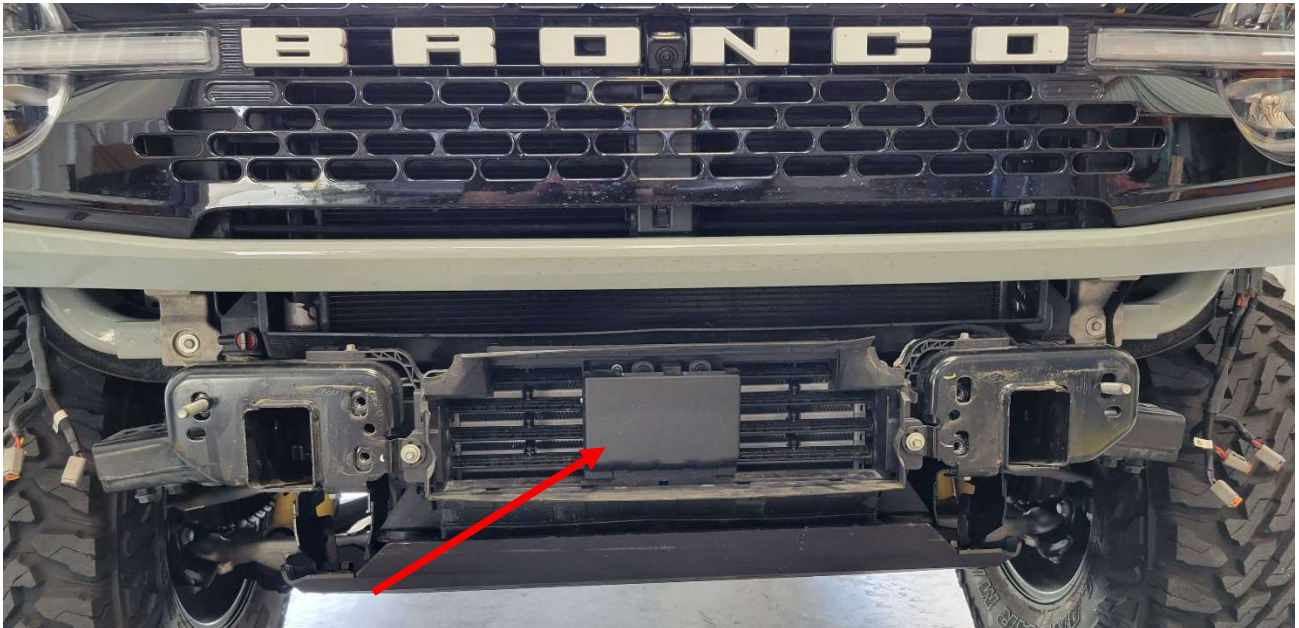


RCI 21+ Bronco Adaptive Cruise Control Sensor Relocation
Bracket Install Guide

INSTALLATION STEPS:

****Use hand tools, impact wrenches may cause damage if over torqued.****

- 1) Begin by unpacking and removing all components and hardware. Please verify that all hardware and mounting components are present. Reference your original order invoice and verify all items are accounted for.
- 2) Remove the vehicle's front bumper.
 - a. Refer to the [RCI 21+ Bronco Front Bumper Install guide](#) for detailed instructions to remove the Bronco's factory bumper options, or follow the instructions in reverse to remove the RCI Bronco Arapaho or Kingston bumpers from the vehicle.
- 3) Remove the plastic cover from the Adaptive Cruise Control Module.



- 4) Remove the three silver bolts securing the ACC module and bracket with an 8mm socket.



- 5) Pull the ACC assembly away from the vehicle and disconnect the wires connected to the sensor.



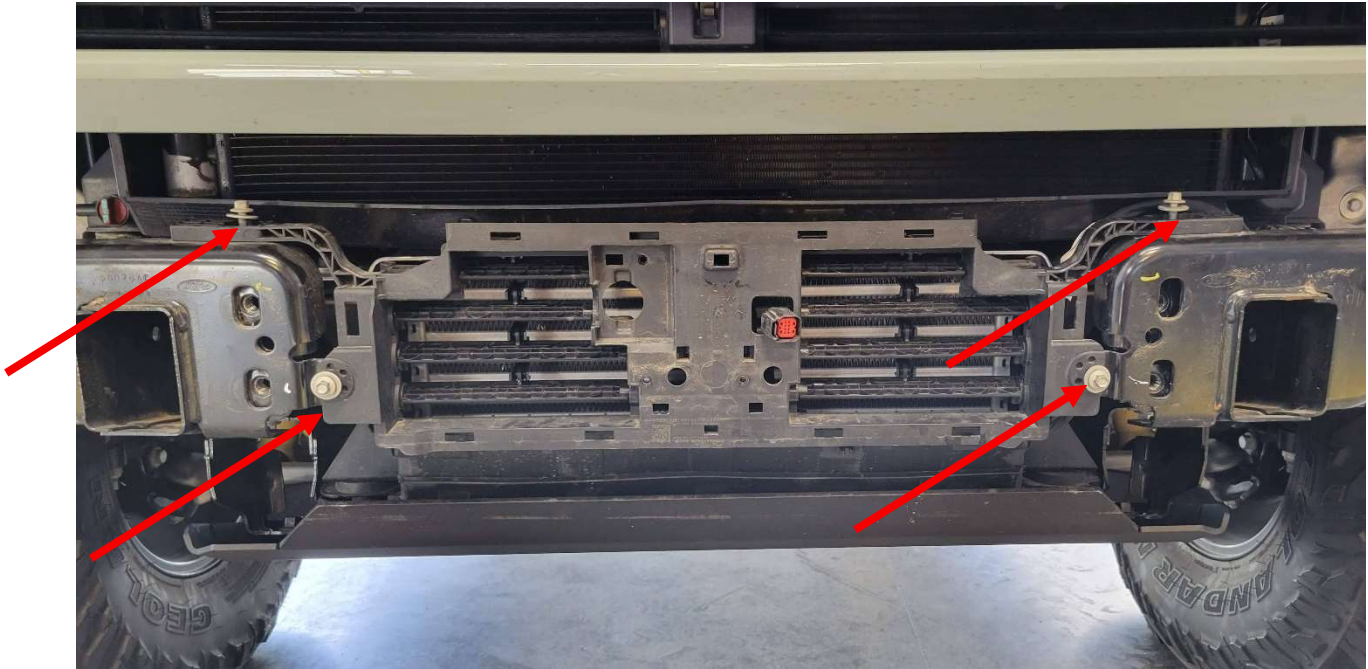
- 6) Using a flat head screwdriver or other tool, carefully pry the sensor module from the bracket.
- 7) Squeeze each of the three bushings with a pair of pliers to remove them from the sensor module.
- 8) Secure the sensor module to the RCI ACC lower bracket with the included 1/4" hardware.



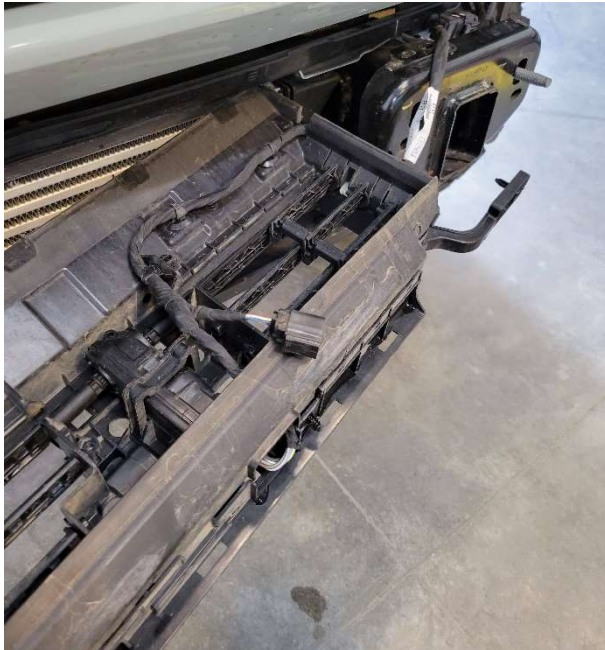
- 9) Attach the lower ACC bracket to the upper ACC Bracket



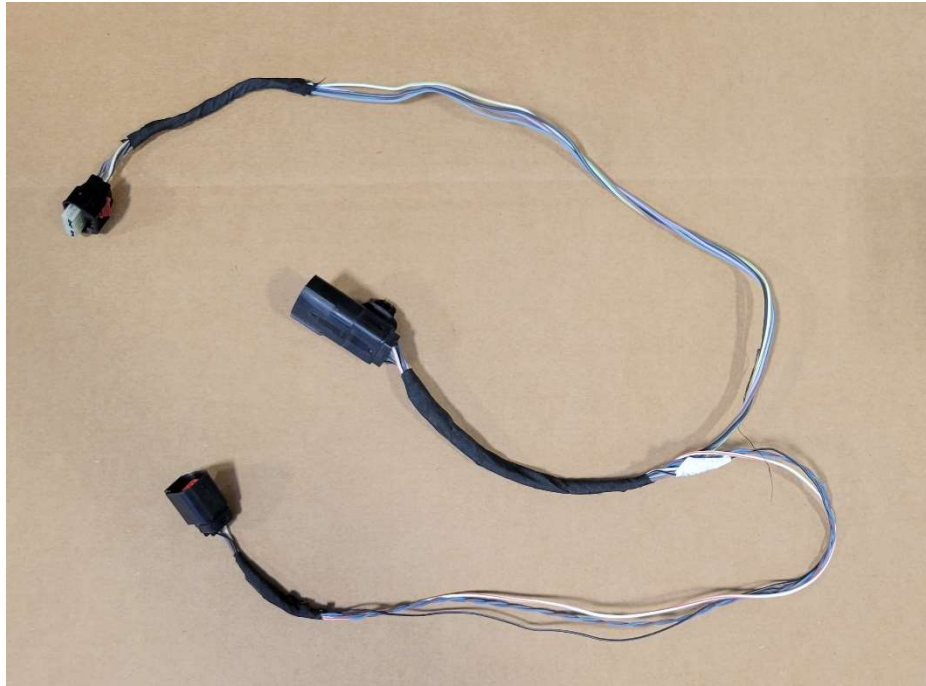
10) Remove the four bolts securing the intercooler shroud and remove the shroud.



11) Disconnect the intercooler shroud fin actuator and remove the wiring harness from the vehicle.



12) Unwrap the tape that surrounds the wiring harness to expose the wires.

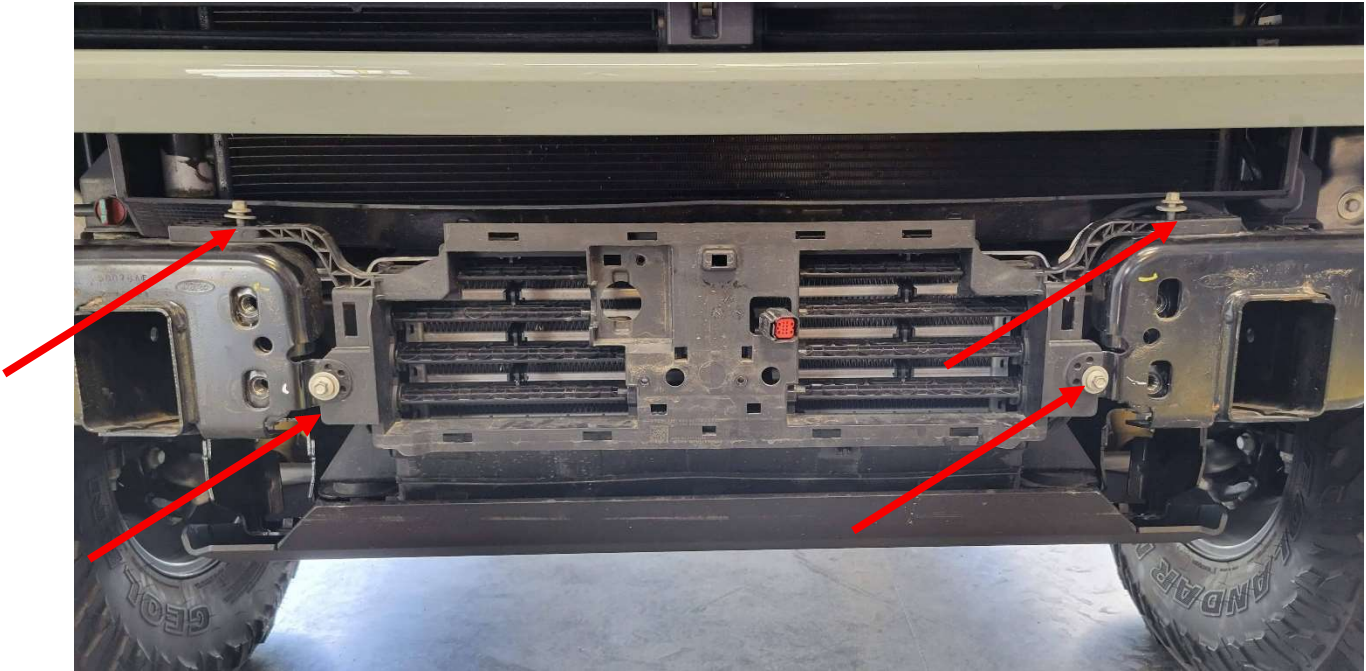


13) Separate the intercooler shroud fin actuator connector wires from the ACC sensor connector wires and wrap them in tape separately. Gaffer's or electrical tape is recommended to re-wrap the wires.



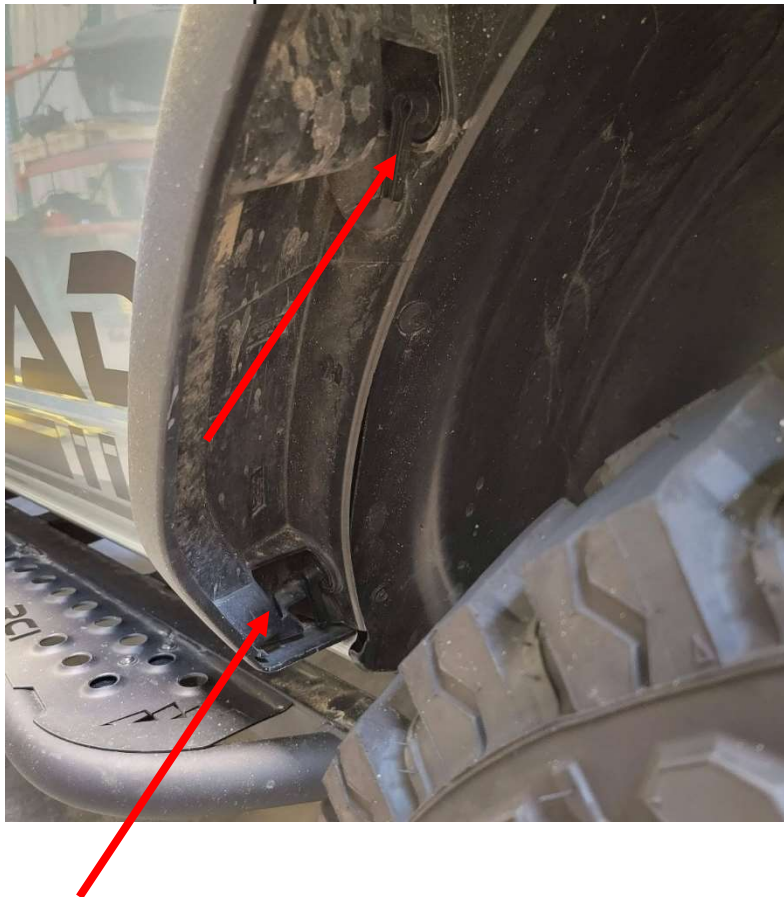
14) With the wires separated and re-wrapped, plug the harness back into the intercooler shroud fin actuator.

15) Reinstall the intercooler shroud with the use of the four bolts removed in step 10.



16) Remove the vehicle's front fender flares.

- a. There are several quarter-turn latches on the underside of each of the fender flares. Turn them to the unlocked position.

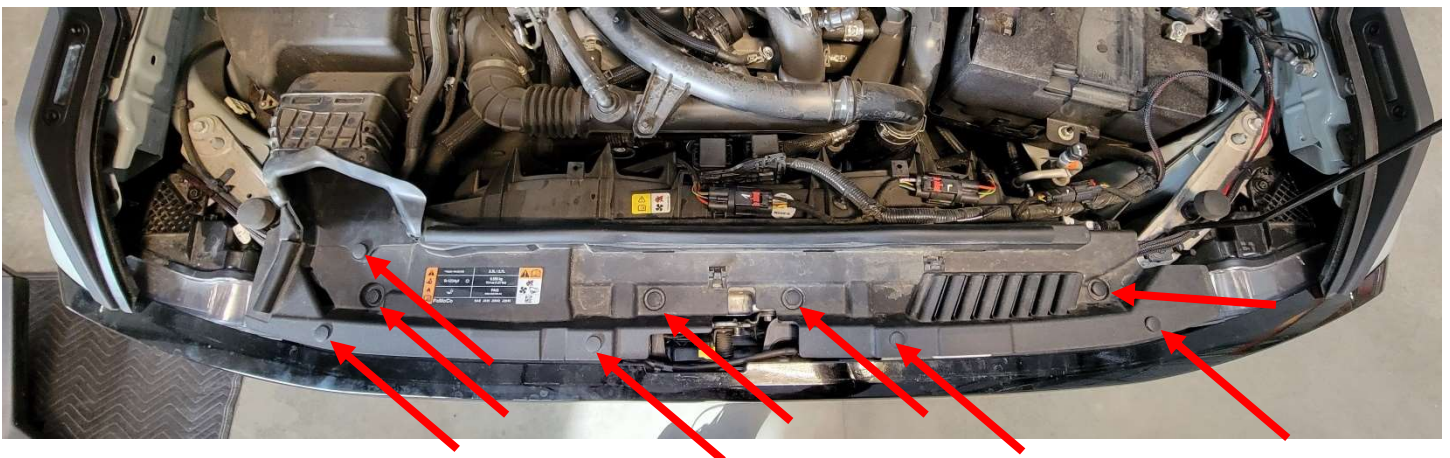


- b. Remove the fender flares by gripping at the lower corners and carefully but firmly pulling the flares away from the body of the vehicle.

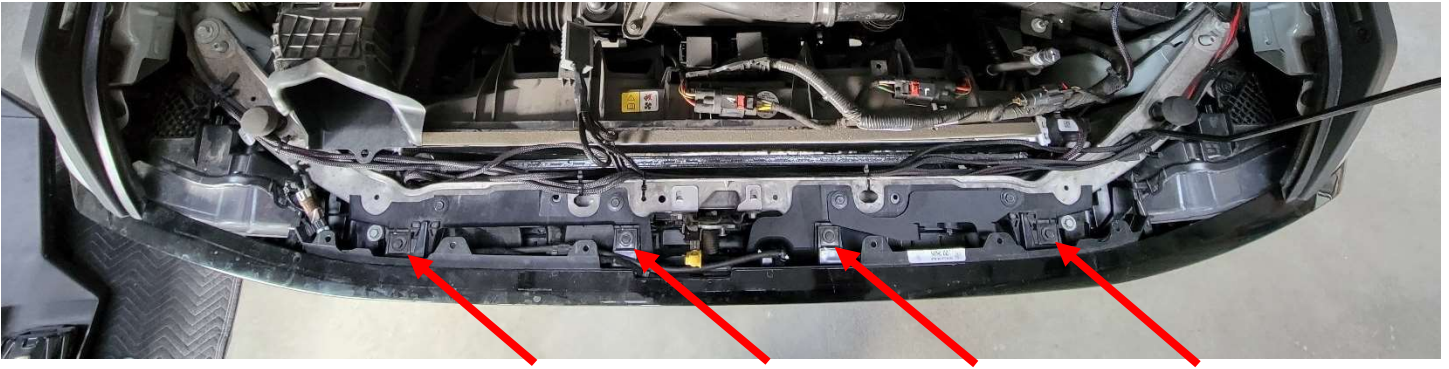
17) Removing the fender flares will expose both sides of the body-colored valence found below the grille. Firmly pull each of the sides out and away from the vehicle while simultaneously pulling towards the front of the vehicle. With the sides of the valence separated from the vehicle, pull the center of the valence towards the front of the vehicle to complete removing the valence.



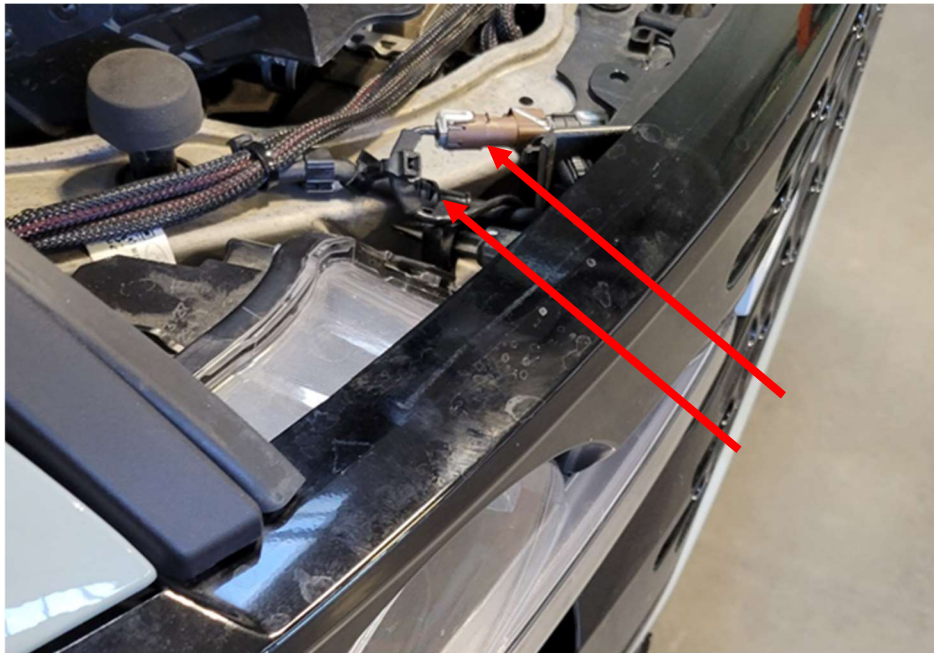
18) Remove the 9 push pins securing the grille shroud to the top of the grille. Remove the grille shroud.



19) Remove the four bolts that secure the grille along the top face.



20) Disconnect the two plugs found just behind the top passenger side of the grille.



21) Like the valence, pull each side of the grille forward and away from the vehicle around the headlights. With the sides separated from the vehicle, pull forward from the center of the grille to complete removing the grille.



- 22) Remove the 6 bolts securing the headlights.
- One bolt will be found directly below each headlight module.
 - Two bolts will be found above each headlight. One behind the headlight towards the outside of the vehicle and the other towards the inside of the vehicle.

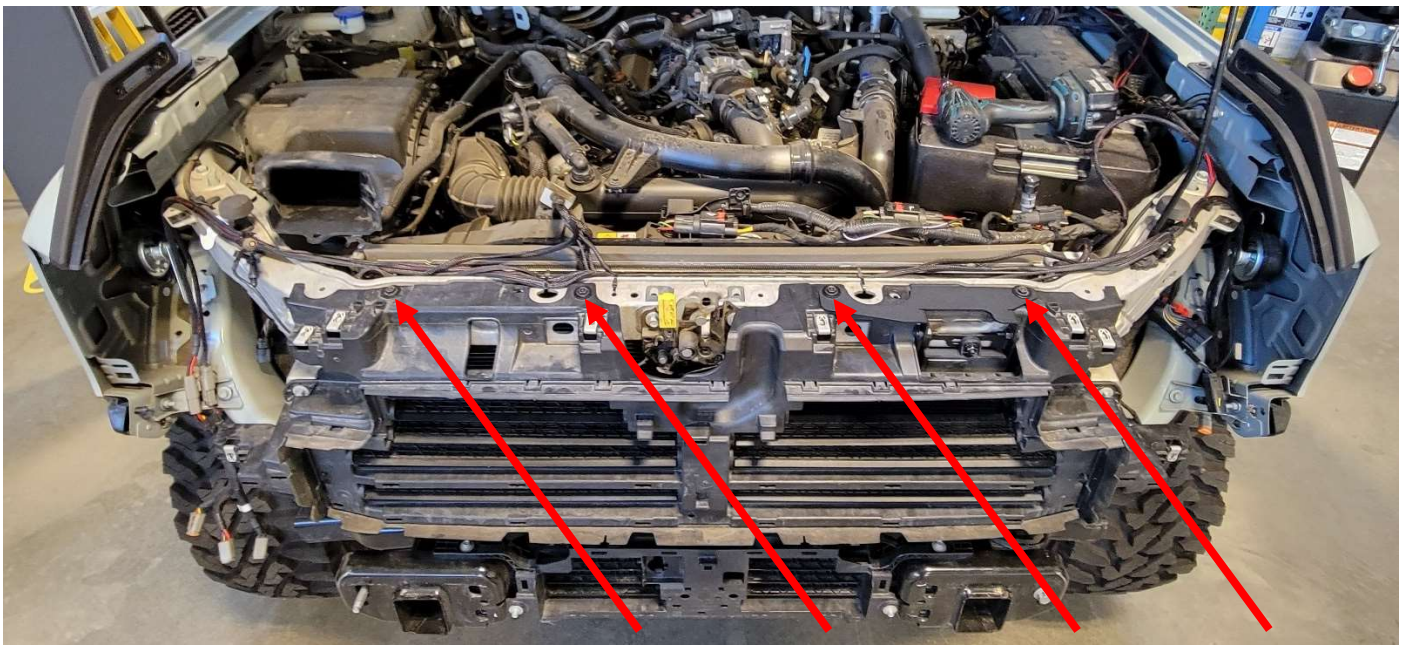


- 23) Remove the headlights by pulling straight towards the front of the vehicle. There will be some resistance as your pulling overcomes the pin detent securing the headlight to the vehicle. This is normal. Take special care to pull straight, as pulling at an angle can cause the pin to break off the headlight housing.

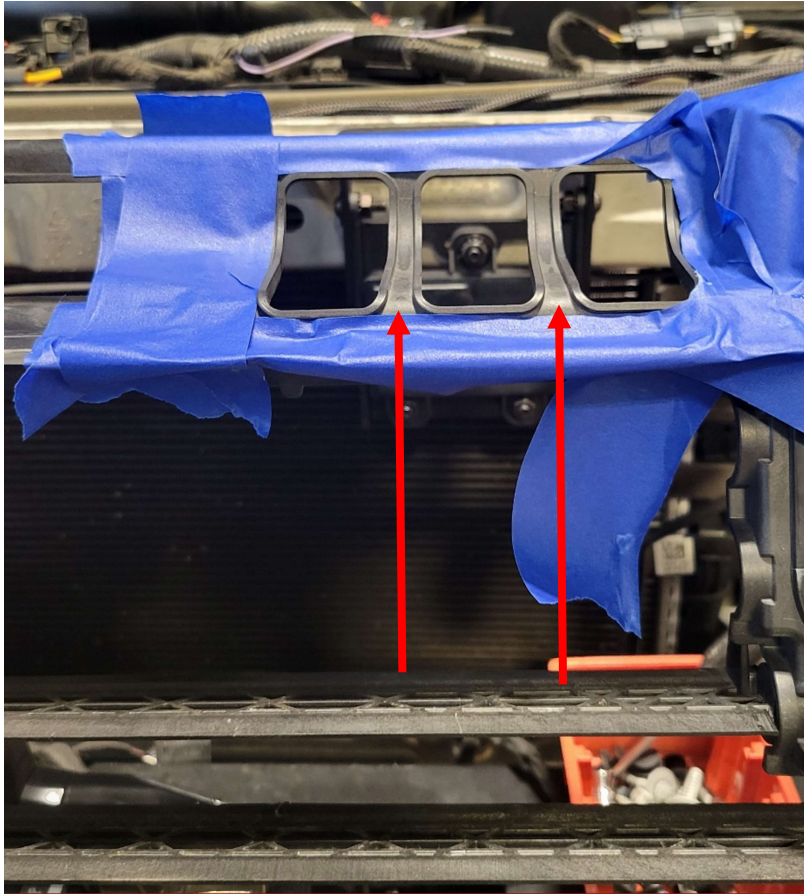
24) Unplug the headlights to complete removing the headlight from the vehicle.



25) Remove the grille insert housing the radiator fins from the vehicle by removing the two bolts securing each side of the insert and the four bolts at the top of the insert.

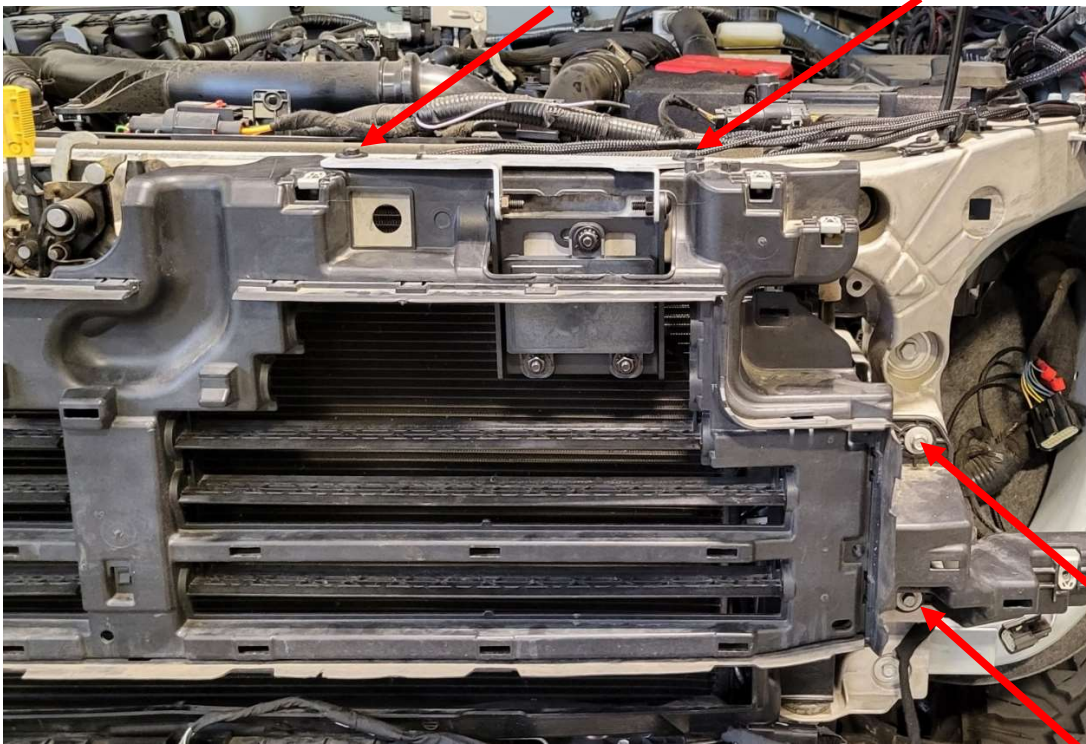


- 26) On the upper driver side, pry the two uppermost fins out of the grille insert.
 - a. These fins will not be reused for as long as the RCI ACC relocation kit stays installed on the vehicle but can be saved if the vehicle is ever to be returned to factory configuration.
- 27) Using snips, a saw, or other cutting device, remove the two bars from this area as shown in the figure below.

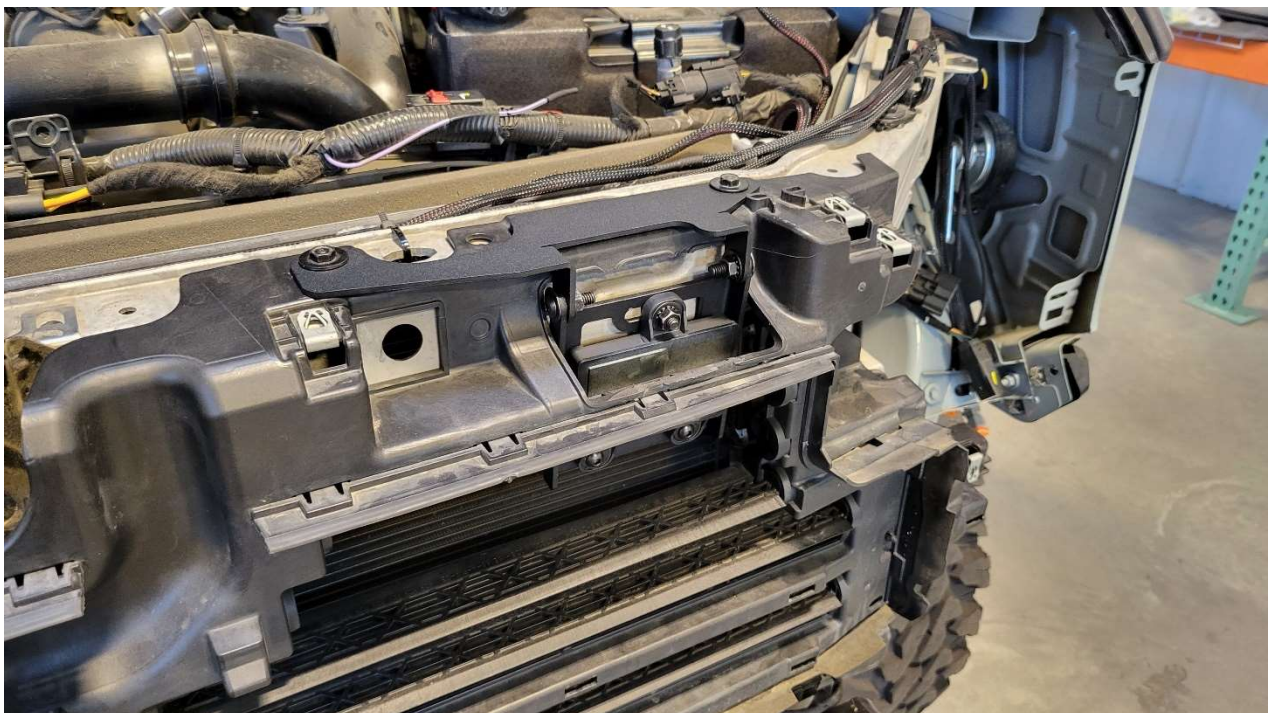


- 28) With the grille insert trimmed, reinstall the grille insert but do not install the eight bolts that secure it to the vehicle. Feed the wire up through the grille insert up until it rests in the gap left in the insert by the two removed fins.
- 29) Tilt the grille insert forward and away from the vehicle slightly to allow the ACC relocation assembly to be slid into the slot cut in the upper driver side of the insert. The front face of the ACC sensor should be facing forward and roughly perpendicular with the ground with the top face of the ACC assembly resting flush with the front crossmember above the radiator.
- 30) Reconnect the ACC sensor to the wiring harness and confirm that all electrical connections except for the headlights have been successfully reconnected.

31) Reinstall the eight bolts that secure the grille insert.



- 32) Verify that the front face of the ACC sensor is roughly perpendicular to the ground.
- If the sensor is perpendicular to the ground, tighten the two sets of hardware securing the two ACC relocation brackets together.
 - If the sensor is not perpendicular to the ground, undo and repeat steps 29 through 32 to adjust the sensor and secure it.

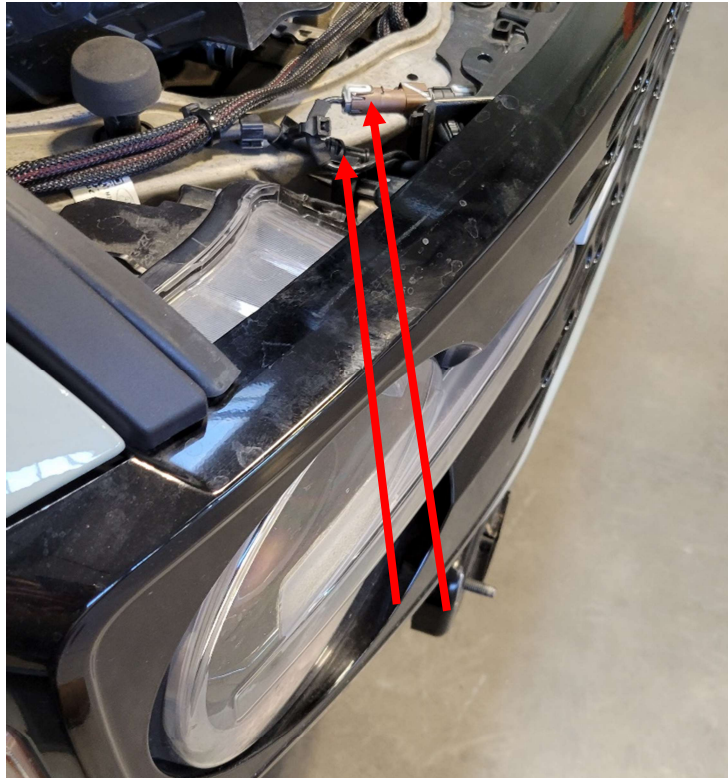


- 33) Verify that the sensor works as expected and calibrate the sensor angle as necessary.
- a. It is recommended that the vehicle be driven in a safe environment with a predictable lead car to validate the functionality of the ACC sensor location and angle.
 - i. Be prepared to stop as necessary and/or unexpectedly.
 - b. Adjust the sensor as necessary.
 - i. Calibrating the sensor will require some guess and check work as there are a number of variables depending on the mods, overall height, etc. of the specific vehicle that we cannot explicitly account for.
 - ii. As a general rule, adjust the sensor down if the sensor is having difficulty sensing the vehicle ahead. If the sensor is picking up vehicles further down the road but having difficulty picking up vehicles closer, angle the sensor downwards slightly. If the sensor is picking up vehicles up close but not sensing vehicles further down the road, angle the sensor upwards slightly.
 - c. We experienced our best results with the ACC sensor angled down slightly.
- 34) Plug in each of the headlights and reinstall them with the six bolts removed earlier.



- 35) Reinstall the grille by pushing the sides into place, then press the center of the grille until the tabs click into place.

- 36) Plug in both connections for the camera wiring and washer fluid tubing found on the upper passenger side of the grille.



- 37) Reinstall the body-colored valence by aligning the sides with the clips present on the front quarter panels of the vehicle. With the sides secured, align the clips in the center of the valence and press into the vehicle firmly to seat the valence.



- 38) Reinstall the fender flares by pressing firmly into the body of the vehicle, then rotate each of the locking levers on the fender flare to the locked position.
- 39) Reinstall the upper grille shroud using the nine plastic push pins removed in step 18.



- 40) At this time, verify that all electrical connections have been reconnected and all original hardware has been reinstalled on the vehicle.
- 41) Reinstall the original bumper removed in step 2, or refer to the [RCI 21+ Bronco Front Bumper Install guide](#) to install the RCI Arapaho or Kingston Bronco bumpers!



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