

TRAIL FORCE HD FRONT BUMPER WITH LED LIGHTS

(2021-2023+ BRONCO)

INSTALLATION INSTRUCTIONS

CONTENTS

- (1) Front Bumper
- (2) 3/4" D-Rings
- (1) Over Rider Bar
- (1) Rear Block Off Plate
- (1) ACC Block Off Plate
- (1) LH End Cap
- (1) RH End Cap
- (1) LH Bumper Mounting Nut Plate
- (1) RH Bumper Mounting Nut Plate
- (1) Backup Sensor Installation Kit
- (2) Rectangle LED Lights w/ Hardware & Bezel
- (2) Circular LED Lights w/ Hardware & Bezel
- (4) Rectangle LED Light Mounting Brackets
- (4) Circular LED Light Mounting Brackets
- (6) M12x1.75 x 50mm Bolts
- (6) M12 Lock Washers
- (6) M12 Flat Washers
- (8) M8x1.25 x 25mm Allen Bolts
- (8) M8 Flat Washers
- (8) M8 Flange Nuts
- (7) M6x1.00 x 30mm Allen Bolts
- (7) M6 Lock Washers
- (11) M6 Flat Washers
- (7) M6 Nuts
- (34) M6x1.00 x 25mm Bolts (LED Lights)
- (34) M6 Locking Nuts (LED Lights)

TOOLS REQUIRED

10mm, 15mm, 17mm, 19mm Sockets Plastic Panel Removal Tool Phillips Screwdriver 3mm, 4mm Allen Keys/Sockets

WINCH BUMPER SPACER

- (2) Bumper Spacers
- (6) M12x1.75 x 65mm Bolts
- (6) M12 Lock Washers
- (6) M12 Flat Washers

SKU # FB16212 Edited: 06/08/2022



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.



STEP 4

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.

Note: If the vehicle has Adaptive Cruise Control, see step 15-20 for module removal/transfer.



STEP 6

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



Unplug the wiring harness from each fog light and proximity sensor, if applicable. The proximity sensors can be used on the new bumper.



STEP 8

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.

PROXIMITY SENSORS



SENSOR REMOVAL

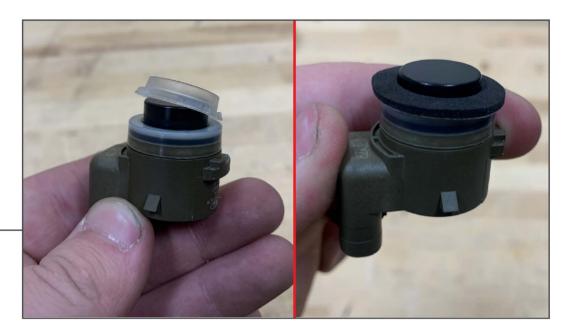
Optional: If equipped with bumper sensors, unplug the sensors by pressing the connector tab inwards while pulling up. Disconnect the wiring harness retaining clips from the bumper using a plastic panel removal tool and remove the harness.



SENSOR REMOVAL

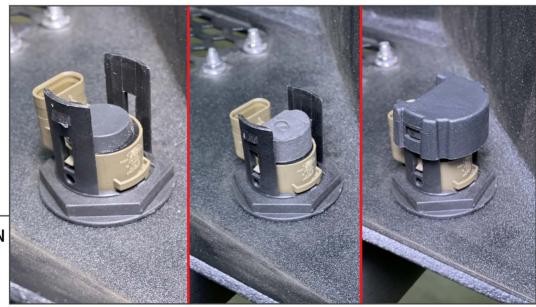
Remove the sensors from the bumper by using a small flat head screwdriver or pick to gently pry back the mounting tabs.

PROXIMITY SENSORS



SENSOR REMOVAL

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



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.

PROXIMITY SENSORS



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.



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 9

Install (2) mounting brackets to each LED light using the (2) screws included with the lights.



STEP 10

Install the (4) LED lights with the exterior trim to the bumper using the (34) M6 x 25mm Allen bolts, and (34) M6 lock nuts. Tighten until secure. Plug the lights into the provided wiring harness, and neatly route towards the LH (Driver's Side) of the bumper.



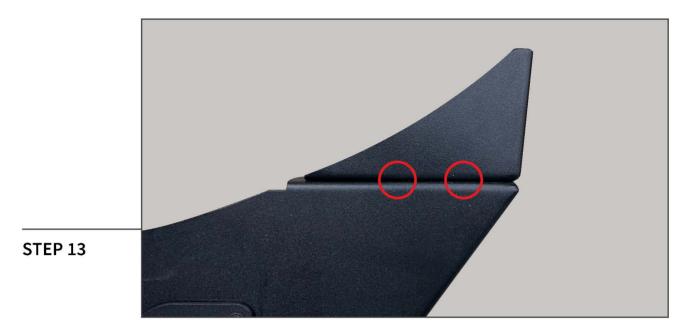
Secure the over rider bar to the bumper using (6) M8 x 25mm Allen bolts, (6) M8 flat washers, and (6) M8 flange nuts. Tighten until secure.



STEP 12

Place the (2) bumper mounting nut plates behind the vehicle frame rails. With assistance, install the bumper to the vehicle frame rails using (6) M12 x 50mm bolts, (6) M12 flat washers, and (6) M12 lock washers. Do not fully tighten to allow for adjustment later.

Note: Some winches may interfere with the vehicle painted trim panel. For additional clearance, fit the (2) bumper spacers in-between the frame rail and the bumper, and secure into place using the (6) M12x1.75 x 65mm bolts, lock washers, and flat washers.

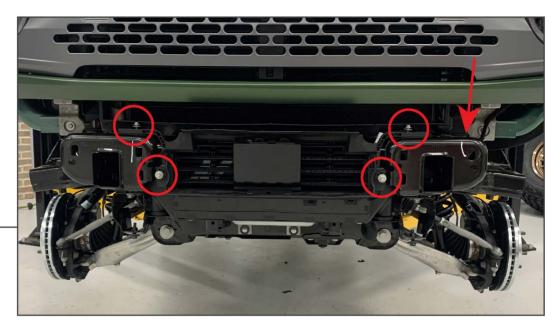


Install each end cap to the bumper using (2) M6 x 30mm Allen bolts, (4) M6 flat washers, and (2) M6 lock nuts. Fully tighten once properly aligned.

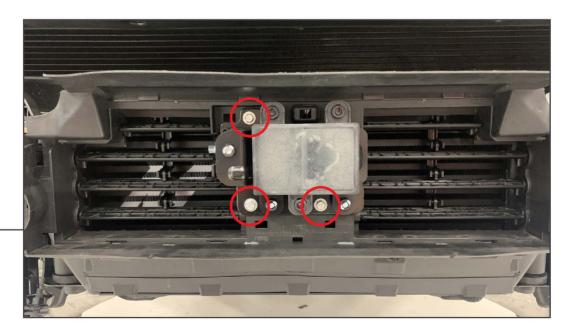


If the vehicle is equipped with Adaptive Cruise Control (ACC), see step 15-20.

If vehicle is not equipped with Adaptive Cruise Control (ACC), install the included block off plate using (3) M6 x 25mm bolts, (6) M6 flat washers, and (3) M6 lock nuts. *Note: The plate is directional. After installing the block off plate, skip to step 21.



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.



STEP 16

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

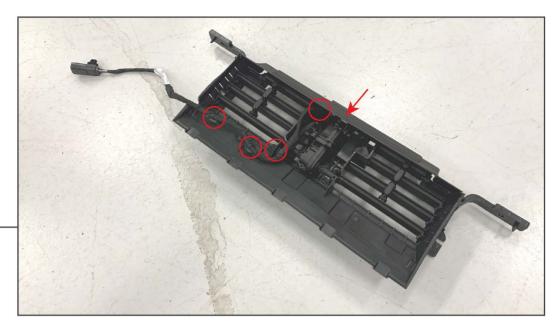


Unplug the ACC module from the shutter assembly wiring harness.



STEP 18

Using a pry tool, gently pry the ACC module away from the retaining bracket. The brackets are secured to the module using friction-fit ball studs.



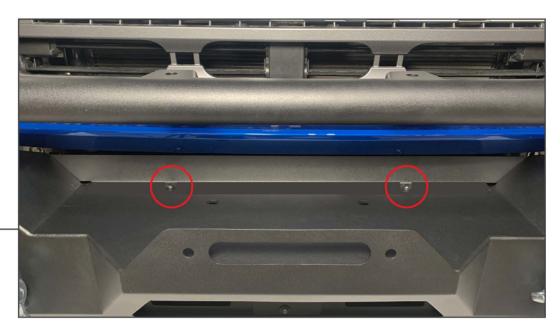
Unplug the shutter assembly motor by sliding the red lock, and pressing the tab. Then, use a pry tool to dislodge the wiring harness from the shutter assembly. With the harness removed, mount the shutter assembly to the vehicle using the original (4) 8mm bolts.



STEP 20

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. The module can be installed in front or behind the bumper.

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.



Install the rear block off plate to the bumper. Plate the panel under the bumper winch plate surface, and secure using (2) M8 x 30mm bolts, (2) M8 flat washers, and (2) M8 flange nuts.



STEP 22

Install the (2) 3/4" D-Rings to the front bumper mounting points.

Installation is now complete.