

Ford Super Duty 2017+ ARB Compressor Installation Instructions



1) Remove OEM Bottle Jack:

Fold down the rear seat and remove the factory jack using a 13mm socket.



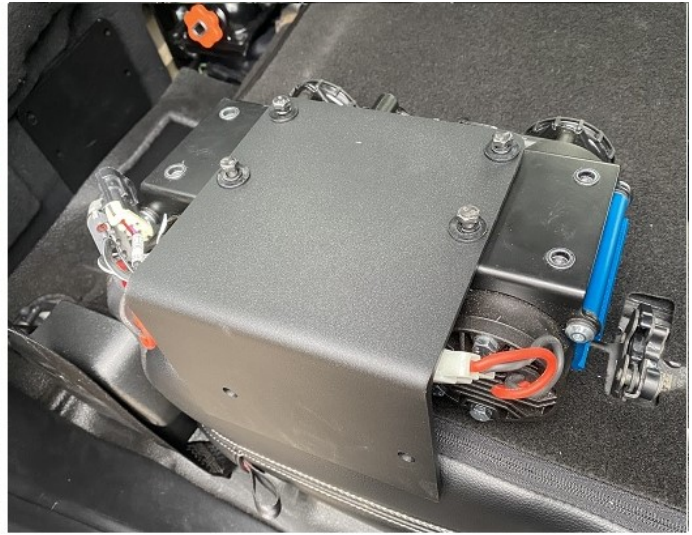
2) OEM Bottle Jack Installation:

Remove the rear seat center mounting nut using a deep 18mm socket. Attach the bottle jack mounting plate to the provided bracket using (2) 3/8" bolts, (4) washers and (2) nuts using a 9/16" wrench. Reinstall the nut previously removed and reattach the bottle jack as shown below.



3) Compressor Installation:

Install the (4) 3M adhesive pads as shown below. Using the provided (4) bolts, (4) washers and (4) lock washers that came with your ARB, attach the compressor as shown below using a 10mm wrench.



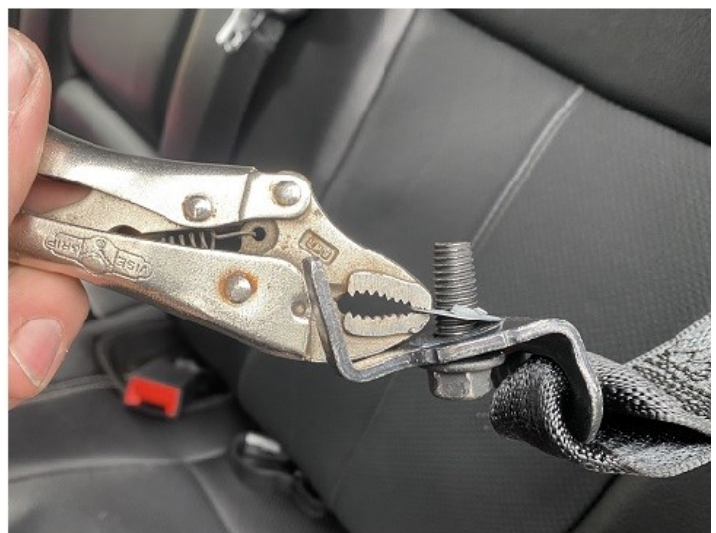
4) Tricky Bit:

The first photo below is showing you how when installed the provided mounting bracket will sit underneath the factor carpet. Attach the mounting bracket using the two bolts removed in step 1 with a 13mm wrench. When installing the compressor make sure both electrical plugs are accessible and not being pinched.



5) Seat Belt Bolt Removal:

Using a 13mm socket remove both of the rear seat belt mounting bolts and retention clips.





6) Air Chuck Installation:

Install the air chuck mounting bracket. These brackets are symmetrical and will work on either side of the vehicle. Reinstall the seat belt mounting bolt as shown below then install the 1/4" diameter self-tapping screw using a 3/8" socket. Thread the push to connect fitting into the air chuck using a 9/16" & 13/16" wrench. Firmly tighten this connection. Repeat this procedure to the opposing side of the vehicle.



7) Air Lines Passenger Side:

Using a 9/16" wrench install the push to connect airline "T" fitting as show below. Insert the 1/4" diameter, 14" long airline on the passenger side connecting both push to connect fitting.



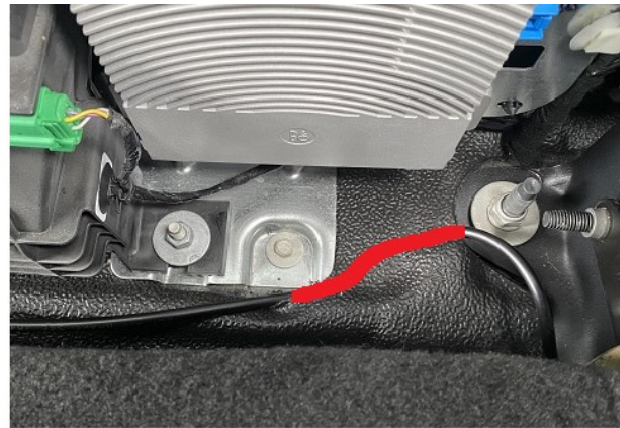
8) Laying Down The Driver Rear Seat:

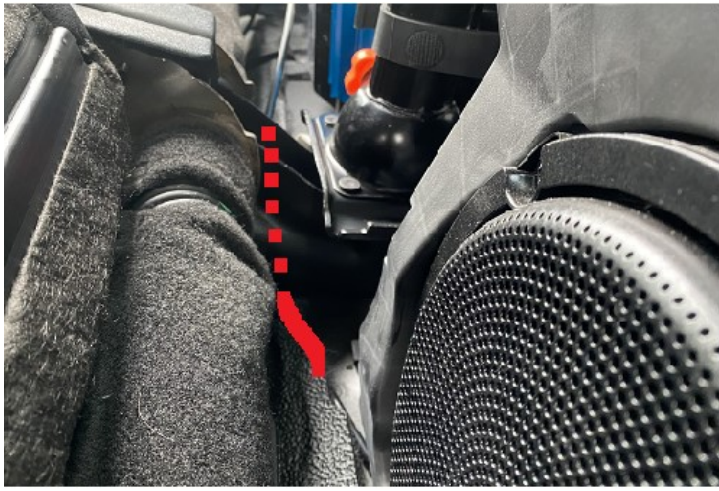
Lift up the bottom portion of the seat until it is in it's fully locked position. Using the photos below as a reference to its location on the driver side of the vehicle, Lift up on the steel pin as indicated by the red arrow until it is locked in the open position. There is an audible sound made when it is disengaged. When it is in the open position you can then fold down the bottom portion of the seat and lower the top.



9) Air Lines Driver Side:

Insert the 1/4" diameter, 54" long airline on the driver side, connecting the push to connect fitting. Carefully route the air line under the carpet where possible as outlined in red to reduce any potential rattling or damage, then connect the opposing end of the airline to the compressor.





Ford Super Duty 2017+ ARB Wiring Installation Instructions

Tools required

- *8MM, 10MM & 13MM sockets
- *Wiring crimpers
- *Wire cutter
- *Large hammer
- *Zip tie cutters
- *Drill with .75" drill bit or uni-bit, stepper bit.
- *Flat screwdriver
- *Small pick or awl
- *Lighter



10) Wiring Access:

You will need to gain access behind the large panel shown in the first picture to route the wiring. To remove the following panel you will first need to remove the snap in panel shown in the 2nd picture on the passenger side of the vehicle. No tools are required to remove these panels, as they simply snap into place. Once this panel is removed pull back the rubber door seal then snap out the large panel. **Note**, the large panel has a plastic barbed clip, circled in red, that must be removed and is only accessible once partially pulled out.

Once the large panel has been unclipped set it to the side.



11) Drill .75" Hole:

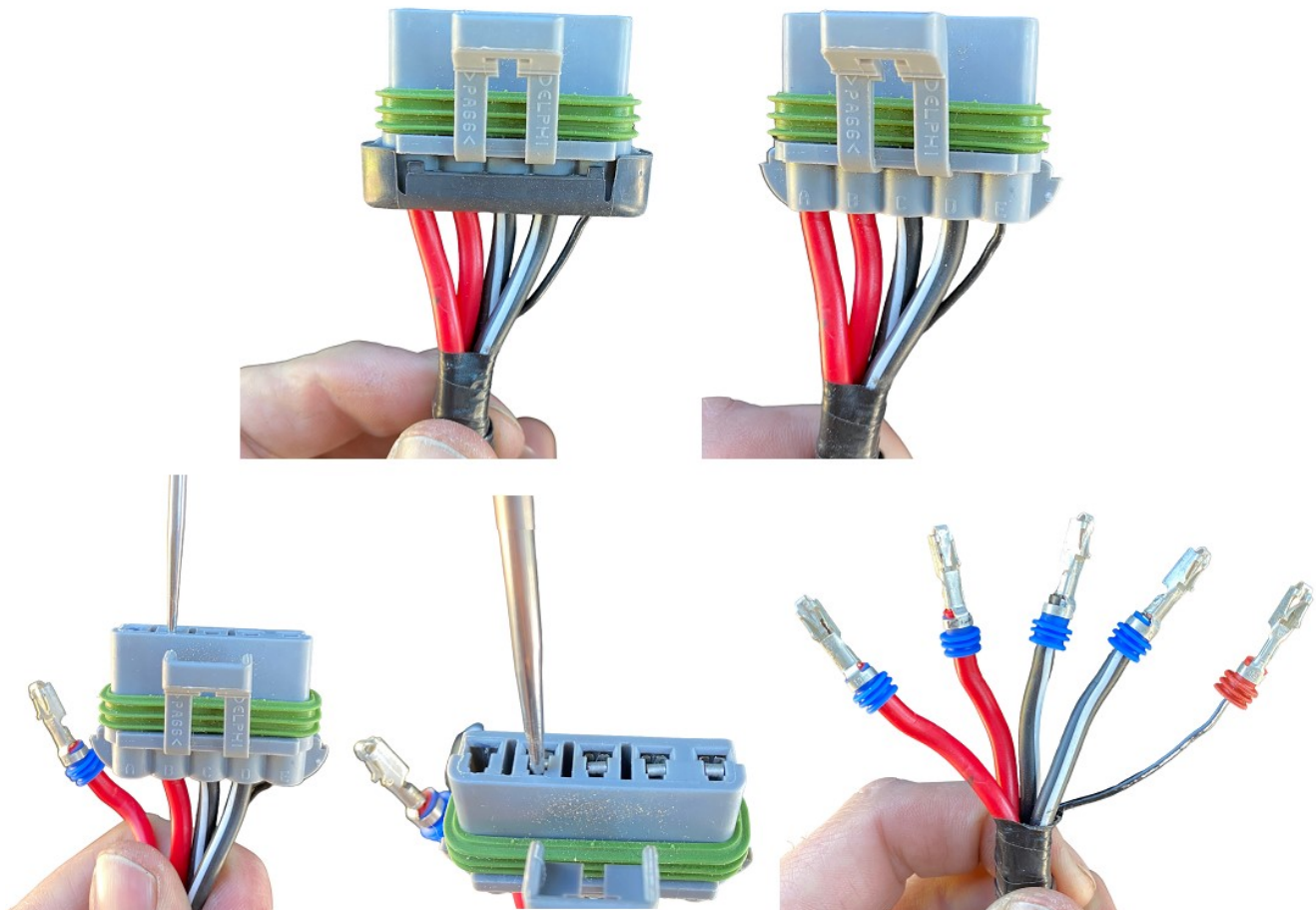
The pictures below show the area that is now visible since the large plastic panel has been removed. Using the pictures below as a reference for location, drill a .75" dia hole through the floor board of the truck.

The hole will be ~1.75" down from the white plastic clip, and ~2.0" over from the side of the body.



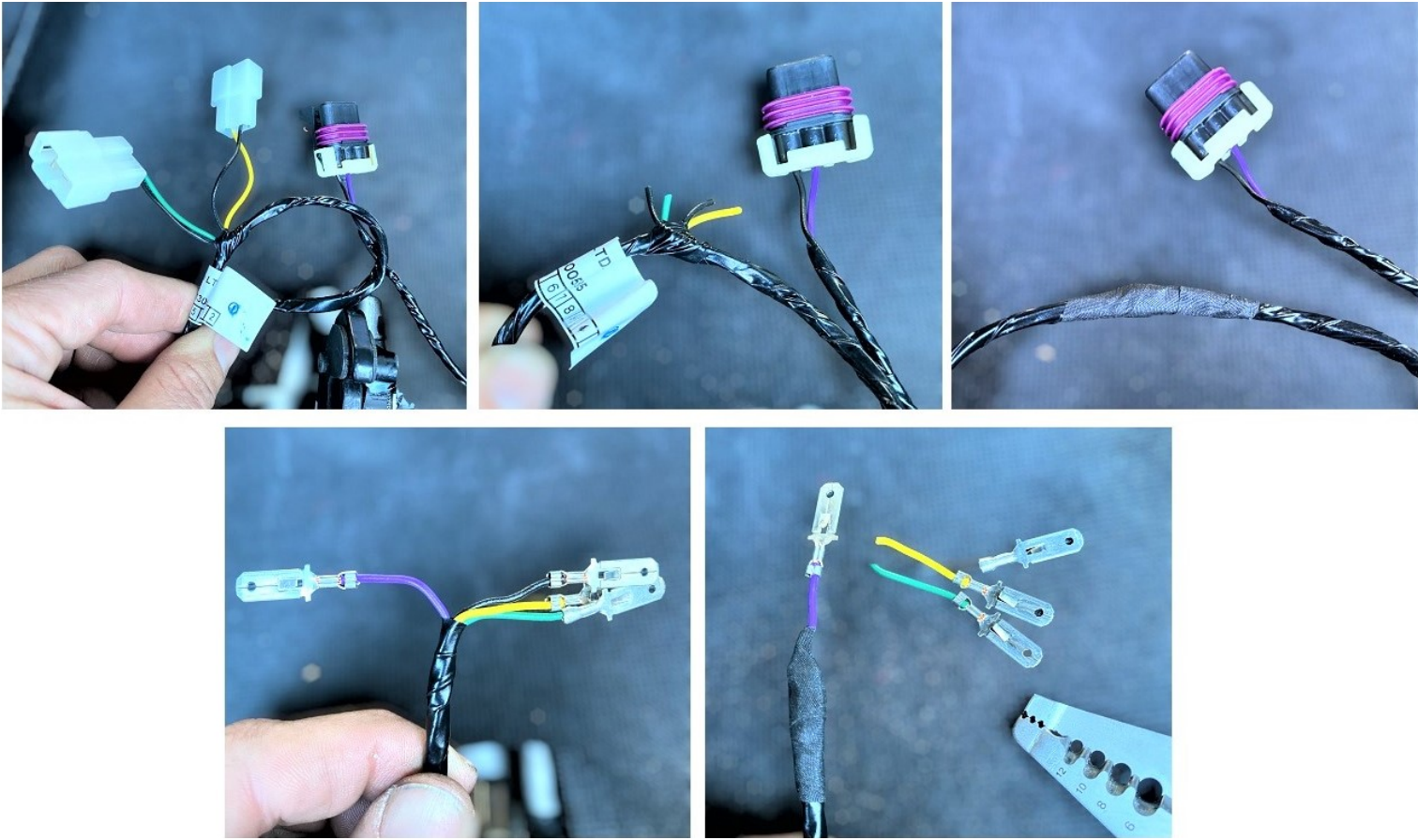
12) Large Wire ARB Wiring Harness:

Remove the black plastic wire clip on the large ARB compressor wiring harness. Use a small pick and insert it into the wiring harness as shown below to remove wires from the plug. The smaller the pick the better.



13) Small Wire ARB Wiring Harness:

Uncoil the small wire ARB wiring harness. You will only be using the purple for this installation. All the other wires and connectors will be cut off and taped up using the supplied Tessa heat tape. Using the pictures below as a guide cut off all other plugs.



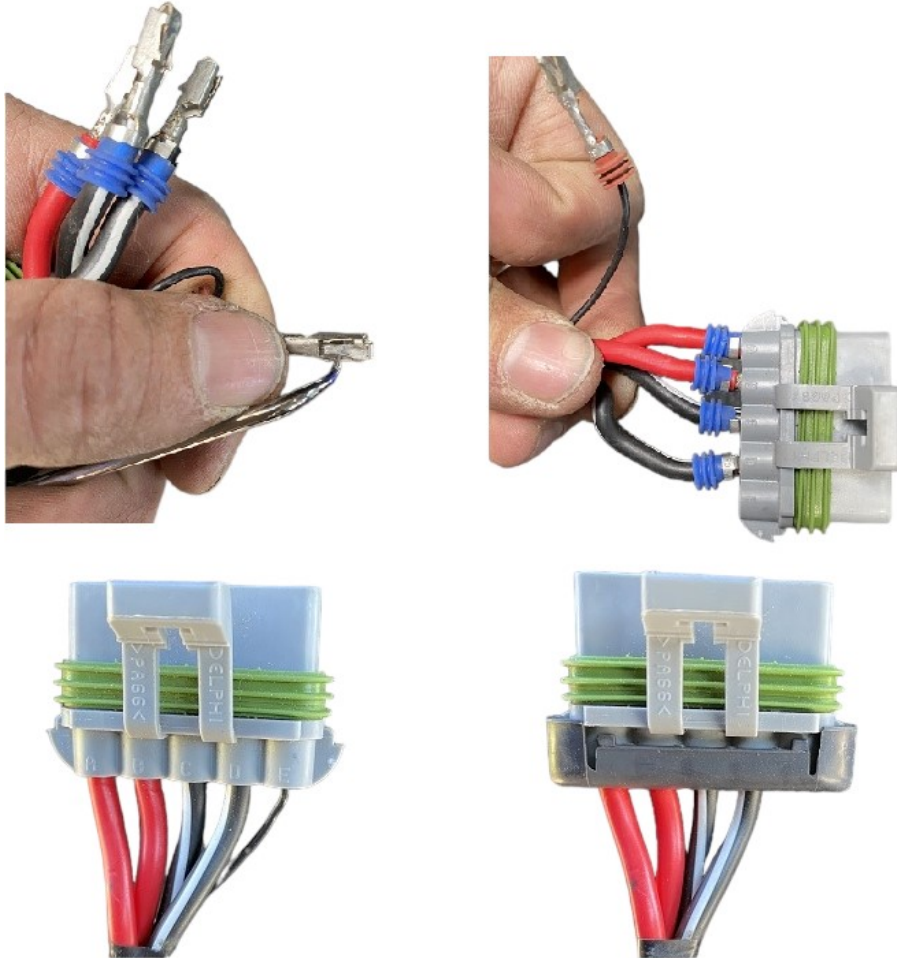
14) Feeding Wires Through The Floor:

Insert the small purple wiring harness through the provided rubber grommet, then install the larger wire loom into the grommet. Pass the wires through the hole previously drilled into the floor then install rubber grommet, leaving ~20" of wiring exposed into the cab of the truck.



15) Reassemble Plug:

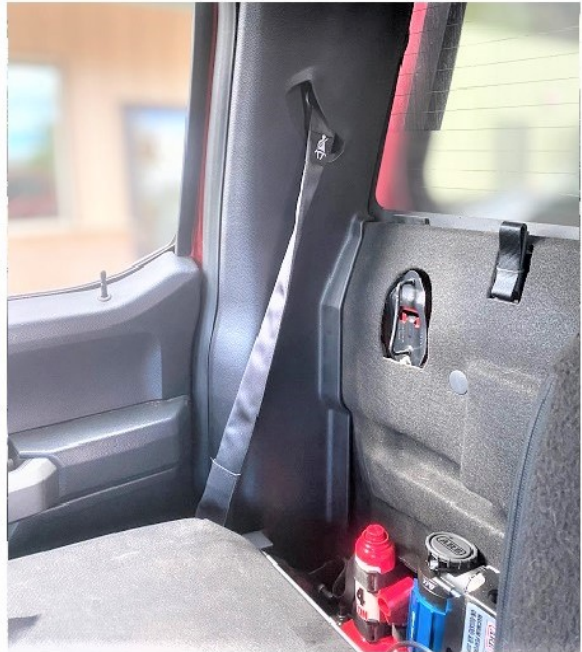
Using the photos below reassemble the main ARB harness. **Note:** You will more than likely need to use a small pick to pull back the small metal tabs that hold the wire to the plastic connector. Install the wire in one at a time in the same order as shown below, then install the black plastic wire clip. Plug both wiring harnesses back into the ARB compressor.



16) Interior Reassembly:

Tuck the wiring harness that goes behind bottle jack mounting plate behind the carpet and out of harms way. You are now able to bolt down the bottle jack mounting plate using a deep 18mm socket. Making sure that the wiring harness is not pinched or being pulled too tight. Reinstall the plastic interior panels.



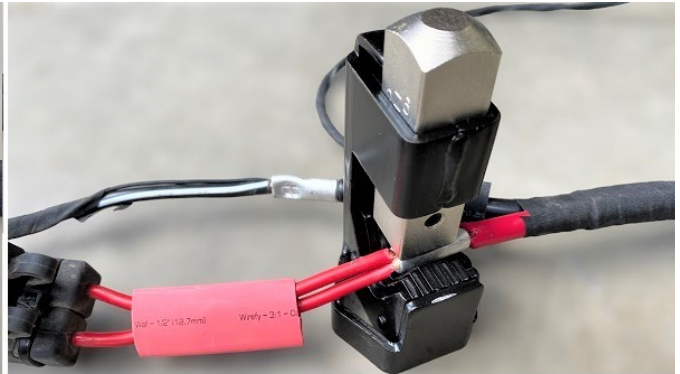
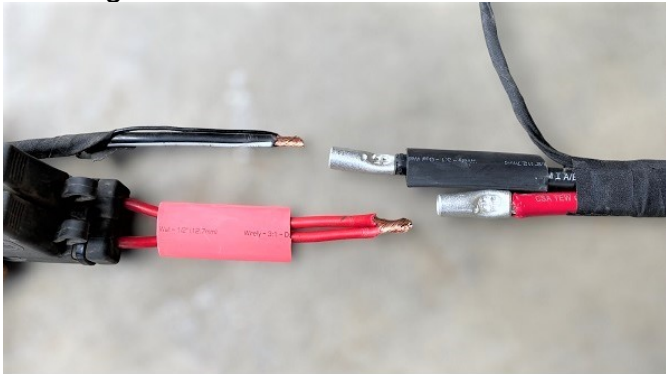


17) Large Wire ARB Wiring Harness:

The provided wiring harness has both the positive and negative wires staggered. This is to reduce the possibility of the wires coming in contact with each other and shorting out the vehicle. Using the provided harness as a template, cut down the ARB harness to match the offset and strip off the 3/8" of insulation off the black wires. Then twist the two red wires together, and the two black wire together. **Note: Be sure to install the provide 1/2" heat shrink tubing prior to crimping the terminal ends.**

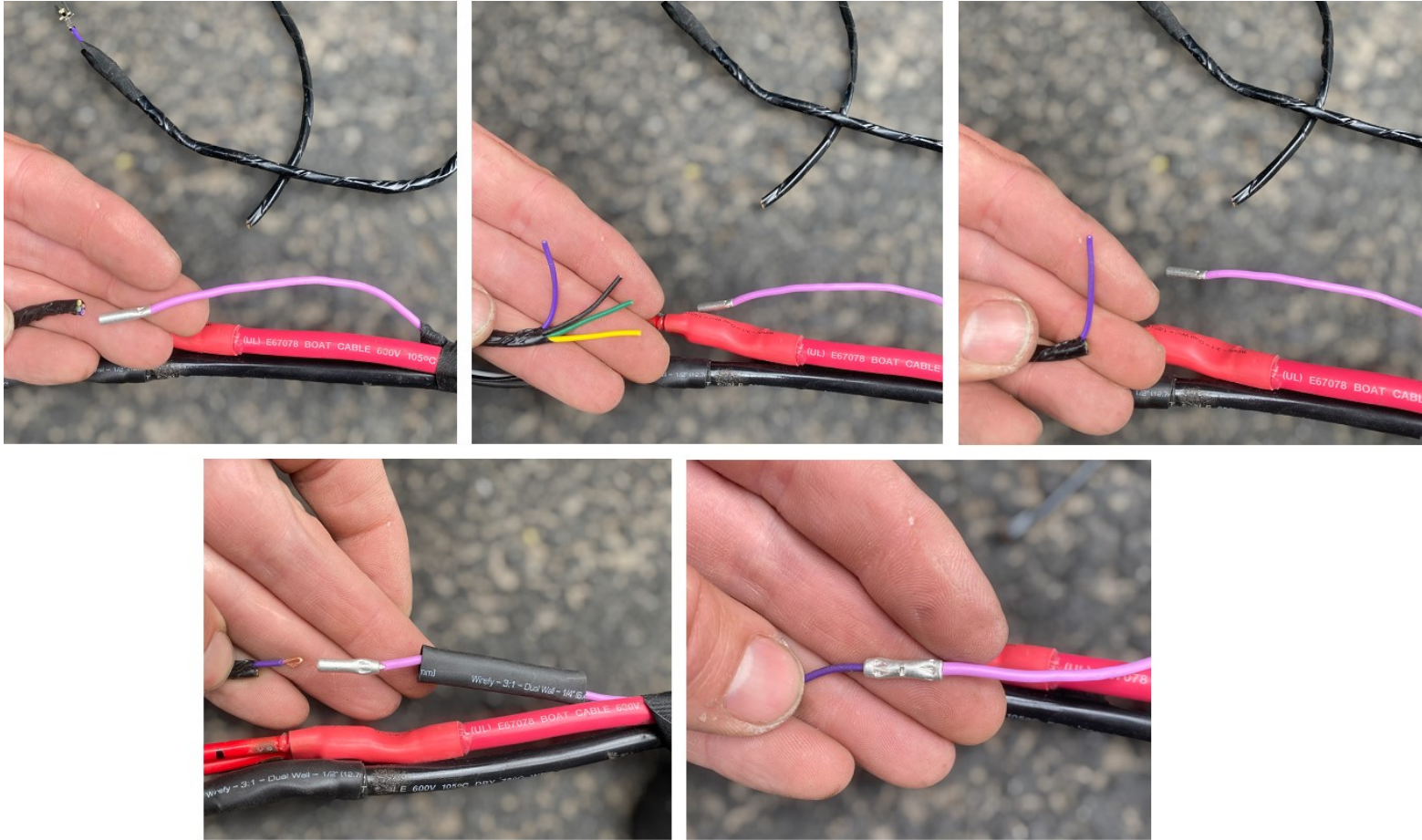
Using the provided lug crimper, place it on a solid surface, Insert the wires inside the butt connector. Hit the top of the crimping tool with a large hammer, forcefully.

Using a lighter, install the provided 1/2" heat shrink tubing over the wires to prevent it from grounding out.



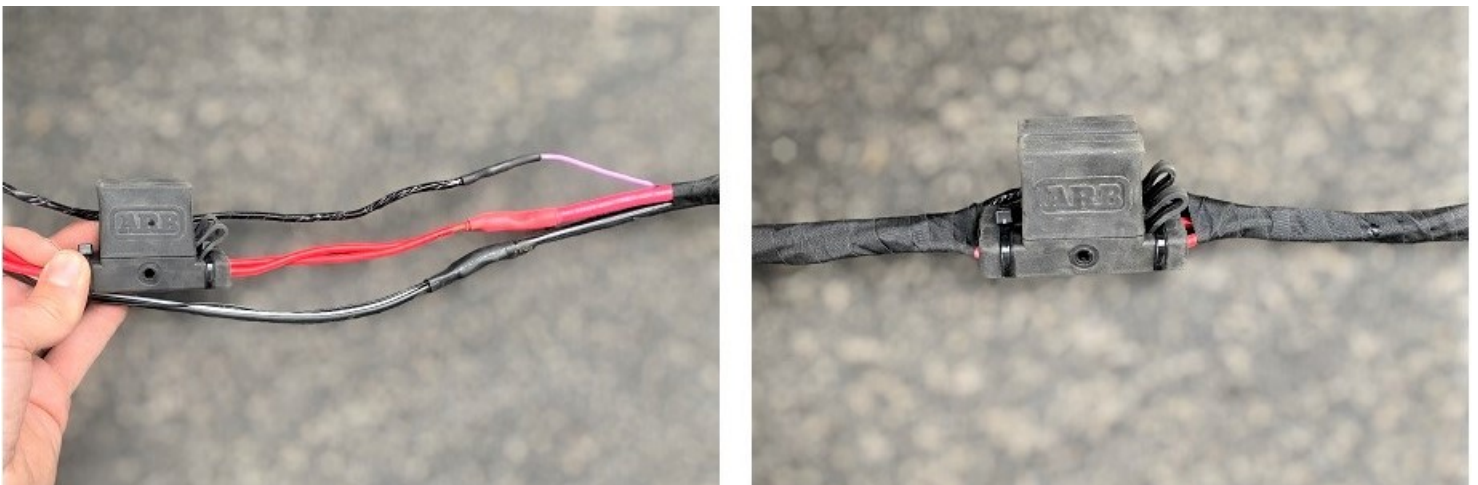
18) Purple Signal Wire:

The purple signal wire coming off the main ARB wiring harness will now be cut down to match up to the purple wire coming off the supplied wiring harness with this kit. Follow the pictures below. Using a lighter, install the provided 1/4" heat shrink tubing over the wires to prevent it from grounding out.



19) Taping The Wiring Harness:

Using the provided heat tape, wrap up the wires, this includes the small purple wire as shown below



20) Wiring Routing Up To The Battery:

Route the wiring harness behind the body mounts, then route with wiring between the inner fender well and the fire wall of the truck up towards the battery on the passenger side of the vehicle. It's a bit tricky to show in the photos, however, route the wiring harness away from sharp edges and potential pinch points. Using the provide zip ties secure the wiring done thus far to the side of the frame rail.

21) Secure Wiring:

Using the provide zip ties secure the wiring done thus far, keeping the wires away from sharp edges and potential pinch points.



22) Under The Hood:

Route the wiring harness up towards the battery on the passenger side of the truck as shown in the photos below. It's a bit tricky to show in the photos, however route the wiring harness over the body mount and clear moving or hot engine parts.



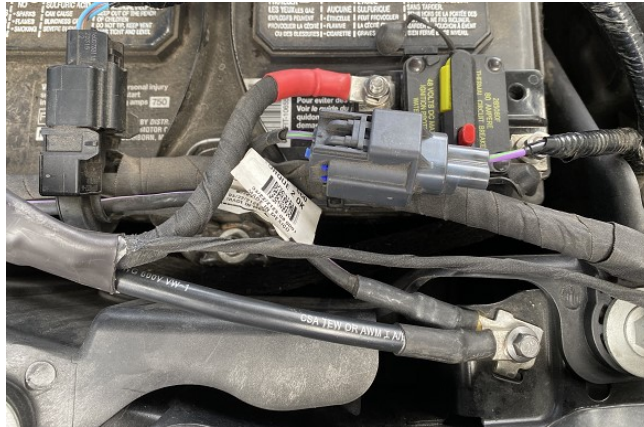
23) Mount The 80 Amp Fuse:

Using the supplied 3M adhesive pads, place two of them on the underside of the 80 amp fuse block. Clean all the excess dirt/oil off the top of the battery and apply as shown below.



24) Attach Positive & Negative Wire:

Attach both the positive and negative wire leads as shown below using a 10mm and 8 mm socket.



25) Connecting To Switch Panel Wires:

Determine which one of the wires you want to tap into to power on your compressor. The purple (signal) wire that you previously installed uses 3 Amps. We recommend saving switch 5 & 6 for items that will require higher amperage. Unclip the plastic box by pushing in on the two tabs as shown below. This will free up a bit more room to gain access to the switched wires.

The power leads are coded as shown:

Switch	Circuit Number	Wire Color	Fuse Amp Rating
AUX 1	CB117A	Brown with green trace	25A
AUX 2	CB114A	Violet with orange trace	25A
AUX 3	CB116A	Blue with green trace	25A
AUX 4	CB113A	Gray with brown trace	25A
AUX 5	CB115A	Brown with blue trace	40A
AUX 6	CB118A	Gray with orange trace	40A

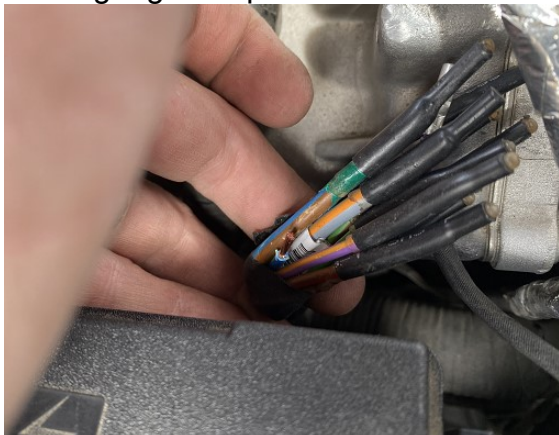


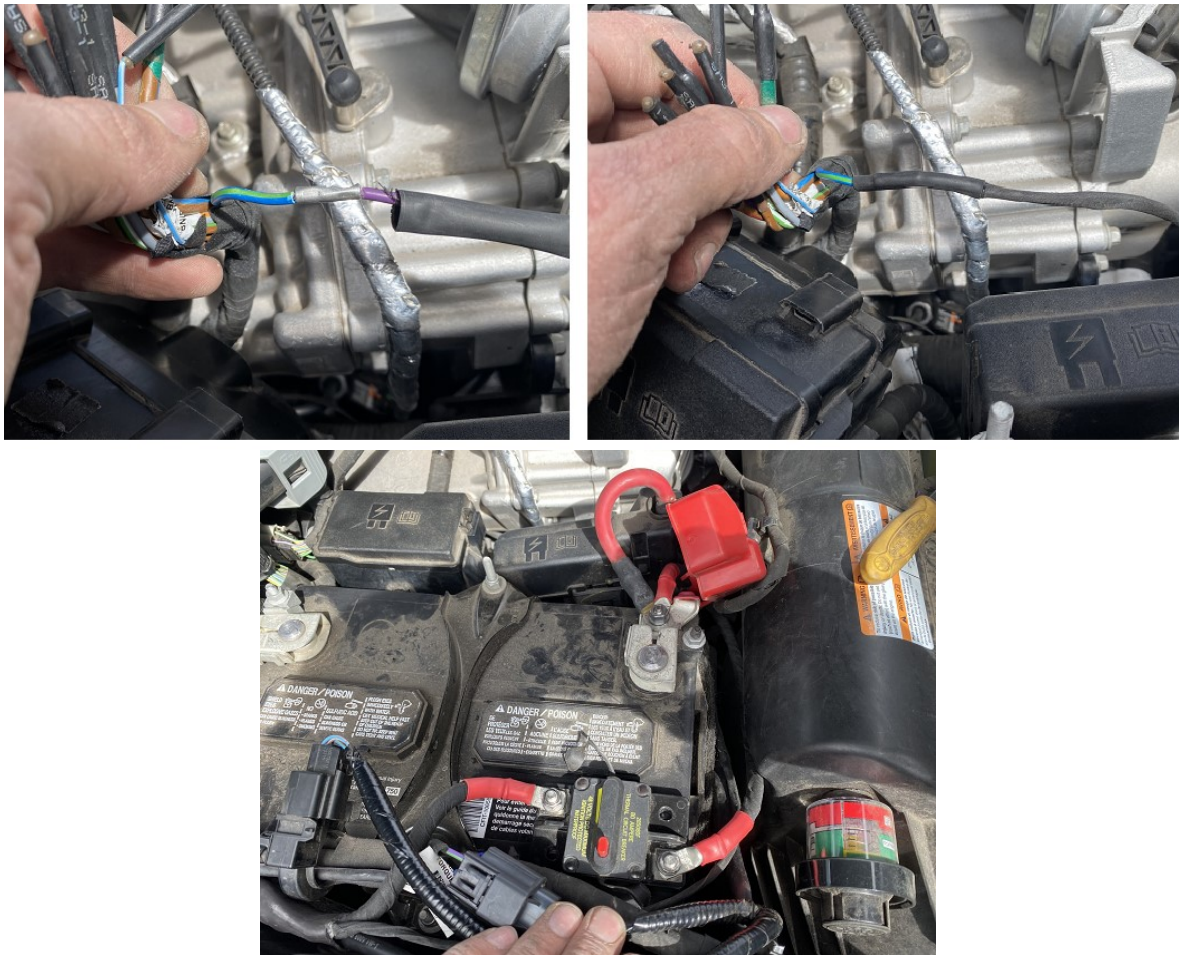
26) Attaching Upfitter Switched Wires:

Cut off the tape connecting the switched wires together. Select the wire you want to tap into for power, cut off the tip of the wire just past factory installed heat shrink tubing. Route the purple signal wire up to the switched wire, strip the end, attach the ¼" heat shrink tubing and crimp both the purple signal wire and the switched wire. Once completed reinstall the plastic fuse block.

27) Attaching 6 AWG Wire:

Attach the 6 gauge red power wire from the battery to the 80 amp fuse block using a 10mm socket.





28) Wrapping Up:

Turn the truck ignition on. Turn on the proper upfitter switch for activation. Once the compressor cycles on it should quit pumping and automatically turn off at ~95psi. If the compressor continues to cycle on and off, there is an air leak in the system. Using soapy water check for air leaks and double check your connections for both the brass air chucks as well as the push lock air lines.

Once all the air leaks are fixed, go through the entire wiring harness and securely attach the harness using the supplied zip ties. Keep the wiring away from any pinch points or hot engine parts.

If applicable reassemble the under rear seat storage box using a 13mm socket, reattach the tire iron kit and the power inverter cover.

Dirt Church Industries appreciates your order!

Questions during the assembly of this kit or, have design feedback please reach out to us at sales@dirtychurchindustries.com



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