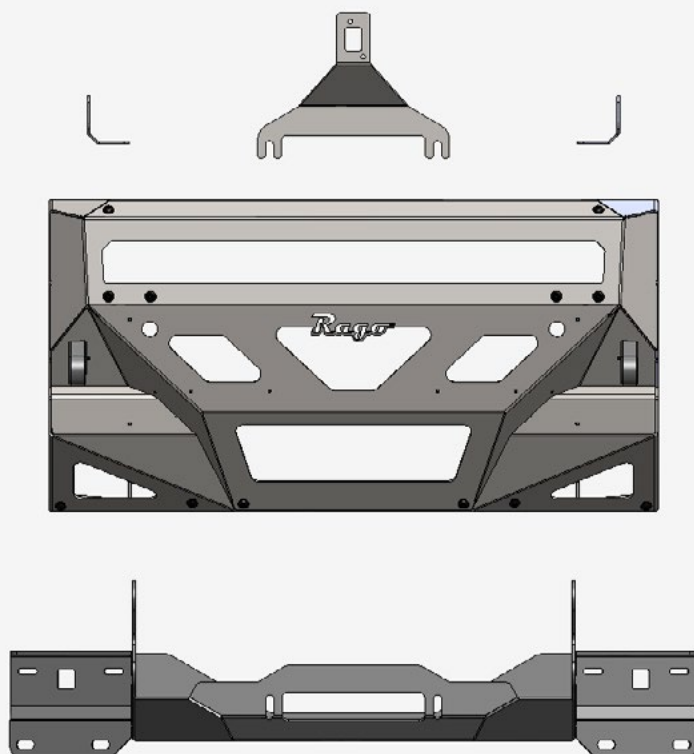


CENTER MOUNT WITH WINCH FRONT BUMPER

2024/TOYOTA LAND CRUISER

F7703622001NA



TOOLS REQUIRED

- 10mm, 17mm, 7/16, 9/16, 3/4 sockets
- 10mm, 17mm, 7/16, 9/16, 3/4 wrenches
- Flathead Screwdriver
- Phillips Screwdriver
- 5/32, 7/32 Allen
- Zip Ties
- Cutting Tools
- Heat Gun
- Razor Blade



SKILL LEVEL

- Expert



TIME REQUIRED

- Approximately 4-5 Hour

⚠ WARNINGS/CAUTIONS BEFORE STARTING INSTALLATION ⚠

-BEFORE YOU INSTALL THIS KIT-

Read and understand all instructions, warnings, cautions, & notes contained in this installation instruction guide. Consult your vehicle owner's manual for proper disconnection of electrical and lifting of vehicle if required for installation of this product.

This install may require some technical skills and knowledge of basic mechanical work. If you do not feel that you are capable of performing this install please take this product to a trained professional.

After reading this guide please contact us with any questions or concerns before installing product.

Customer Service: 830-896-7571

Rago Fabrication is **not** responsible for any bodily injury or harm to you or your vehicle as a result of an improper install.

Proper installation of this kit required knowledge of the factory recommended procedures for removal and installation of original equipment components.

We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the

performance of these components and the safety of the vehicle.

Inspect all contents of this package to make sure product is not damaged and all installation hardware has been included. If parts are missing from kit, please be prepared to provide the following information:

1. Name of purchase location
2. Bar Code on side of box
3. Date above bar code
4. Date inside box cover

***ALWAYS WEAR EYE PROTECTION
WHEN OPERATING POWER TOOLS***

HARDWARE

A.



1/4-20 X 1" BUTTON HEAD BOLT

QTY: 2

A1.



1/4" FLAT WASHER

QTY: 2

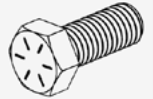
A2.



1/4-20" NYLON LOCK NUT

QTY: 2

B.



3/8-16 X 1 1/4" HEX HEAD BOLT YELLOW

QTY: 4

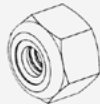
B1.



3/8" FLAT WASHER YELLOW

QTY: 6

B2.



3/8-16" NYLON LOCK NUT YELLOW

QTY: 4

C.



3/8-16 X 1" CARRIAGE BOLT

QTY: 4

D.



3/8-16 X 1" BUTTON HEAD BOLT

QTY: 12

D1.



3/8" FLAT WASHER BLACK

QTY: 10

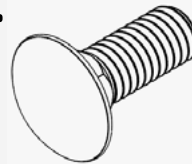
D2.



3/8-16" NYLON LOCK NUT BLACK

QTY: 10

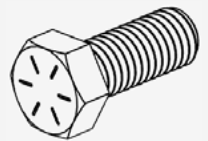
E.



1/2-13 X 1 1/2" CARRIAGE BOLT

QTY: 6

F.



1/2-13 X 1 1/2" HEX HEAD BOLT

QTY: 4

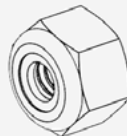
F1.



1/2" FLAT WASHER

QTY: 14

F2.



1/2-13" NYLON LOCK NUT

QTY: 10

G.



3M DOUBLE SIDED TAPE

QTY: 4



PARTS

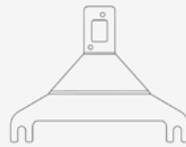
H.



SAD0010, SAD0010-M

QTY: 2

I.



SPL0795

QTY: 1

J.



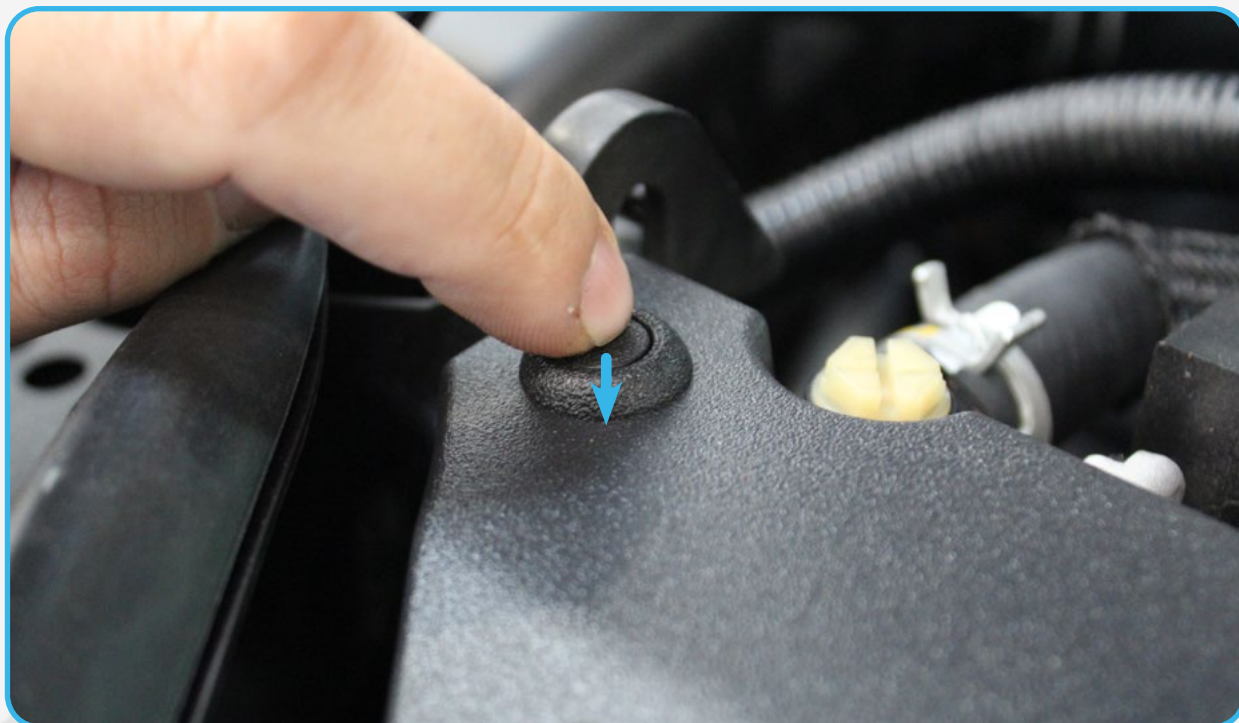
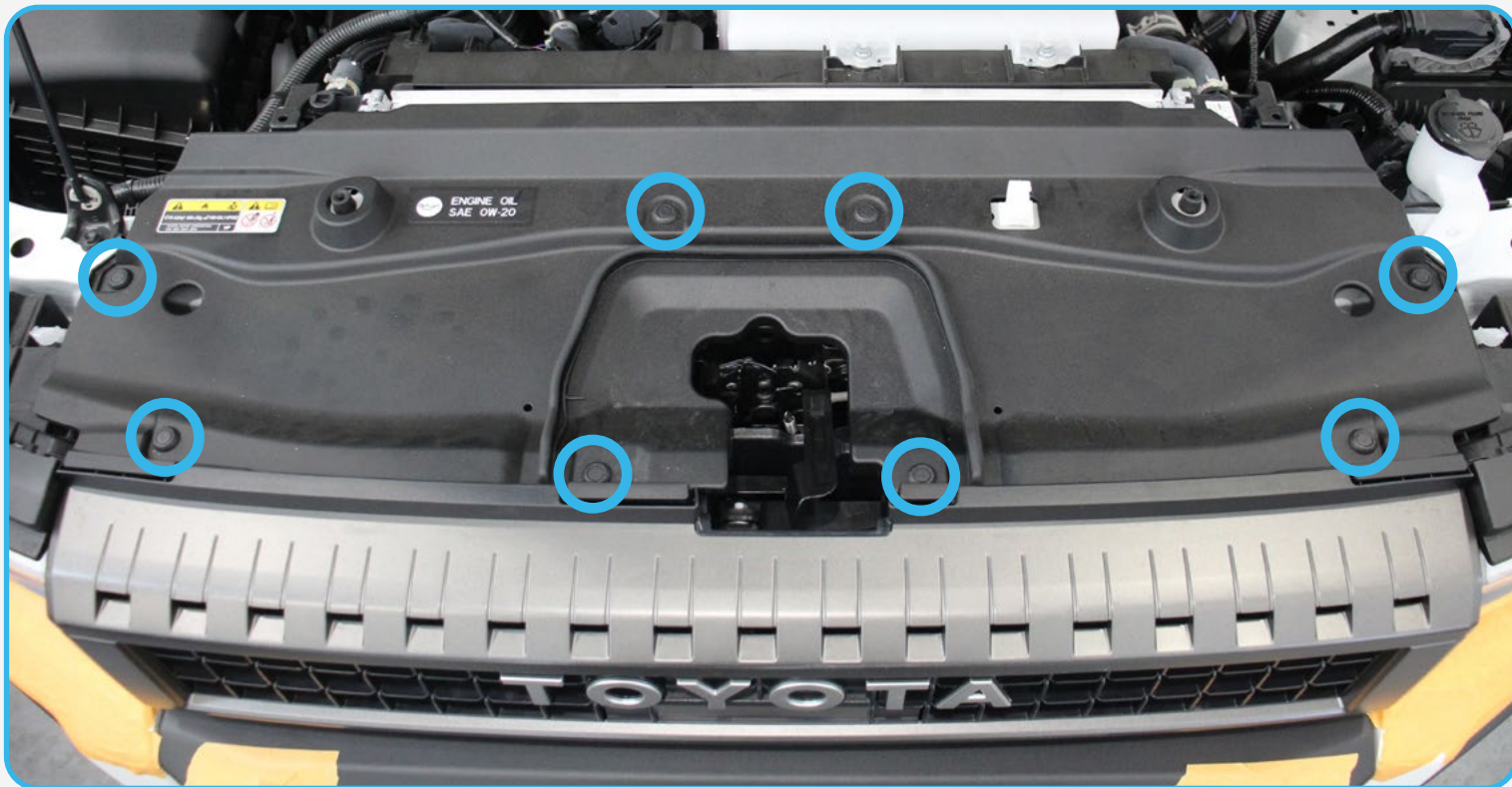
UUS0089

QTY: 6



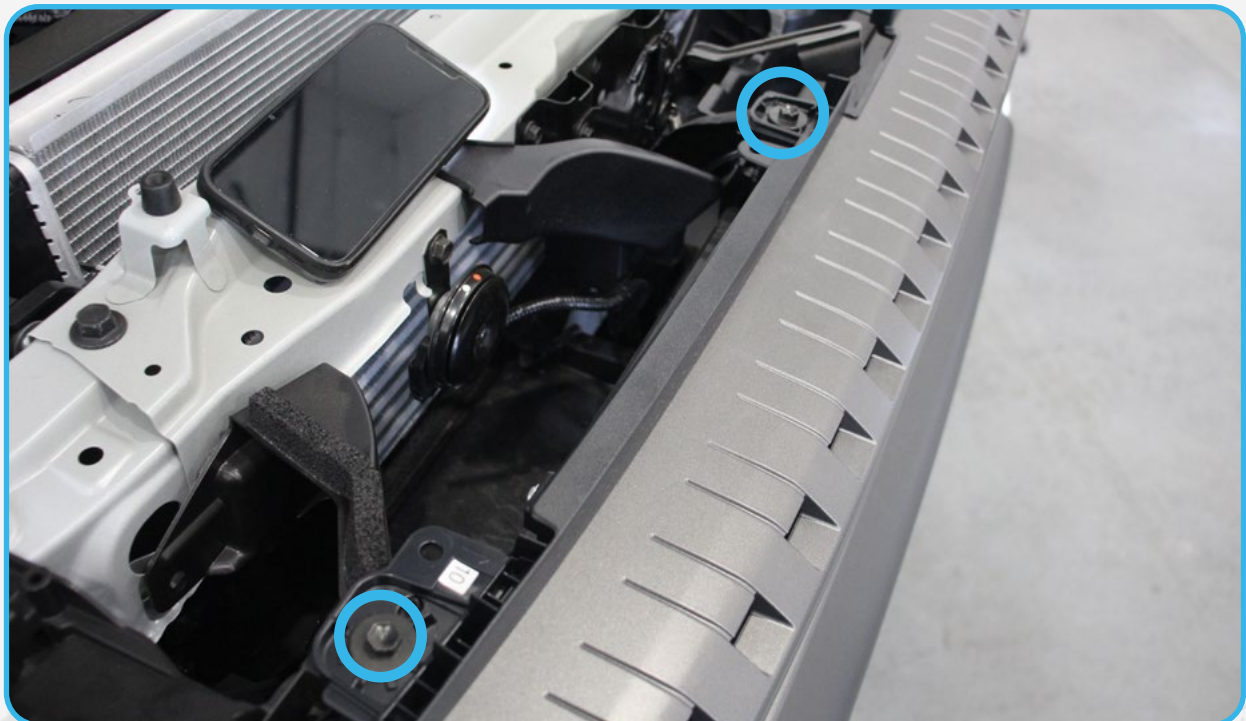
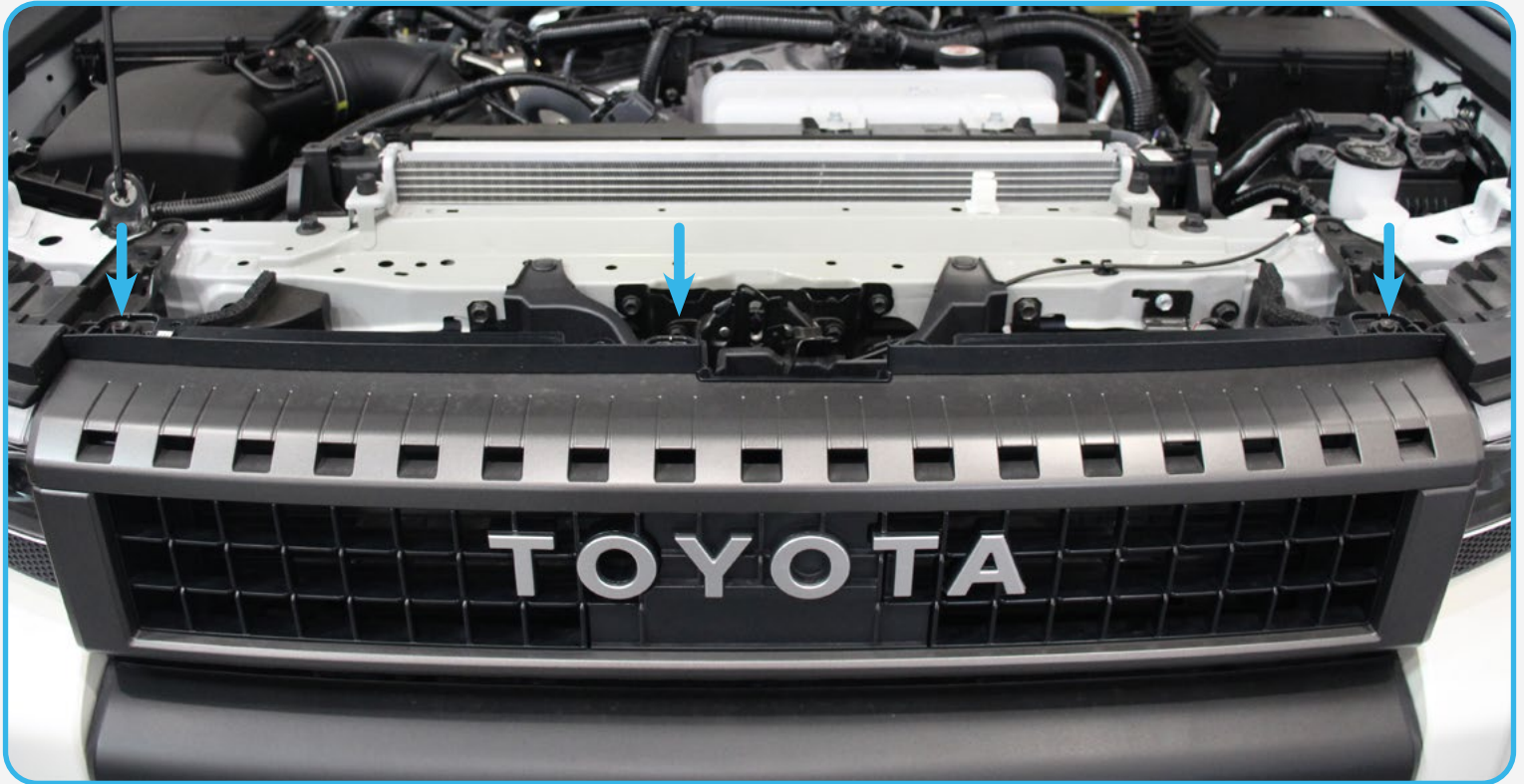
□ STEP 1

Open the hood and remove the 8x push pins by pushing the center down to release. Remove covers and set aside.



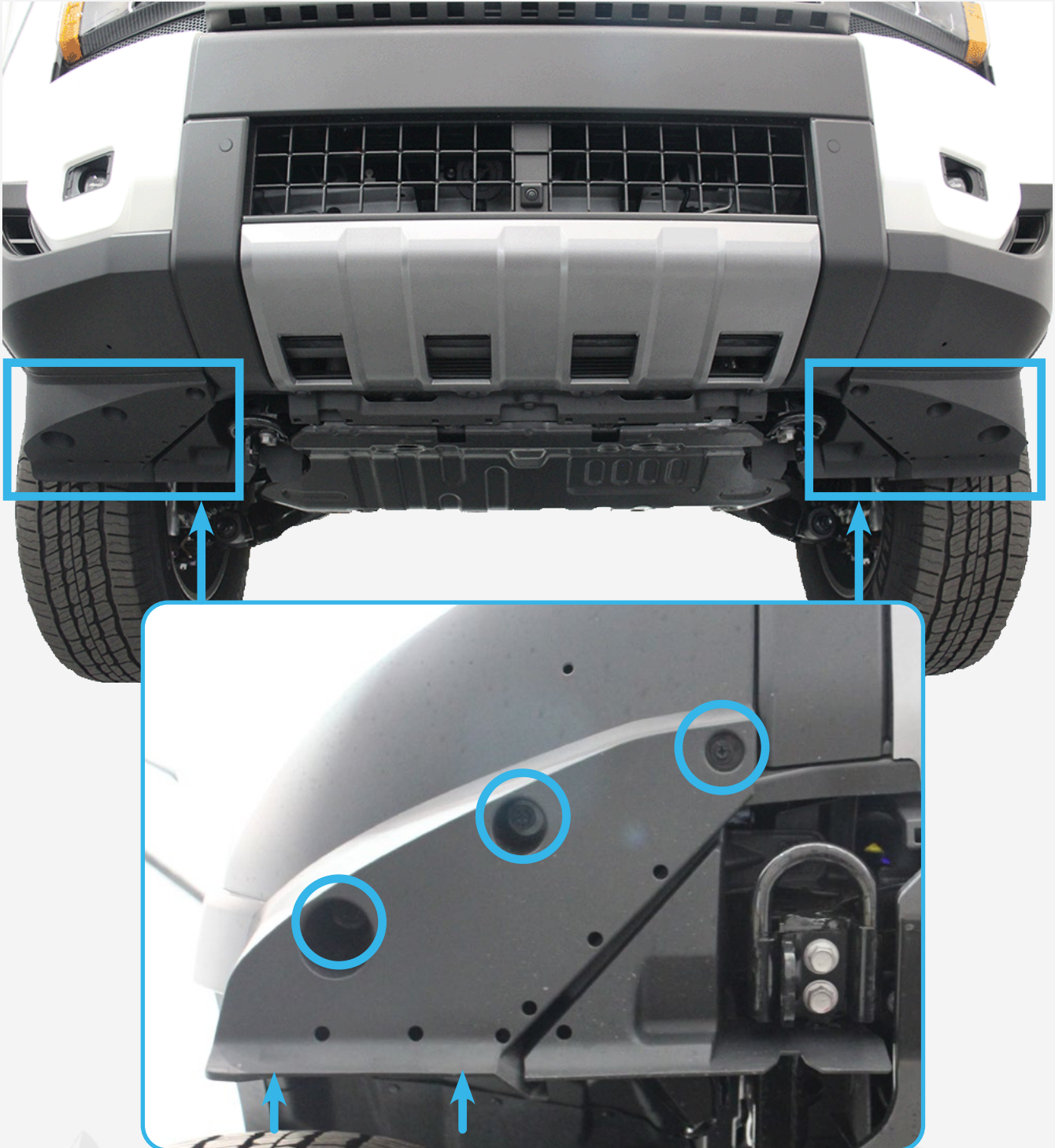
□ STEP 2

Next, using a (10mm socket) remove the hardware highlighted below.



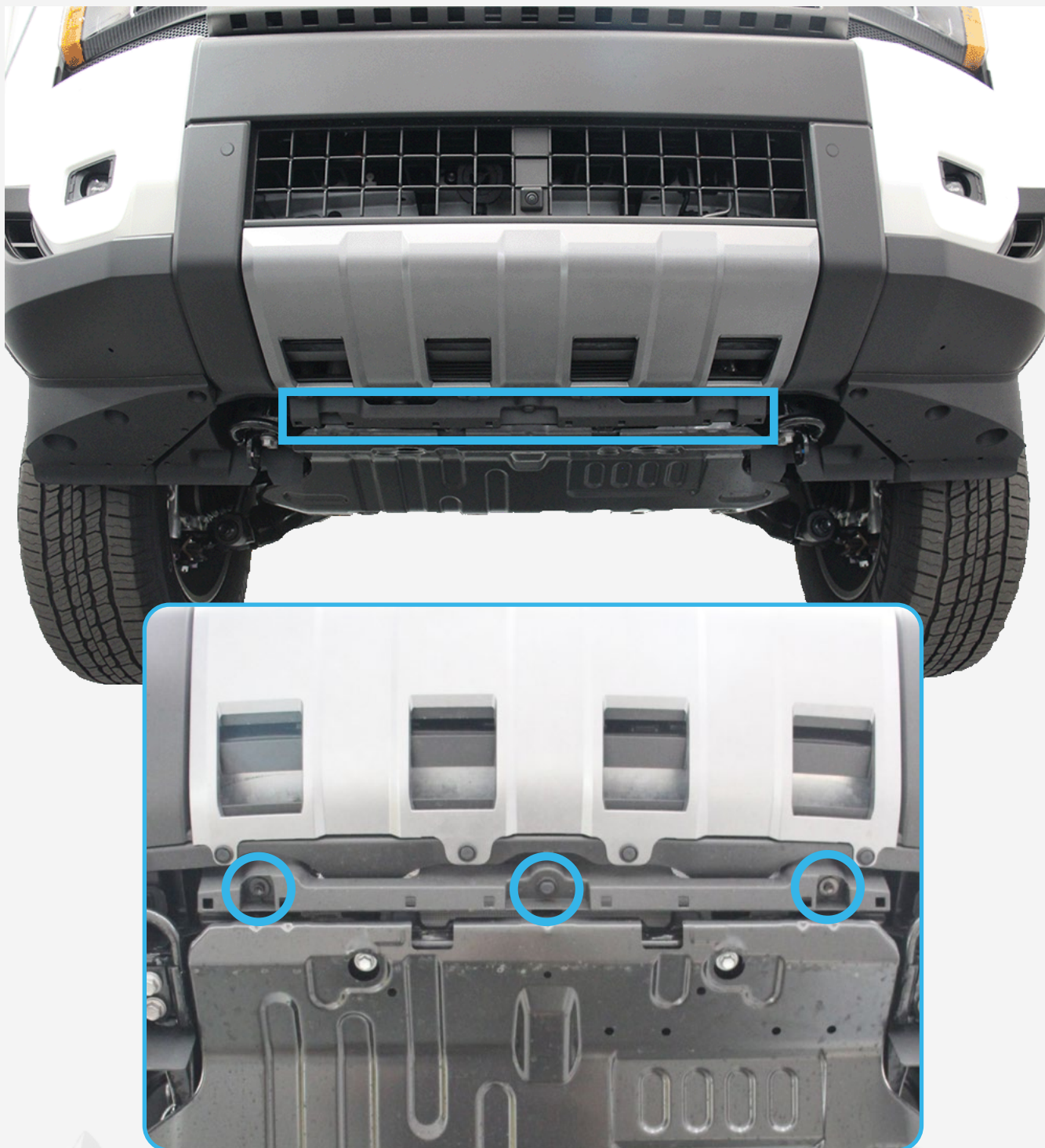
□ STEP 3

Using a (10mm socket) remove the bottom covers on both driver and passenger side.



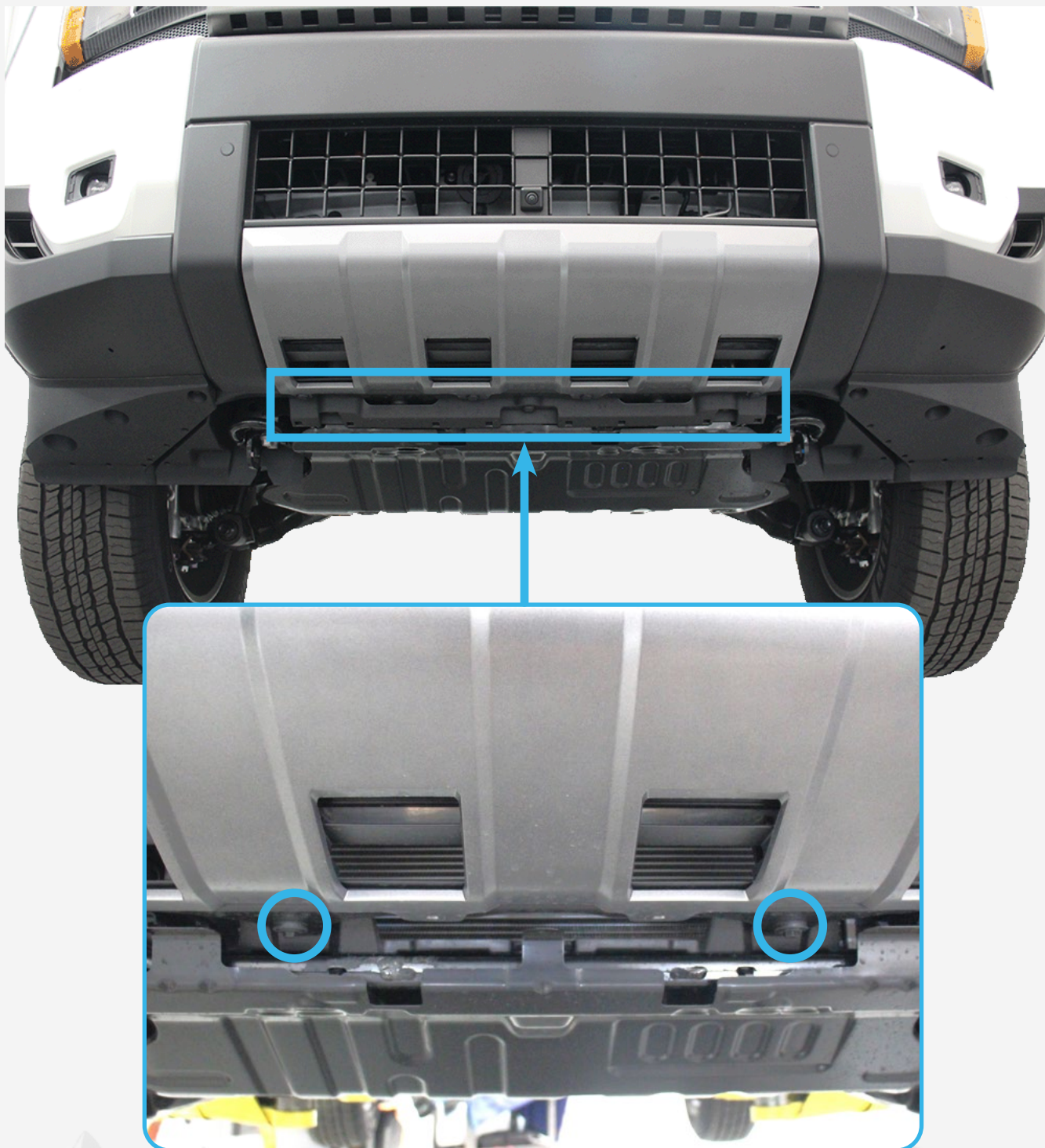
□ STEP 4

Using a (10mm socket) remove the 3x bolts holding the plastic cover located underneath the center of the bumper.



□ STEP 5

Next, using a (10mm socket) remove the bolts located underneath the plastic removed from **step 4**.



□ STEP 6

Remove the hardware holding the fender flairs located inside the wheel well using a (flathead screwdriver) and a (10mm socket).



☐ **STEP 7**

Pull the fender flairs outwards as shown below.



☐ STEP 8

Using a (10mm socket) and a (flathead screwdriver) remove the push pins and bolts holding the valence.



□ STEP 9

Unplug the harness connections located on both driver and passenger side. You can now remove the whole grill assembly.



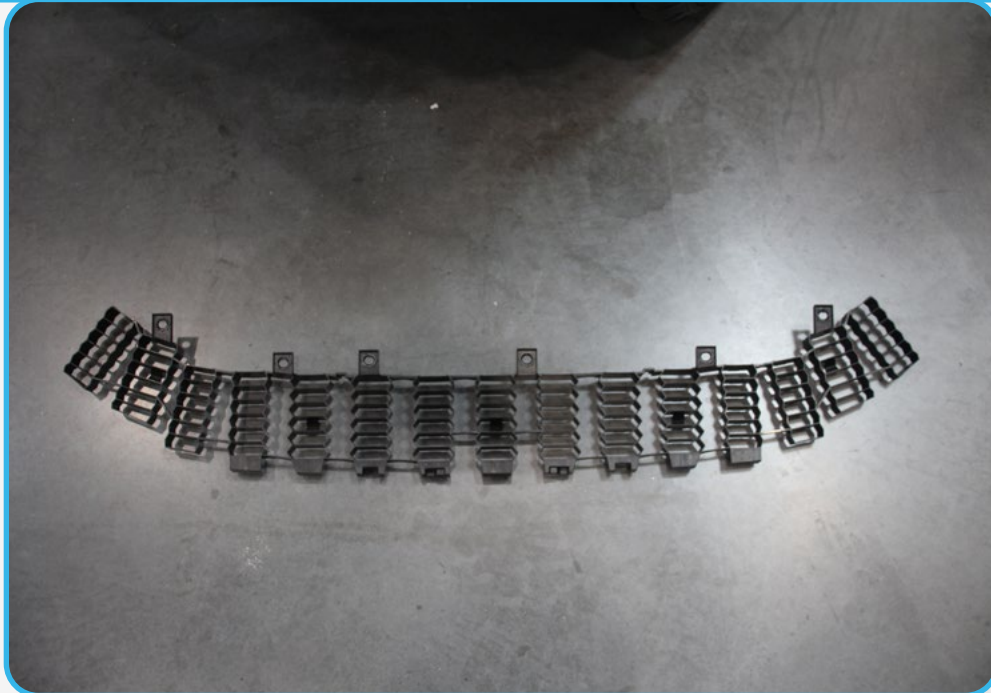
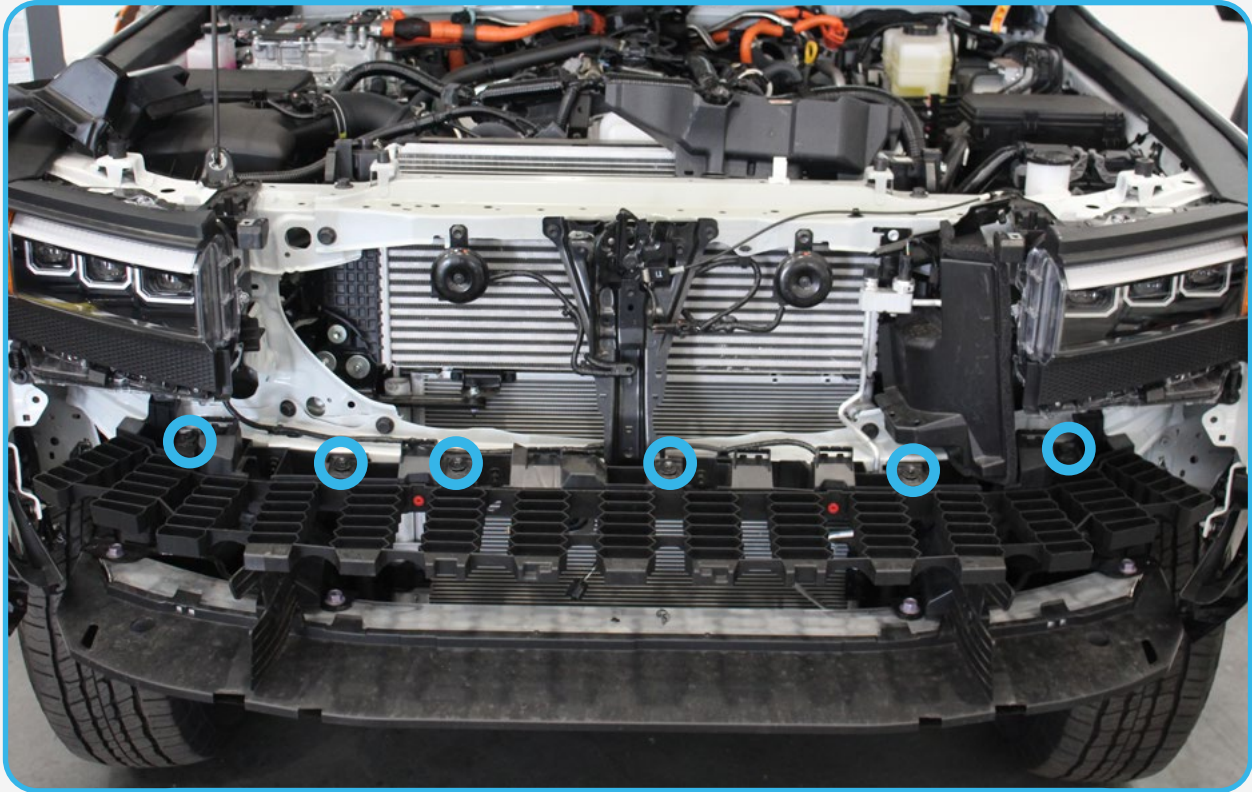
☐ STEP 10

Remove the crash bar cover by simply pulling.



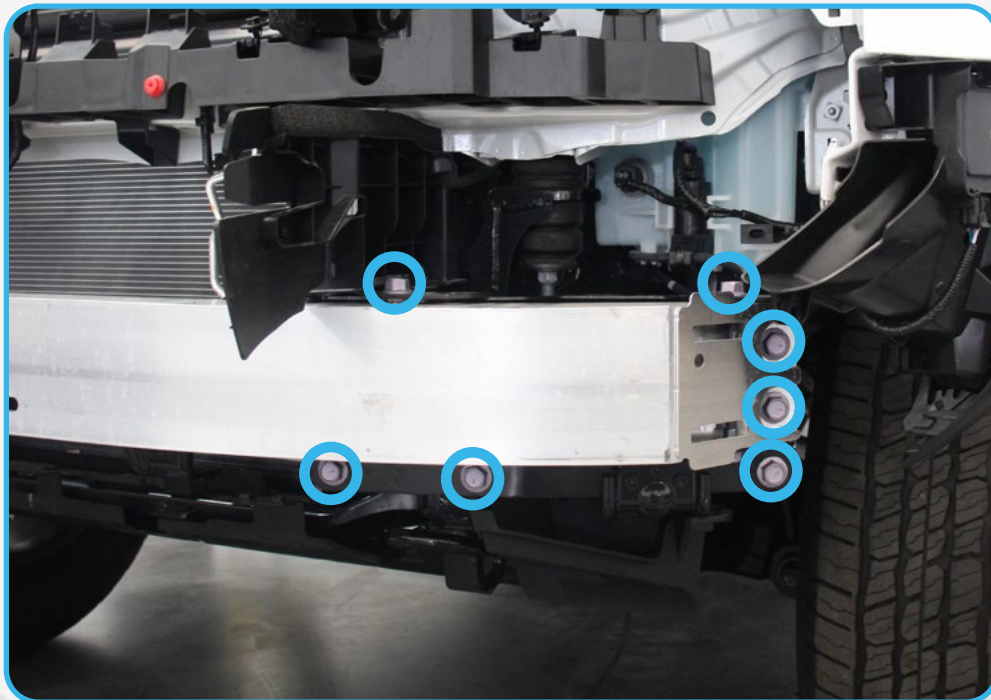
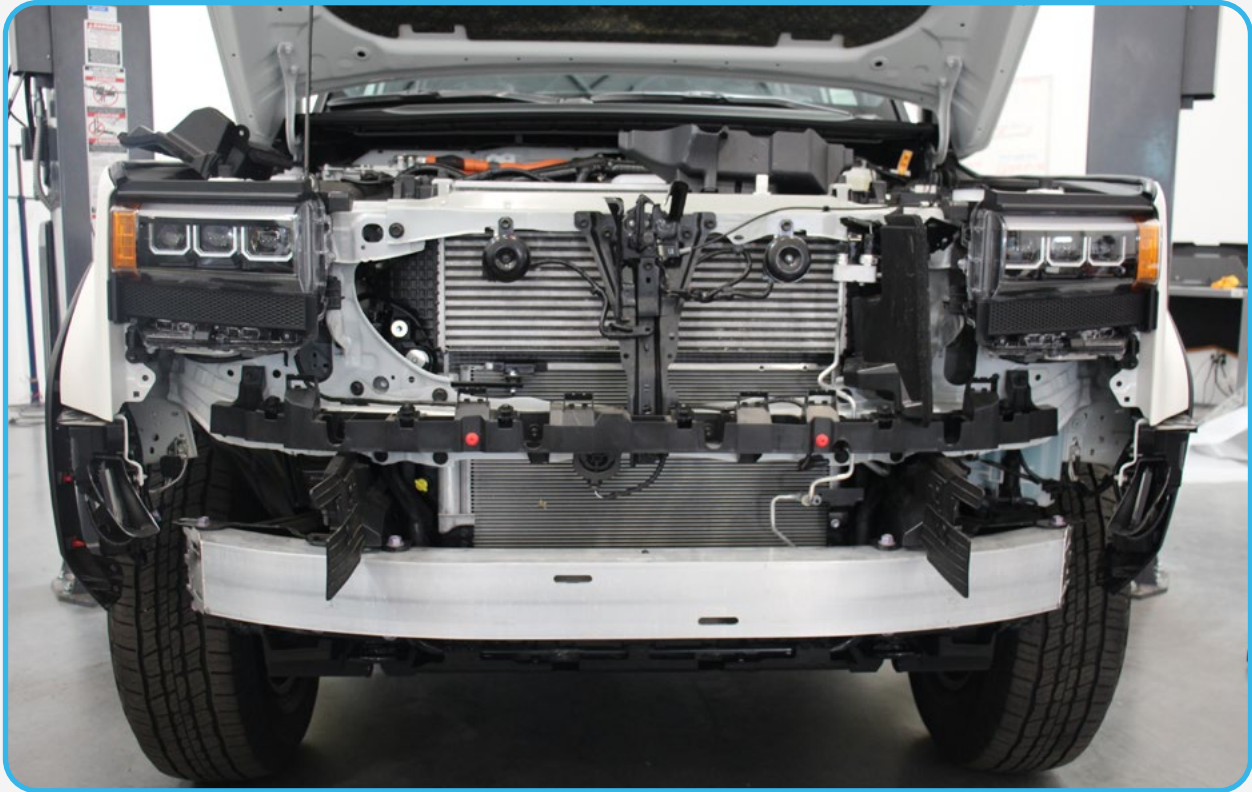
□ STEP 11

Using a (10mm socket) remove the plastic as shown below.



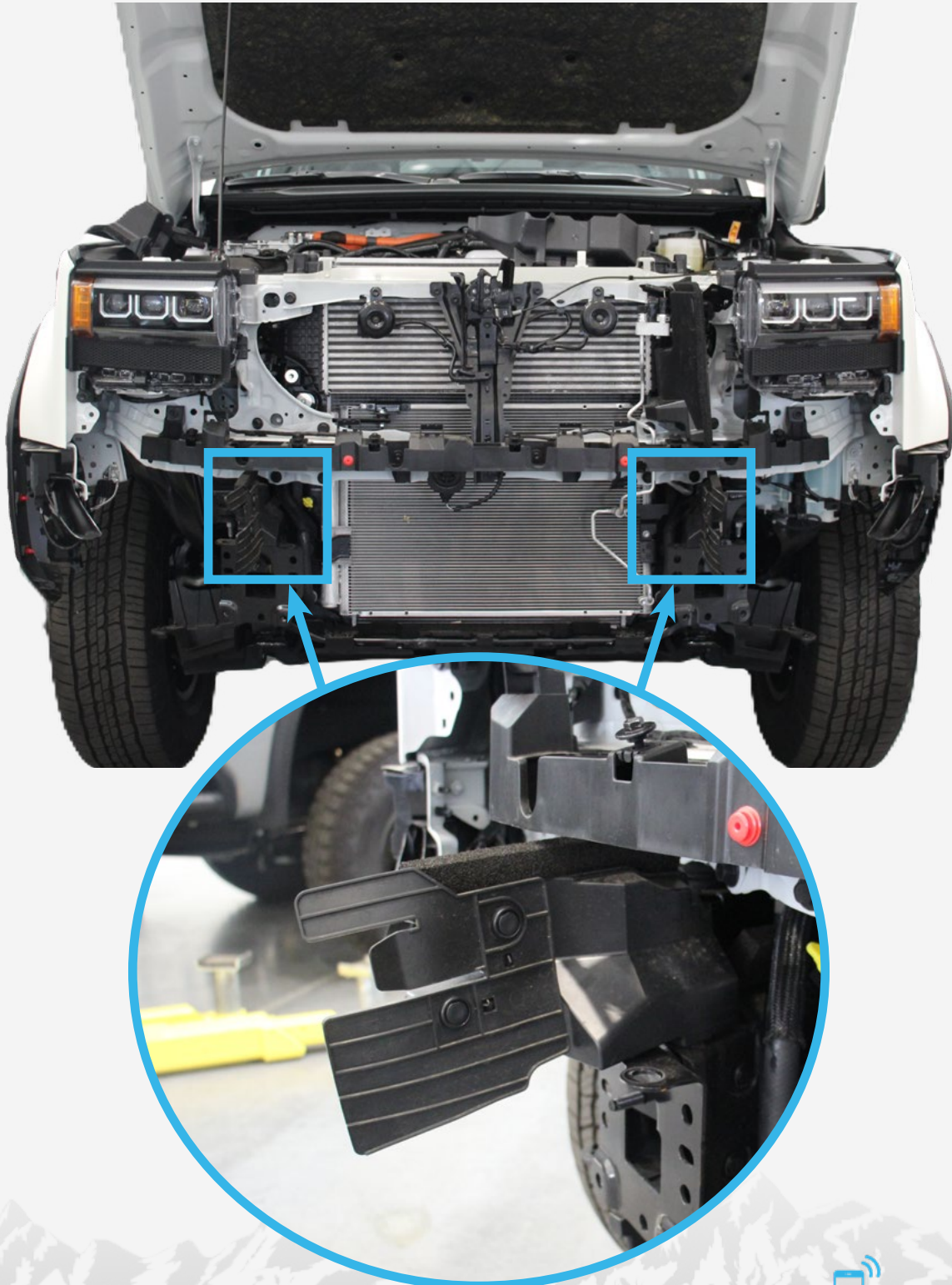
□ STEP 12

Using a (17mm socket) remove the crash bar by removing the hardware highlighted below.



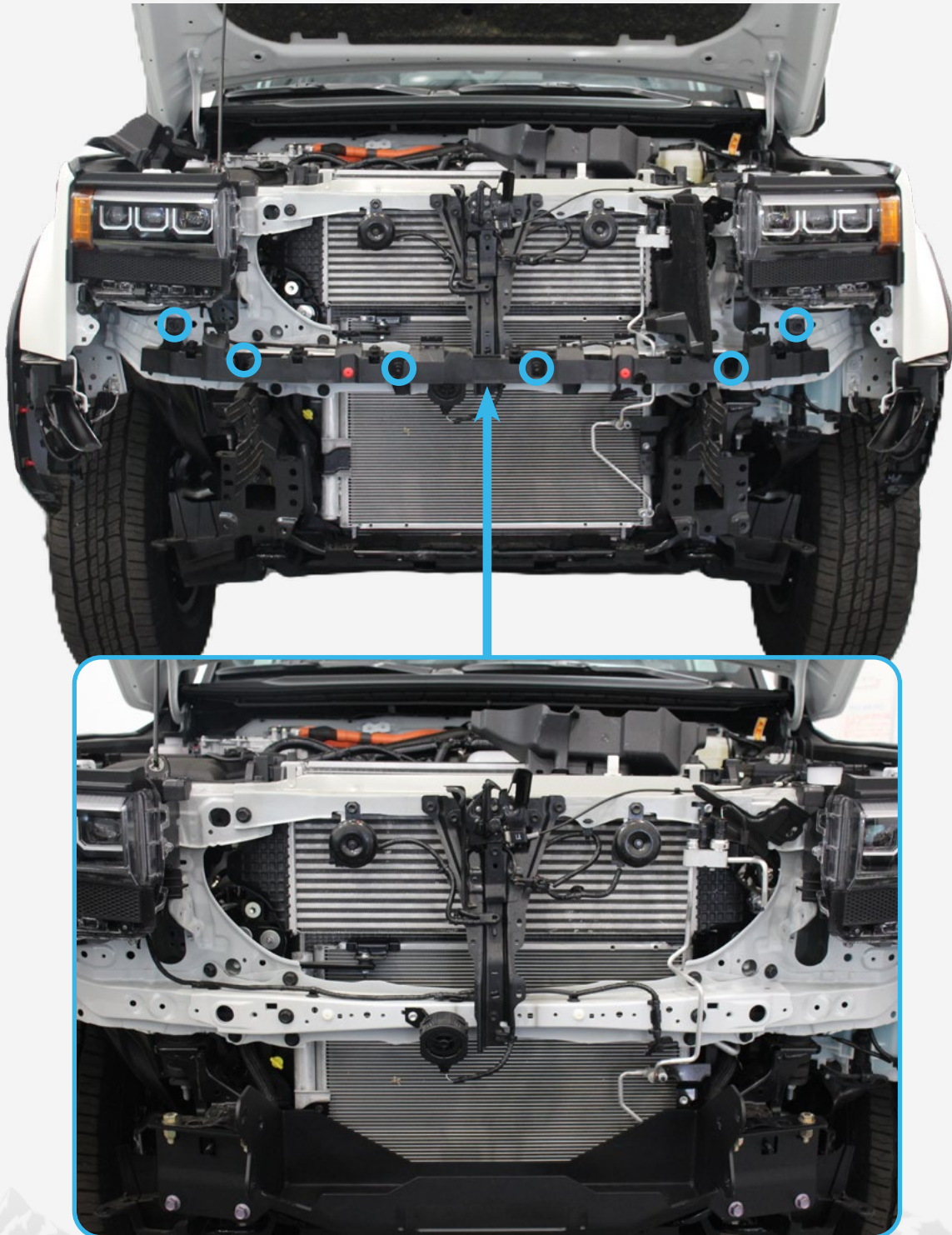
STEP 13

Remove the covers shown below by simply pulling.



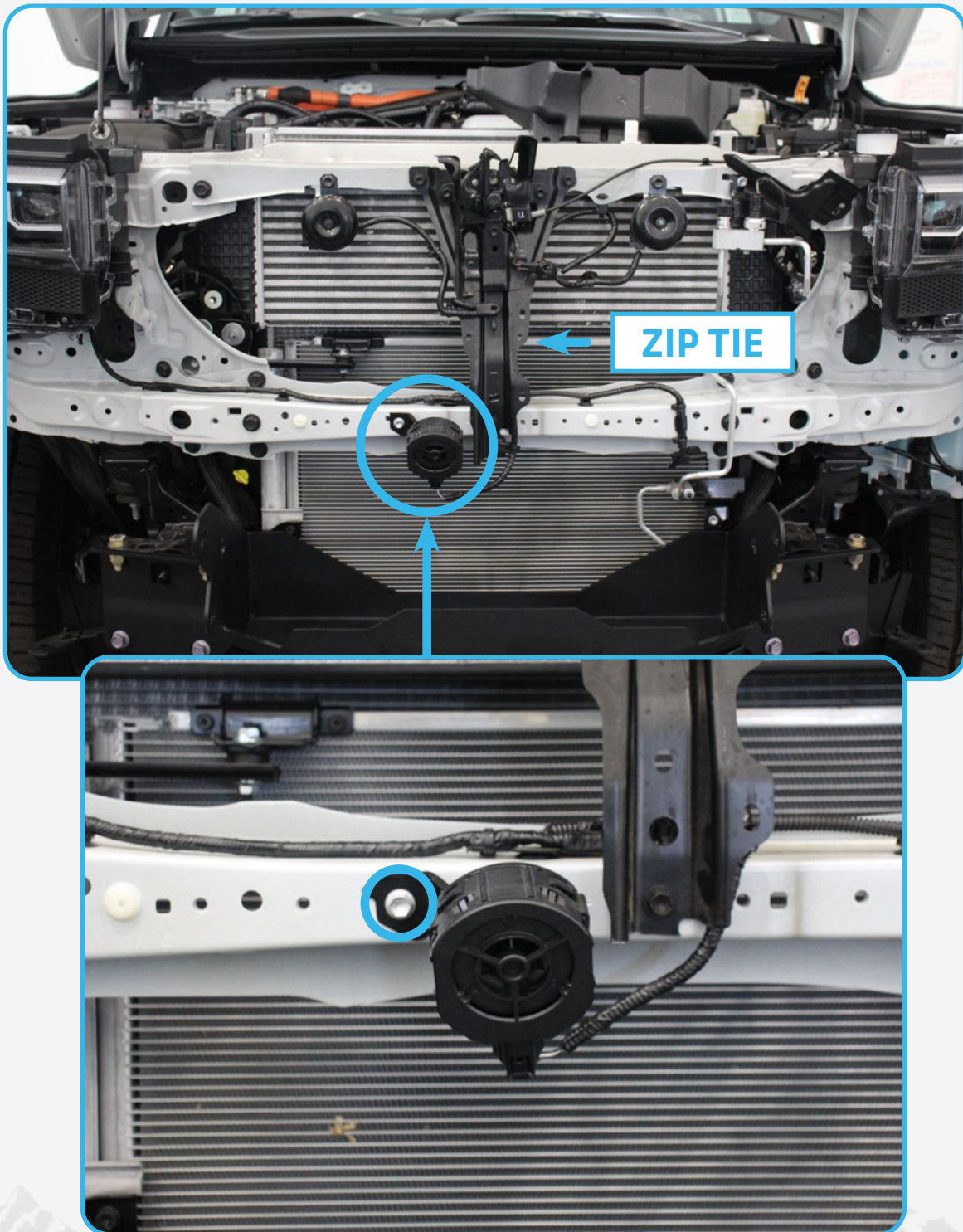
□ STEP 14

Next, remove the plastic mount using a (10mm socket). Set aside for later.



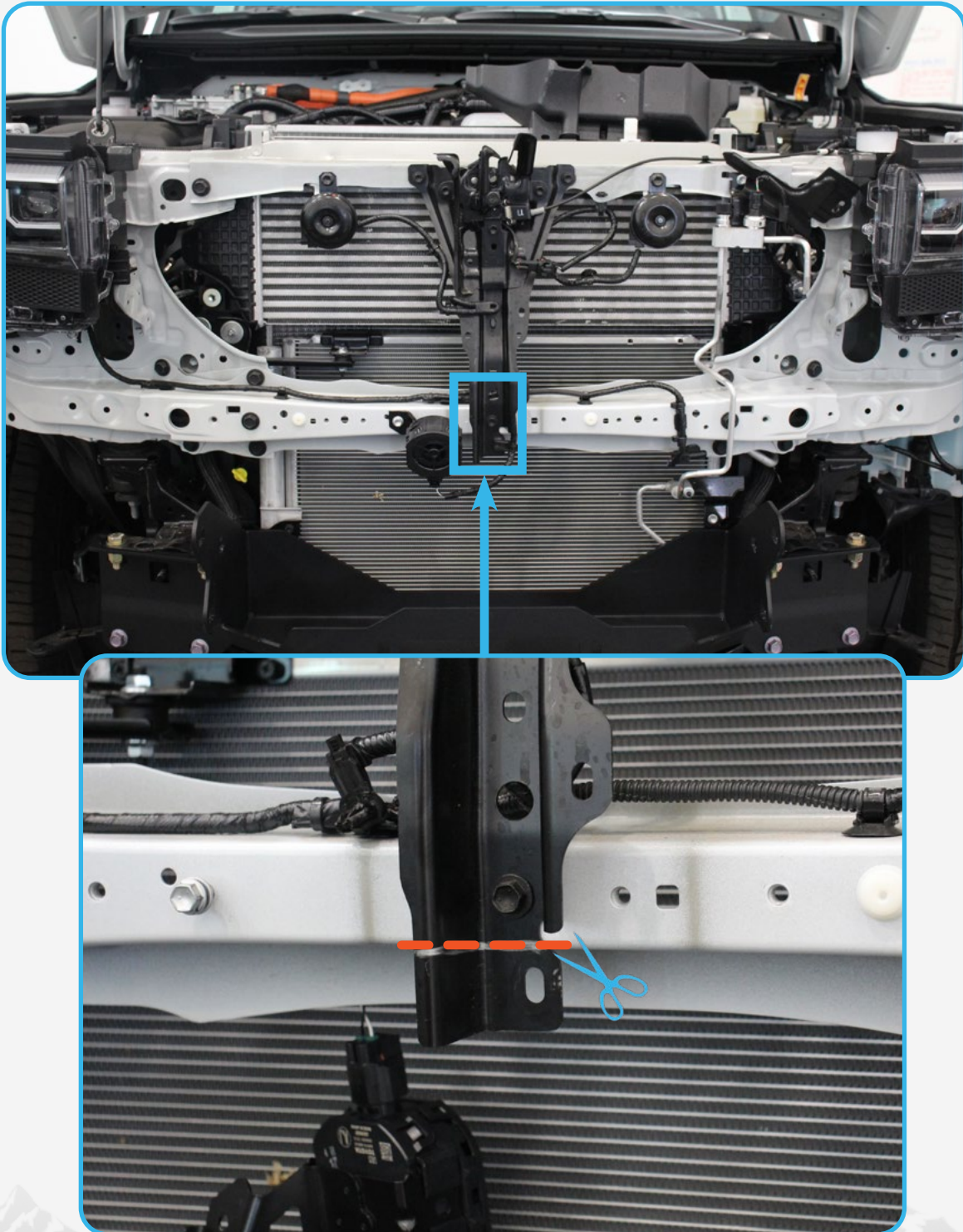
□ STEP 15

Relocate the parking speaker using a (10mm socket) and zip tie behind the support bracket as shown below.



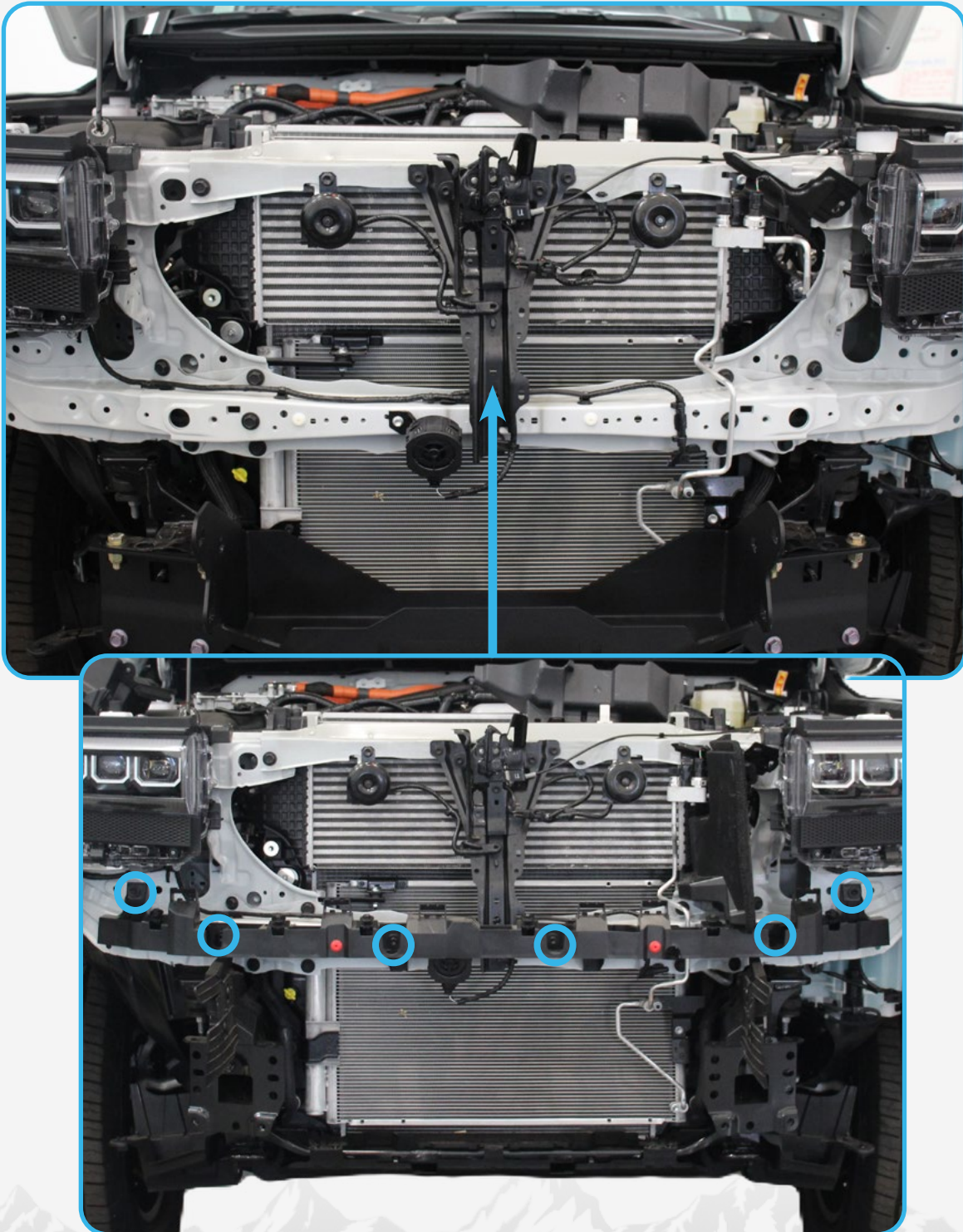
□ STEP 16

Using a your choice of cutting tools, cut the over hang of the middle support shown below for preparation of winch install.



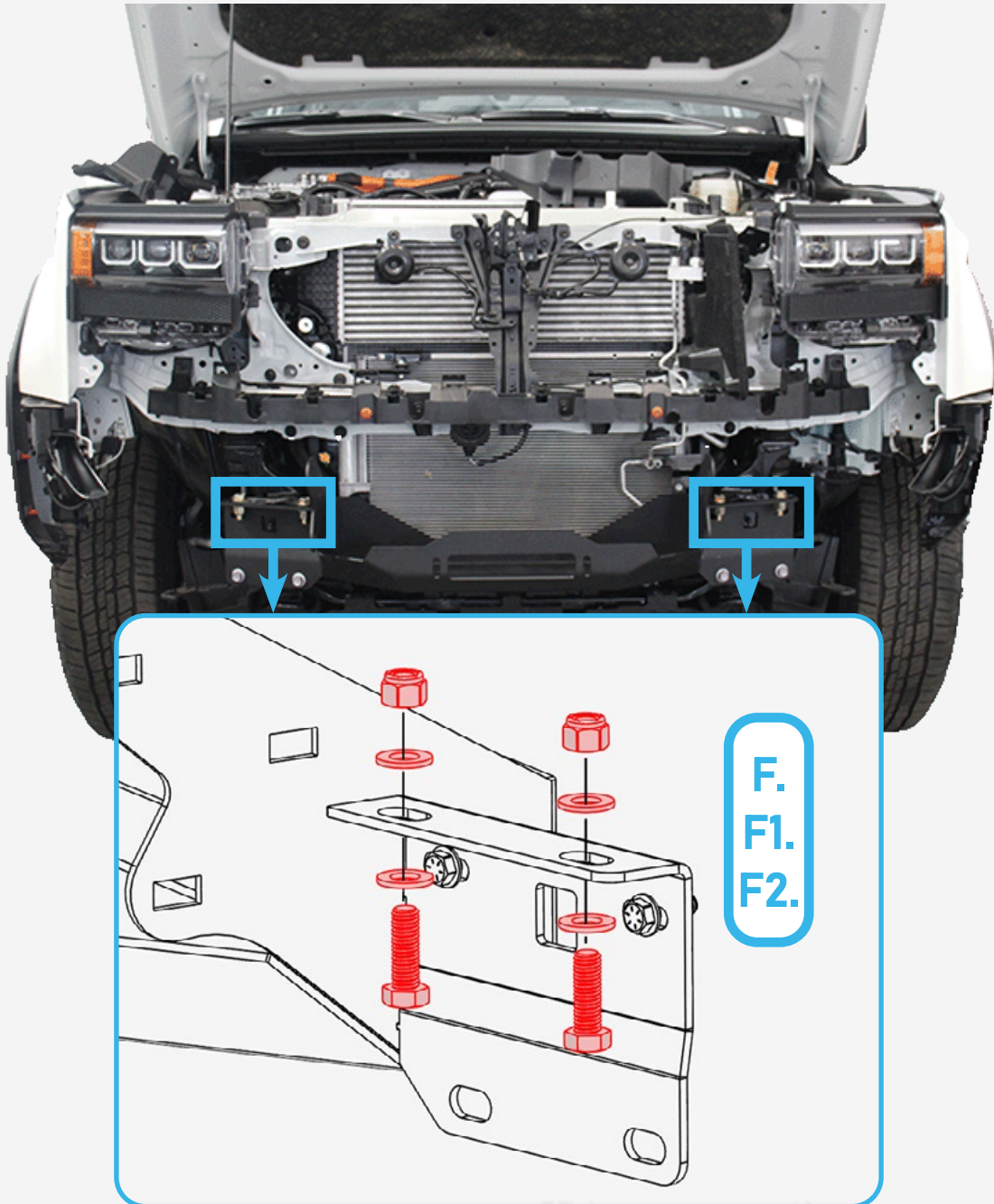
□ STEP 17

Re-Install the plastic mount removed from **step 14** using a (10mm socket).



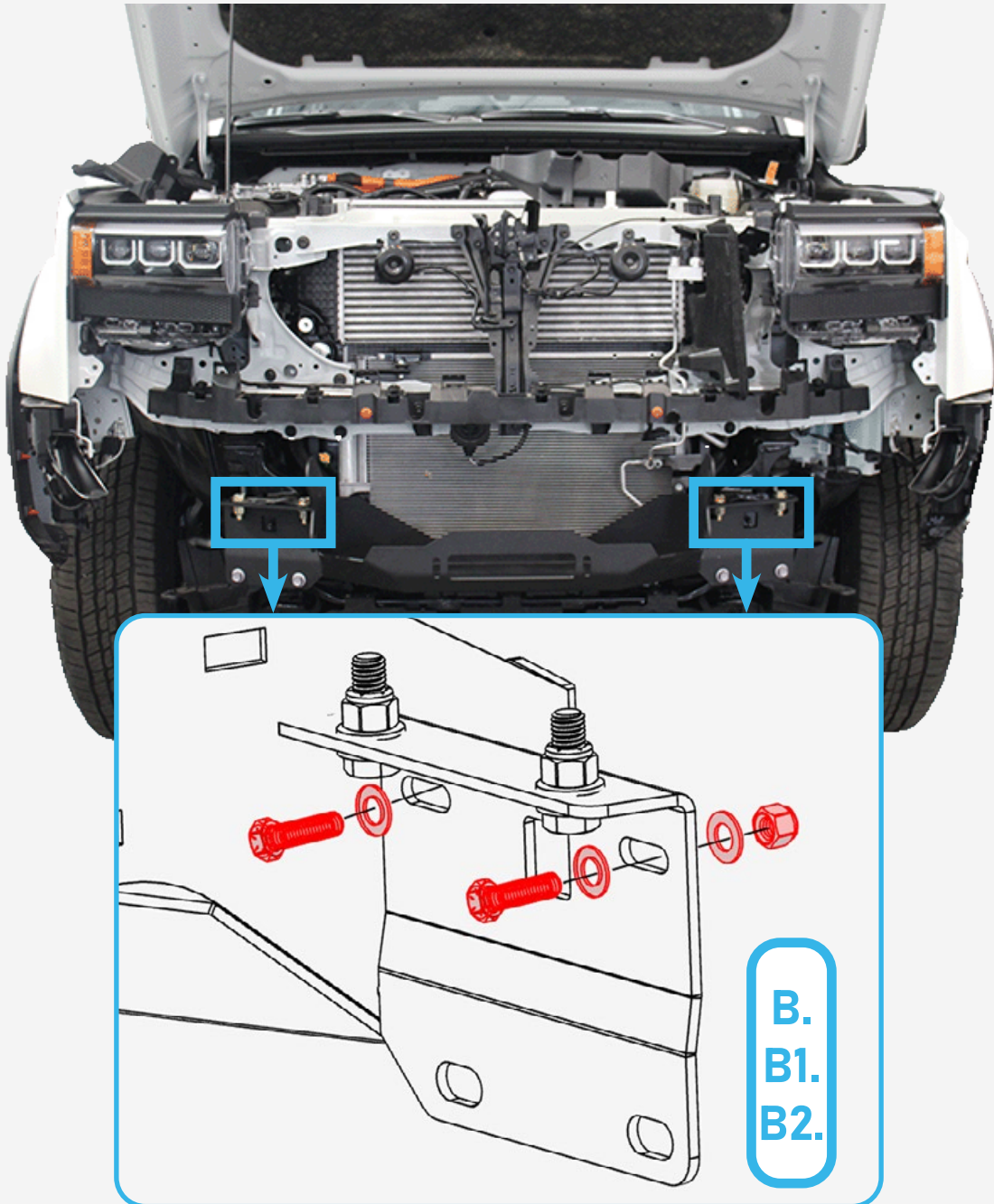
□ STEP 18

You can now install the winch to the winch plate and install to the vehicle with the provided (F, F1, F2) using a (3/4 wrench) and a (3/4 socket).



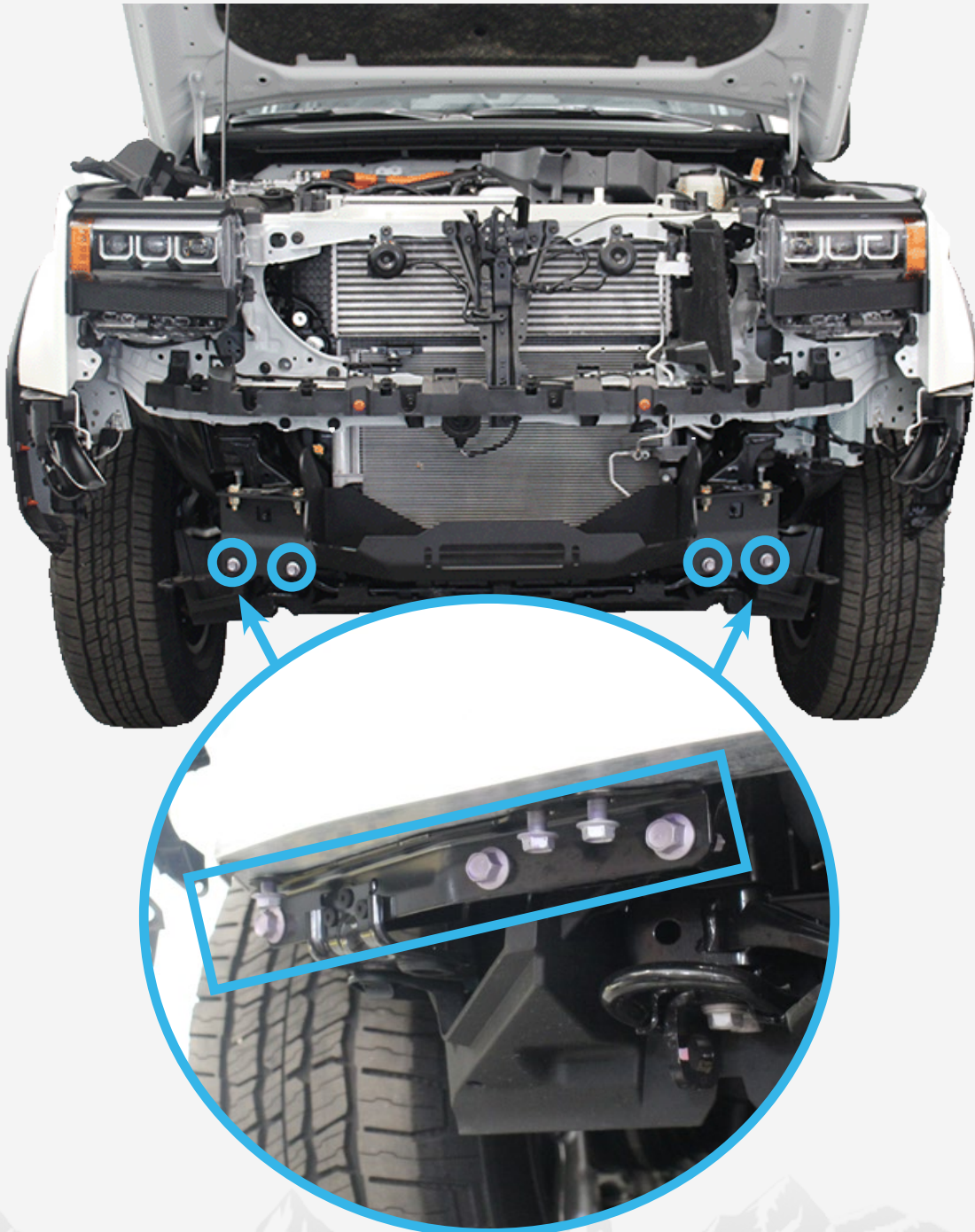
□ STEP 19

Next install the provided (**B, B1, B2**) 3/8" hardware using a (**9/16 wrench**) and a (**9/16 socket**).



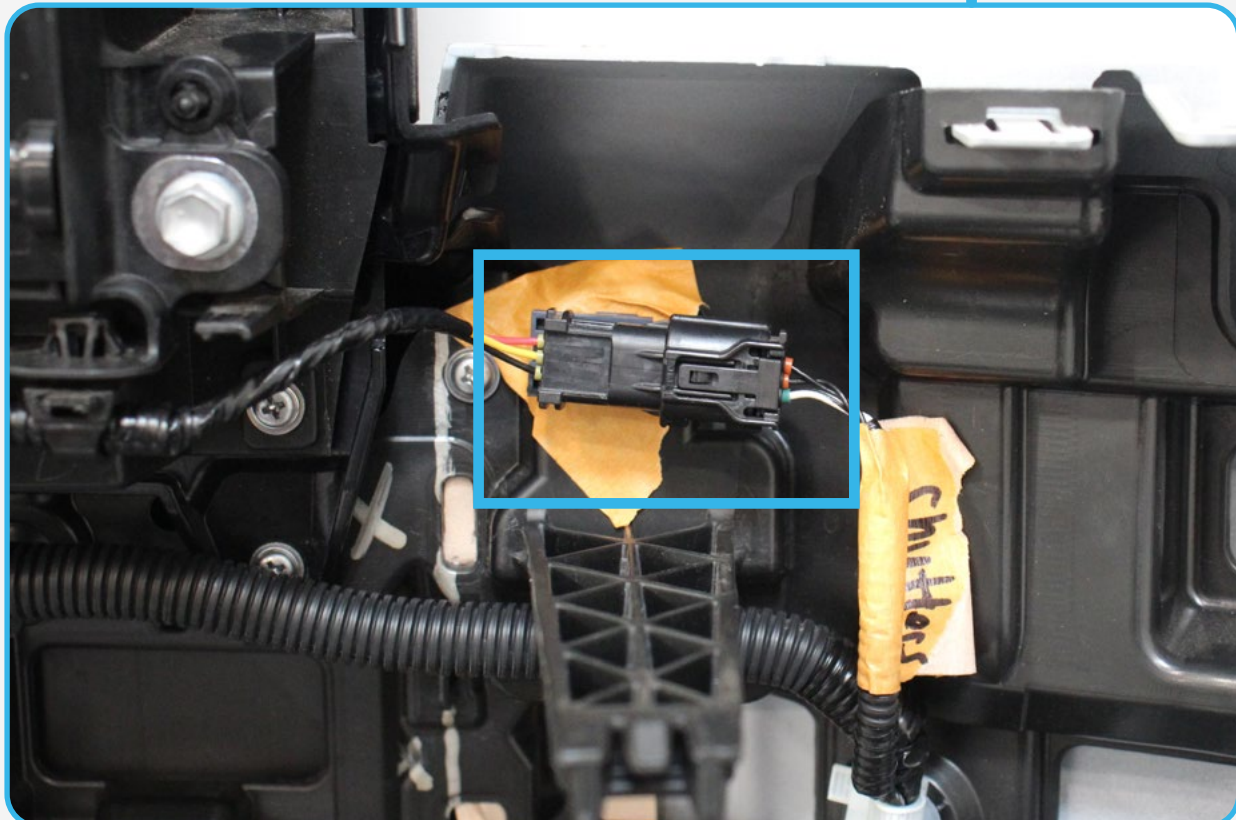
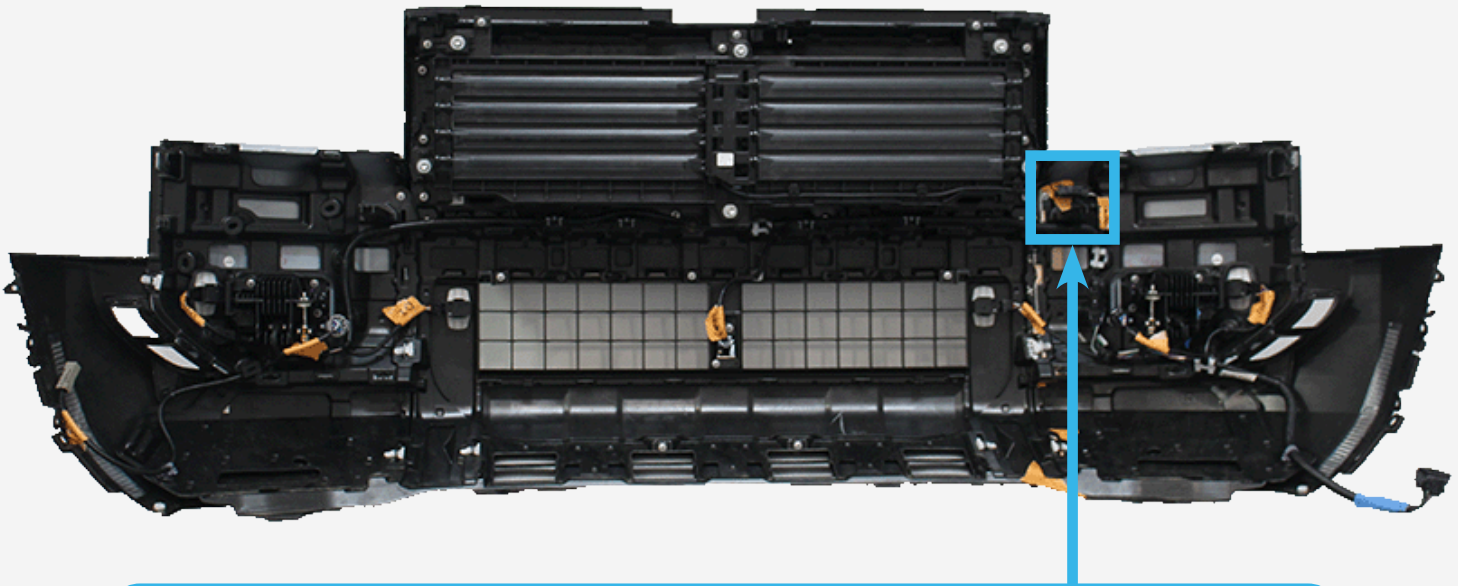
□ STEP 20

With the crash bar removed install just the bottom brackets using a (17mm socket). These brackets will be used for mounting the valence.



□ STEP 21

Unplug the shutter assembly as shown below.



□ STEP 22

Using a (10mm socket) remove the top grill shutter assembly as shown below. **(Do not remove shutters from the assembly, this OEM assembly will be re-used later in the install)**



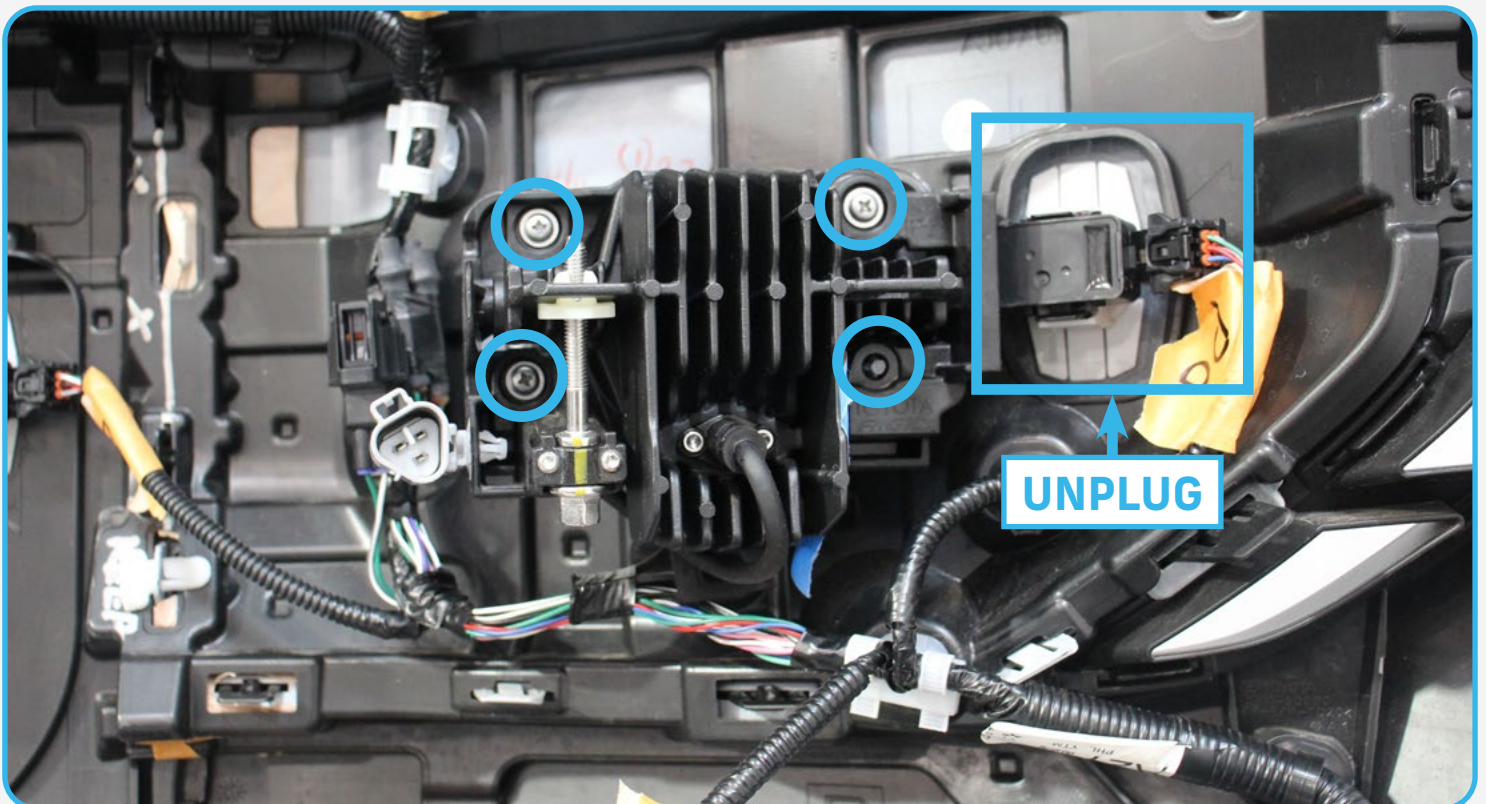
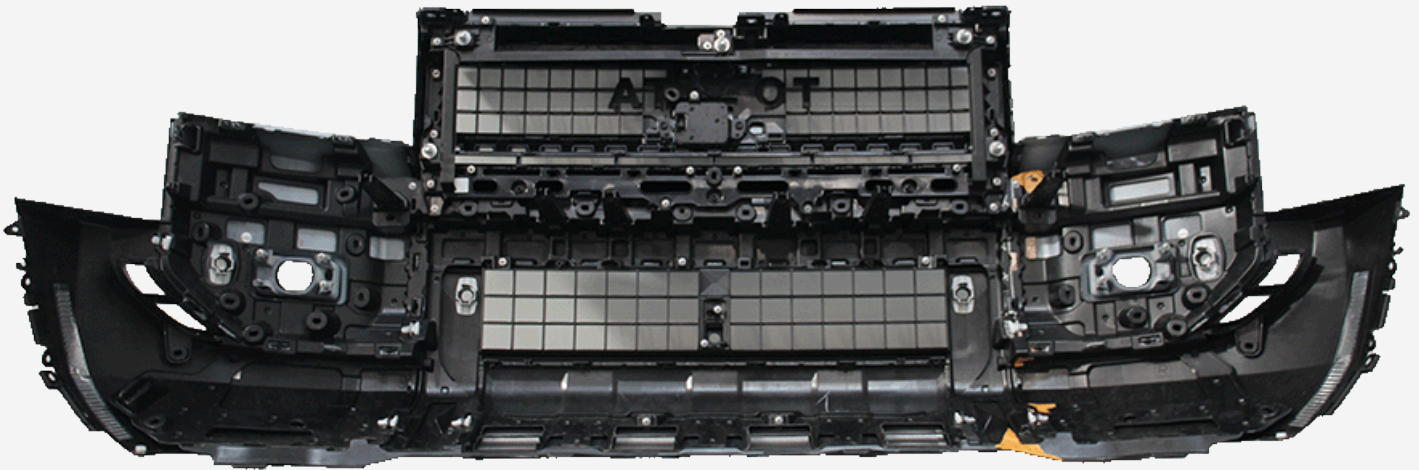
□ STEP 23

Next, Unplug the addaptive cruise control sensor and using a (philipshead screwdriver) remove the 4x screws shown below.



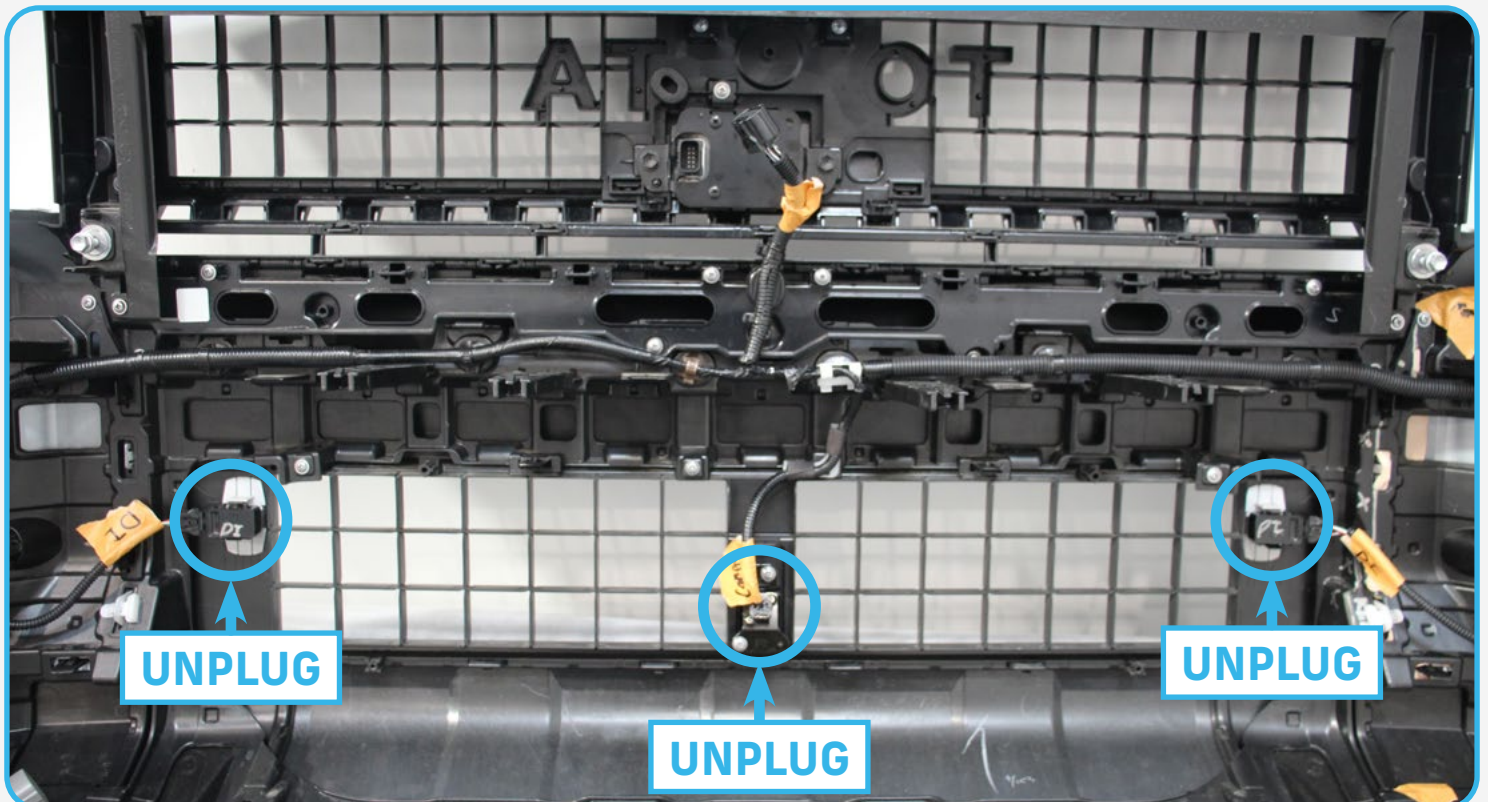
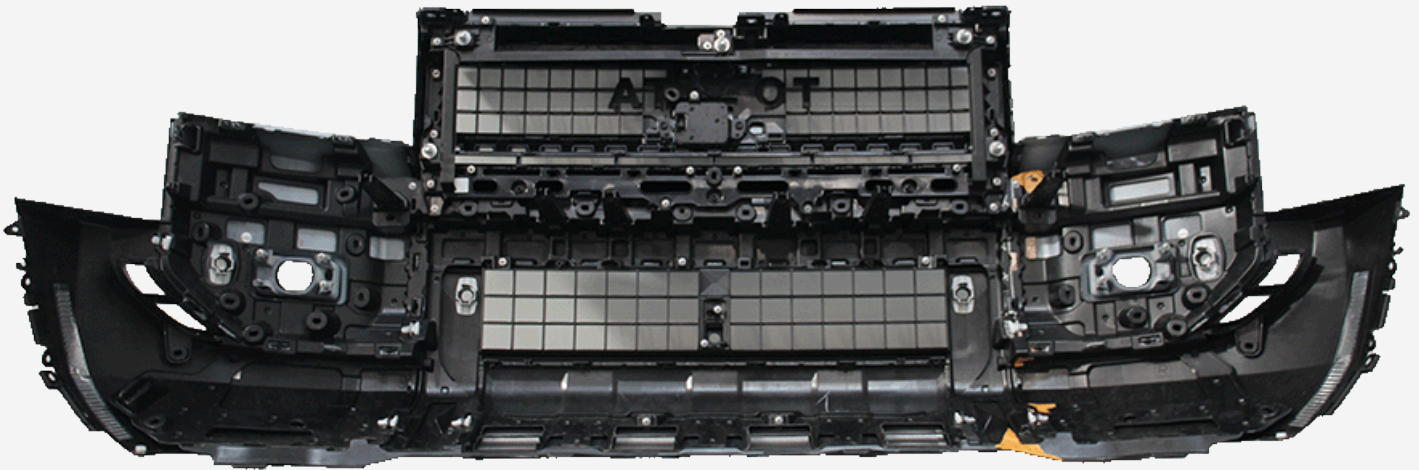
STEP 24

Using a (philipshead screwdriver) remove the fog light and unplug the parking sensor highlighted below.



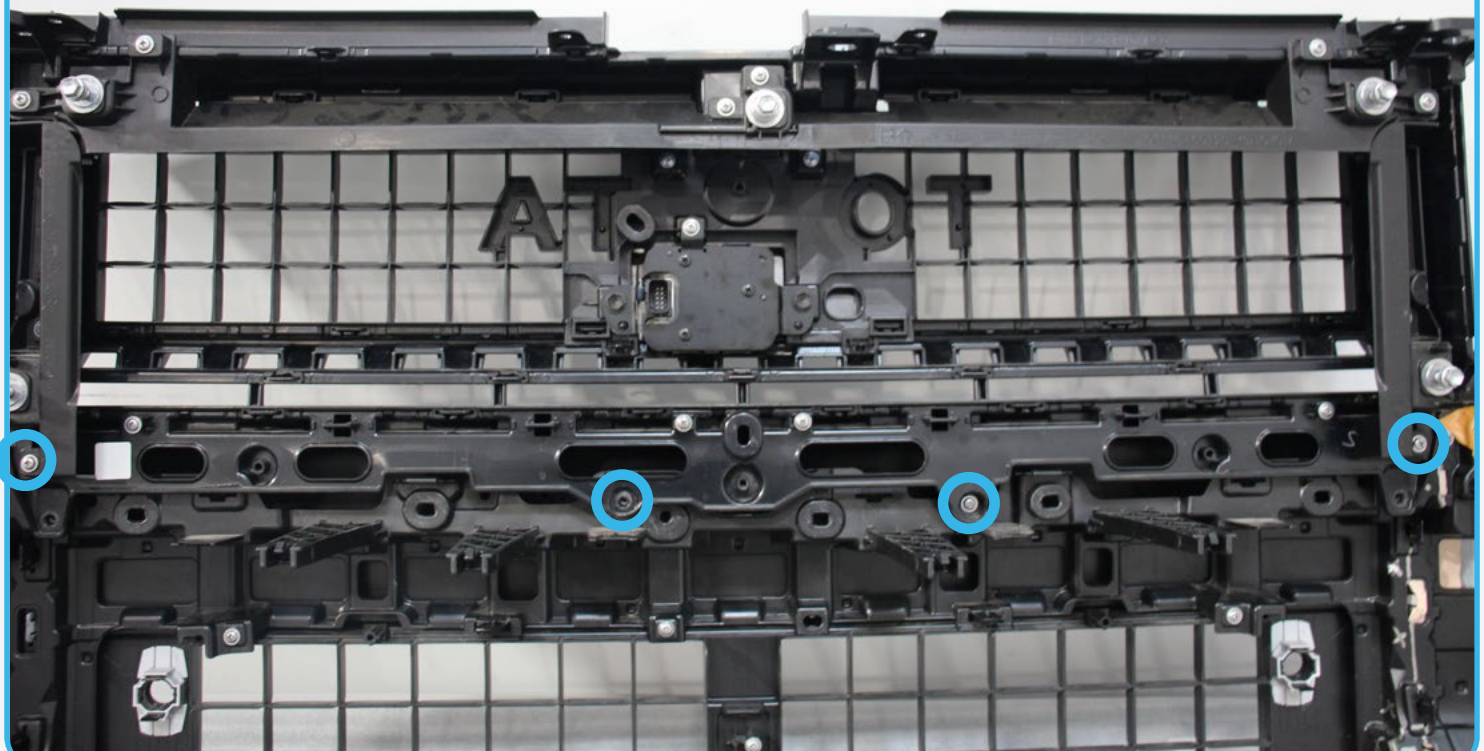
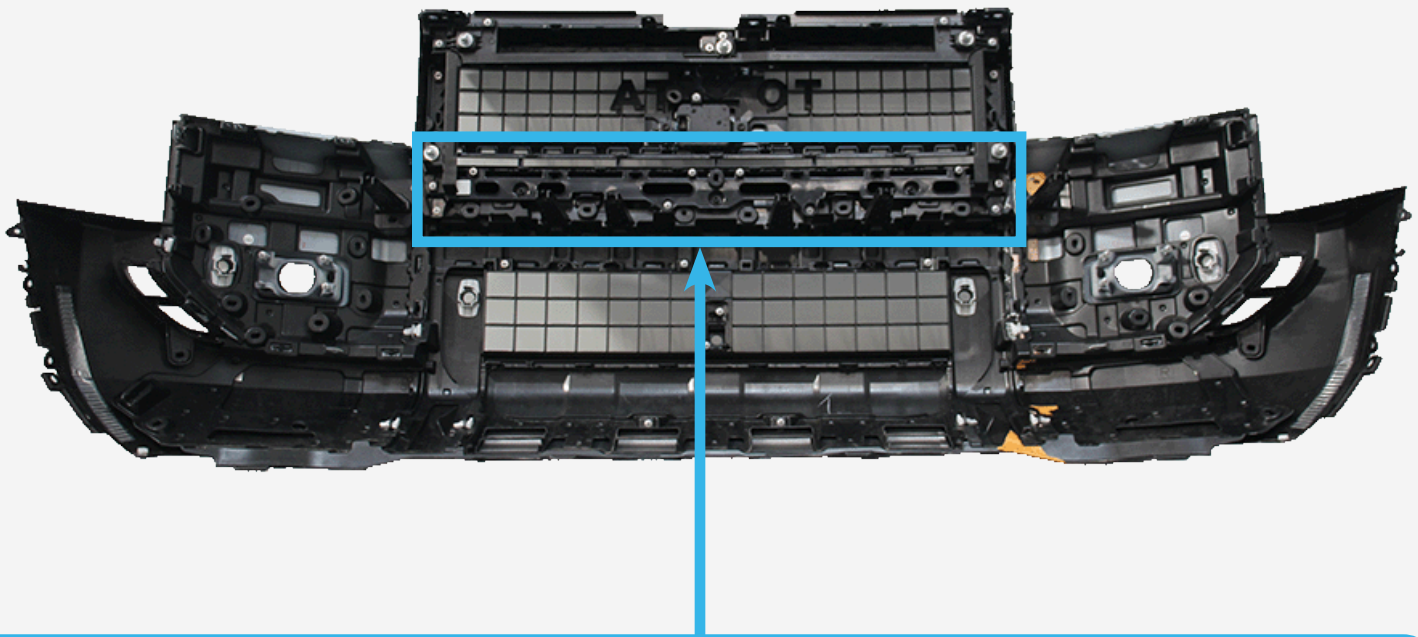
□ STEP 25

Unplug both front camera and parking sensors and remove the wire harness from the grill assembly.



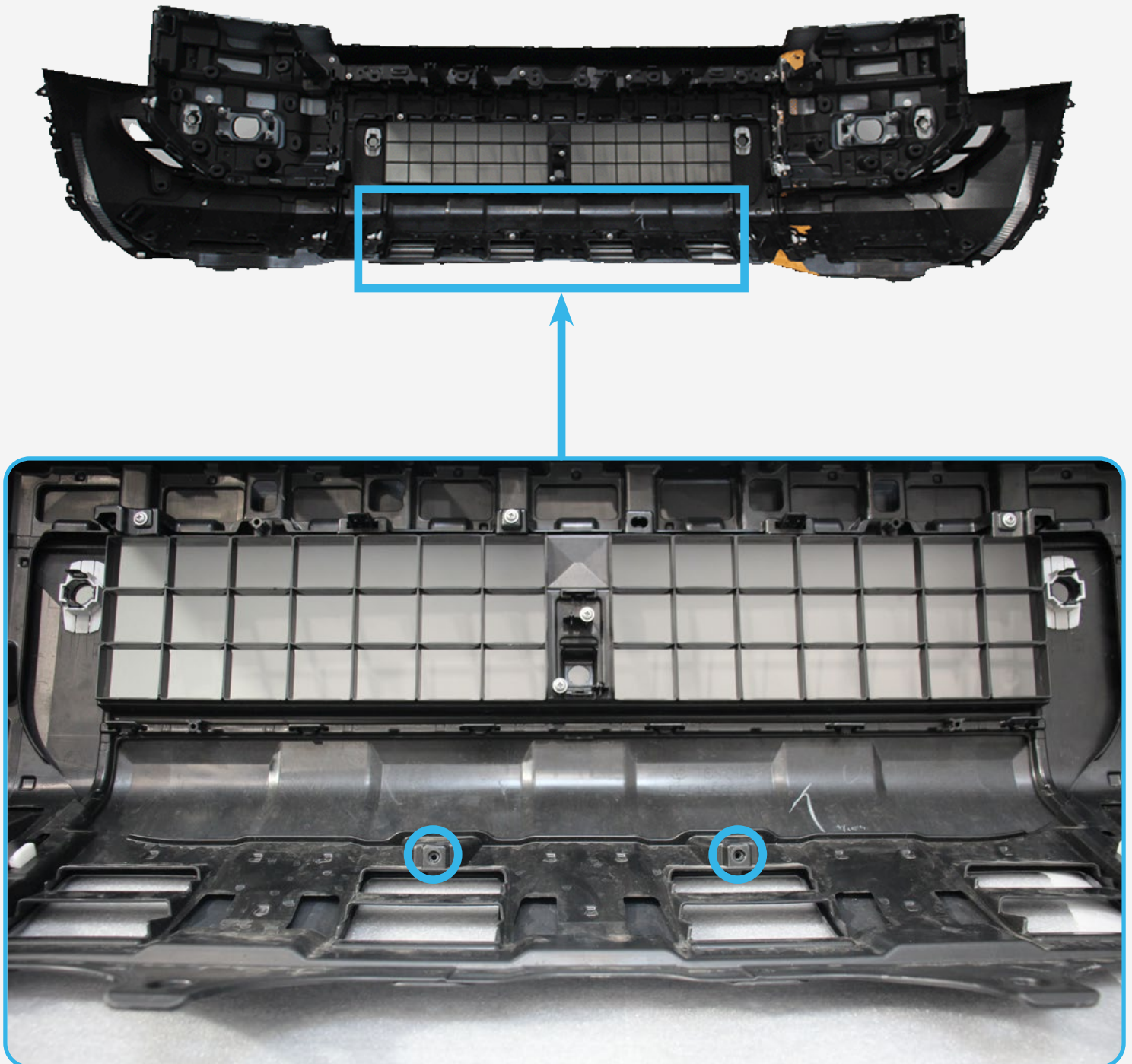
□ STEP 26

Next, using a (philipshead screwdriver) remove the 4x bolts highlighted below to remove the top grill piece.



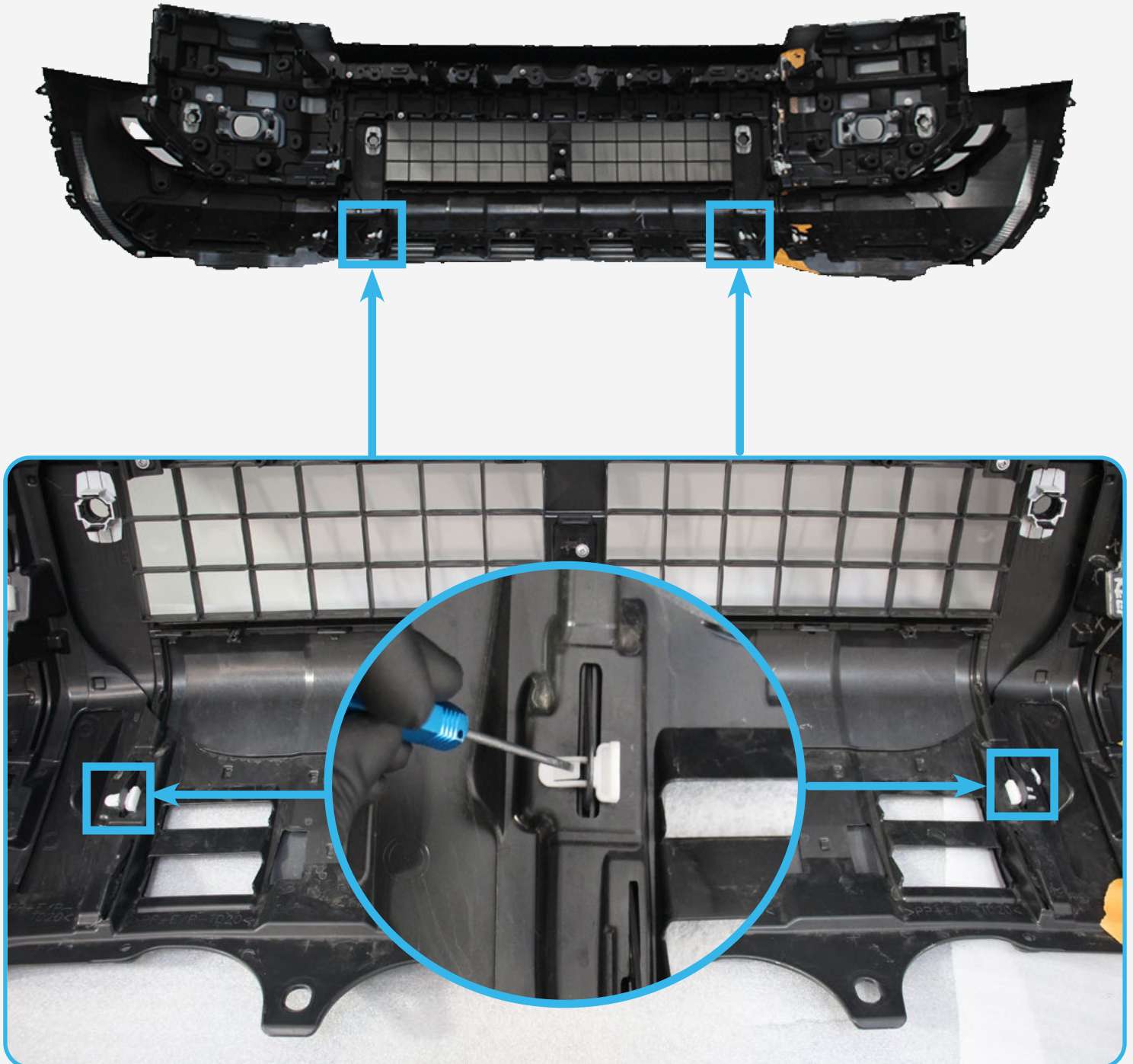
□ STEP 27

Using a (philipshead screwdriver) remove the bottom 2x screws as shown below.



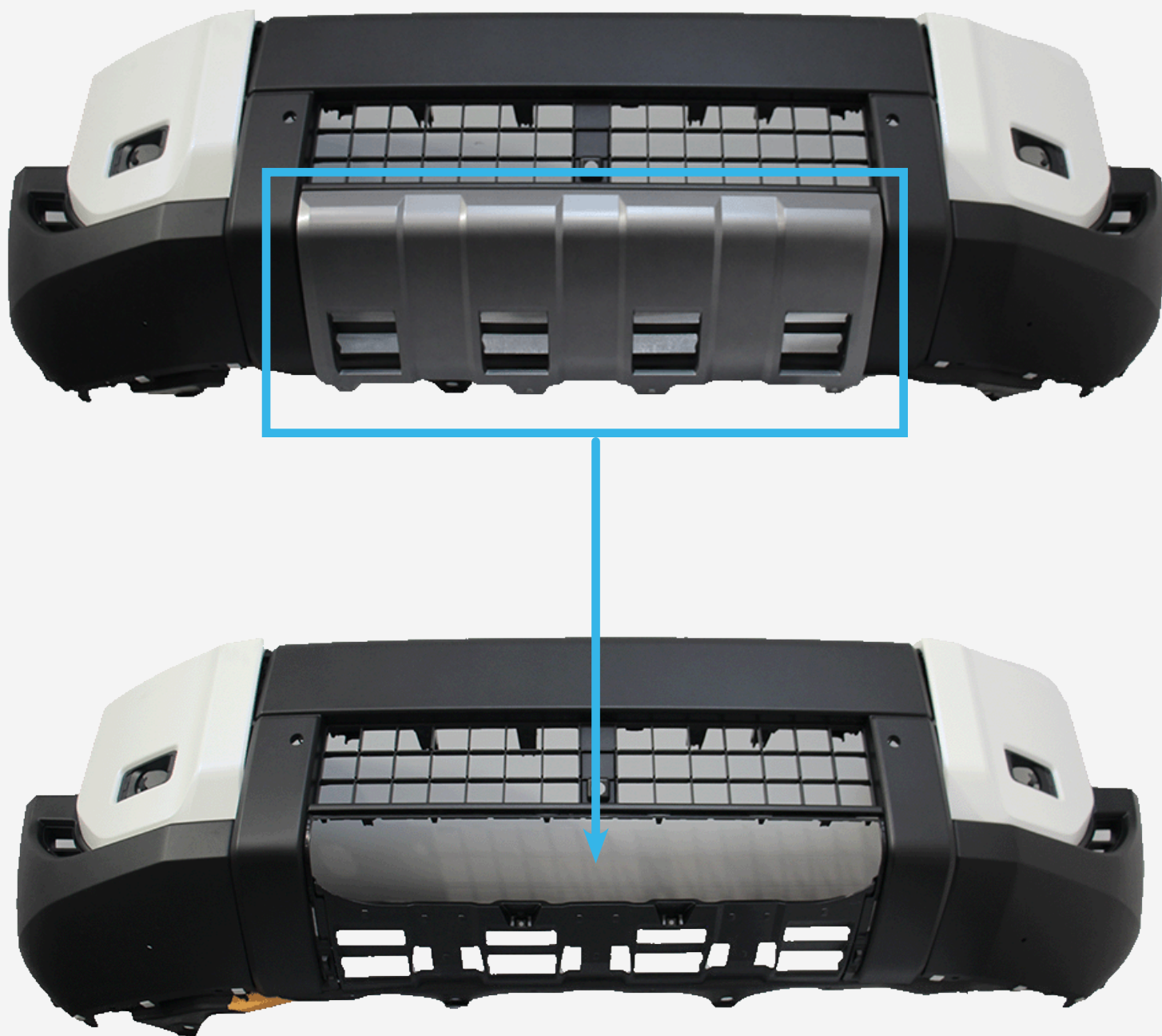
□ STEP 28

Remove the plastic retaining clips using a (flathead screwdriver).



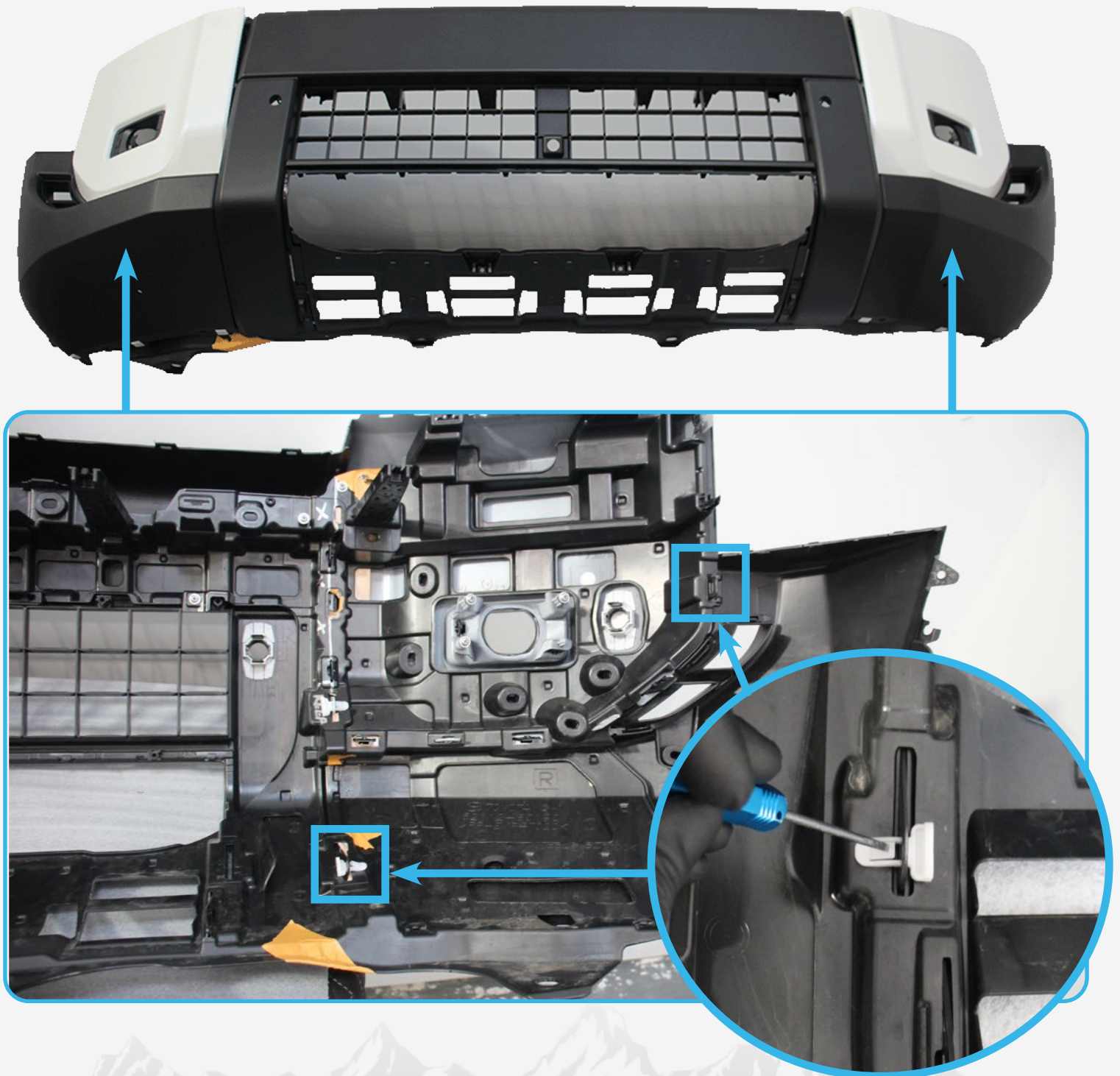
☐ STEP 29

You can now remove the plastic cover by pulling.



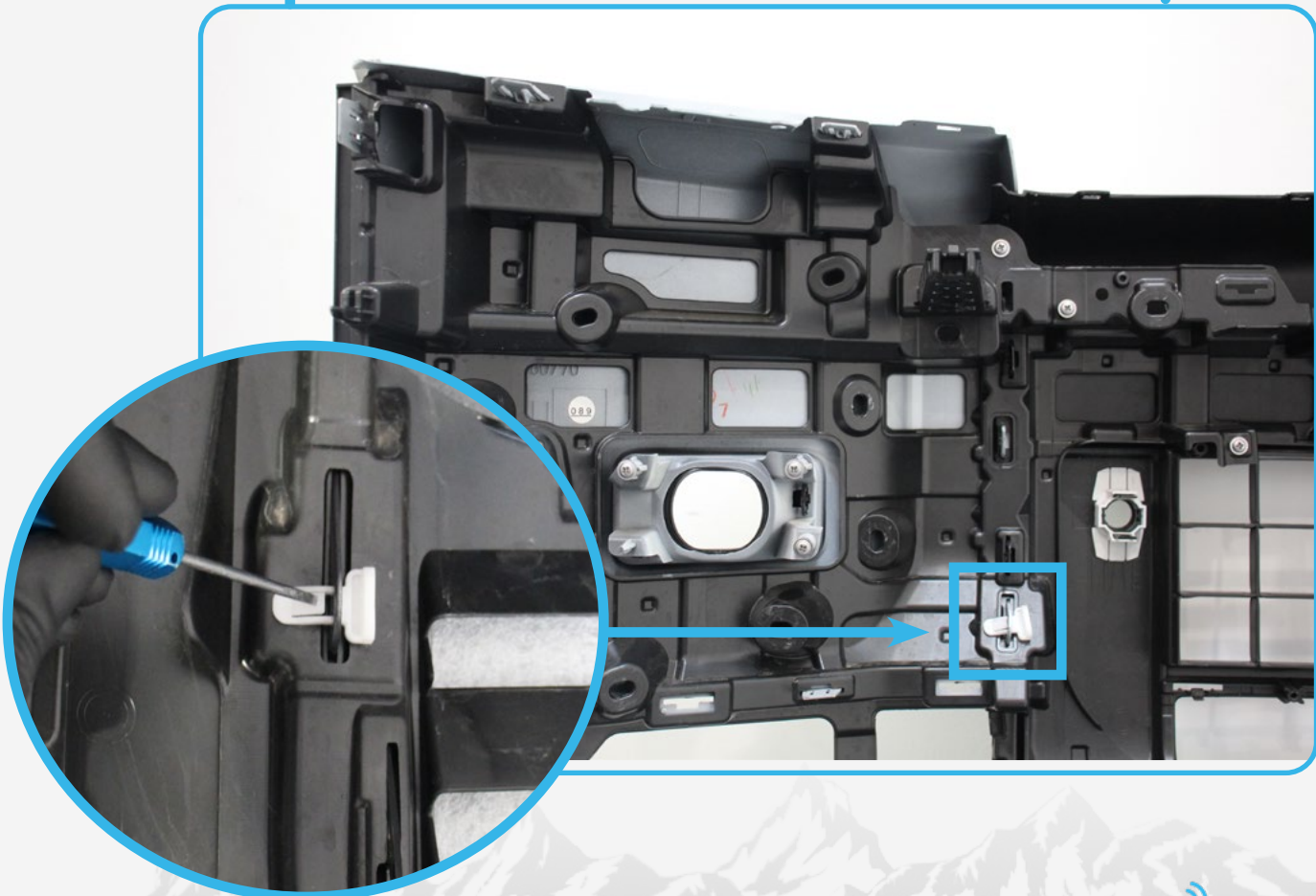
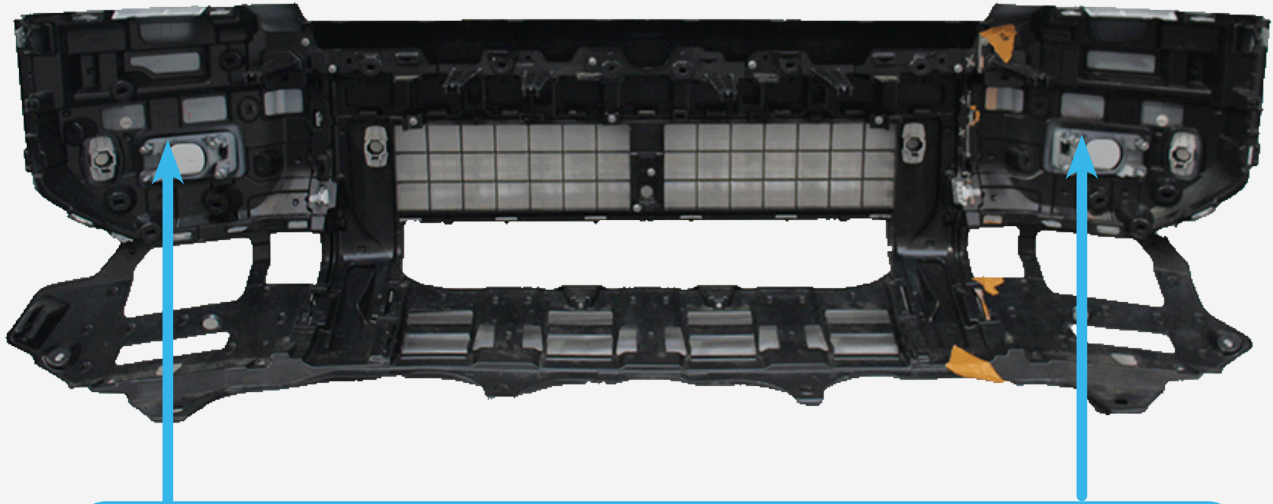
□ STEP 30

Next, remove the 4x plastic retaining clips for the bottom side covers and remove by pulling.



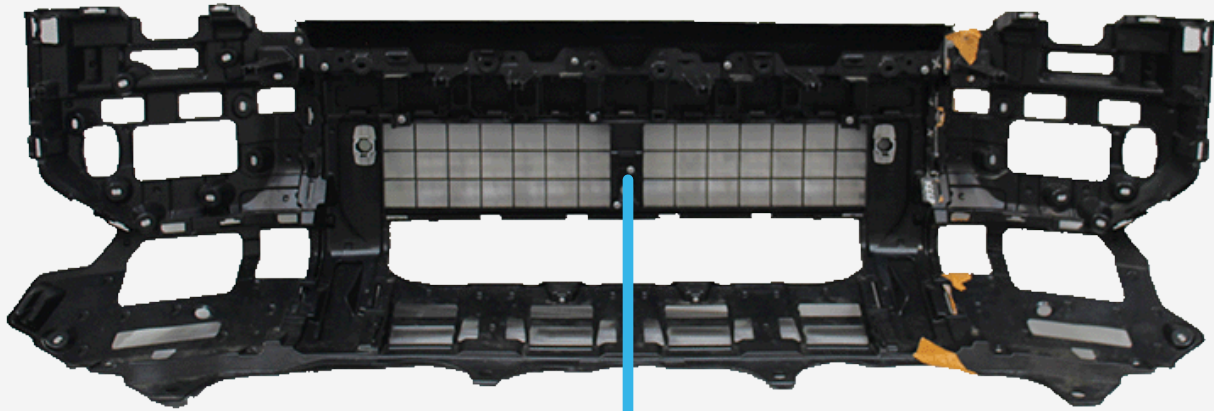
□ STEP 31

Using a (flathead screwdriver) remove the 2x plastic retaining clips holding the top side pieces to the grill. Remove by pulling.



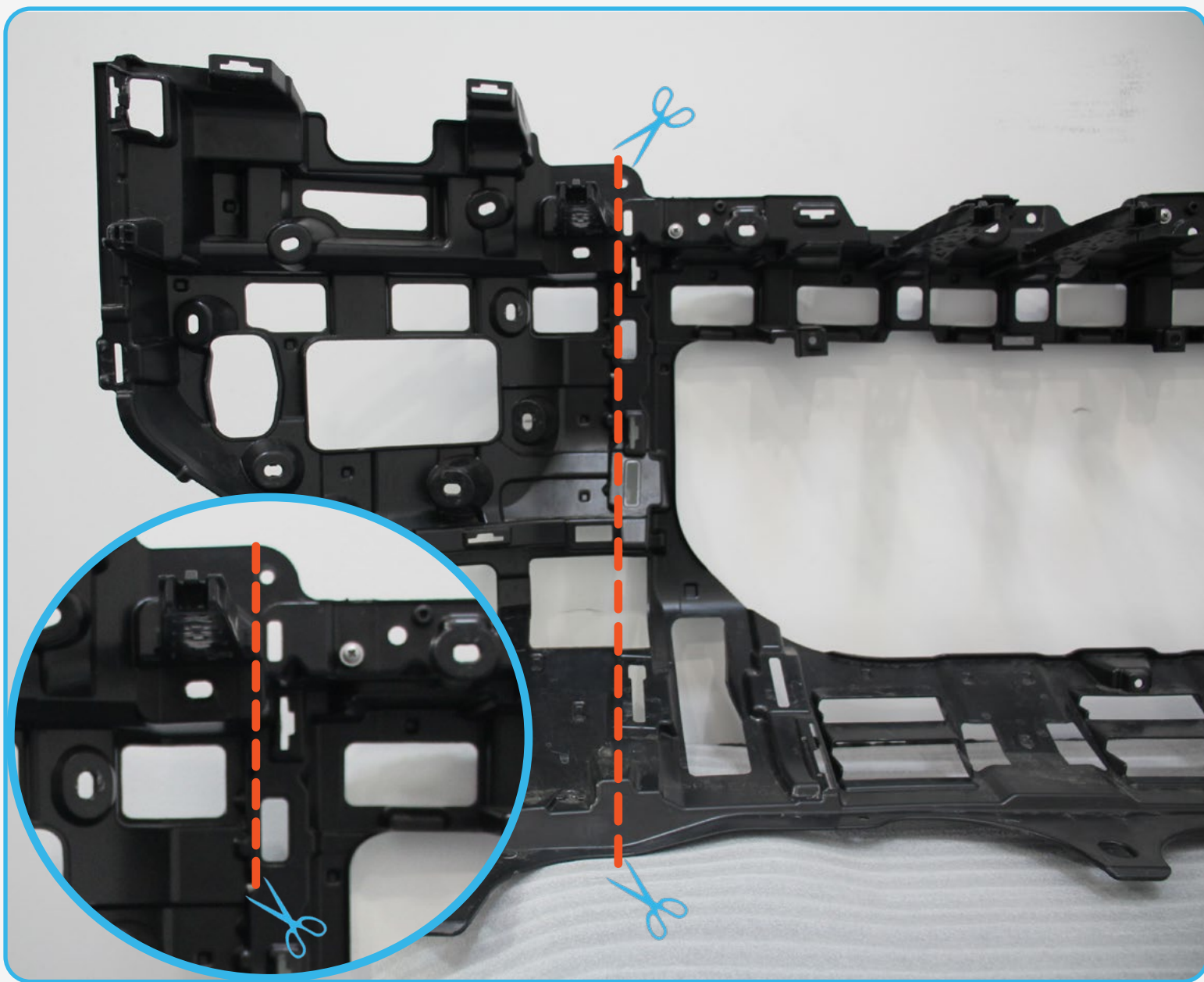
□ STEP 32

Next, remove the center plastic by pulling.



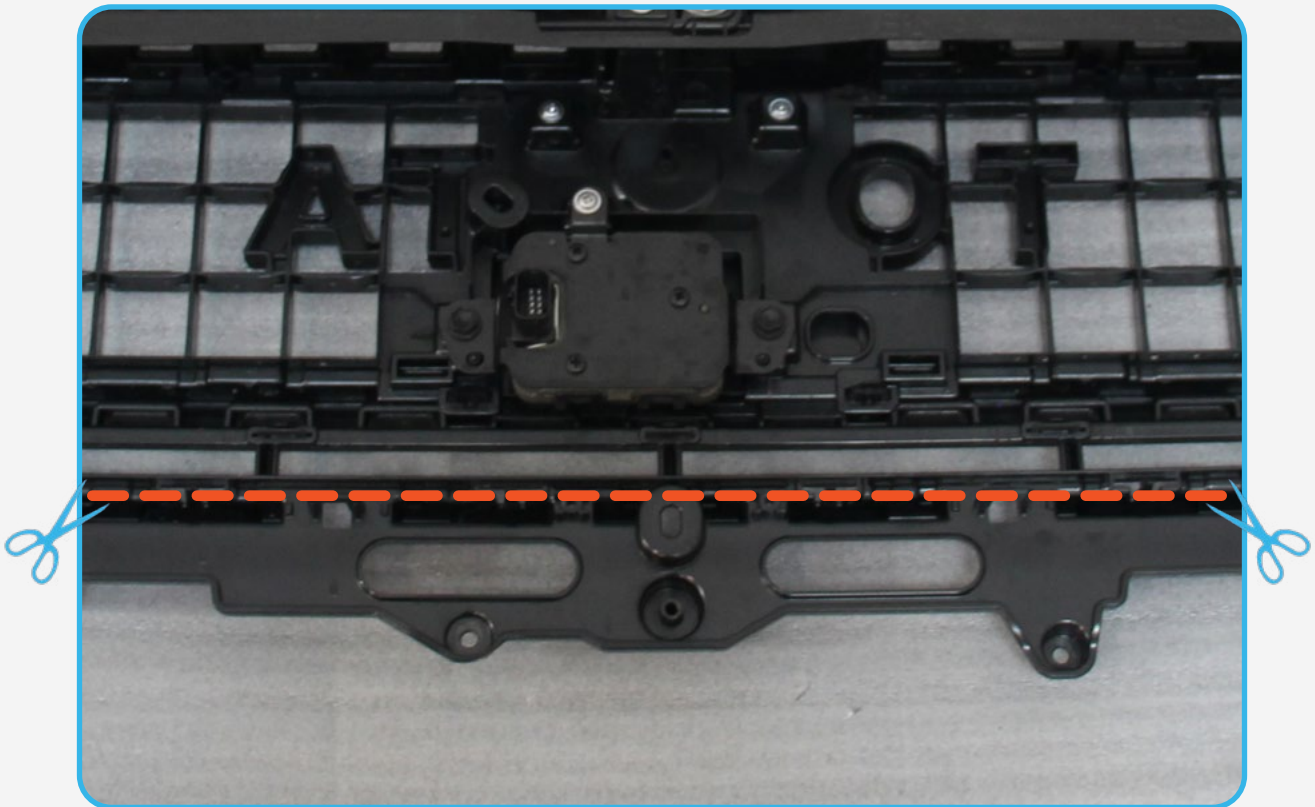
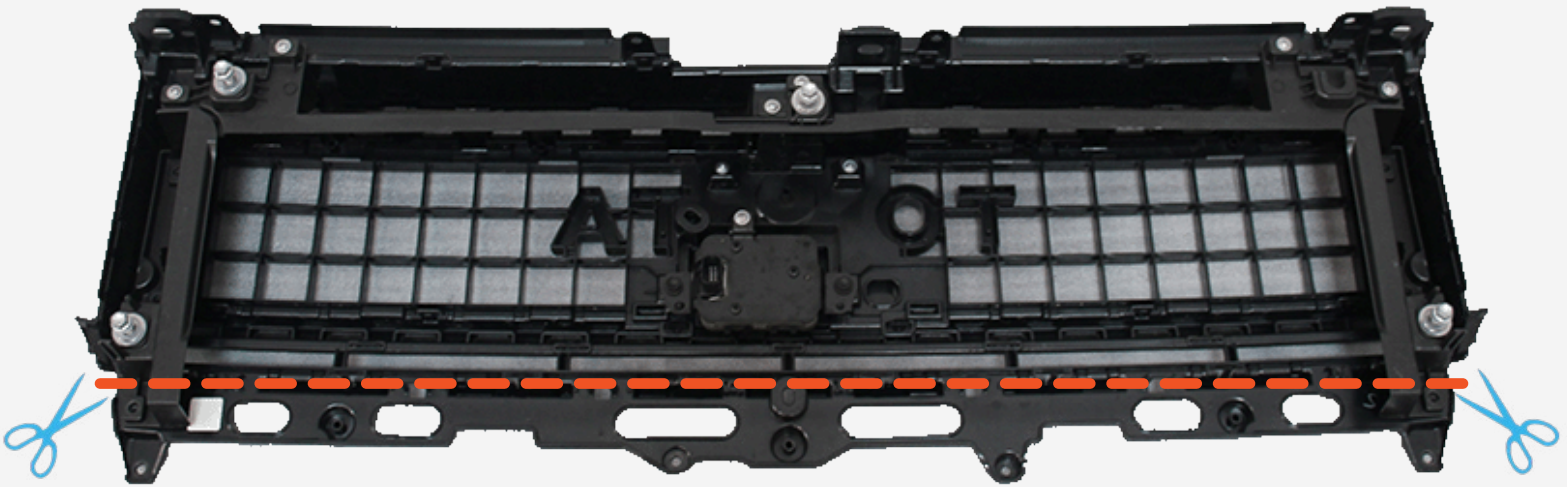
□ STEP 33

With your choice of cutting tools, cut along the outside edge where the center plastic removed from **step 32** clipped in. ****This step may need adjustments later on in the install****



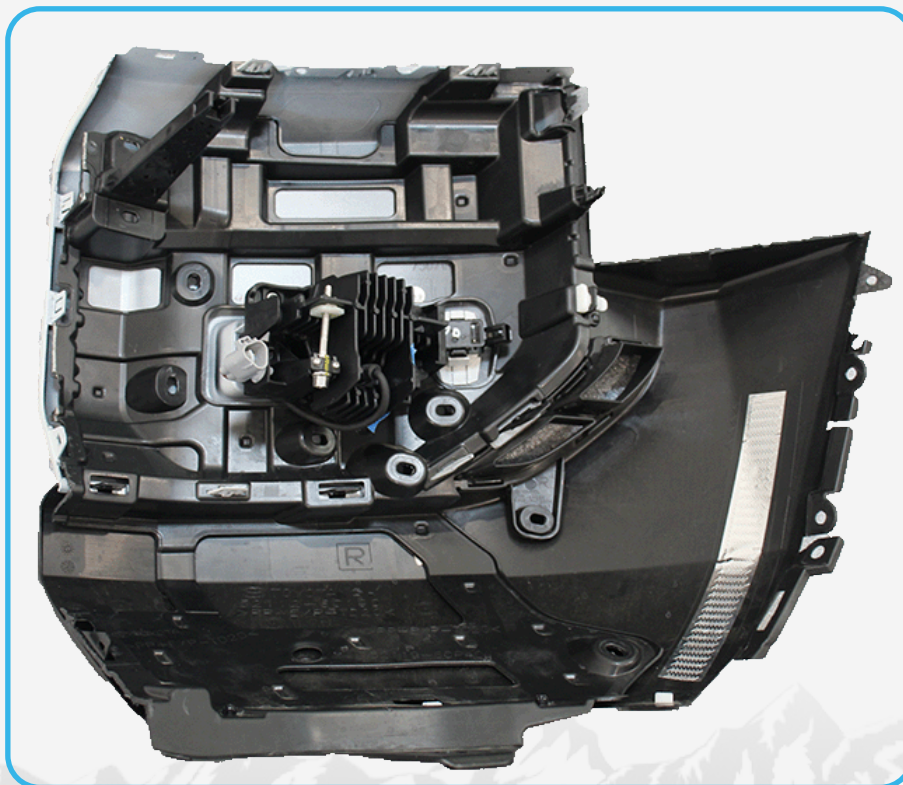
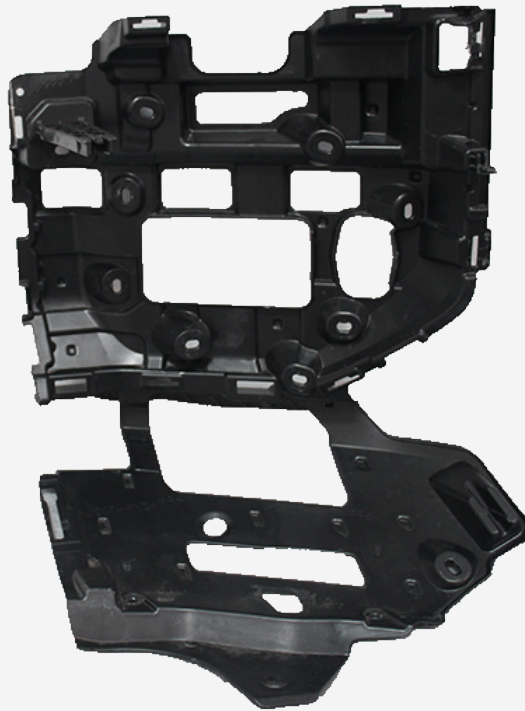
□ STEP 34

With your choice of cutting tools, cut the bottom edge just below the window cutouts are on the top grill removed from **step 26**.



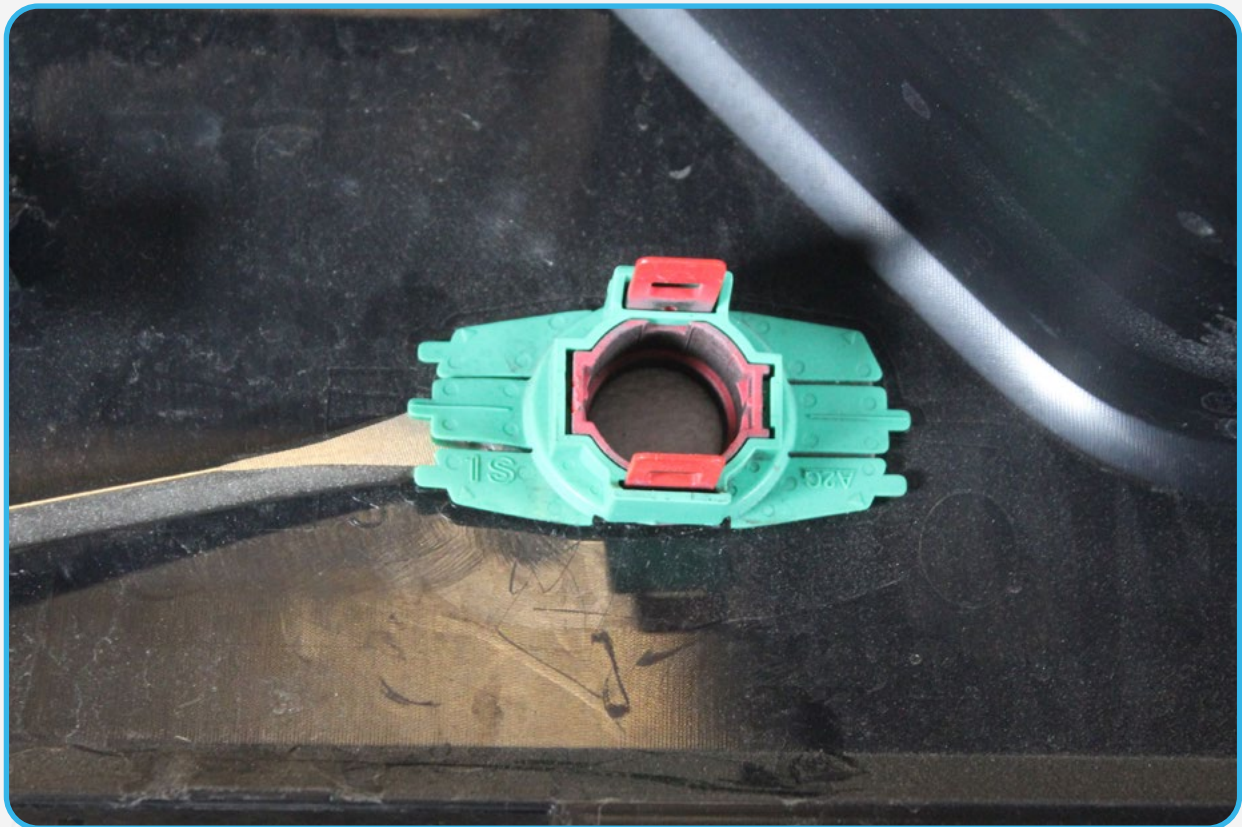
☐ STEP 35

Repeat **steps 30-31** to re-install the plastic covers removed.



□ STEP 36

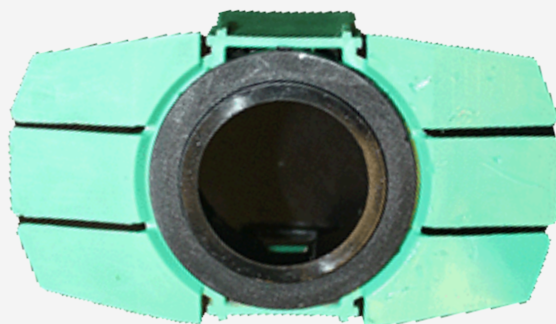
Use a (heat gun) to soften adhesive and use (flathead screwdriver) remove the sensor bezels from the plastic removed from step 32. ****Keep for install****



☐ **STEP 37**

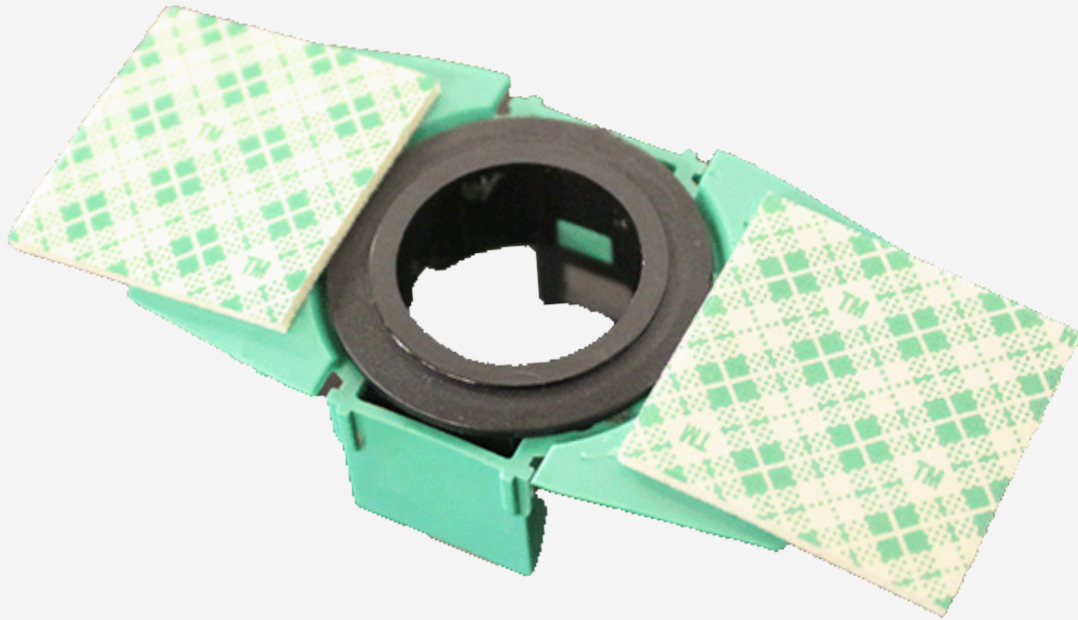
Remove double sided tape from the bezel until the surface is clear of residue.

Tec tip: Use a razor blade to remove adhesive.

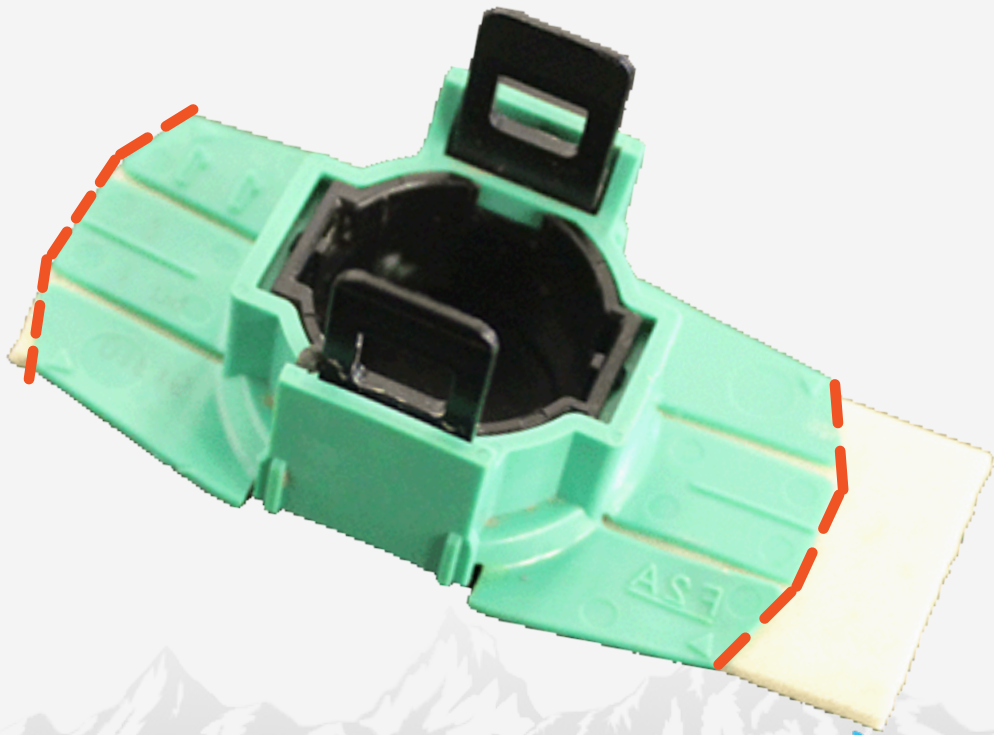


□ STEP 38

Install the provided (G) 3m double sided tape to each side of the bezel wings and trim excess with a (razor blade).

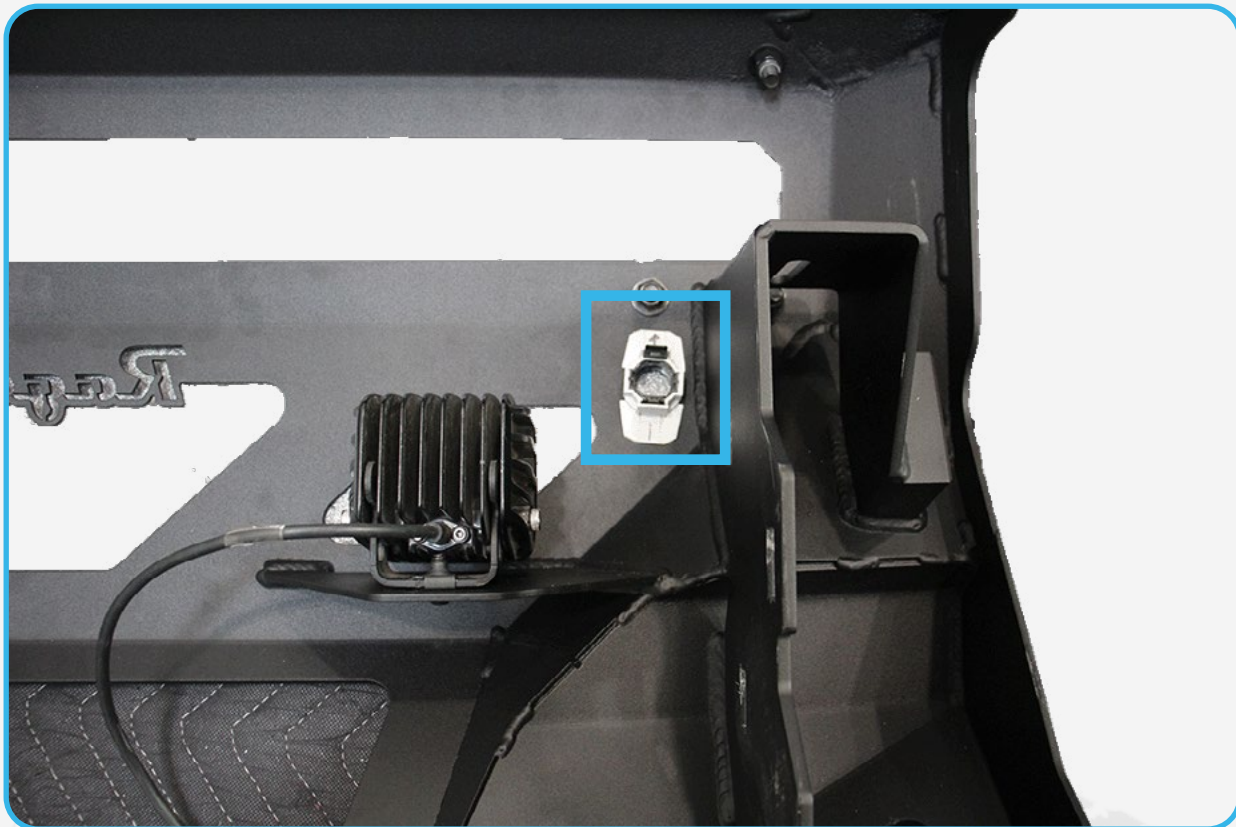
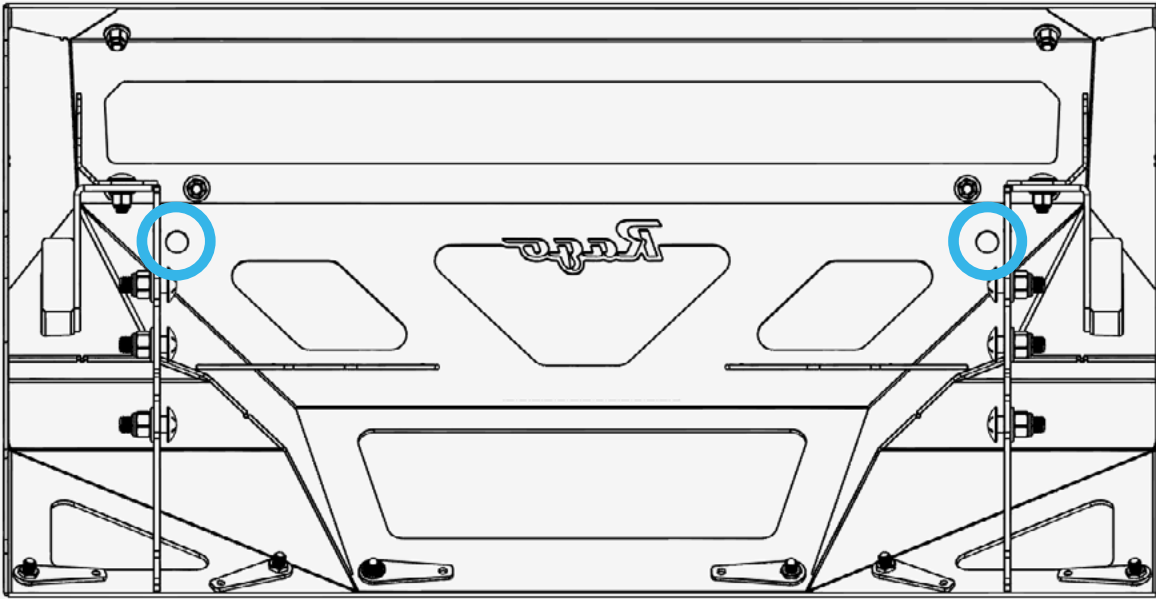


G.



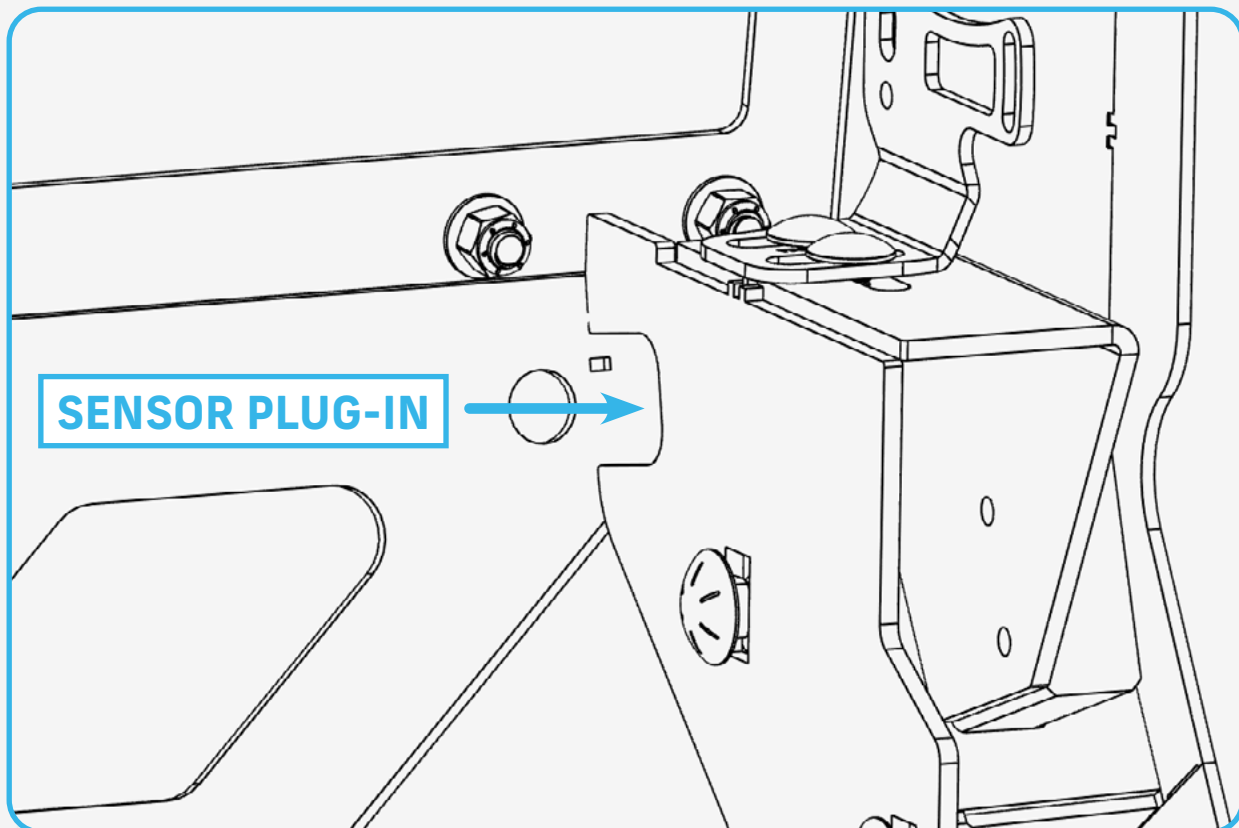
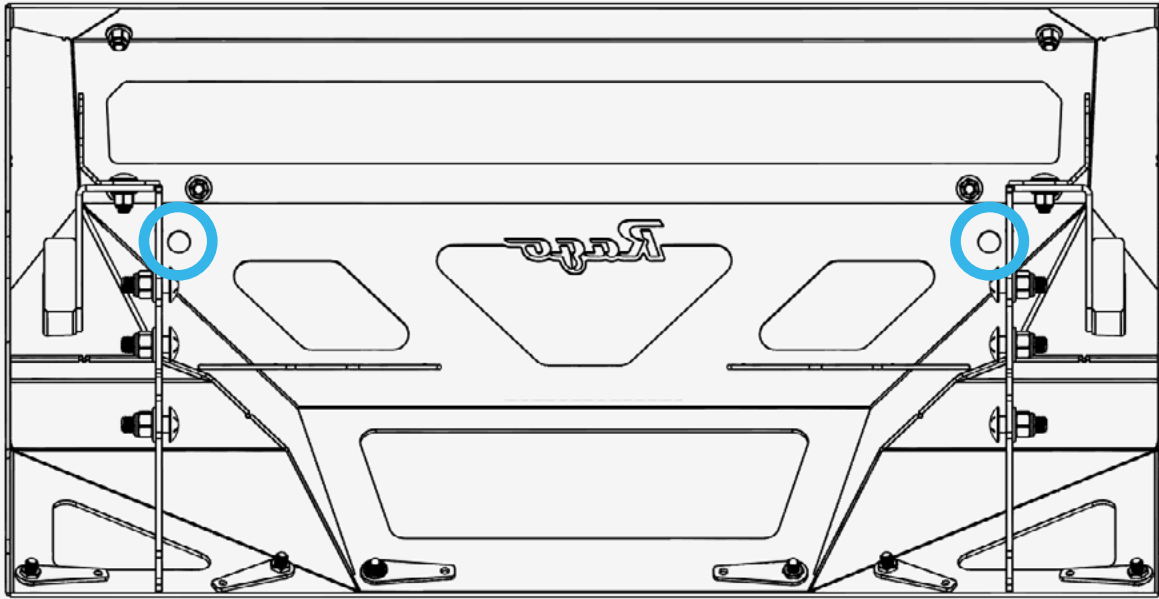
□ STEP 39

Install the sensor bezels in the orientation shown below.



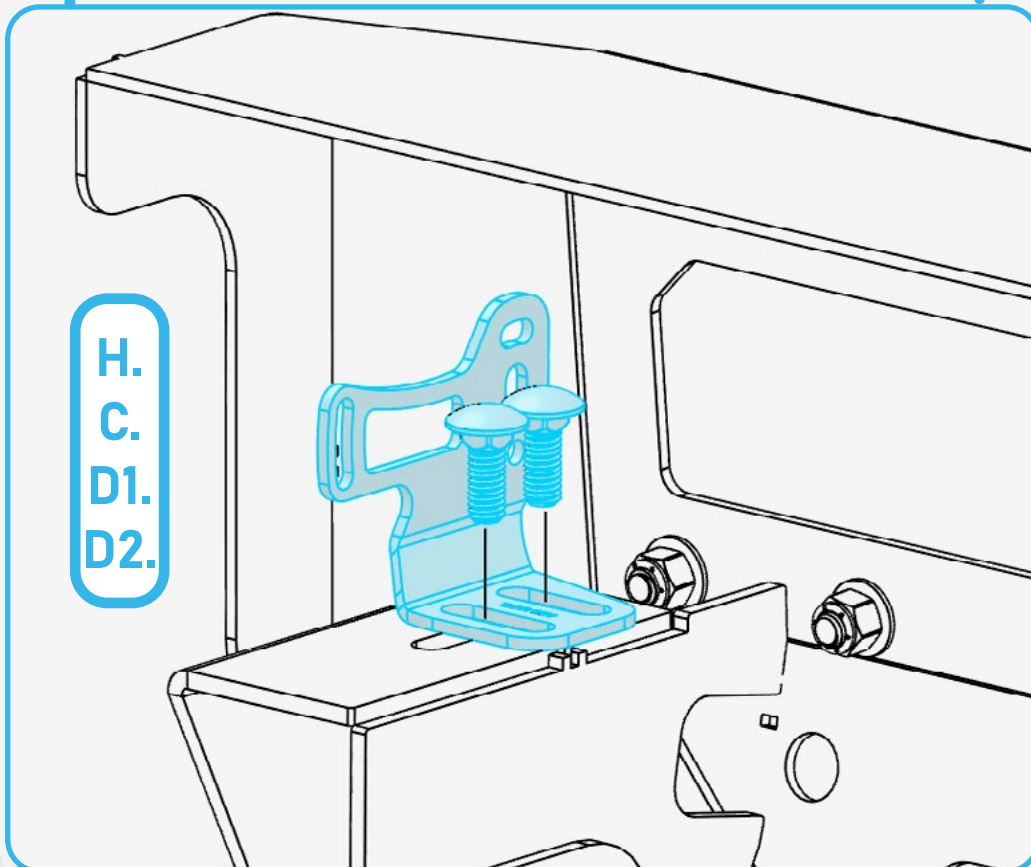
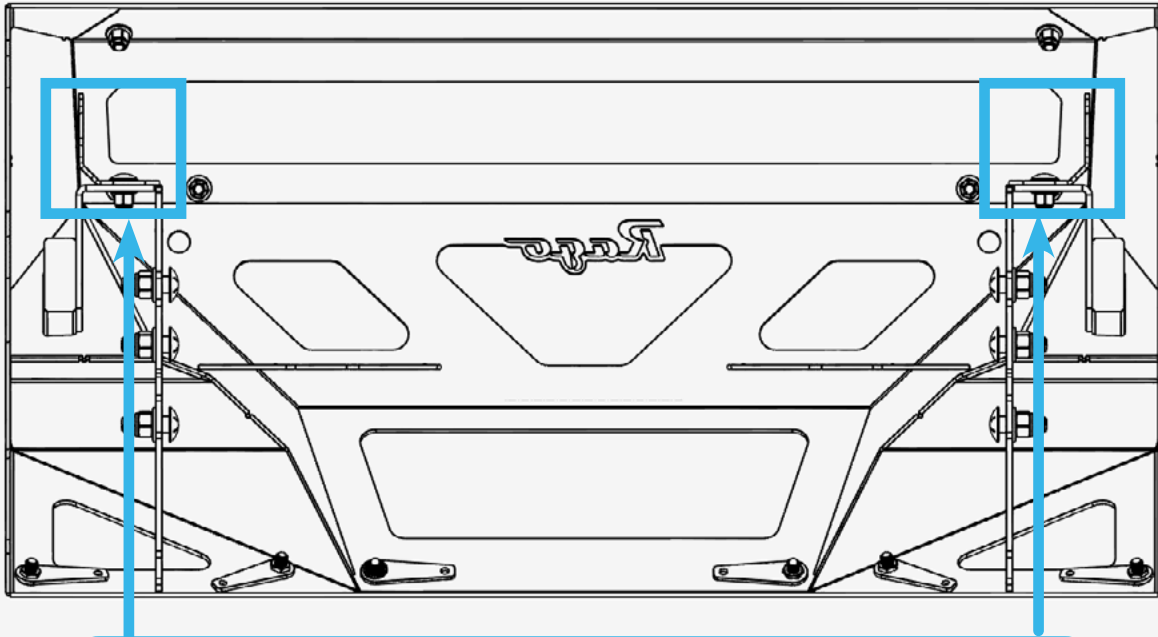
□ STEP 40

Plug in the parking sensor ensuring that the plug in is facing the direction of the window cutout shown below.



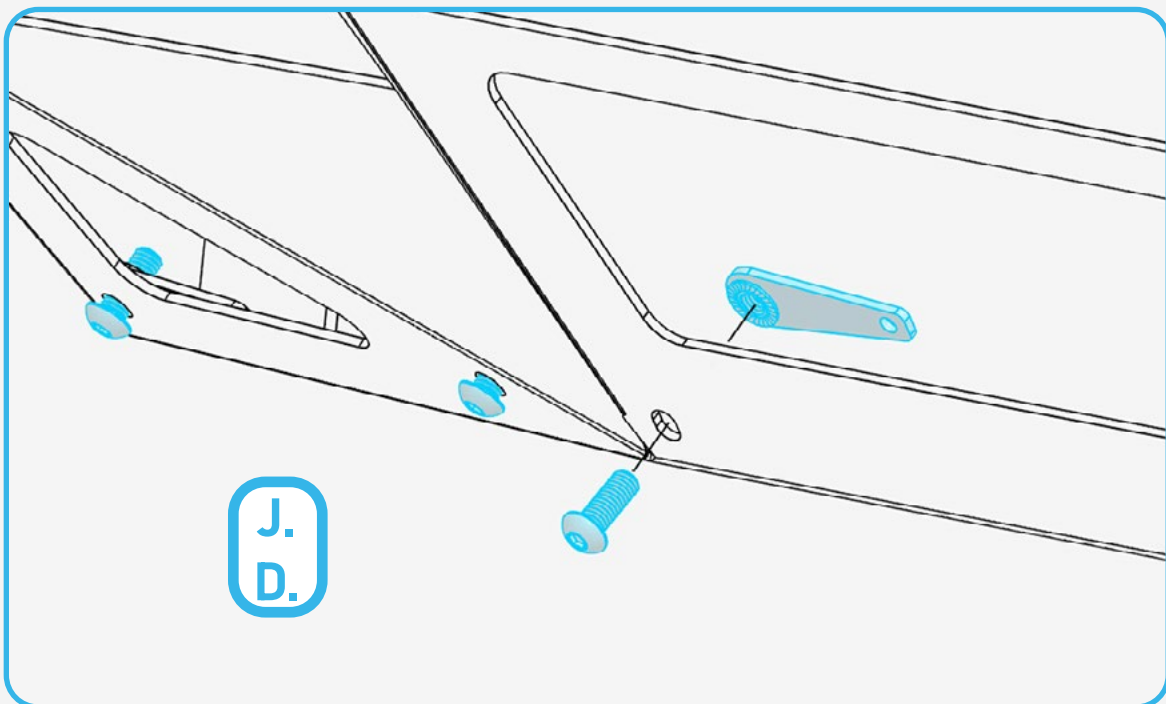
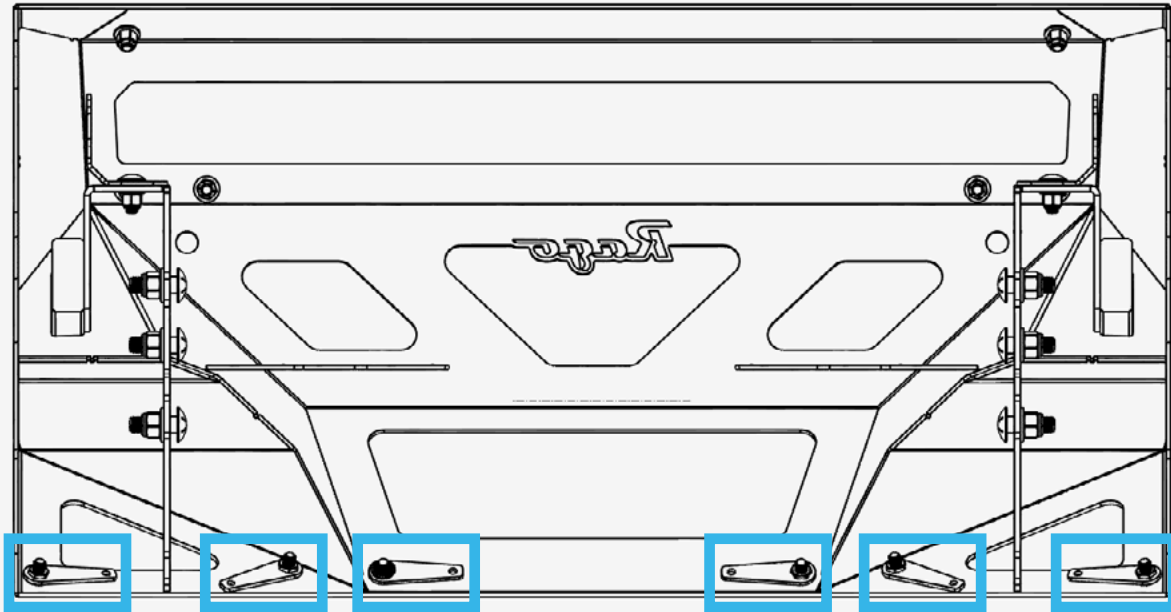
□ STEP 41

Now would be a good time to install any light configurations you may have. With the provided (H) light bracket install with the provided (C, D1, D2) 3/8" hardware using a (9/16 wrench).



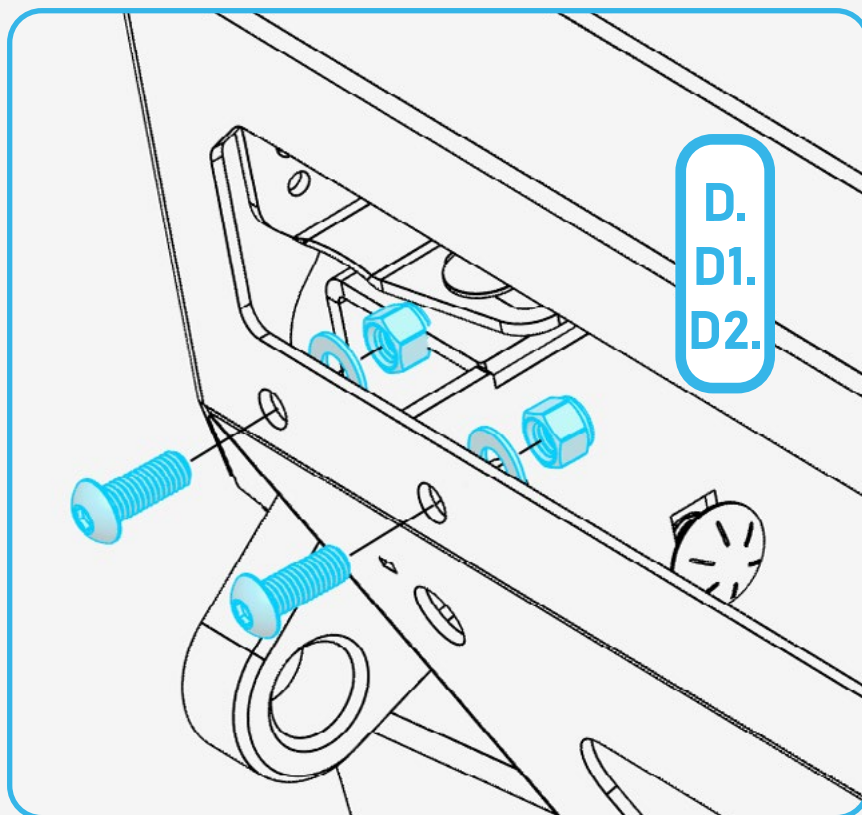
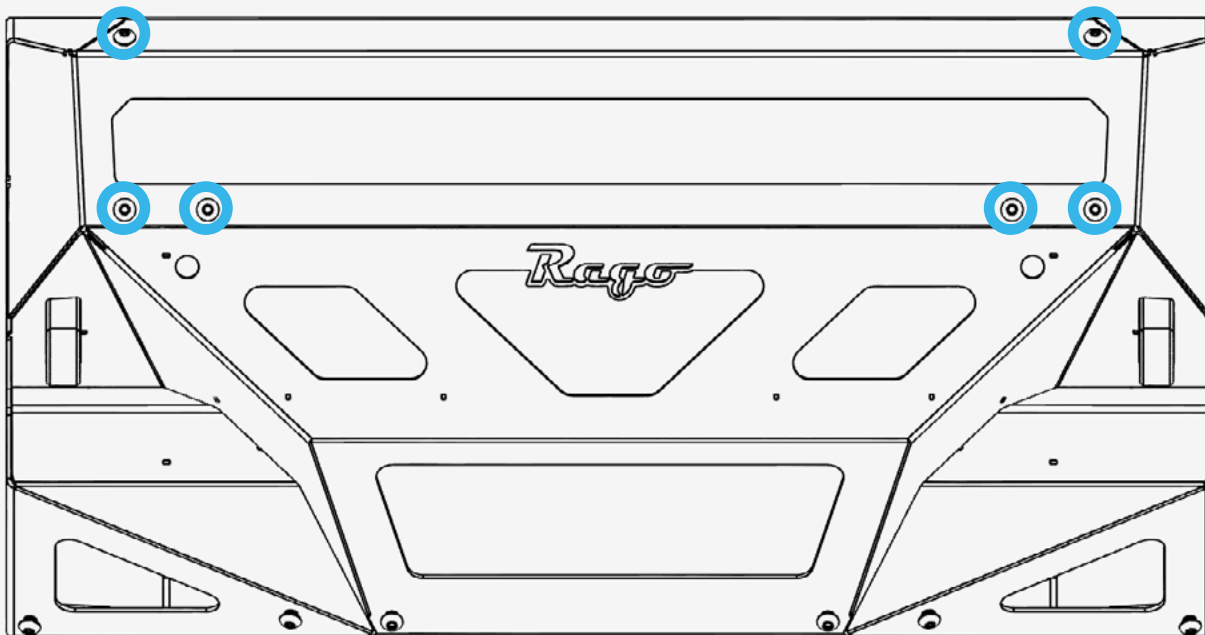
□ STEP 42

Install the provided (J) flag nuts and (D) 3/8" hardware into the holes shown below using a (7/32 allen). (If you purchased a skid plate do not install)



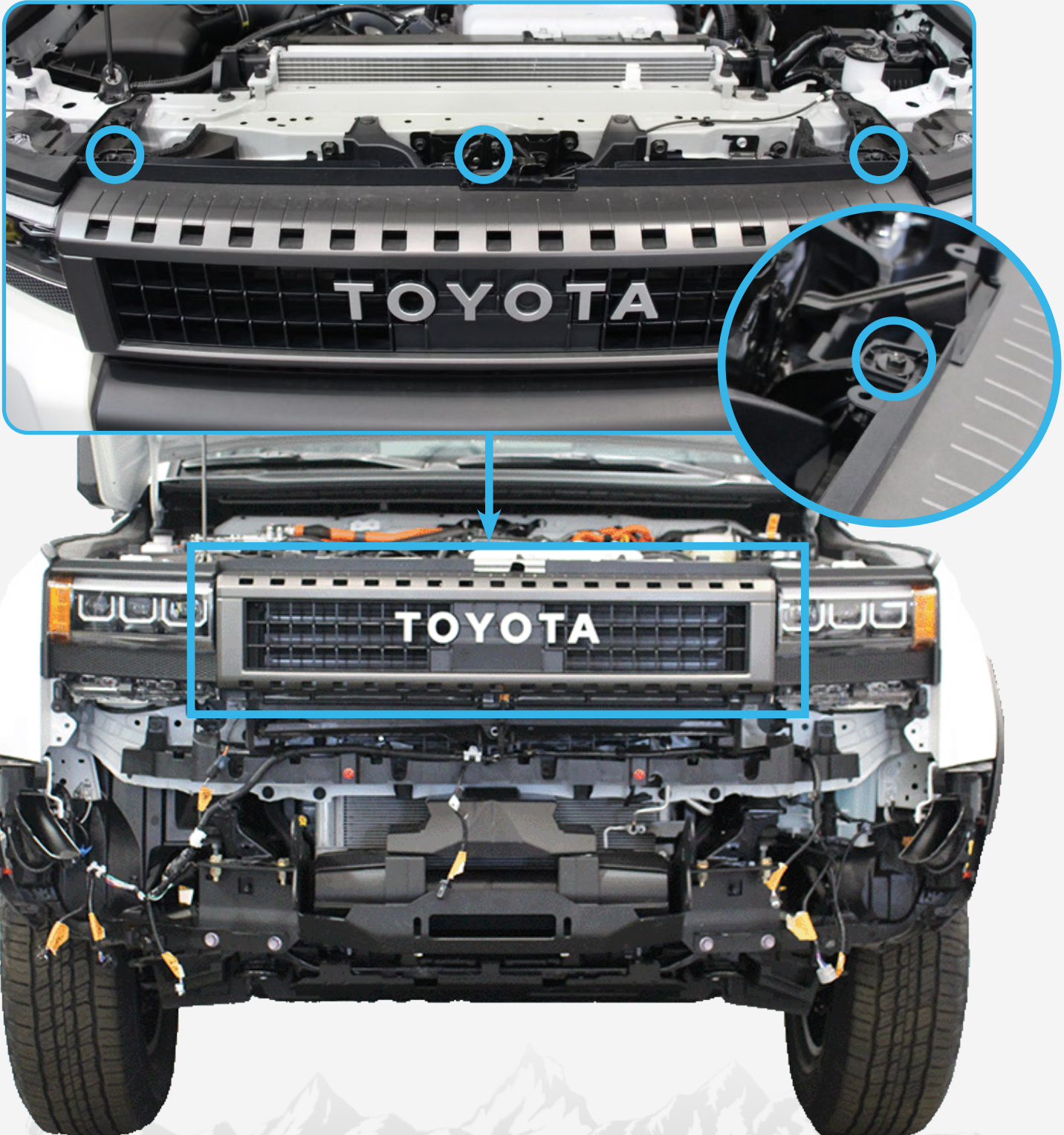
□ STEP 43

Install the provided (D, D1, D2) 3/8" hardware into the holes shown below using a (7/32 allen) and a (9/16 wrench). (If you purchased a brush guard please reference guide before proceeding)



STEP 44

Install the top grill as shown below using a (10mm socket).



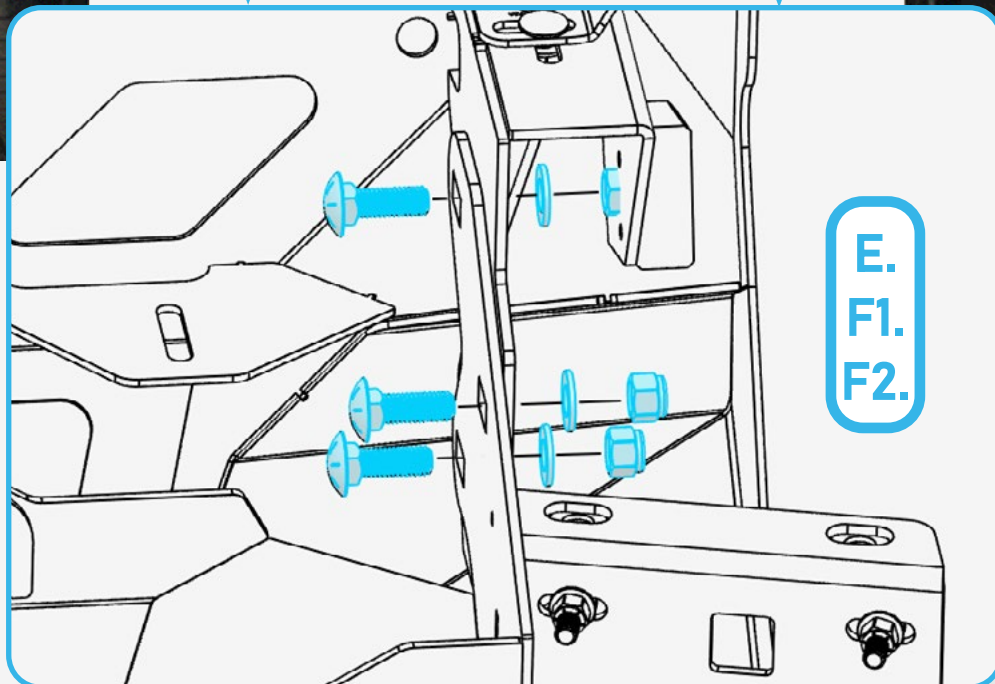
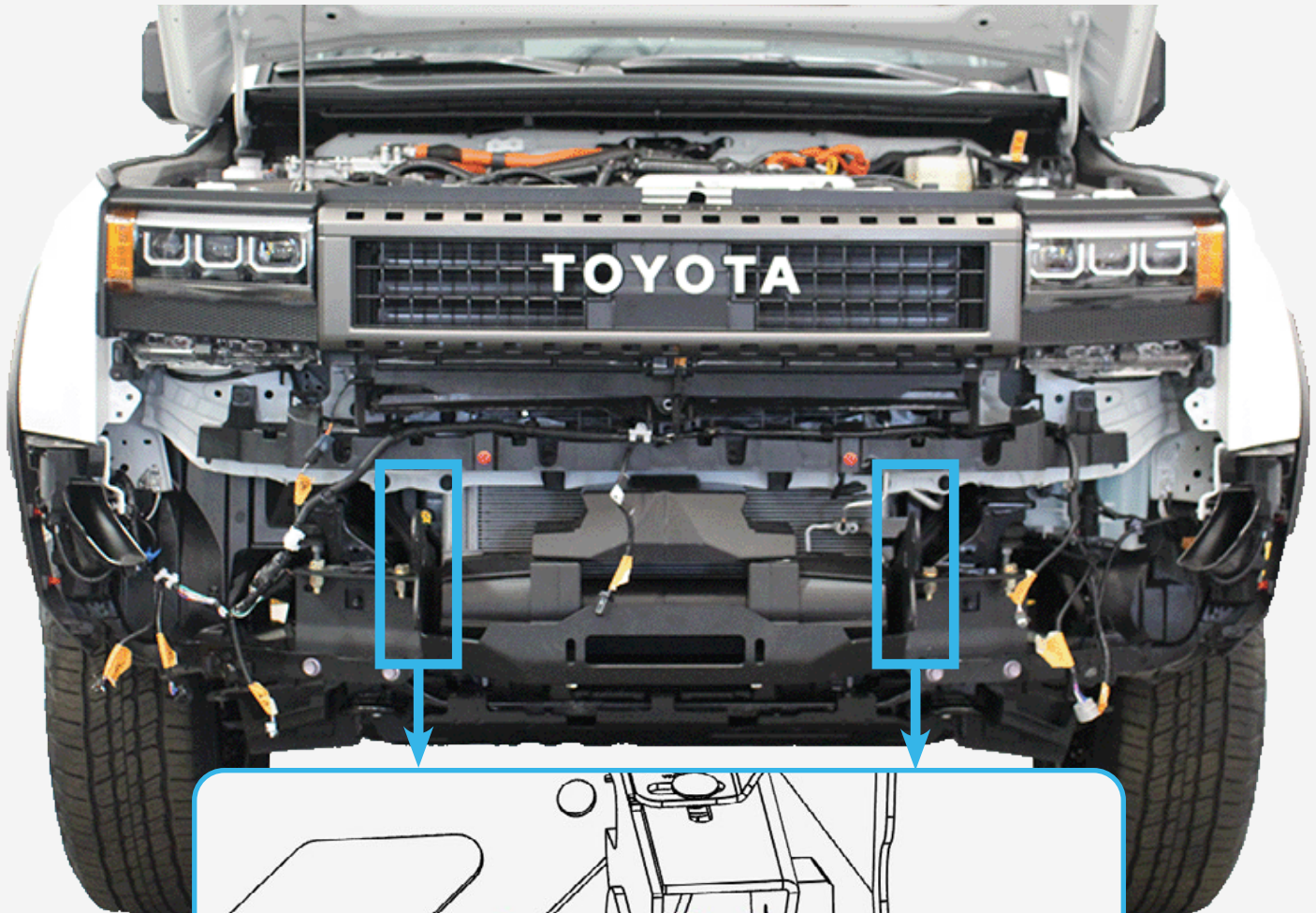
□ STEP 45

Install the wire harness and ensure that the shutter assembly and adaptive cruise control Module removed from **steps 21-23** is plugged in prior to re-installing the bumper and side plastics.



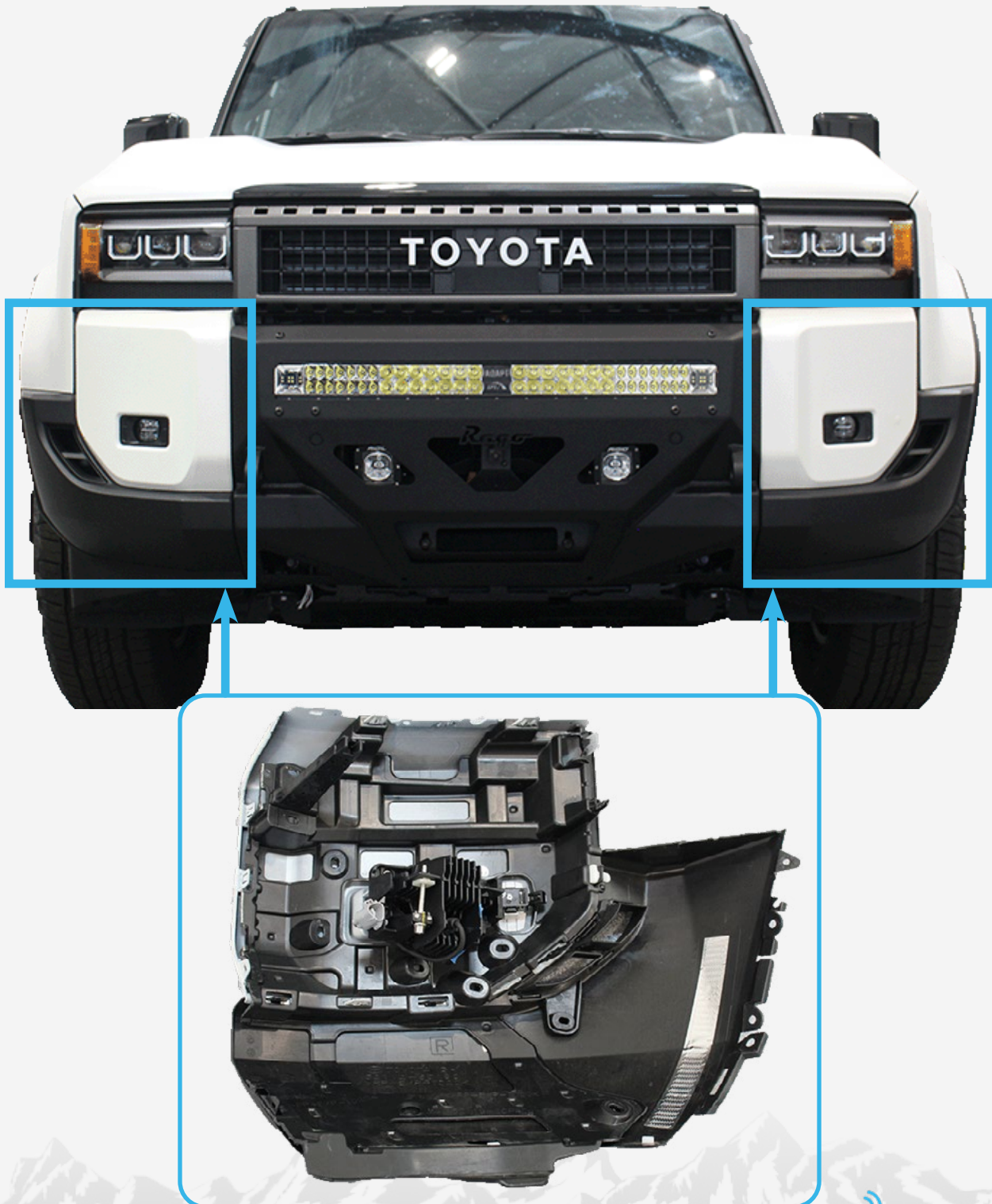
□ STEP 46

With a helping hand, install the center mount front bumper with the provided (E, F1, F2) 1/2" hardware using a (3/4 socket).



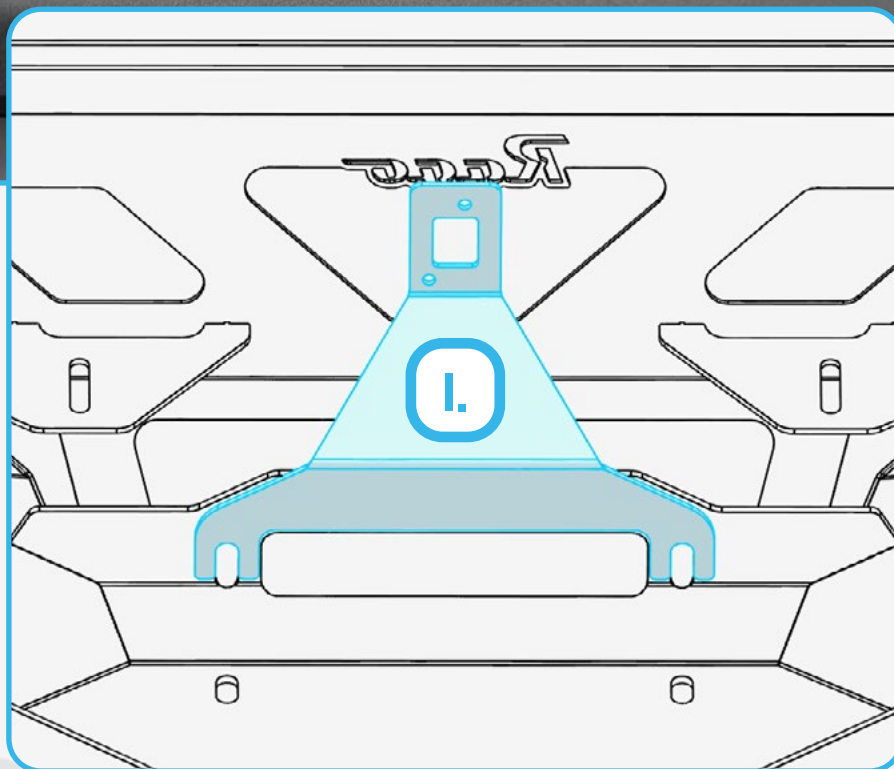
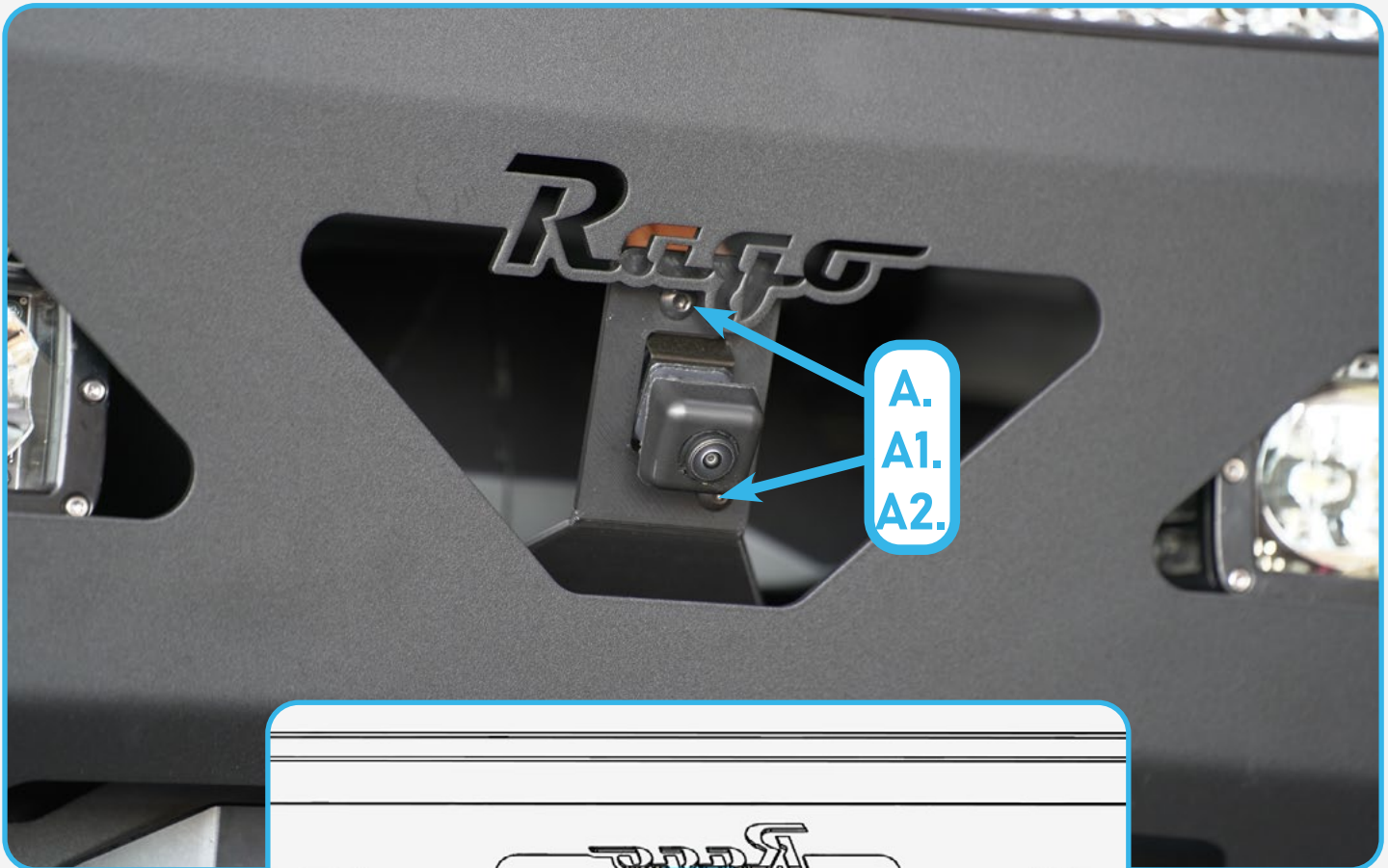
□ STEP 47

Next, install the side plastics by repeating steps 9-6. (**Ensure to install parking sensors before installing**)



□ STEP 48

Install the front camera mount (I) to the hardware used for your choice of fair lead and installing the camera to the bracket with the provided (A, A1, A2) 1/4" hardware using a (5/32 allen) and a (7/16 wrench). **(Ensure to plug in the camera)**



☐ STEP 49

If you purchased a skid plate, refer to the install guide located on the Rago website.



☐ STEP 50

Stand back and enjoy your new RAGO Center Mount With Winch Front Bumper.

Check and re-tighten all mounting bolts after 100 miles and periodically thereafter.

