 inch allen wrench

#### **NOTES:**

- Component appearance in instructions may vary from those received

## WARNING MESSAGES

This product demands a basic understanding of mechanical procedures and should only be installed by individuals proficient with mechanic's tools. Any tasks involving welding or cutting parts should be performed by trained professionals. Artec Industries disclaims responsibility for mishaps arising from improper installation, or any damage or accidents resulting from cutting or welding tasks. Exercise caution and seek professional help as required.

## SAFETY

1. We've furnished a written installation guide, along with relevant details, to aid you in making safety-conscious decisions.
2. While these guidelines will highlight potential risks, it's crucial to exercise your personal judgment when performing any required steps.
3. Before initiating any tasks, it's essential to conduct a job safety analysis to identify specific hazards in your situation and take measures to eliminate or protect against them.
4. Before commencing the installation of this product, make sure you familiarize yourself with and fully understand all safety warnings and guidelines.

## DISCLAIMERS

All Artec Industries products should be installed by a competent, certified individual following the intended installation instructions for each product. Incorrect installations not only nullify any warranties but could also lead to product damage or even damage to the vehicle it's installed on. Prior to installation, carefully read all provided instructions or manuals, and watch any associated videos. For any doubts or queries, reach out to Artec Industries before beginning the installation process.

Many products necessitate lifting and supporting the vehicle off the ground. It is the installer's responsibility to ensure this can be done safely and that the right equipment is at hand to carry out the installation. Artec Industries installation instructions presume the installer is competent to lift the vehicle safely and correctly.

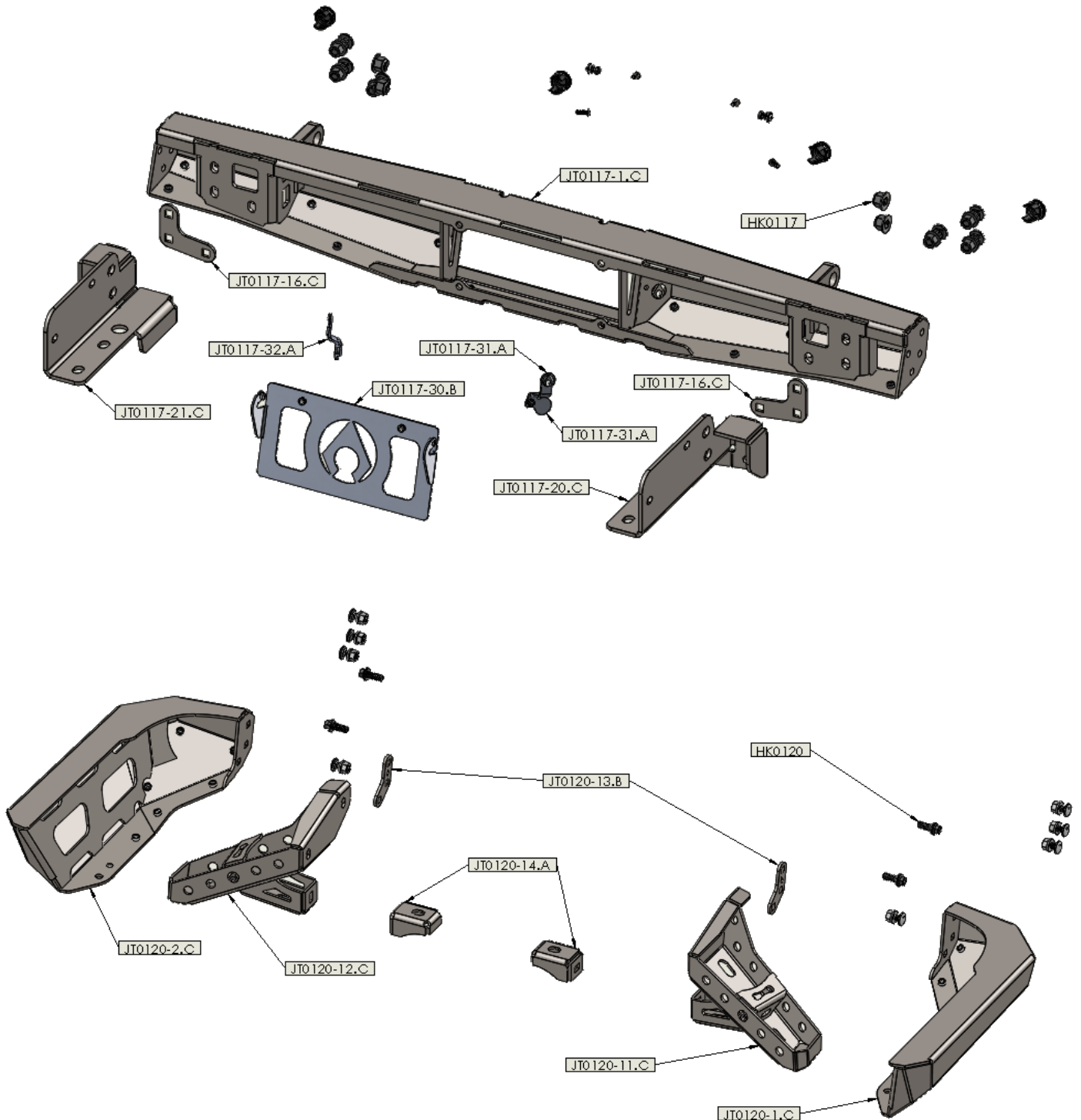
Modified vehicles won't perform identically to their stock counterparts. It's incumbent upon the vehicle owner to understand the alterations such modifications will bring to the vehicle's driving dynamics. These might encompass (but aren't limited to): changes in handling, braking, rollover angle, and potential incompatibilities with the factory-installed anti-lock braking systems, stability control systems, or traction control systems.

## SPECIAL NOTES

- Unless otherwise noted, all hardware should be **LOOSELY** tightened by hand until the very end of installation when all components are attached.

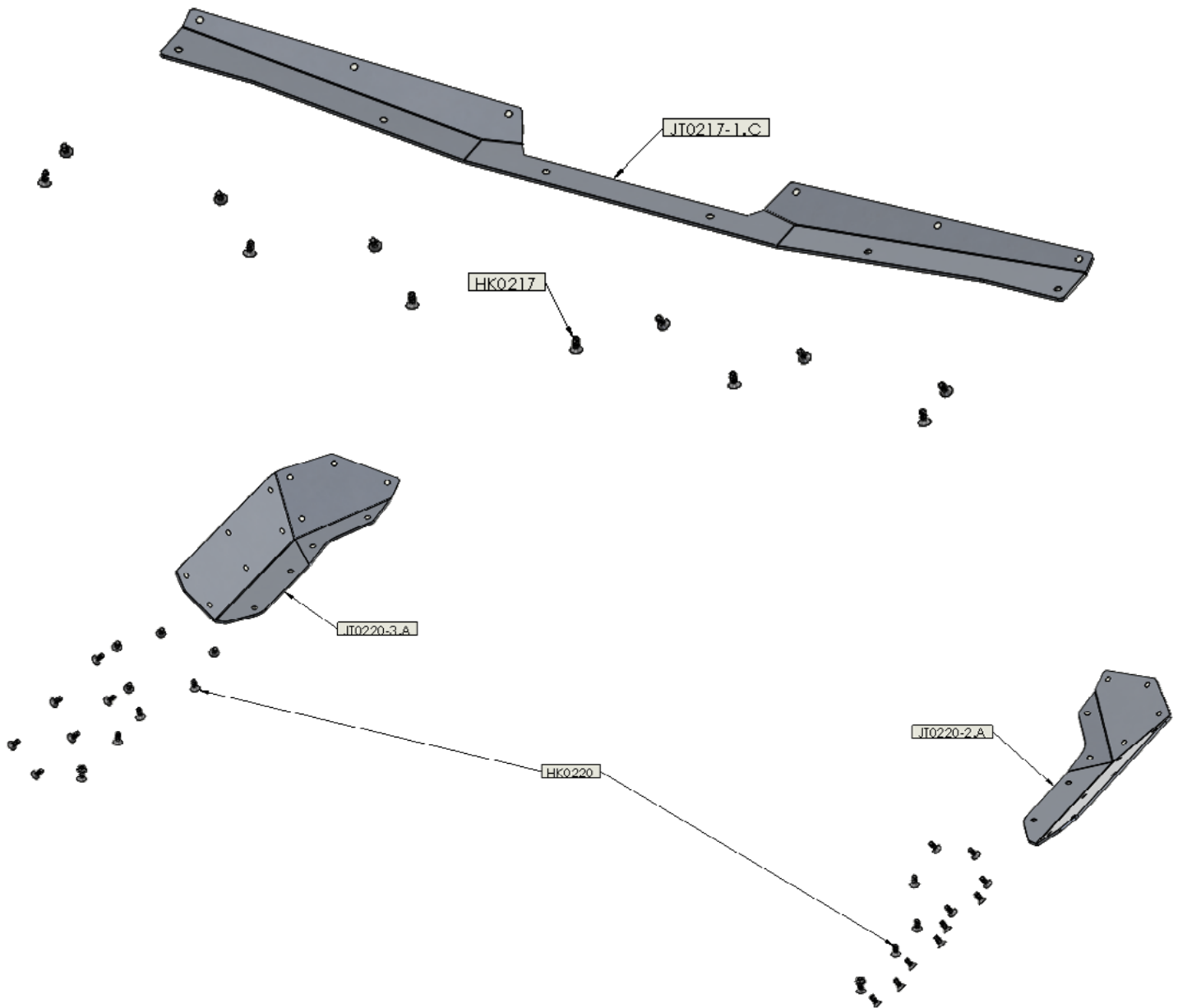
## JT0020 PARTS BILL OF MATERIALS

Please confirm you have all the listed parts below **BEFORE** beginning your installation. If any parts are damaged or missing, **KEEP ALL ORIGINAL BOXES and PACKAGING** and contact us.



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### HK0117 & HKS117

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HW0234	M12-1.75mm Steel Flange Nut - MAGNI 565 COATING	6
2	HW0244	M12-1.75x35mm Steel Carriage Bolt - MAGNI 565 COATING	6
3	HW0245	M12 Steel Push Nut/Washer - MAGNI 565 COATING	6
4	HW0251	M14-2.0mm Steel Flange Nut - MAGNI 565 COATING	4
5	HW0062	1/4"-20 x 3/4 Button Head Socket Cap Screw Zinc Plated	4
6	JL5501-6	Sensor Spacer for JL Nighthawk Rear Bumper	4
7	HW0102	O-Ring 1.0625" ID 0.0625" Width	4
8	HW0103	Plastic Plugs for Panels with Snap-in Ring 3/4" ID	4
9	HW0217	1/4" UHMW Plastic Washer, WHITE	2
10	HW0092	1/4"-20 x 1/2" Button Head Socket Cap Screw Zinc Plated	2
11	HW0087	1/4" Standard Flat Washer Clear Zinc	2
12	HW0252	1/4-20 RH THIN JAM NUT - CLEAR ZINC COATING	2

### HK0120

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HW0243	M10-1.5x25mm Steel Carriage Bolt - MAGNI 565 COATING	8
2	HW0233	M10 x 1.5mm Steel Flange Nut - MAGNI 565 COATING	8
3	HW0229	3/8 SAE Flat Washer - MAGNI 565 COATING	4
4	HW0238	M10-1.25x30mm MAGNI 565 Flanged Hex Head Screw	4
5	HW0256	5/16 -18 x 1in Counter Sink Allen Head Bolt - MAGNI 565 COATING	2
6	HW0255	5/16-18 Thread Locking Flange Nut - MAGNI 565 COATING	2

### HK0217

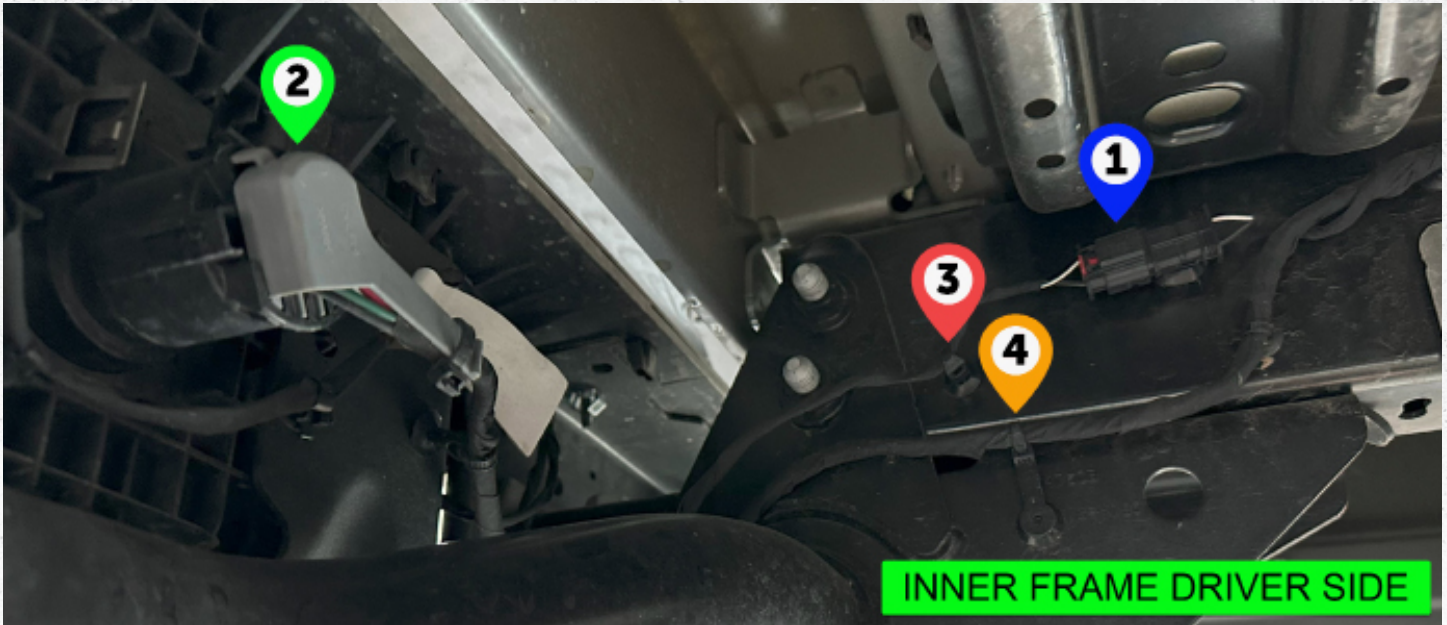
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HW0230	5/16 -18 x .75in Counter Sink Allen Head Bolt - MAGNI 565 COATING	12

### HK0220

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HW0230	5/16 -18 x .75in Counter Sink Allen Head Bolt - MAGNI 565 COATING	26
2	HW0256	5/16 -18 x 1in Counter Sink Allen Head Bolt - MAGNI 565 COATING	2
3	HW0255	5/16-18 Thread Locking Flange Nut - MAGNI 565 COATING	2

**NOTE:** The part numbers indicated above end in a "." and "letter" which indicate the revision number for the part. The etched part number on your physical parts do not need to match the above drawing revision exactly.

## DISASSEMBLY INSTRUCTIONAL GUIDE



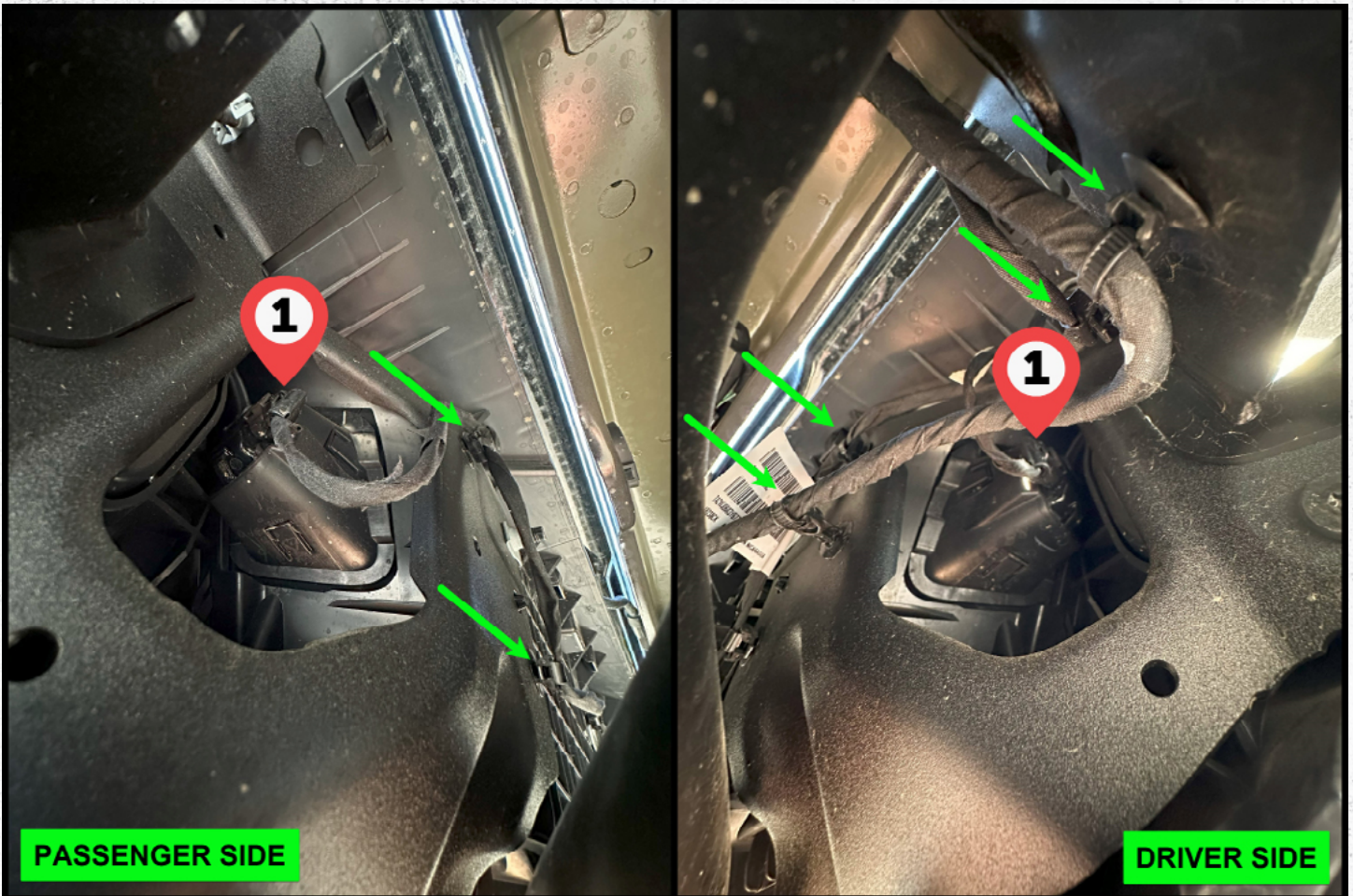
Step 1:

Before any mechanical disassembly, you will need to disconnect the wiring from the bumper. This will include the trailer plug assembly, license plate lights (x2) and reverse sensor lights IF you have them. In this guide we cover the license plate lights and trailer plug assemblies.

A. Disconnect the 1 license plate light plug and then cut the zip-tie clips 3 and any ties from there to the bumper.

B. Disconnect the 2 trailer tow connector from the bumper and cut the zip-tie clips 4 and any ties from there to the bumper. Do not remove this connector but coil and zip tie it up and out of way.

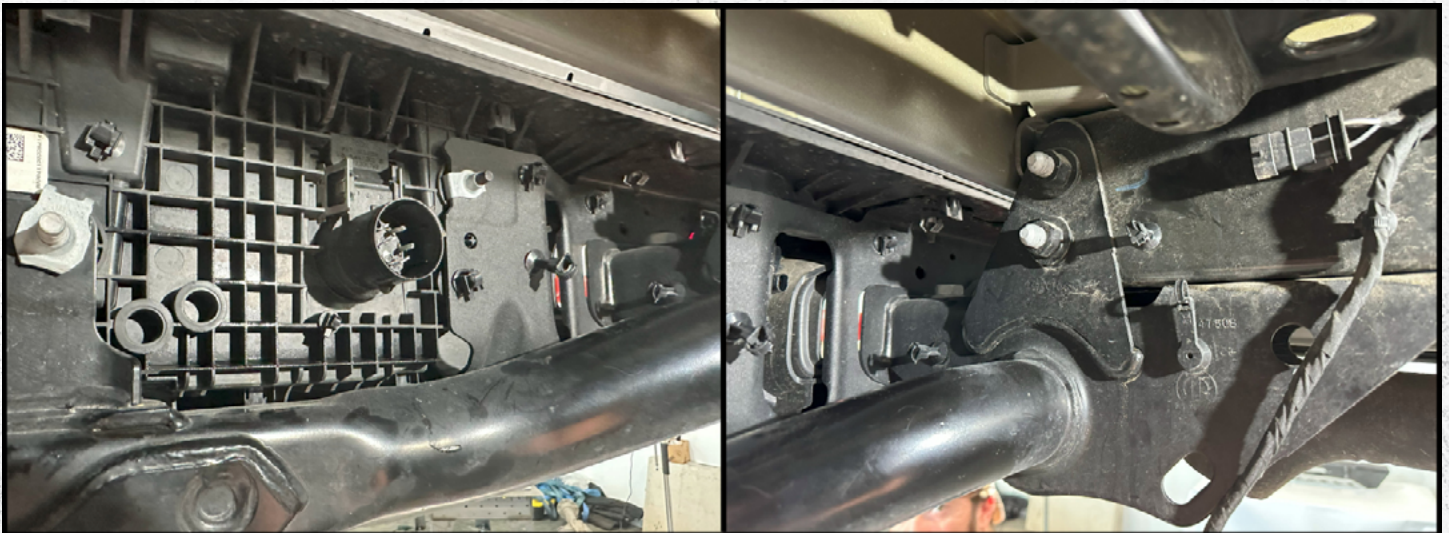
**NOTE: Be careful not to damage any of the wiring during disassembly as you will be reusing it during reassembly.**



Step 2A:

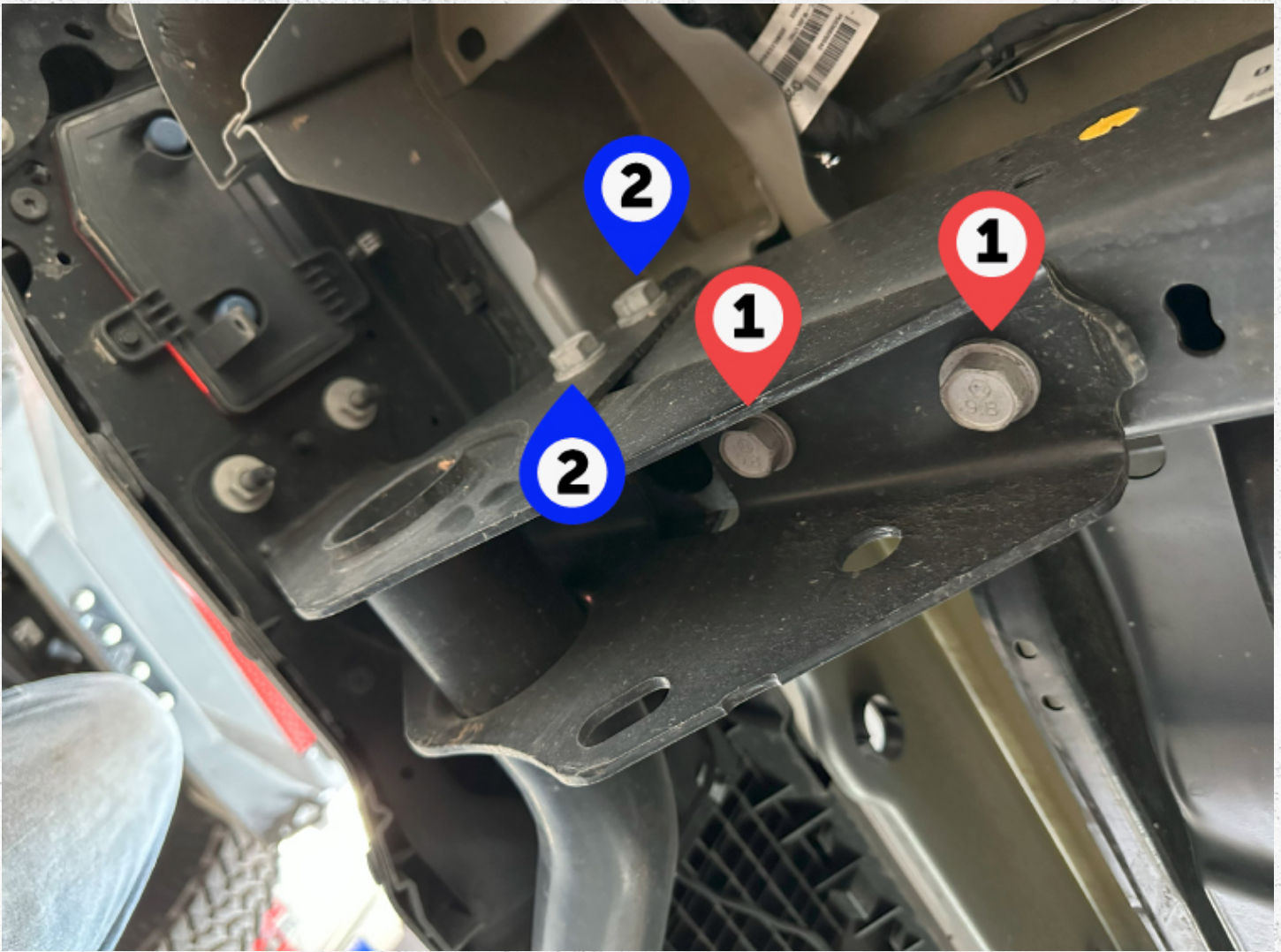
Disconnect the wiring from the 1 2 - license plate lights and clip ALL the zip-ties holding the wiring to the bumper **GREEN ARROWS**.

**NOTE: Keep this harness. It will be used on the new bumper with different routing.**



Step 2B:

Once you have removed the wiring you are now ready to move onto the mechanical disassembly.



**Step 3:**

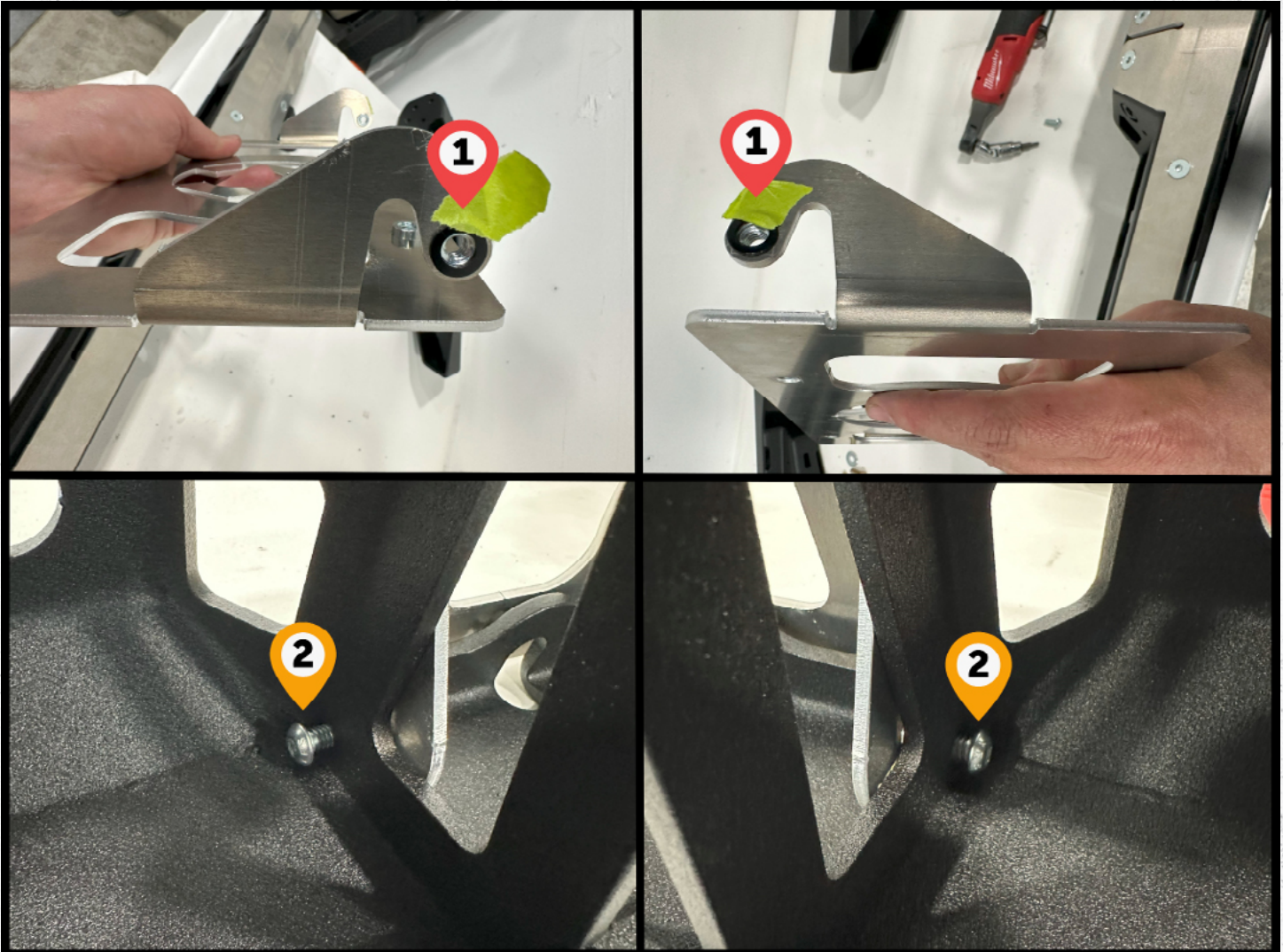
A. To disassemble the receiver hitch from the frame begin by removing 4 - M14 bolts **1** using a 21mm socket from both frame locations.

B. After removing the bolts from location **1**, **UNTHREAD** but do not remove the 4 - M14 bolts **2** using a 21mm socket. Support the hitch and then remove the bolts from location **2**. This will free the hitch completely.

NOTE: unlike the factory bumper, the receiver hitch has some weight to it. You may want a second set of hands supporting the hitch when disassembling it.



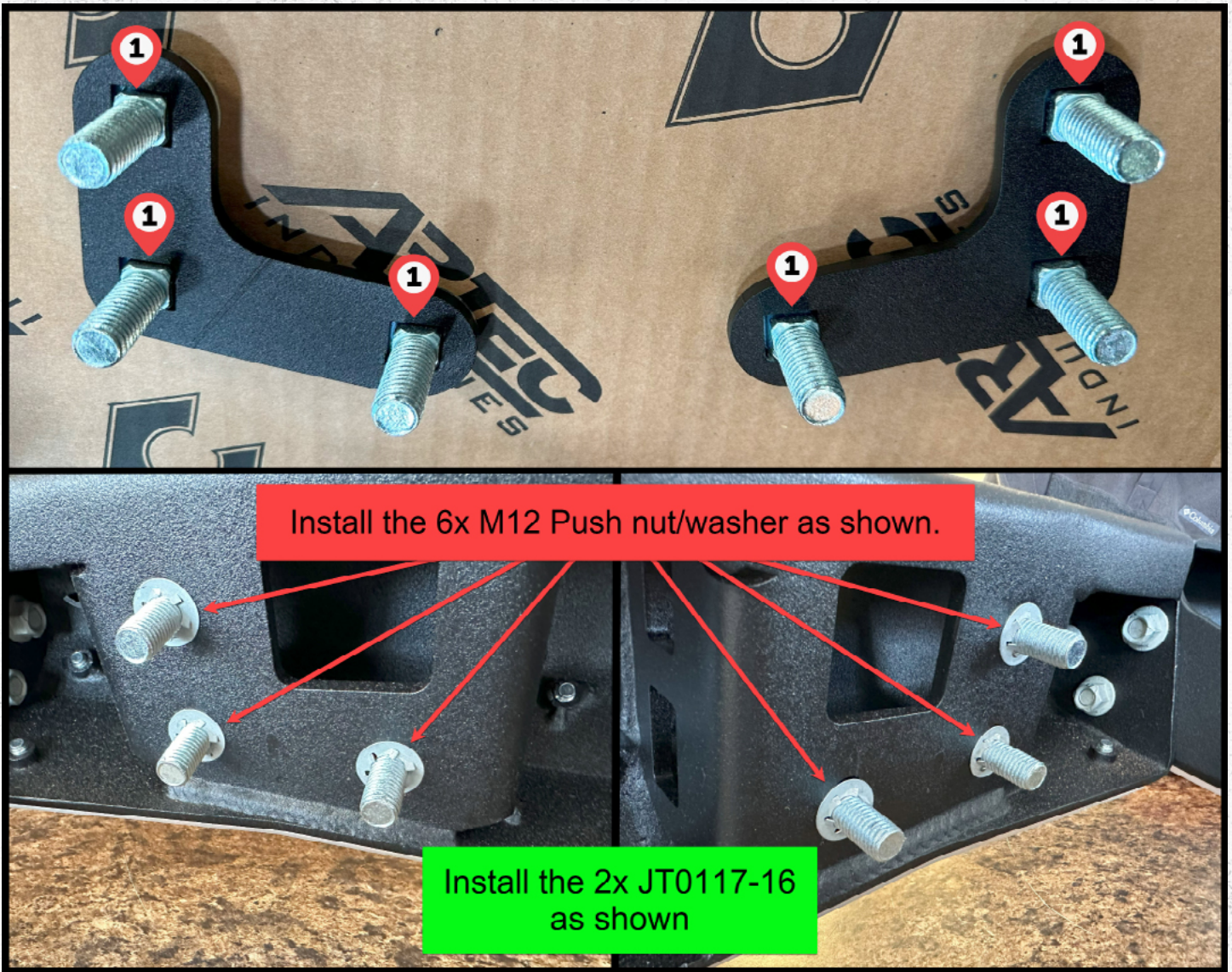
## ASSEMBLY INSTRUCTIONAL GUIDE



### Step 4:

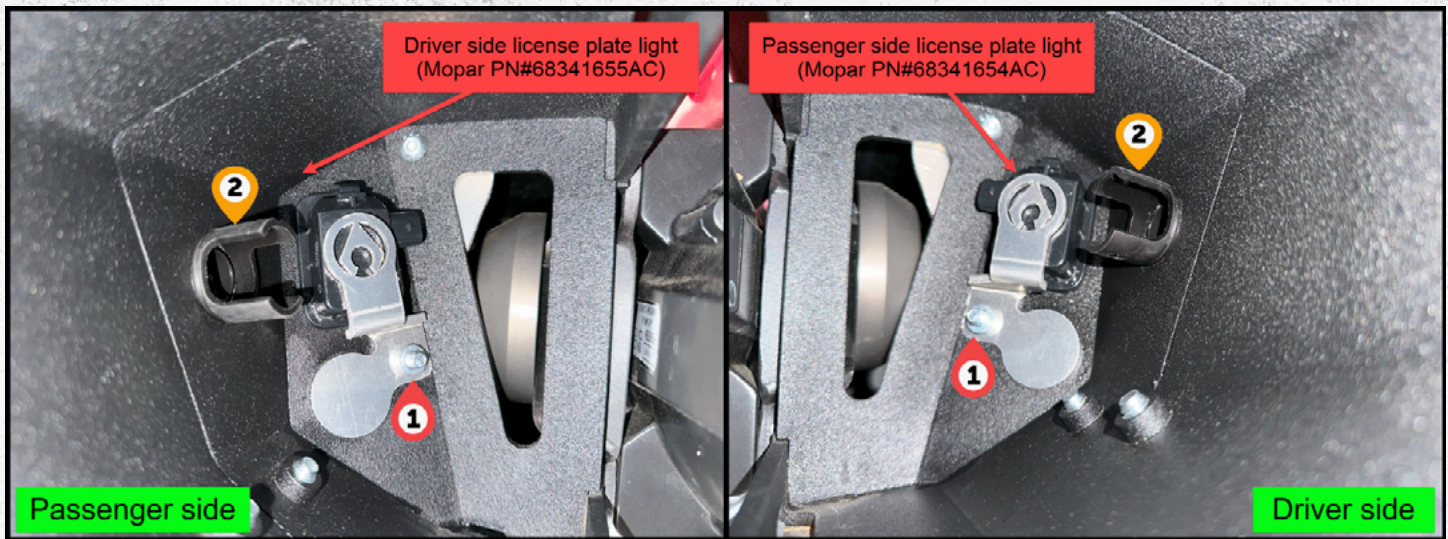
Insert the license plate holder into the bumper.

Using a 3/16" Allen wrench, assemble the license plate holder to the bumper with 2 - 1/4 x 1/2" button head screw **2** and 1/4" zinc plated washers. Adjust the screw to your desired tension. Then attach and tighten the 1/4" nut, post pem nut. **(Washers not shown above)**



Step 5.

A: Insert 3 - M12 x 35mm carriage bolts **RED 1** into each **JT0117-16** bracket. Place the bracket inside the bumper as shown above. Once inserted with the carriage bolts through the bumper, attach the M12 push nut washers.



Step 6.

**A: THIS BUMPER UTILIZES THE STOCK LICENSE PLATE LIGHTS.**

Plugging the cable in beforehand (not shown above) insert the license plate lights into the correct locations; Passenger side light 68341654AC into the driver side bumper location, (Driver side light 68341655AC into the passenger side bumper location). Once placed retain the light with **JT0117-31** (**JT0117-32** for driver side location) and 1- 1/4 x 3/4" button-head screw **RED 1** using a 3/16" Allen wrench. Verify fit and then tighten them.

B: If you have the reverse sensors, install them into the appropriate bumper locations using **JL5501-6** plastic inserts **ORANGE 2** to seat them. If you do not have the reverse sensors use **HW0103** to cap the sensor inserts.

**NOTE: temporarily zip-tie the license plate wire harness to the bumper. It will keep this from interfering with the install later.**



Step 7.

A: Place the corner pods into the orientation above.

B: Align the corner pod up with the center bumper section.

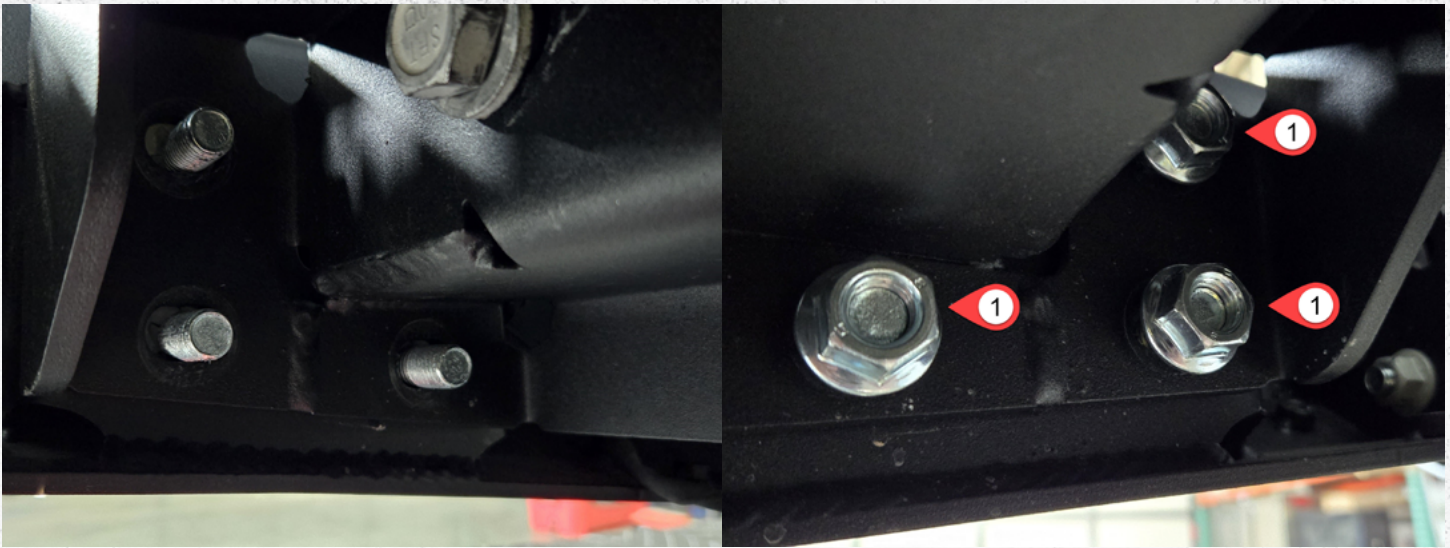
C: Insert the carriage bolts into the JT0120-13 plate, then assemble them **ARROW DOWN**, in this orientation. Hand tighten the flange nuts.

D: Holding the center bumper and the corner pods down tight to the flat surface, tighten the flange nuts.



Step 8.

Install bracket **JT0117-20 & JT0117-21** into place as shown above and loosely install the factory hardware as shown.



Step 9.

Move the bumper **JT0117-1** onto the frame mounted brackets **JT0117-20 & JT0117-21** and loosely place the six flange nuts into place.



Step 10.

Install bracket **JT0120-11 driver side & JT0120-12 passenger side** loosely into position over the corner-pods and aligned with the frame-side brackets **JT0117-20 & JT0117-21**

**Note: Before any bolts are tightened be sure to use a tape measure and adjust the bumper to its final position. When tightening the bolts the bumper will move upwards and inwards. Repeat this process until the bumper is in the position you prefer.**

**If you are having trouble or have any questions about this phase of the install, please us at**



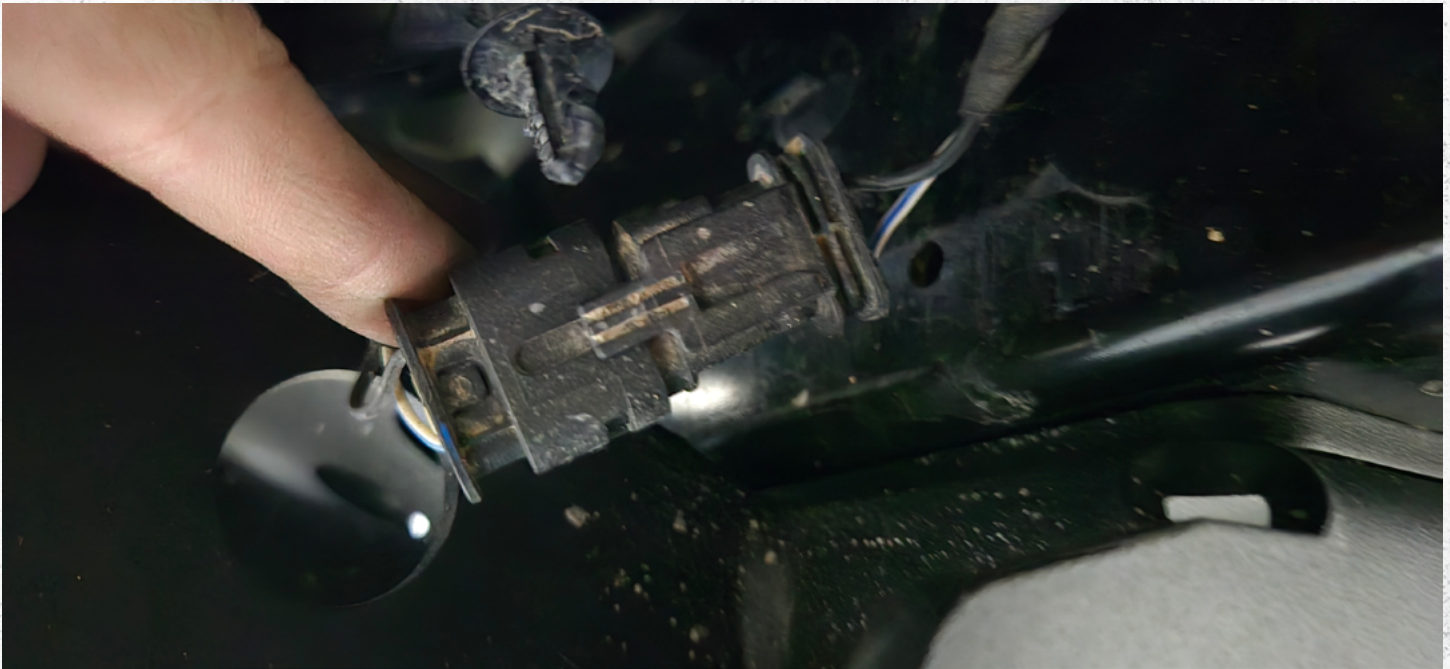
Step 11.  
Install the aluminum bumper  
skids loosely using the 1.5in  
countersunk bolts.

Step 12. Verify fitment and  
All countersunk bolts.



Step 13.

With the bumper fully assembled and in the correct position centered in the vehicle, tighten all hardware and re-secure your wiring to the vehicles harness.



**Verify ALL previously installed hardware is tight / torqued to specifications.**



## CONCLUSION

Congratulations on finishing the installation for your Artec Industries High clearance JT rear bumper. Before driving your vehicle, inspect all bolts to ensure they are properly tightened.

If you used a vehicle lift, take proper care to ensure you lower your vehicle safely.

Now take your vehicle out and enjoy the outdoors in confidence.

## MAINTENANCE / CARE

- After 500 miles, inspect all components and hardware to ensure they are properly fastened.
- If driving during the winter where salt is used on the roads, thoroughly and frequently wash underside of vehicle to prevent salt based corrosion.
- If removal of skid panels is required for vehicle maintenance, and bolts will not loosen, tap the bolt heads with a small sledge hammer using moderate force. This will allow the threads to loosen.
- Spray wax or similar products can be used to create a protective barrier on raw metals to protect against long term corrosion.