



HD MODULAR FRONT BUMPER

(2024-2026 F-150)

INSTALLATION INSTRUCTIONS

CONTENTS

(1) Front Bumper Assembly	(6) M12x1.75 x 45mm Bolts
(1) Upper Filler Panel	(12) M12 Flat Washers
(1) LH LED Light Enclosure	(6) M12 Lock Nuts
(1) RH LED Light Enclosure	(4) M10x1.50 x 30mm Bolts
(1) License Plate Bracket	(4) M10 Lock Washers
(2) License Plate Screw Retainers	(4) M10 Flat Washers
(4) Mesh Panels	(19) M6 x 20mm Combo Allen Bolts
(1) ACC Mounting Bracket	(10) M6x1.00 x 20mm Allen Bolts
(1) ACC Extension Harness	(16) M6 Flat Washers
(1) Center Cover Panel	(13) M6 Flange Nuts
(6) Proximity Sensor Install Kits	(10) M6 Lock Nuts
(2) Proximity Sensor Extension Harness	(1) 4mm Allen Key
(2) LED Lights w/ Hardware & Harness Kit	(10) Cable Ties

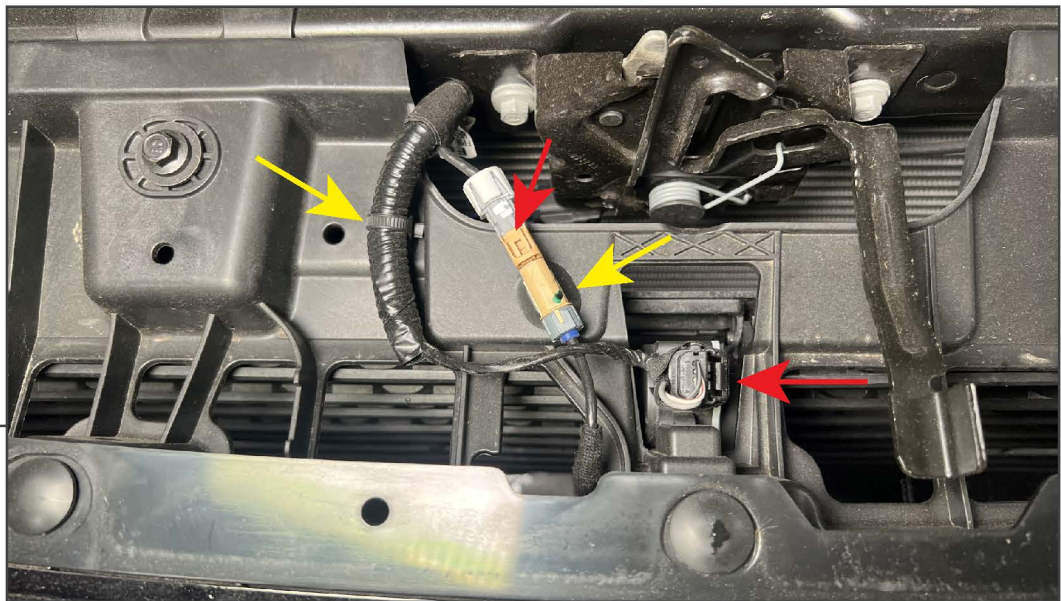
TOOLS REQUIRED

8, 10, 13, 15, 19, 21mm Socket/Wrench
Ratchet
T-30 Torx Socket
Panel Removal Tool
Flathead Screwdriver

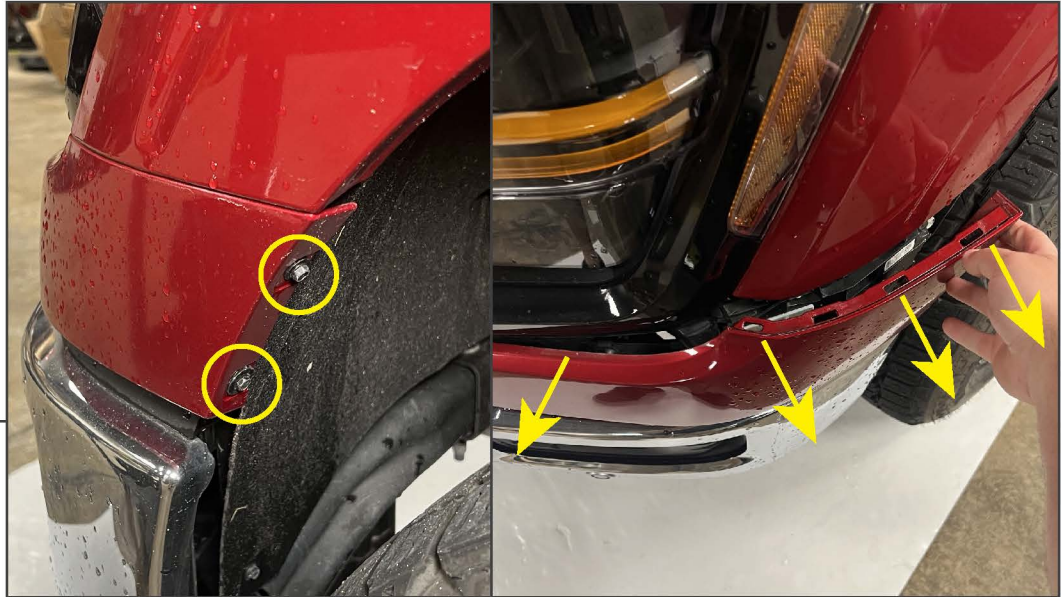
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**STEP 1**

Open the vehicle hood. Remove (15) plastic push clips from the radiator cover. Then, lift and remove the radiator cover from the vehicle.

**STEP 2**

Next to the hood release latch, unplug the forward camera and shutter assembly by pressing the tab on each connector. Then, use a pry tool to dislodge the harnesses mounting retainer in the shutter assembly.

**STEP 3**

From in the wheel well, locate the (2) 7mm screws securing the front painted trim panel to the vehicle. Remove the screws from both sides of the trim panel, and firmly pull the panel away from the fenders, and then the front grille assembly.

Note: The painted trim panel is difficult to dislodge from the grille. Removing this panel requires additional force to dislodge the retaining clips/tabs.

**STEP 4**

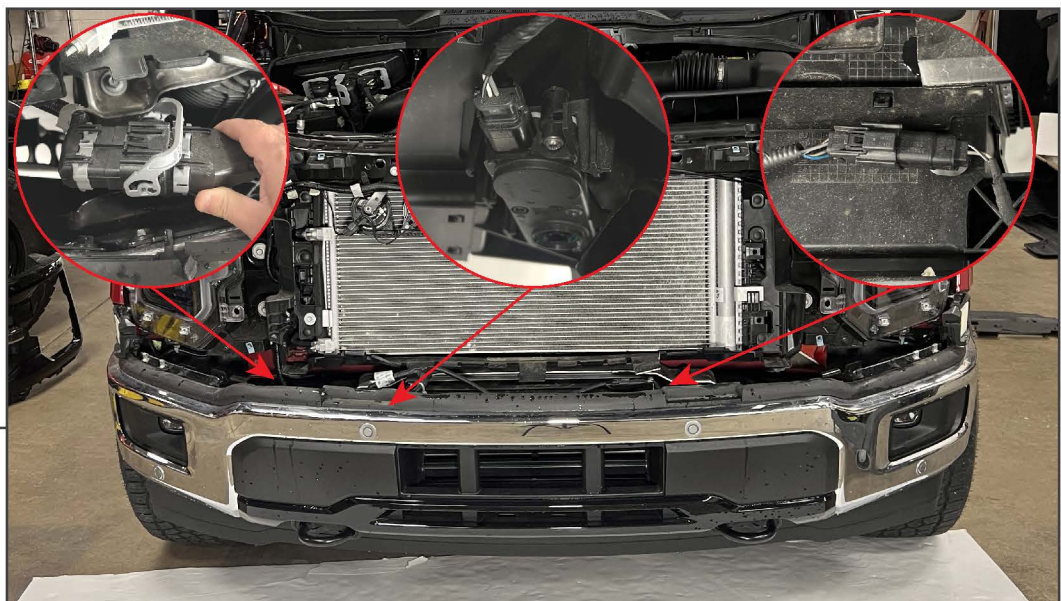
Remove (2) plastic push clips from the upper edges of the grille assembly. Then, remove (6) 10mm bolts securing the grille assembly to the radiator support.

Note: The lower bolts are more difficult to locate. The lower (2) 10mm bolts are the inner-most bolts.

**STEP 5**

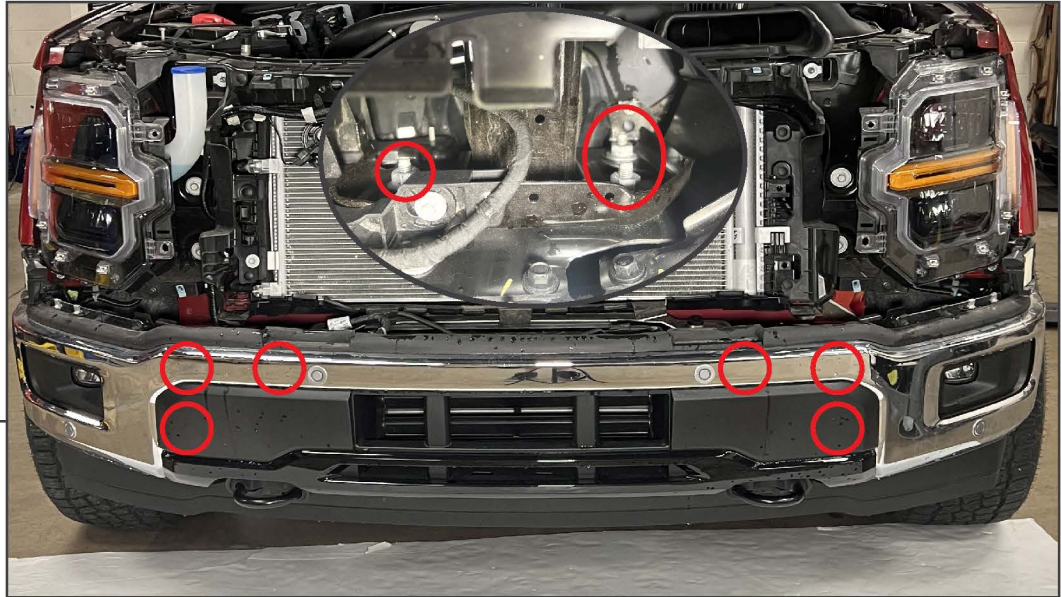
Firmly pull the grille away from the vehicle, and set aside on a soft surface.

Note: There are various retaining clips around the headlight assemblies and along the bottom of the grille. Use a plastic pry tool to dislodge the grille from these clips, if necessary.

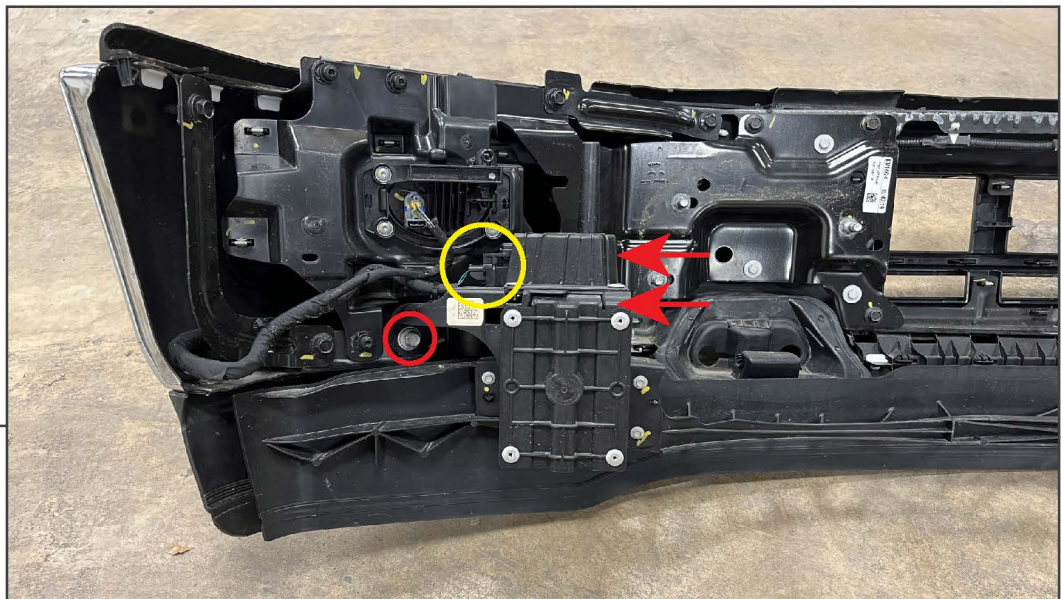
**STEP 6**

Locate the various electrical connectors along the top of the bumper. Depending on trim level, there may be additional connectors. On this vehicle, there are (3) connectors.

Disconnect the connectors, and dislodge any harness retaining clips from the bumper using a panel removal tool.

**STEP 7**

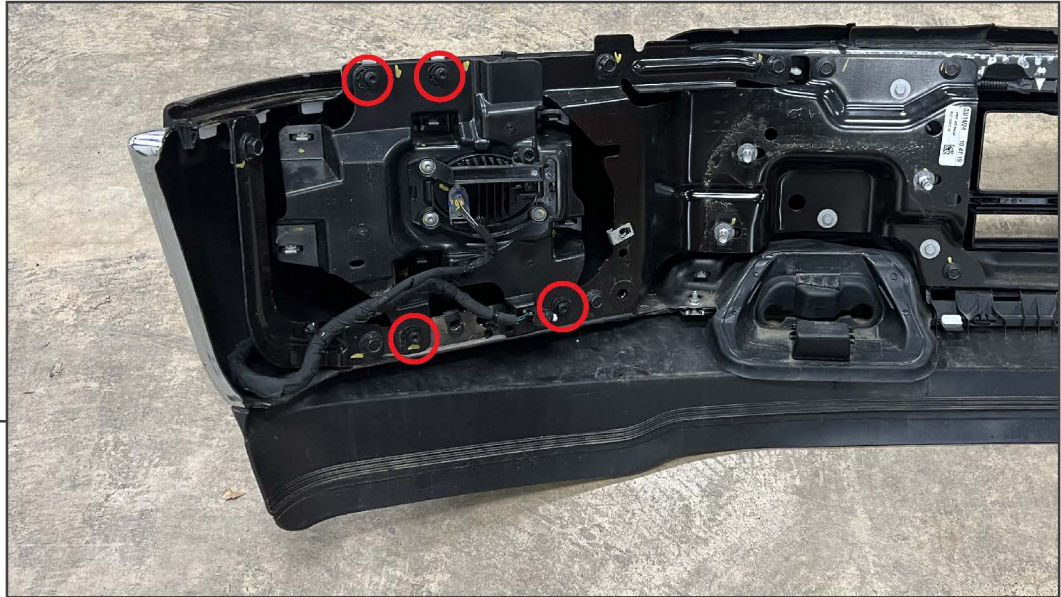
Behind the bumper, locate and remove (6) 21mm nuts. Then, with a helper, lift the bumper from the vehicle and place on a workable surface for disassembly.

**STEP 8**

Unplug the active air dam motor on each side of the air dam from the bumper harness. Remove (3) 13mm bolts from each side of the active air dam.

Note: Some connectors have red locks. If the connector has a lock, slide the red lock back, then unplug the connector.

Remove the active air dam from the bumper and set aside.

**STEP 9**

Unplug the vehicle fog light from the bumper harness. Remove (4) T-30 Torx bolts from the fog light assembly and set the assembly aside.

**STEP 10**

Remove (7) 13mm bolts from each of the bumper mounting pads.

Note: Vehicles with Adaptive Cruise Control (ACC) have a module behind the LH side mounting pad. Unplug the module when removing the bumper mounting pad.

**STEP 11**

Vehicles with Proximity Sensors: Slide the white connector lock back, and then press the tab to release the connector from the sensor. Use a small pry tool to lift the plastic retainer tab around the sensor to allow the sensor to be removed from the bumper.

Repeat this step for all remaining sensors. Vehicles without proximity sensors Skip to Step 16.

**STEP 12**

Remove the OEM silicone gasket from the end proximity sensor. Then, install the included foam gasket onto the face of the sensor.

STEP 13

Sensor Mounting Option 1: Place the sensor into the designated port, ensuring the mounting tabs are within the slots. Adhere (1) rubber grommet to the sensor using the attached adhesive. Place (1) foam pad onto the rubber grommet. Place the (1) plastic cap onto the assembly, ensuring the (2) tabs lock into place to secure the sensor tightly to the port.

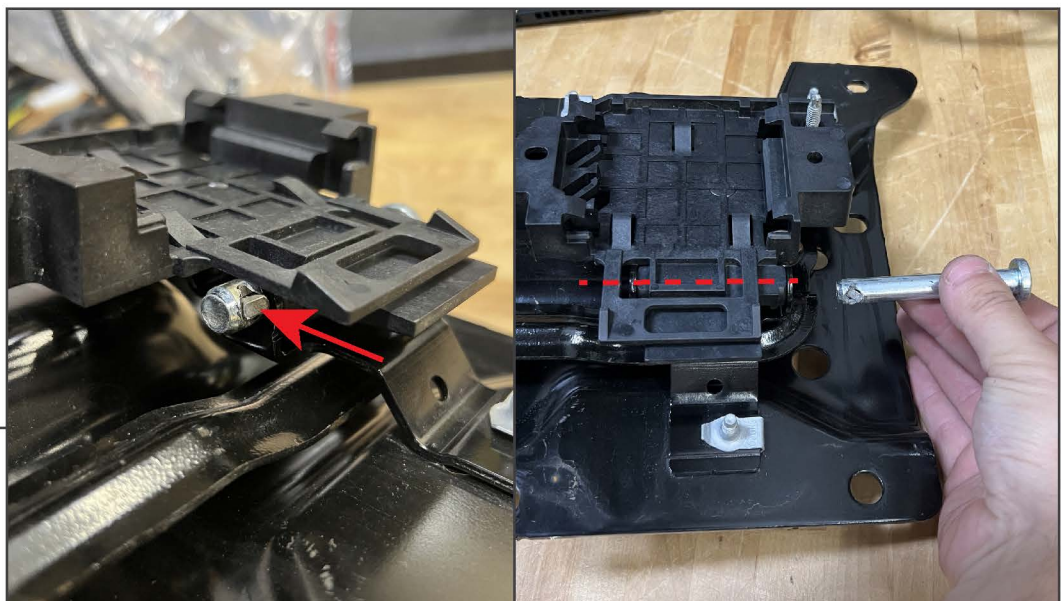
STEP 14

Sensor Mounting Option 2: Place the sensor into the designated port, ensuring the mounting tabs are within the slots. Using (2) Phillips screws, gently tighten the screws until moderate pressure is on the sides of the sensor to hold the sensor into place.

Note: Do NOT over-tighten the screws as the sensor can become damaged.

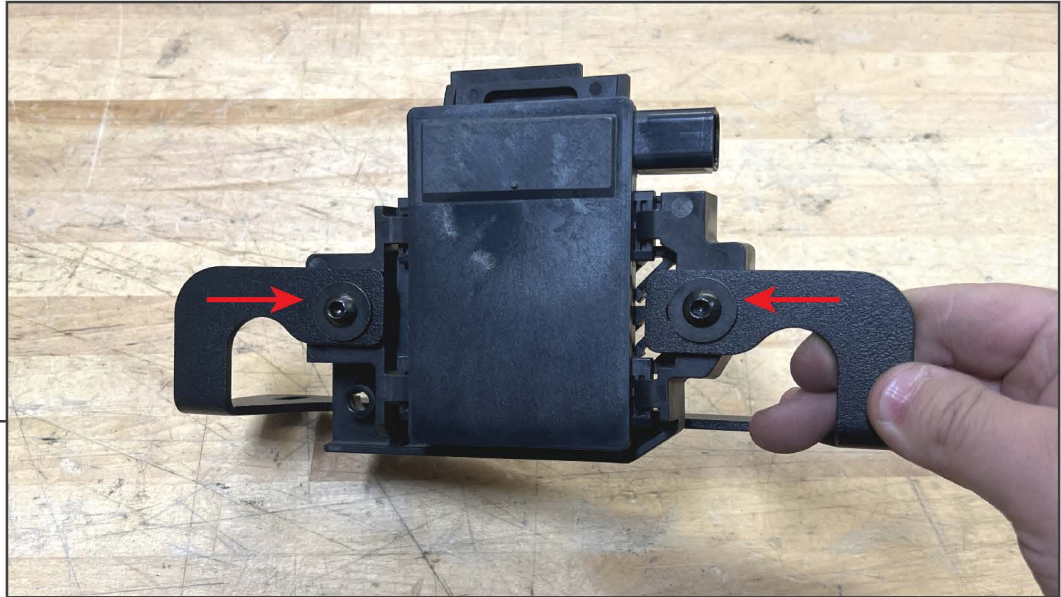
STEP 15

No Sensors: Press the plastic cap into the backup sensor housing through the face of the bumper.

STEP 16

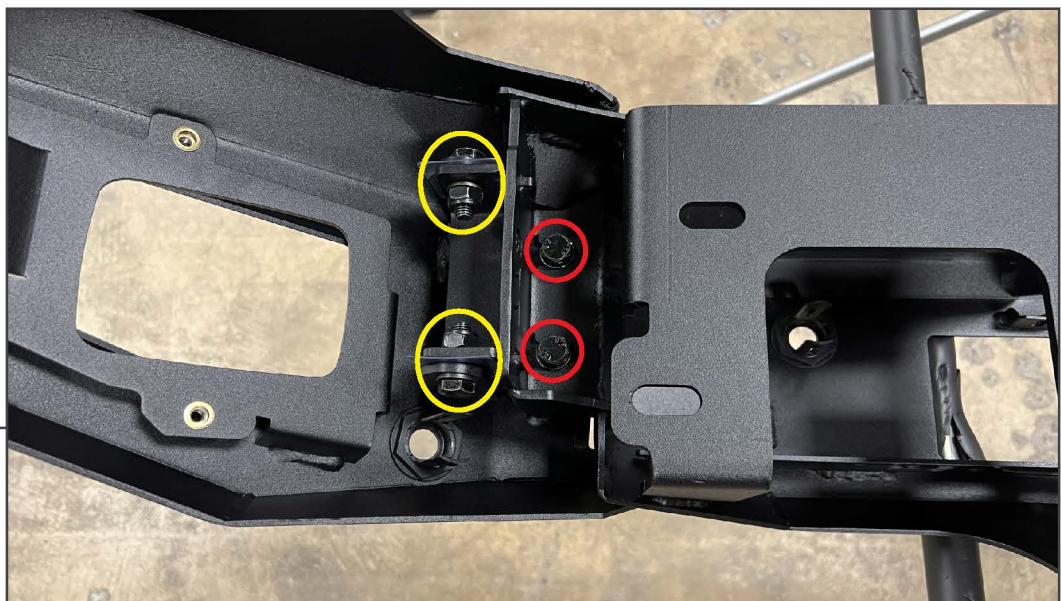
Vehicles with Adaptive Cruise Control (ACC): Place the previously removed LH bumper mounting pad assembly on a workable surface. Locate the ACC module. Using a flathead screwdriver and a hammer, press the pin retaining the bracket to the bumper mounting pad out of the bracket to release the ACC mounting bracket. Then, lift the bracket/module assembly from the mounting stud.

Note: The pin has a tab that must be pressed down before the pin will slide out of the bracket. Vehicles without Adaptive Cruise Control skip to Step 18.

**STEP 17**

Secure the ACC module to the included ACC bracket using (2) M6 x 20mm Allen bolts, (2) M6 flat washers, and (2) M6 lock nuts.

Set the assembly aside at this time, the assembly will be installed at a later step.

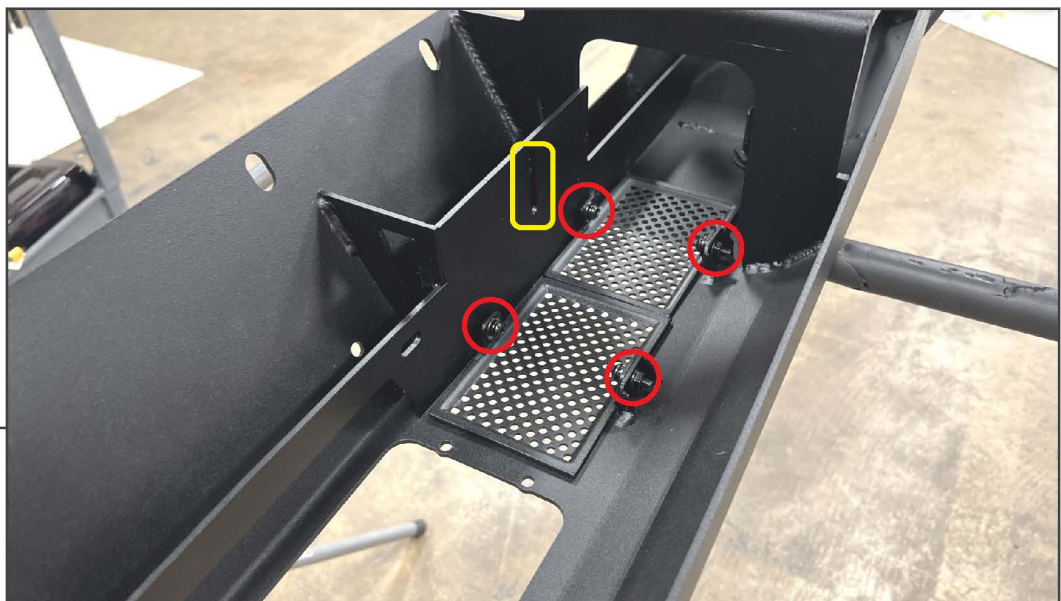
**STEP 18**

Place the bumper on a workable surface. Fold the end caps outwards, and then secure the end caps in the open position using the included (2) M10 x 30mm bolts, (2) M10 lock washers, and (2) M10 flat washers per end cap. Ensure the pre-installed bolts used to hinge the end caps are fully tightened.

STEP 19

Secure the LH and RH LED light enclosures to the bumper using (2) M6 x 20mm combo Allen bolts into the threaded inserts pre-installed in the bumper end caps.

Assemble the LED light brackets to the LED lights using (2) M6 x 12mm cap Allen bolts and (2) M6 lock washers. Then, secure the included LED lights to each enclosure using (1) M8 x 30mm hex bolt, (1) M8 lock washer, (1) M8 flat washer, and (1) M8 nut included in the lighting kit.

STEP 20

Secure the (4) mesh panels to the bumper using (8) M6 x 20mm combo Allen bolts and (8) M6 flange nuts.

Note: Installing additional lighting is possible in place of the grilles using the pre-drilled hole in the lower plate.

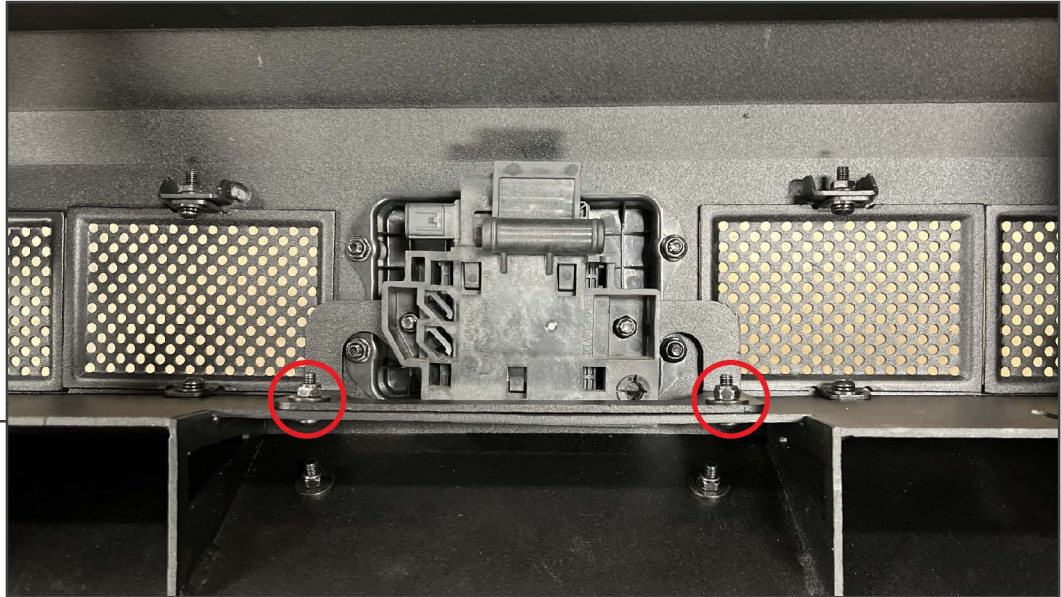
STEP 21

If desired, secure the front license plate mounting bracket to the bottom of the bumper using (2) M6 x 20mm Allen bolts, (4) M6 flat washers, and (2) M6 lock nuts. Then, fit the (2) square plastic screw retainers into the square holes in the bracket.

Use OEM license plate screws to secure the license plate to the bracket.

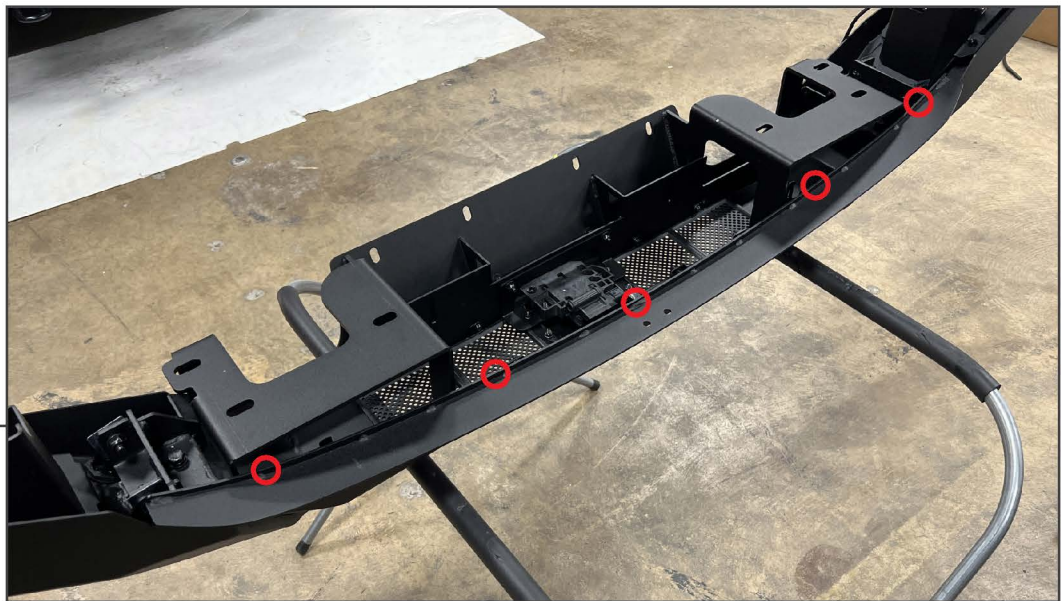
STEP 22

Install the center plastic cover panel to the bumper using (4) M6 x 20mm Allen bolts, (4) M6 flat washers, and (4) M6 lock nuts.

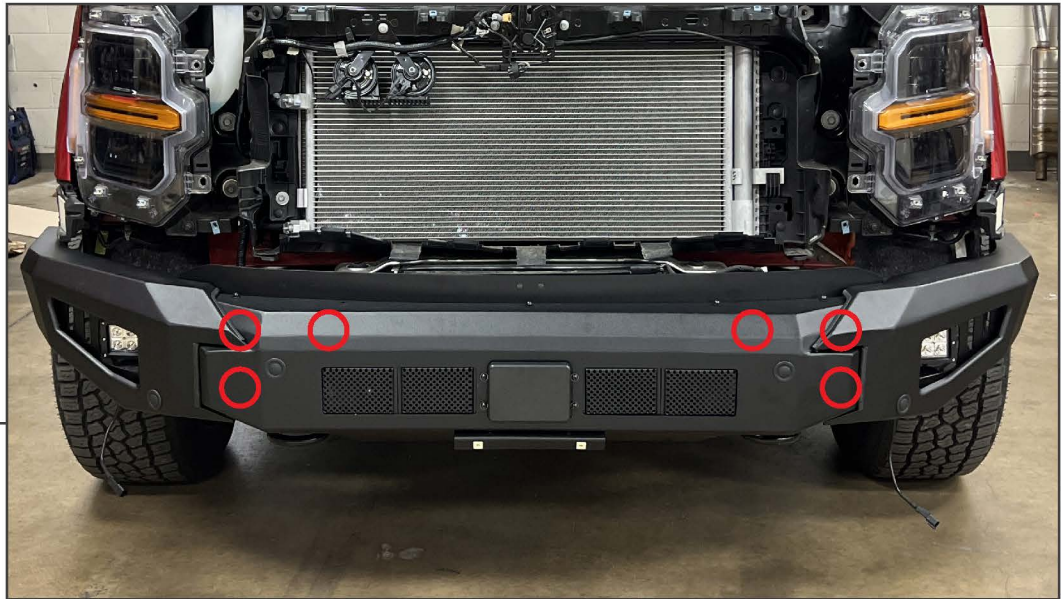
**STEP 23**

Secure the Adaptive Cruise Control module assembly to the bumper using (2) M6 x 20mm Allen bolts, (4) M6 flat washers, and (2) M6 lock nuts.

Vehicles without Adaptive Cruise Control skip to Step 24.

**STEP 24**

Install the upper filler panel using (5) M6 x 20mm combo Allen bolts, (5) M6 flat washers, and (5) M6 flange nuts.

**STEP 25**

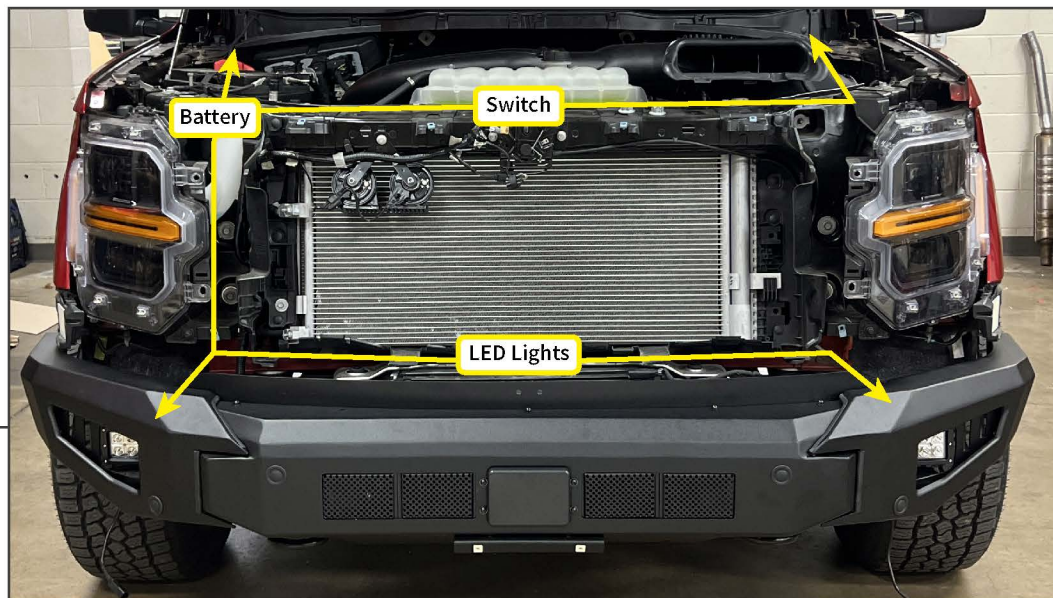
With a helper, lift the new bumper to the vehicle, and secure into place using (6) M12 x 45mm bolts, (12) M12 flat washers, and (6) M12 lock nuts.

Test fit the painted bumper trim panel to the vehicle (latch into the bottom of the fenders), and adjust the bumper to best fit the vehicle. Once adjusted, tighten all bumper mounting hardware until secure.

**STEP 26**

Route the OEM front bumper harness to new front bumper, and plug in all modules & sensors if equipped. Ensure to plug in the bumper harness to the vehicle chassis harness.

Use the included (2) Proximity Sensor Extension Harnesses and (1) Adaptive Cruise Control extension harness, if necessary.

**STEP 27**

Route the included LED light wiring harness throughout the engine bay following the diagram above. Ensure to route the harness away from any hot/moving components. Use the included (10) cable ties to ensure the harness is secure. Mount the relay to a suitable location in the vehicle engine bay.

Unplug the switch connector, and set the switch aside. Route the switch connector on the main harness towards the main firewall grommet below the brake master cylinder. Carefully cut a small slit in the grommet to allow for the switch connector to route into the vehicle interior.

**STEP 28**

Using the included double sided tape attached to the switch, fit the switch to the desired position on the dashboard. Route the harness towards the vehicle firewall grommet, and plug the connectors together. Ensure the harness is secure away from the steering/pedal assemblies.

- Connect the Red ring terminal lead to battery + terminal.
- Connect the Black ring terminal lead to battery - terminal.
- Test the LED lighting at this time.



STEP 29

Install the grille and painted trim panel using the OEM hardware.



STEP 30

Installation is now complete.