Instructions

B6 – Single ARB Compressor Tailgate Mount

Thank you for purchasing your Single ARB Compressor Tailgate Mount from AAL! We greatly appreciate your trust in our company. We take that purchase and your commitment to us very seriously. If you have any questions along the way, please don't hesitate to give us a call at 385.202.4188.

****Please read these instructions thoroughly before starting this project.****

What's Included

Single ARB Compressor Tailgate Mount Parts:

Main Bracket	1
Compressor Nut Plate	2
Connection Kit Bracket	1
Large Nut Plate	1
Small Nut Plate	1
Compressor Height Adjustment Tool	1
6" -4 Braided Steel Hose	1

Single ARB Compressor Tailgate Mount Hardware:

M6x14mm Button Head Bolt	7
M6x20mm Button Head Flange Bolt	6
¼" Fitting Tee	1
Steel female fitting adapter	1
M6 Nylon Lock Nut	7
ARB JIC quick coupler	1
M8x8 Button Head Bolt	1

Part Overview and Prep

First lets review images of all the included parts and hardware to ensure we have everything we need for the installation process.

Dual ARB Compressor Mount Parts:

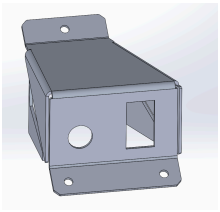
Main Bracket (1):



Compressor Nut Plate (2):



Connection Bracket (1):



Large Nut Plate (1):



Small Nut Plate (1):



6” -4 braided Steel Hose (1):



Compressor Height Adjustment Tool (1):



Single ARB Compressor Tailgate Mount Hardware:

M6x14mm Button Head Bolt	7



M6x20mm Button Head Flange Bolt	6



¼” Fitting Tee	1



Steel Female Fitting Adapter	1



M6 Nylon Lock Nut	7



ARB Quick Coupler	1



M8x8 Button Head Bolt 1



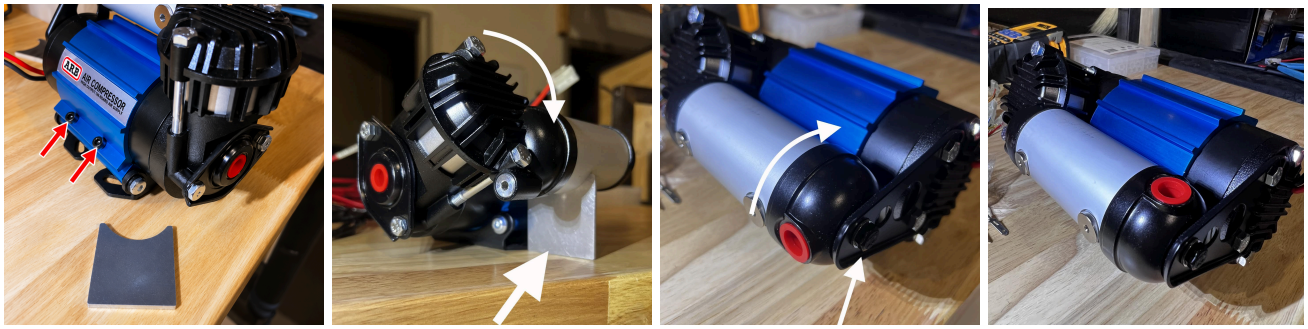
Preassembly Prep

1. **Teardown.**
   Starting with the interior, you'll need to remove the following interior panels,

- Driver side kick panel
- Driver side sill plate
- Lower B pillar panel
- Driver side rear passenger sill plate
- Driver and passenger side rear cargo panel and sill plate.
- Rear gate wiring cover. (release clips from bottom and pull out and down)
- Rear gate cavity cover

2. **Compressor Prep:**
   Before we attach the compressor to the mounting plate, we need to set the clocking of the compressor body to make sure it fits into the tailgate properly.

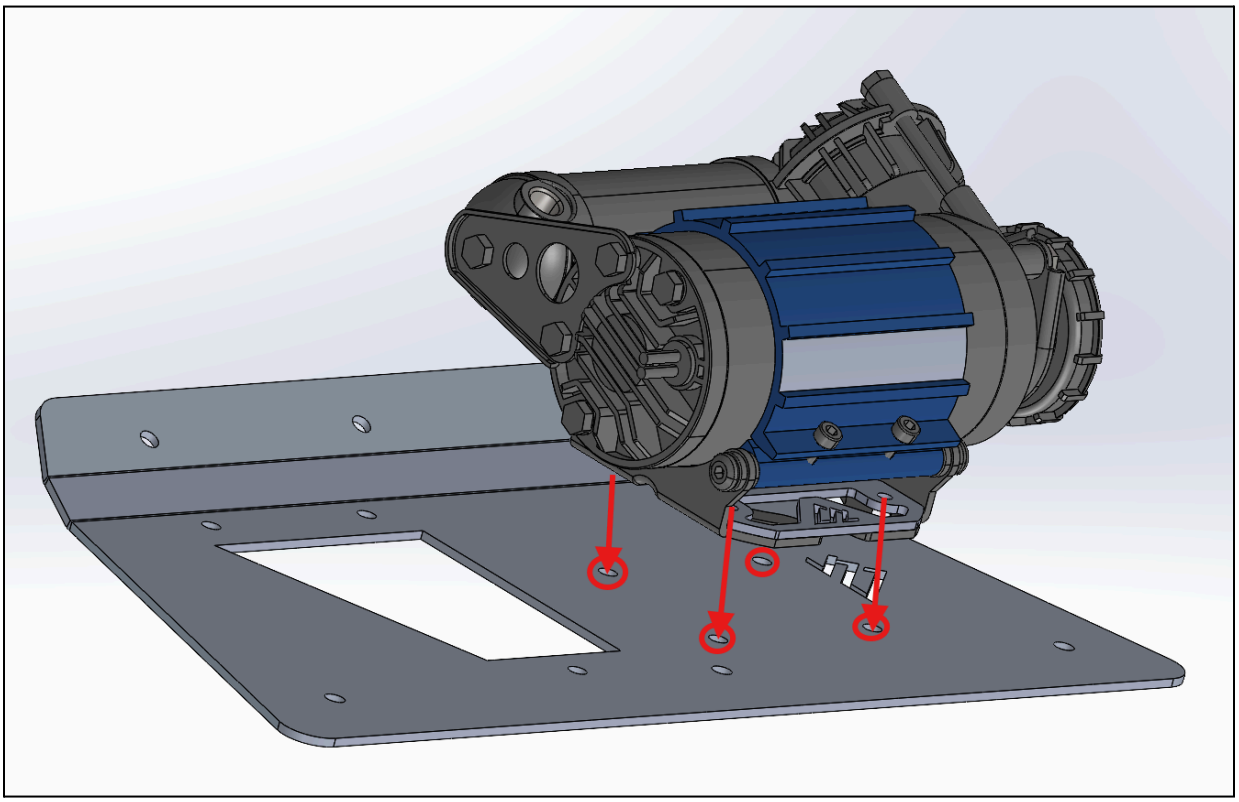
Diagram 1 Diagram 2 Diagram 3 Diagram 4



Loosen, but do not remove the two black socket head bolts on the compressor mount assembly (anodized blue piece). This will allow the compressor to rotate within the mount. Using the Height Adjustment Tool, (Seen in diagrams 1&2) properly set the orientation of the compressor assembly for final assembly. Rotate the compressor so that the tank (silver cylinder with black caps) rests in the cradle of the Height Adjustment Tool and tighten the clamp bolts. **REMOVE** the tool.

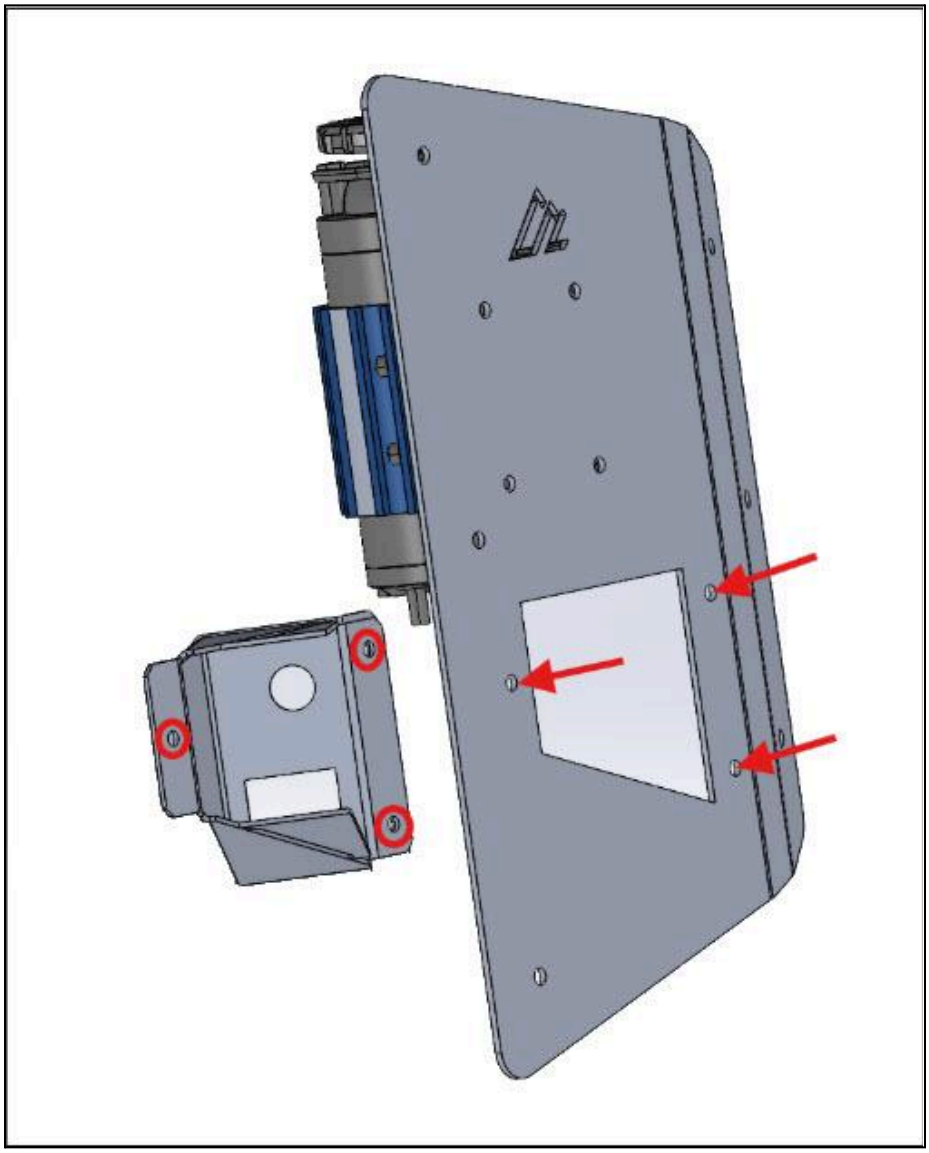
Step 1 – Fasten the Compressor to the Bracket

Using the two Compressor Nut Plates, fasten the compressor to the Main Bracket through the front face of the bracket using (4) M6x14 mm Button Head Bolts in the orientation shown below.

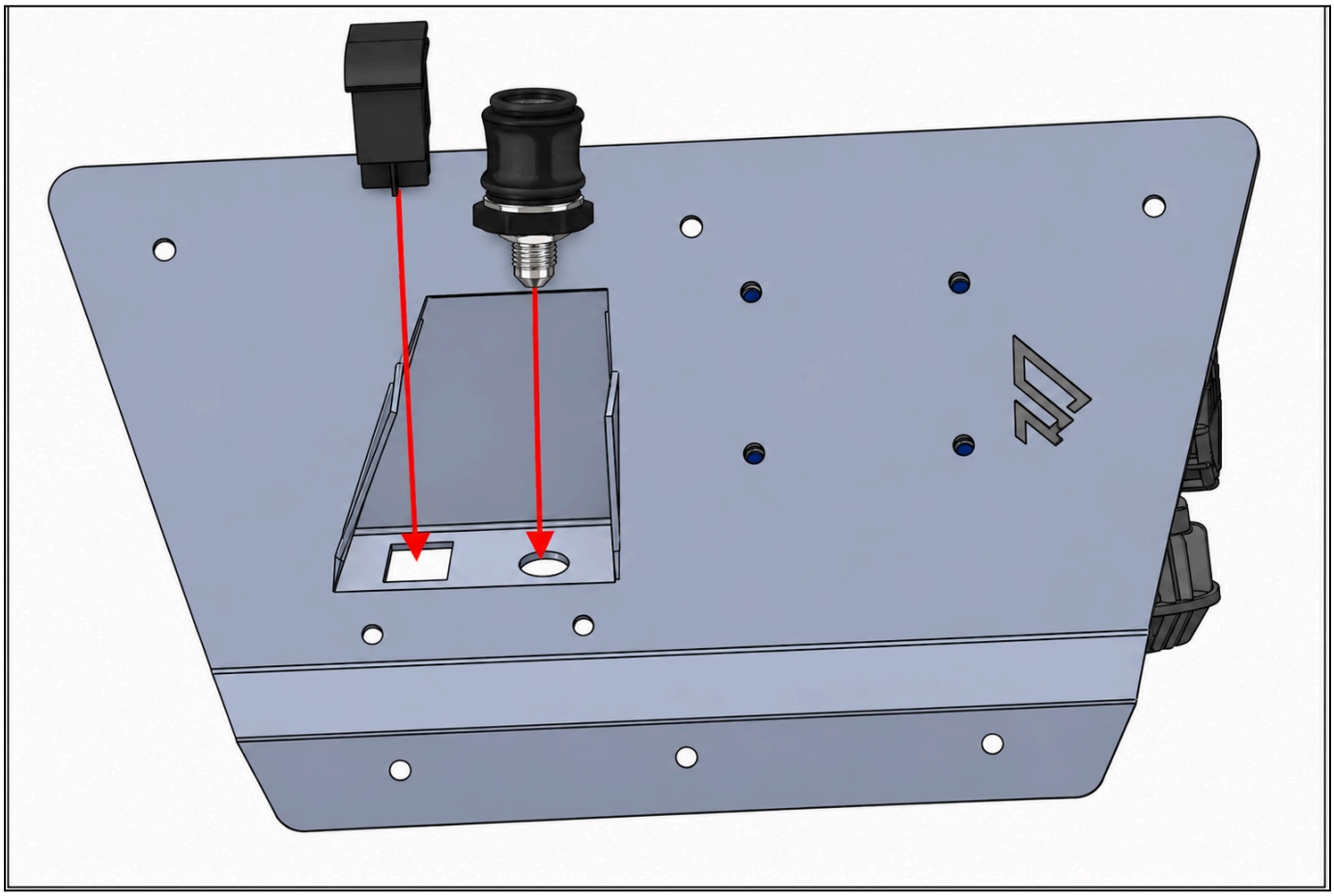


Step 2 - Connection Bracket Assembly

First we need to fasten the connection bracket to the main bracket using (3) M6x14mm Button Head Bolts and M6 Nylock nuts.

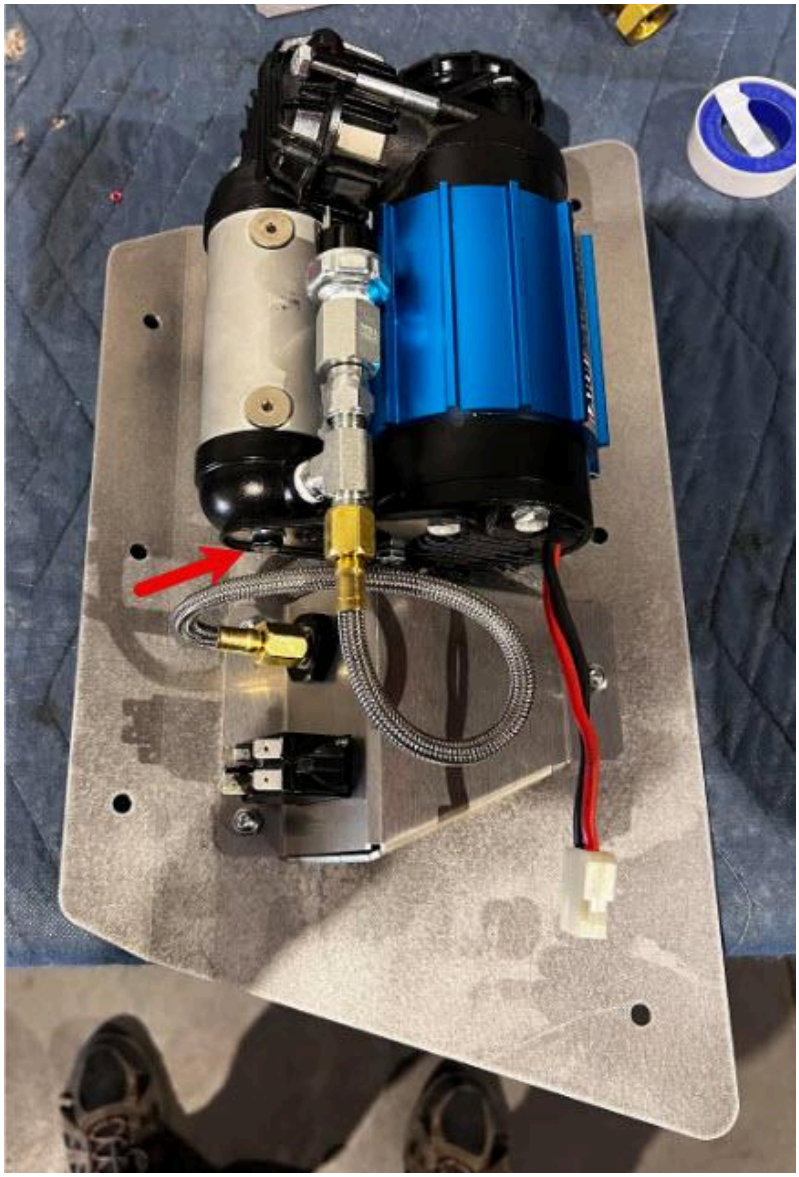


Next, install the ARB coupler and contura switch into the connection bracket as shown below. We recommend using a little medium strength threadlocker on the bulkhead nut.



Step 3 - Plumbing

Diagram 5



For the purpose of installing the airline fittings correctly, the tank will need to be rotated. To do so, loosen the bolt at the bottom of the cylinder but DO NOT remove it. Rotate the black end cap of the tank so that the outlet is pointed up and snug the bolt. Once the fittings are installed we will relocate the tank and tighten. *Shown in diagram 3. Caution: Be careful not to overtighten, the tank caps are aluminium and will crack!*

Apply Teflon Tape to the threads of the "T" fitting, and install it into the outlet of the compressor tank. Orient the "T" to be parallel to the tank when tight. Then, apply teflon tape to the ARB pressure switch and attach it to the JIC adapter fitting. Then attach the adapter to the "T". Tighten all.

At the opposite end of the "T", install the 6" braided hose and tighten. To connect the other end to the ARB coupler, bring the line straight down, loop under itself and into the back of the coupler. **DO NOT KINK THE LINE.** *Shown diagram 5.*

Loosen the tank bolt and rotate it so the fittings nest between the tank and compressor and tighten. *Careful not to overtighten.*

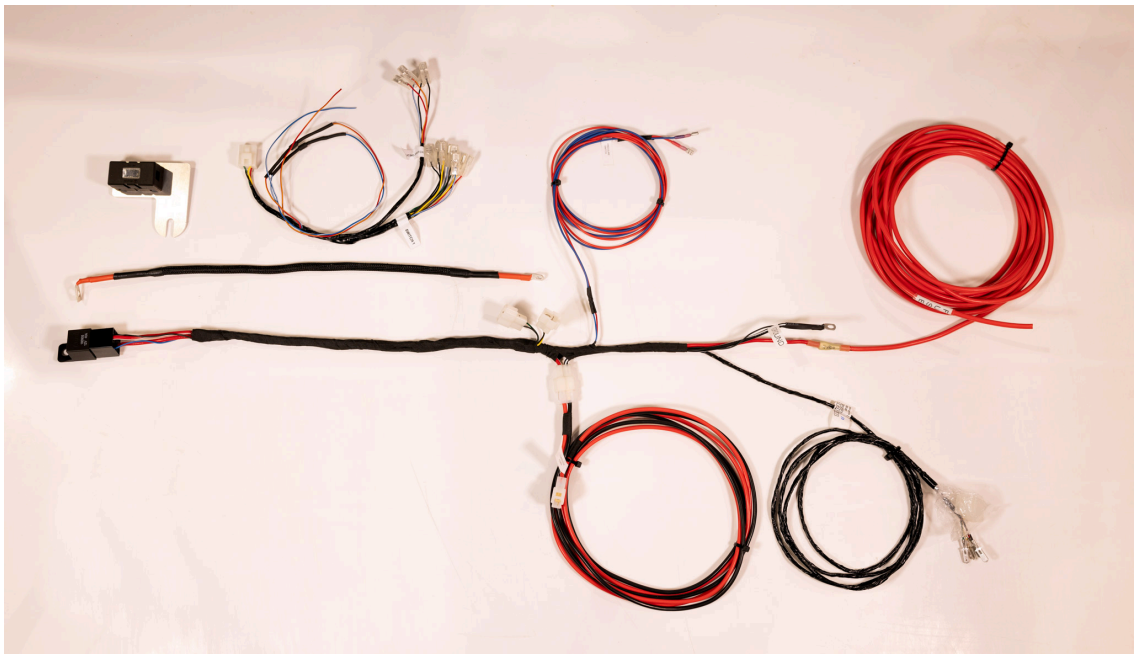
Install the ARB supplied intake filter to the top of the compressor as per ARB's instructions.
Set the assembly aside, it is now time to start the wiring process.

Step 4 - Wiring

If you did not purchase the optional Bronco ARB Dual Wiring Harness, an experienced wiring technician is recommended. The installer should be advised to wire this product in the same fashion as described below.

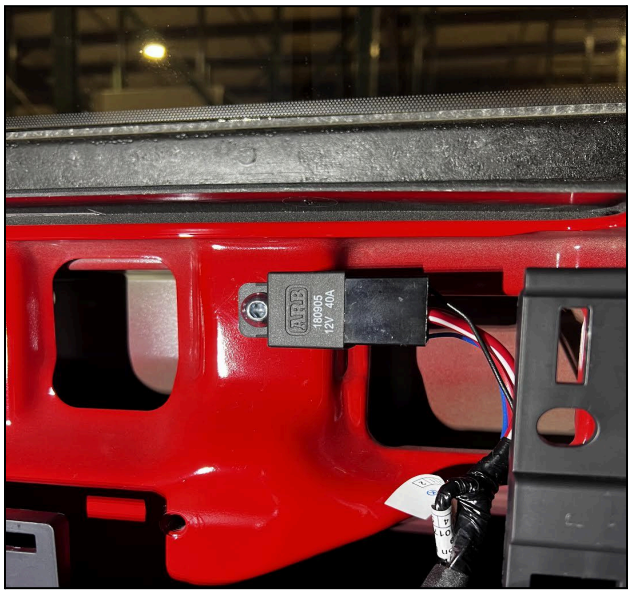
DISCONNECT THE NEGATIVE TERMINAL FROM THE BATTERY BEFORE PROCEEDING

If you did purchase the optional harness, continue as follows. Uncoil and lay flat on a workbench or suitable work surface and familiarize yourself with the layout.



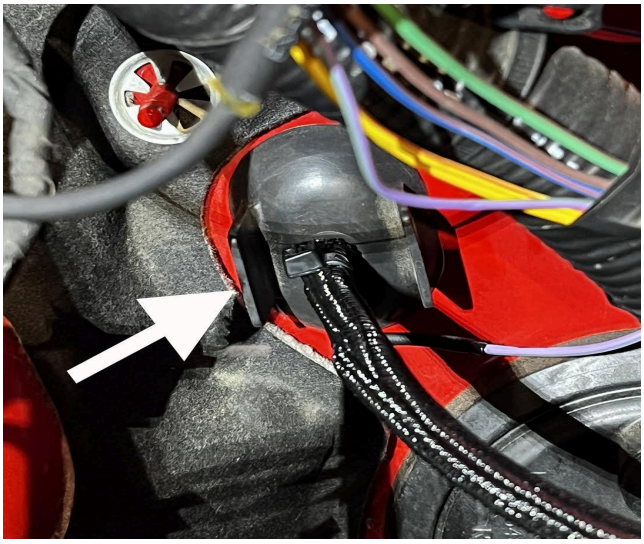
Some connectors have been intentionally left unfinished as these will pass through a wire loom in later steps.

Starting in the passenger rear corner, locate the threaded hole in the metal body panel below the window. *This would have been under the cargo plastic.* With the supplied M8x8 bolt, attach the relay and tighten. *Seen below.* DO NOT OVERTIGHTEN. *Some relay tab holes may need to be enlarged for the M8 bolt.*

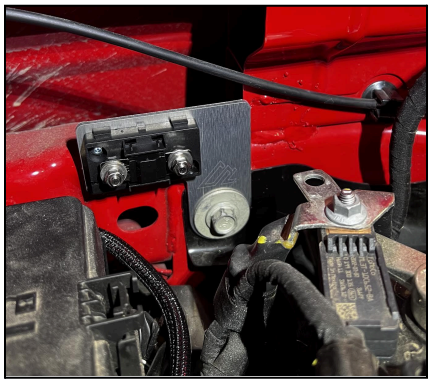


Behind the panel is a factory ground lug attached to the body. Loosen and remove the bolt and add the new ground lug and tighten. DO NOT FORGET TO REINSTALL THE FACTORY GROUND LUG.

Next, take the long, red, 8 ga wire and begin to run it from the rear, along the lower rear cargo area, and along the drivers side behind the previously removed panels and ultimately through the firewall. Locate the oval shaped grommet on the driver side firewall. Make a suitable hole in this grommet to accommodate the red 8 ga wire and from the inside of the vehicle and pass through the firewall. The hole should be snug against the wire when inserted. This will prevent air, fumes and moisture from getting into the cabin.



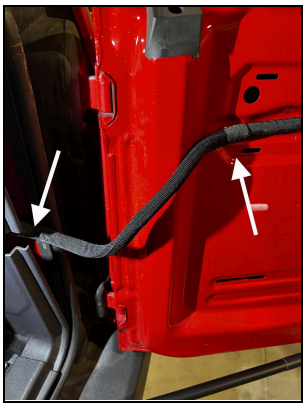
Moving to under the hood. Mount the fuse and mounting plate to the OEM bolt located on the drivers side fender next to the battery. *Shown below.* Simply loosen the bolt enough to slide the mounting bracket behind the washer and tighten. Remove the fuse cover and install the short 8 ga wire to the forward stud on the fuse and the longer 8 ga wire from the firewall to the rear stud on the fuse and tighten. Replace the cover. **Do not connect the battery yet.**



Moving back to the cargo area. The OE harness going from the rear of the vehicle to the tailgate has a cloth wire loom. It has a cloth style TESA tape at both ends. Remove enough of this at both ends to allow access to the loom. *Shown below*.

Installer notes if you didn't purchase our harness:

Place the ARB switch harness inside the cavity where the compressor will be installed. Route 12v source and illumination wires, along with main power and ground wires through the factory loom between the tailgate and body.



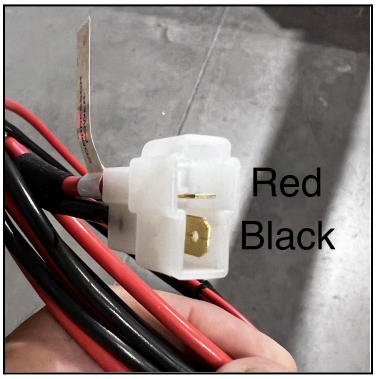
****IF YOU PLAN TO USE THE FACTORY AUX SWITCH FOR "KEY ON" REFER TO THE FORD WIRING DIAGRAM FOR THE PROPER LOCATION, CONNECTION AND INSTALLATION****

Note - The factory power port to which your key on connection was made can stay active for up to 45 minutes after the vehicle has been shut off according to Ford.
Note - Some connectors have been intentionally left off for this next step.

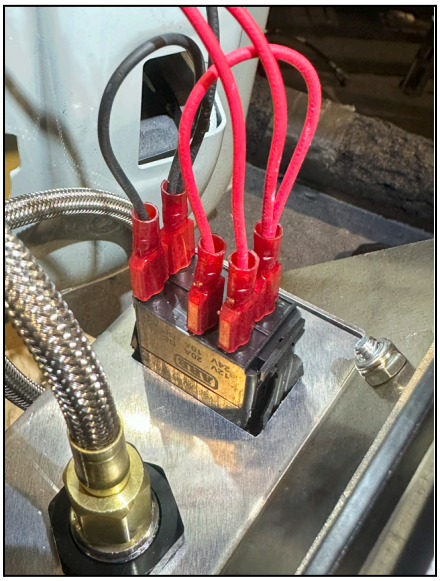
Helpful hint - putting a small amount of electrical tape on the wire pins will prevent snags going through the loom.

Now take the “Compressor Power”, “Pressure switch” and the power switch wires (red & black with the short jumpers) and feed these through the loom following the factory harness and into the gate. These connections will be made later. This will be a snug fit, but all of the wires will fit. A long zip tie or welding filler rod works well, if threaded through the loom and taped to the wires, to help pull the wires through.

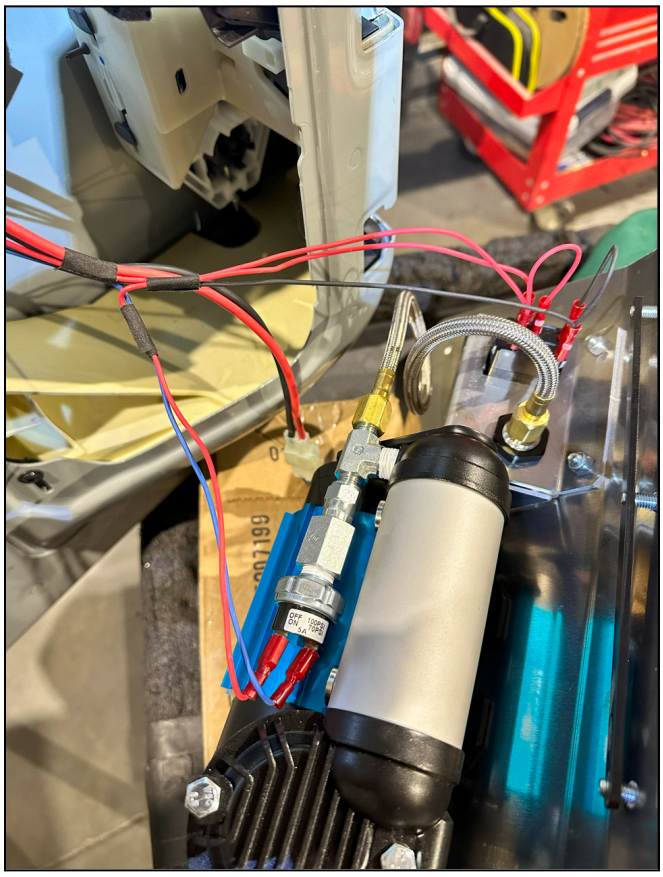
Once these are through, position them where the compressor will be installed and leave enough slack to make your final connections.Take the two wire compressor power harness and insert the pins as follows



We’ll then wire the compressor switch. Take the branch from the bundle of power wires which includes two red wires and one black wire (one red jumper cable, one black jumper cable, one conventional red wire). Orient and connect the wires as shown below.



Next take the red and blue wires from the harness and connect them to the pressure switch. At this point the compressor should appear as shown below.



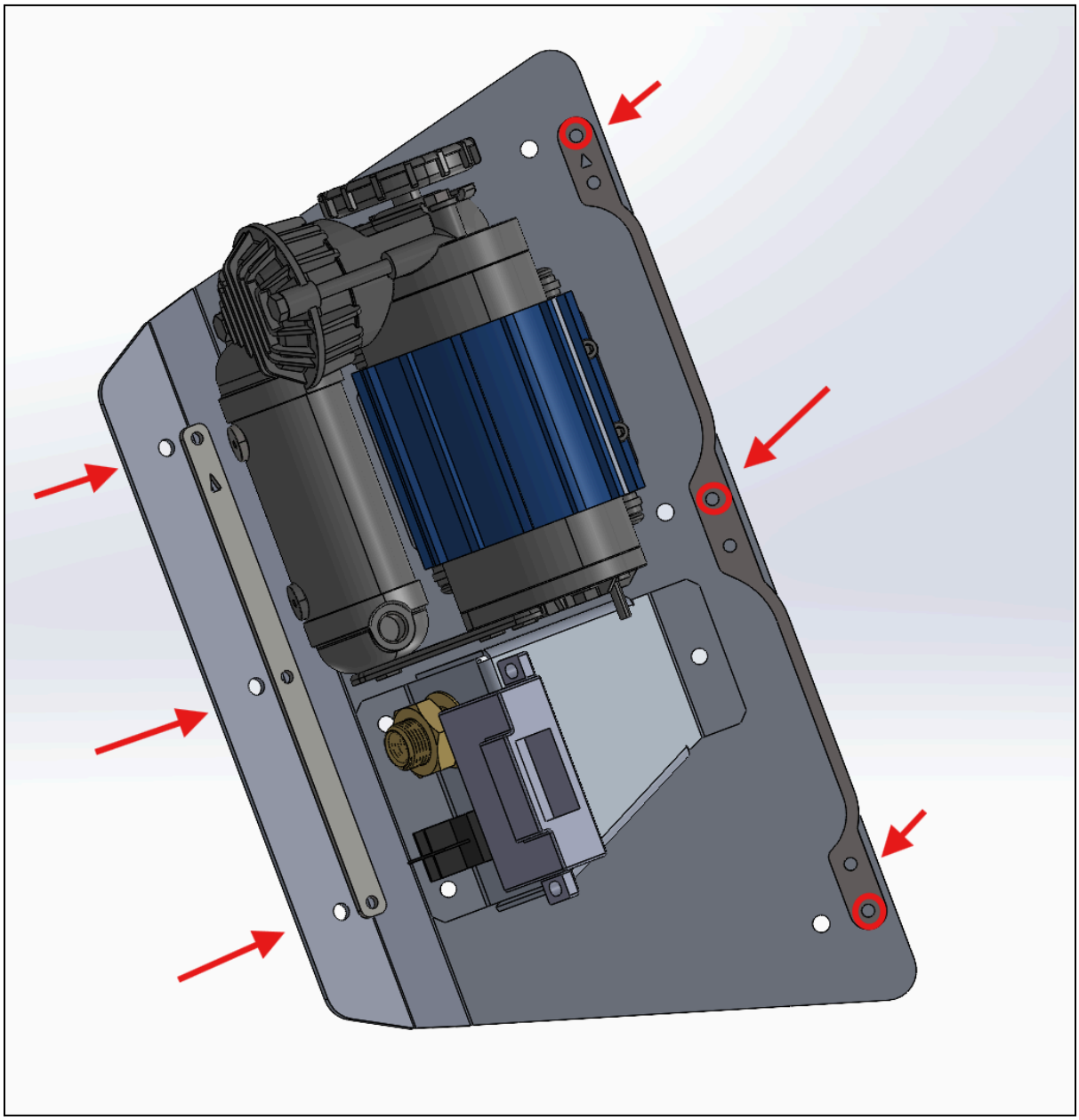
Before installing the compressor assembly into the tailgate, we recommend completing the wiring and test running the compressor to ensure there are no leaks.

Step 5 – Fasten the Assembly to the Tailgate

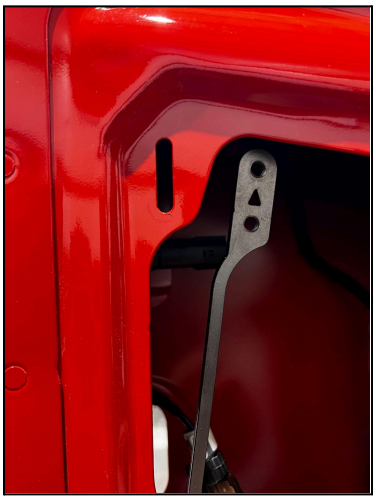
Using the image below, Familiarize yourself with the orientation of the nutplates in relation to the compressor mount assembly. The tailgate will be clamped in between the compressor mount and the nut plates. Note the triangles cut into the nut plates, these should be pointing upward when installed.

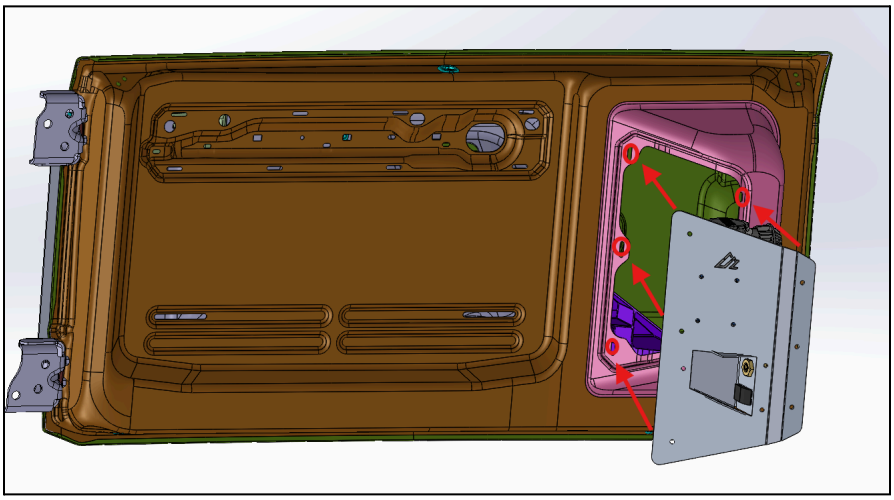
Loosely install (3) M6x20 bolts though the compressor mount and into the shorter nutplate.

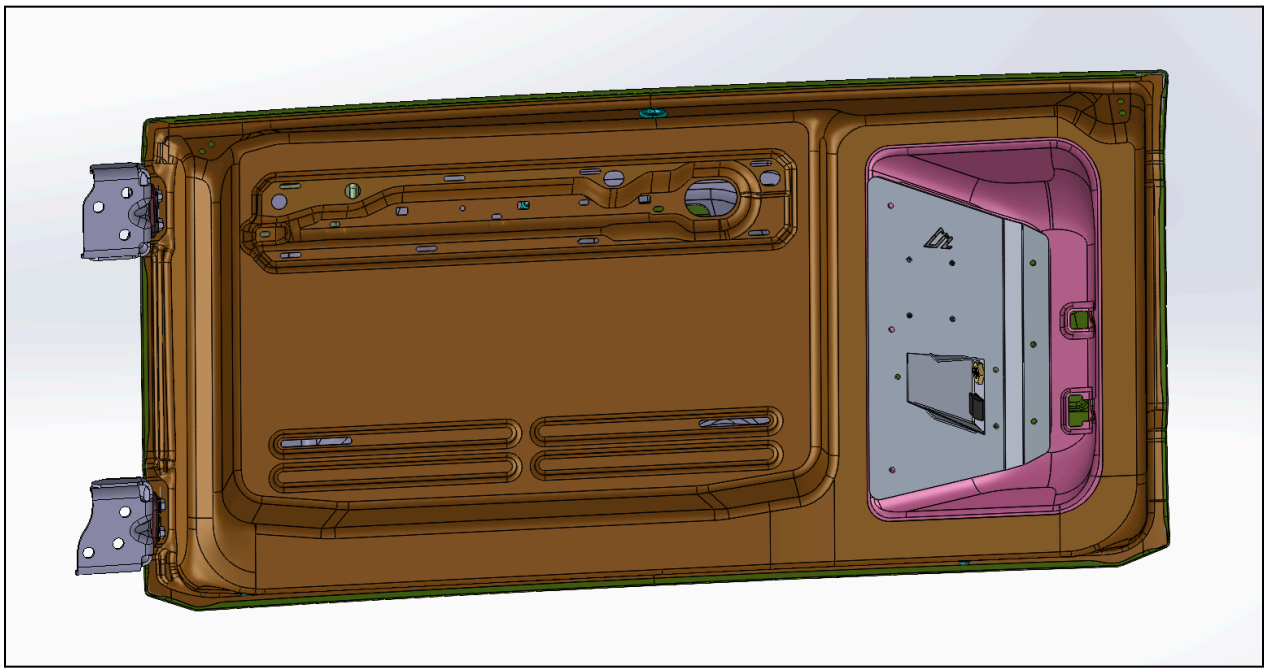
Note: Images show a brass fitting in place of the ARB coupler. Disregard, as this is from a previous design.



Next, put the longer nutplate inside the tailgate and position behind the slots shown below. *Note: Taping the nut plate in place can help a great deal when aligning bolts.*







Finally, after making wiring connections, bring the assembly into the tailgate by tucking the short side nut plate just behind the tailgate sheetmetal. Rotate the long side of the assembly over to the tailgate, and start the remaining (3) M6x20 bolts into the nutplate. Once the compressor assembly is in the tailgate and positioned, tighten the (6) M6x20 button head flange bolts. *Note: We recommend using a medium strength threadlocker on these bolts.*

This completes the installation!

Step 6: Share Your Photos!

We take great pride in building our products and we hope that pride extends to you after installing your [Insert Name of Product]. If you are able to share your photos online (Facebook and Instagram), please tag **@AmericanAdventureLab**. We would love to see how it turned out and give you some reciprocal attention in return!

Thank you!

At American Adventure Lab, we strive to improve anywhere we can. If you experience any issues with this product or have any suggestions, please let us know.

If you have any questions or concerns, please don't hesitate to reach out to us at 385.202.4188 or via email at Support@erp.adventurelab.com.