## HD FRONT BUMPER WITH 20" LED LIGHT BAR

(2021-2024+ BRONCO)

### INSTALLATION INSTRUCTIONS

### CONTENTS

(1) HD Front Bumper (1) Over-Rider Bar (1) Skid Plate (1) 20" LED Light Bar (1) Wiring Harness (1) Light Bar Block Off Plate (2) Fog Light Mounting Plates (1) ACC Block Off Plate (1) Shutter Block Off Plate (2) 3/4" D-Rings (2) M12 Nut Plates (6) M12x1.75 x 50mm Hex Bolts (6) M12 Lock Washers (6) M12 Flat Washers (2) M10x1.50 x 35mm Hex Bolts (2) M10 Lock Washers (2) M10 Flat Washers (4) M8x1.25 x 25mm Combo Hex Bolts (4) M8 Flat Washers (4) M8 Flange Nuts (3) M6x1.00 x 30mm Allen Bolts (23) M6x1.00 x 20mm Combo Allen Bolts (2) M6x1.00 x 16mm Allen Bolts (5) M6 Lock Washers (34) M6 Flat Washers (23) M6 Flange Nuts (6) Nylon Spacers (4) Proximity Sensor Mounting Kits (1) 4mm Allen Key

### TOOLS REQUIRED

10mm, 13mm, 15mm, 17mm Sockets 4mm Allen Key/Socket Ratchet Flathead Screwdriver Isopropyl Alcohol & Microfiber Plastic Panel Removal Tool



Remove (6) 15mm bolts from the lower splash shield.



**STEP 2** 

From under the bumper, reach upwards and unplug the fog light harness main connector located under the LH (Driver Side) headlight. Pull the plastic harness retainer from the vehicle.



Remove the (2) plastic bumper covers using a plastic panel removal tool to reveal the bumper mounting hardware.



Remove (6) 15mm bolts from the front bumper, and remove the bumper assembly from the vehicle.



Unthread the (1) plastic wing nut from each of the bumper mounting nut plates, and remove each nut plate from the vehicle.

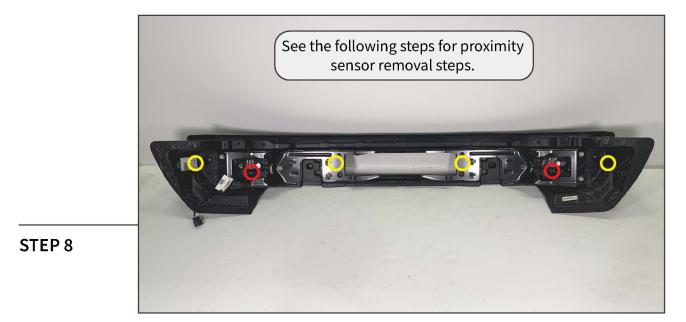


**STEP 6** 

Unplug each fog light from the main harness, and remove each fog light from the bumper by removing (4) 10mm bolts.



Remove (4) 10mm bolts and (4) 15mm bolts to remove the rear bumper brace to reveal the fog light harness from the bumper assembly.



Unplug the wiring harness from each fog light and proximity sensor. The proximity sensors can be used on the new bumper. See the following steps for proximity sensor removal steps.



Place the new bumper on a soft surface. See the following steps regarding proximity sensor mounting.

Once proximity sensors are addressed, proceed to Step 9.



STEP 10

### SENSOR REMOVAL

Optional: If equipped with bumper sensors, unplug the sensors by pressing the connector tab inwards while pulling up. Disconnect the wiring harness retaining clips from the bumper using a plastic panel removal tool and remove the harness.

### **PROXIMITY SENSORS**



### STEP 11

### SENSOR REMOVAL

Remove the sensors from the bumper by using a small flat head screwdriver or pick to gently pry back the mounting tabs.

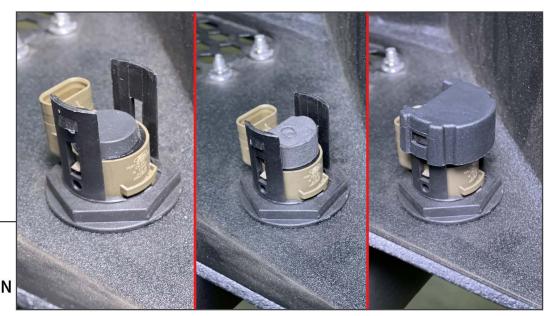


STEP 12

### SENSOR REMOVAL

Remove the rubber gasket from around the sensor. Install the provided foam ring gasket around the sensor.

### **PROXIMITY SENSORS**



STEP 13a

### INSTALLATION (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 13b

## INSTALLATION (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.

### **PROXIMITY SENSORS**



STEP 13c

### OPTION 3 (NO SENSORS)

If vehicle is not equipped with sensors, press the plastic plug into the sensor port until the plug is flush with the port.



STEP 14

### OPTION 3 (WIRING)

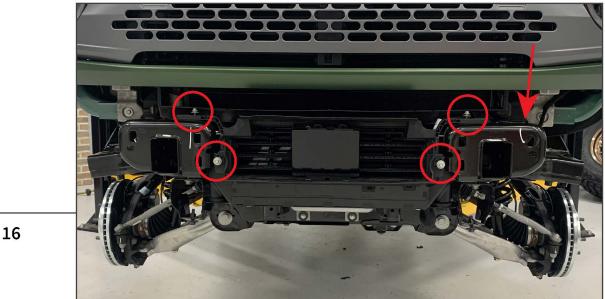
Transfer the sensor/lighting harness from the original bumper to the new bumper, and plug in all sensors/lights. Ensure the wiring is neatly routed away from any bumper mounting area/components.



#### STEP 15

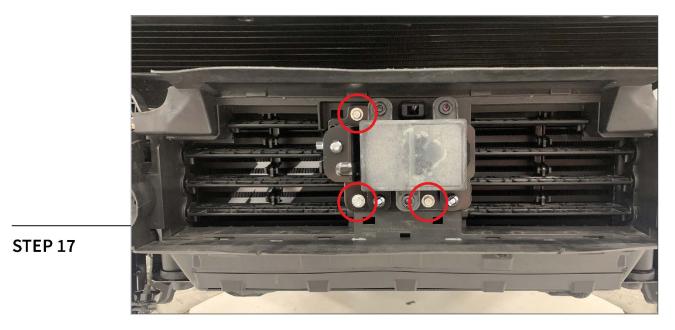
Vehicles with Adaptive Cruise Control: Reference steps 16-21 to transfer the ACC Module to the new bumper.

**Vehicles without Adaptive Cruise Control:** Install the provided block-off plate into the new bumper using (3) M6x1.00 x 30mm Allen bolts, (6) M6 lock washers, (6) M6 flat washers, and (3) M6 flange nuts. **\*Note: The block-off plate is directional.** 



STEP 16

With the bumper removed, locate the front lower shutter assembly. Unplug the wiring harness connector along the LH side of the vehicle, and remove (4) 8mm bolts from the shutter assembly. Remove the shutter assembly from the vehicle and place on a workable surface.



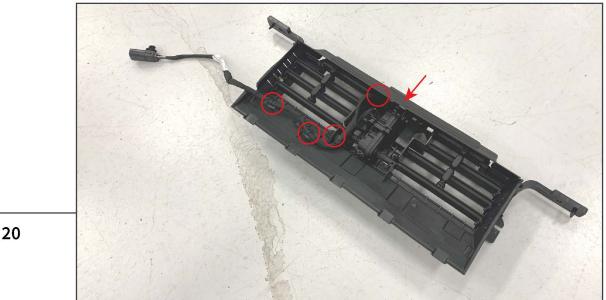
Remove (3) 8mm bolts from the Adaptive Cruise Control [ACC] module.



Unplug the ACC module from the shutter assembly wiring harness.



Unplug the ACC module from the shutter assembly wiring harness.



STEP 20

Unplug the shutter assembly motor by sliding the red lock, and pressing the tab. Then, use a pry tool to dislodge the wiring harness from the shutter assembly. With the harness removed, mount the shutter assembly to the vehicle using the original (4) 8mm bolts.



Mount the ACC module to the bumper using (3) M6 x 25mm bolts, (3) M6 flat washers, and (3) M6 flange nuts, tighten until secure.

With the bumper mounted to the vehicle, route the wiring harness to the ACC module, shutter assembly motor, and the vehicle chassis connector. Clip the lower (3) clips into the vehicle shutter assembly to retain the harness. \*\*Ensure the harness is routed away from any moving parts of the shutter assembly and is not stressed when mounted.



STEP 22

Secure the over-rider bar to the bumper using (2) M8 x 25mm combo bolts, (2) M8 flat washers, and (2) M8 flange nuts per side. Adjust the over-rider to the desired position, and tighten the hardware evenly until secure.



Secure each fog light mounting panel to the bumper using (4) M6 x 20mm combo Allen bolts, (4) M6 flat washers, and (4) M6 flange nuts. Tighten all hardware evenly until secure.



**STEP 24** 

If equipped, secure the OEM fog lights to the vehicle fog light mounting panels using (4) M6 x 20mm combo Allen bolts, (4) M6 flat washers, and (4) M6 flange nuts. Tighten hardware evenly until secure for each fog light.





Light bar: Secure the LED light bar to the vehicle over-rider bar using (2) M6 x 16mm Allen bolts, (2) M6 lock washers, and (4) M6 flat washers. Use (1) flat washer/nylon spacer between the light bar and the mounting bracket to ensure the light bar is spaced evenly. If using an aftermarket light bar, additional spacing may be required.

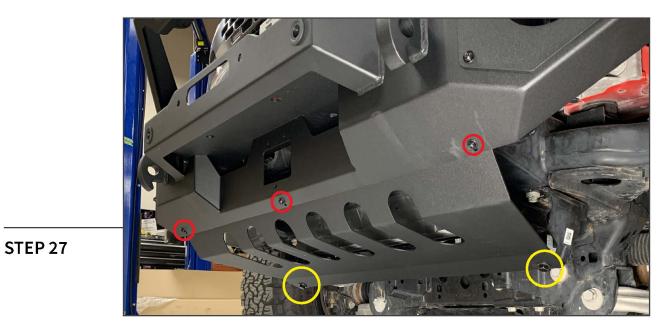
No light bar: Install the included block off plate using (2) M6 x 16mm Allen bolts, (2) M6 lock washers, (4) M6 flat washers, and (2) M6 flange nuts.



**STEP 26** 

Place the included (2) M12 nut plates behind the vehicle frame. Then, with assistance, lift the bumper to the vehicle frame rails and secure into place using (3) M12 x 50mm bolts, (3) M12 lock washers, and (3) M12 flat washers. Adjust the bumper to the desired height, and tighten all hardware evenly until the bumper is secure.

Note: It is recommended to install the bumper



Route the skid plate above the lowest part of the bumper, and loosely secure the skid plate to the bumper using (3) M6 x 20mm combo bolts. Then, secure the skid plate to the OEM skid plate bolt holes in the vehicle frame using (2) M10 x 35mm bolts, (2) M10 lock washers, and (2) M10 flat washers. Once all bolts are threaded into place, evenly tighten all hardware until the skid plate is secure into place.



Install the shutter block-off plate to the winch area of the bumper using (2) M6 x 20mm combo Allen bolts, (2) M6 flat washers, and (2) M6 flange nuts. Tighten the hardware until secure.



Open the vehicle hood. Route the included wiring harness from the LED light bar into the engine bay towards the vehicle battery/cabin.



STEP 30

Secure the harness relay to the vehicle inner fender brace using (1) M6 x 20mm combo Allen bolt, (1) M6 flat washer, and (1) M6 flange nut. Then, secure the ring terminal connectors to the vehicle battery. RED is 12V+, while BLACK is ground (-). Use (1) M6 x 20mm combo Allen bolt, (1) M6 flat washer, and (1) M6 flange nut to secure the negative wire lead terminal to the open hole on the battery terminal. Connect the 12V+ using the existing battery terminal hardware.

Unplug the light switch, and route the connector through the firewall through a suitable grommet.



**STEP 31** 

Plug the switch into the previously routed wiring harness, and locate an appropriate light switch mounting position. Clean the area with isopropyl alcohol and a microfiber cloth and allow to dry. Then, peel the adhesive tape backing and firmly press the switch to the vehicle panel. The light will now power on with the switch.



Install the (2) 3/4" D-Rings to the bumper mounting points, ensure the rings are tight using leverage.

Installation is now complete.