

## F-150 TUBE FRONT BUMPER

21-23 FORD F-150

FBFF1-13



### TOOLS REQUIRED

- 8, 10, 13, 17, 18, 19, 21, 22mm sockets
- #4, 5, 6, 8 Allen head sockets/tools
- T20, T30 Torx Tool
- Trim clip tool
- Sawzall/Grinder
- Razor/Snips
- Zip Ties
- Marker

### SKILL LEVEL

- Intermediate
  - 1 (you) to 2 persons
- Moderate skill level required, you can easily install it by yourself however, additional help will be useful

### TIME REQUIRED

- 4.5 Hours
- Time to install this should take about three and a half hours

## WARNINGS/CAUTIONS BEFORE STARTING INSTALLATION

Before you install this kit – Read and understand all instructions, warnings, cautions, and 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: 855-680-9595

*DVB Offroad 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

- Always wear eye protection when operating power tools

*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



# INSTALLATION MANUAL

Begin by unpacking all items and inspecting for missing pieces or damage. If you have any concerns, please contact the company the product was purchased from. Extra hardware may be included with the product.

## HARDWARE INCLUDED

- |                                 |                                    |
|---------------------------------|------------------------------------|
| (1) Aluminum tubing/<br>spacer  | (19) M8 spring washers             |
| (6) M12x30 allen bolts          | (30) M8 nylon lock nuts            |
| (4) M12x30 hex bolts            | (1) M6x60 allen bolt               |
| (16) M12 washer                 | (28) M6x20 allen bolts             |
| (4) M12 spring washers          | (4) M6x14 countersunk<br>head bolt |
| (6) M12 nylon lock nuts         | (60) M6 washers                    |
| (4) M12 clip nuts               | (4) M6 spring washers              |
| (10) M10x25 allen head<br>bolts | (4) M6 cap nuts                    |
| (10) M10 nylon lock nuts        | (28) M6 nylon lock nuts            |
| (20) M10 Washers                |                                    |
| (51) M8x20 allen head bolt      |                                    |
| (69) M8 washers                 |                                    |



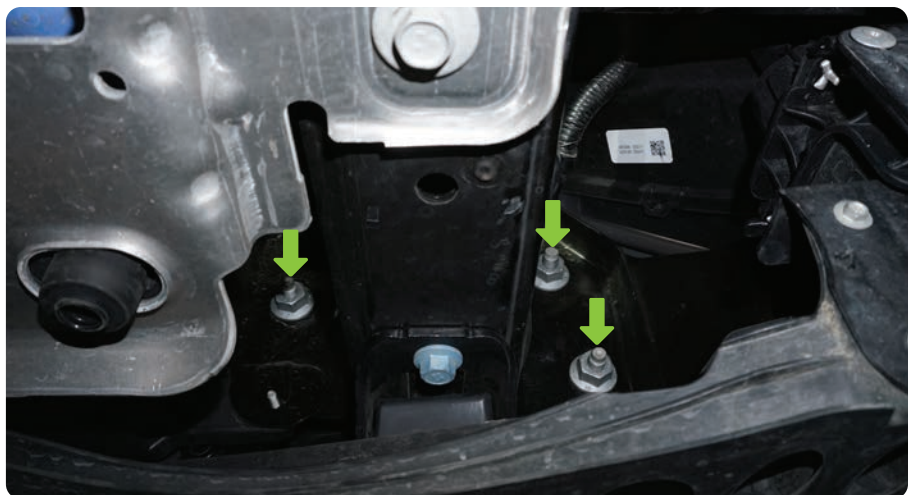
**STEP 1** | Begin by unplugging the bumper from the main wire harness on the truck. The plug can be found located on top of the frame rail under the passenger side headlight.



*Note: If you have trouble removing this plug, you can wait until the bumper has been unbolted, however this will require additional help to hold the bumper and remove the plug.*



**STEP 2** | To remove the bumper, use a 21mm socket to remove the (3) mounting nuts per side.

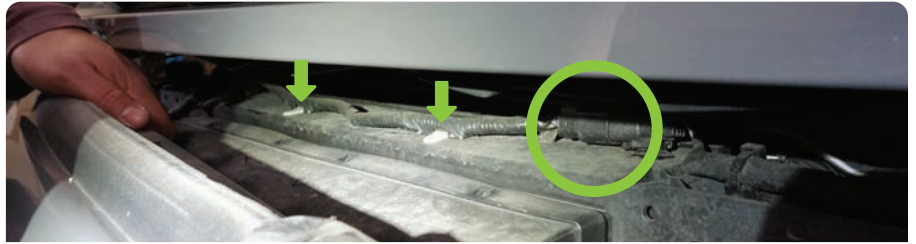


# INSTALLATION MANUAL

**STEP 3** | Once the nuts are removed, pull the bumper off by leaning the center back towards the vehicle and then pulling the bumper forward.



**STEP 4** | Disconnect the lower shutter motor and the electrical plug on top of the lower shutter assembly. Use a trim clip tool to remove any harness clips.



**STEP 5** | Using a 8mm socket, remove the (4) bolts that secure the lower shutter system.

Use a trim clip tool to remove any harness retaining clips.

Set the lower shutter system on a work bench.



# INSTALLATION MANUAL



**STEP 6** | Use a T20 Torx tool to remove the lower shutter motor

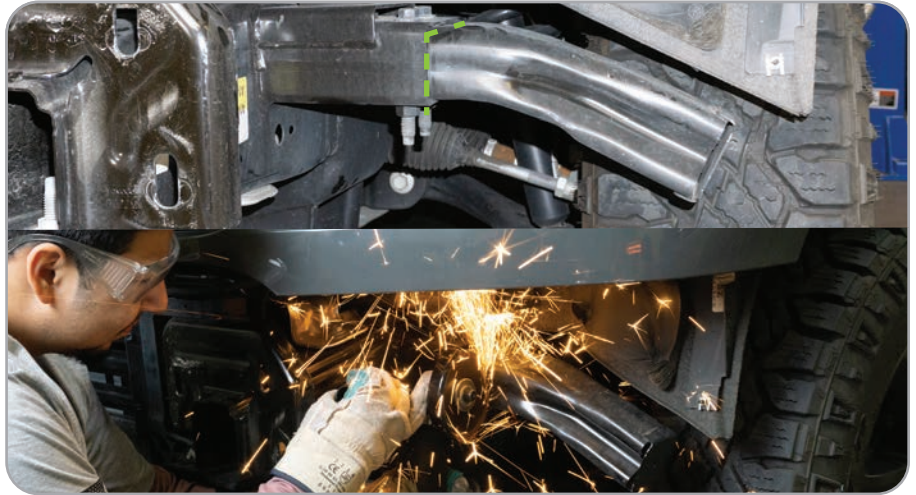


**STEP 7** | Set the shutter motor to the side,



# INSTALLATION MANUAL

**STEP 8** | Once the bumper is removed, set off to the side and using a grinder/sawzall, safely cut off the crash bars. Ensure to paint any raw metal after cutting.

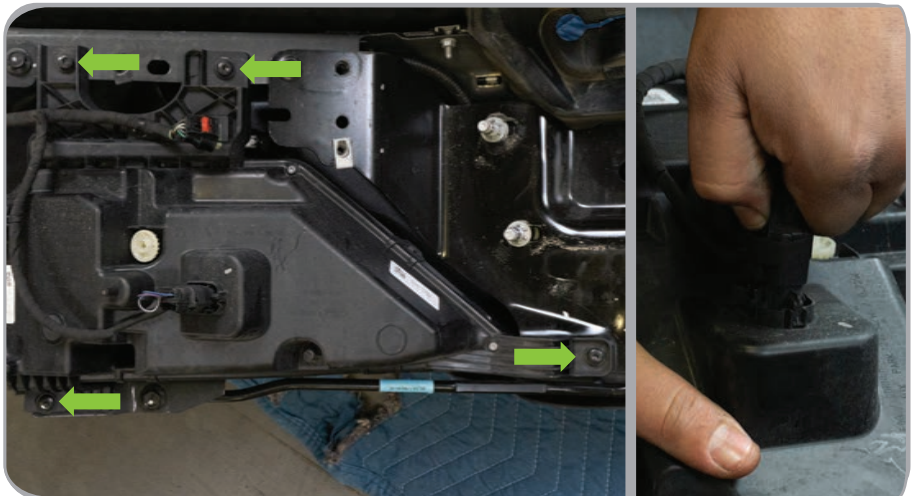


**STEP 9** | If your bumper is equipped from the factory with front parking sensors, begin by removing the automatic air dampening system on the factory bumper using a 13mm socket on the three bolts located on each side.



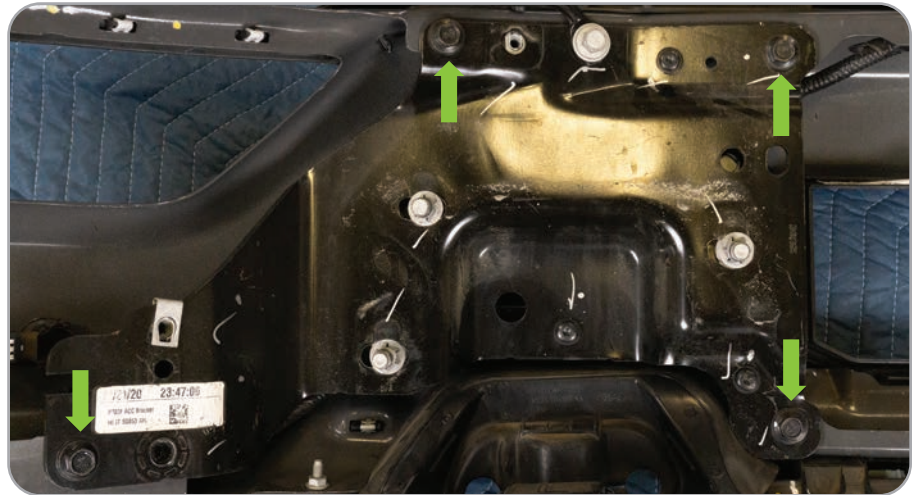
**STEP 10** | Using a T30 torx bit, remove the four bolts holding fog light housing on each side of the factory bumper. Unplug the fog lights and set off to the side.

**Note:** The bumper wire harness has a mount on the fog light. Using your push pin removal tool, remove the harness from each light.



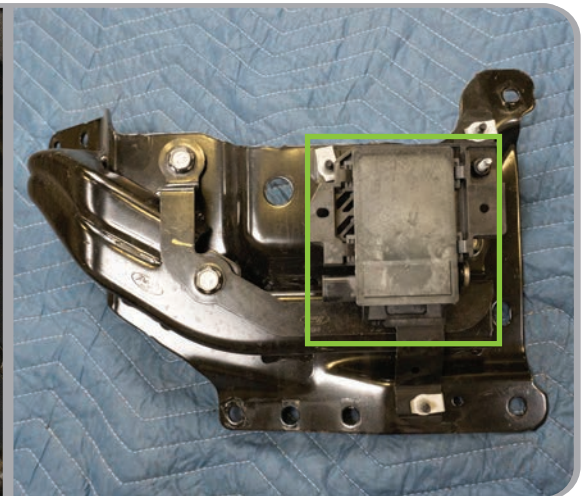
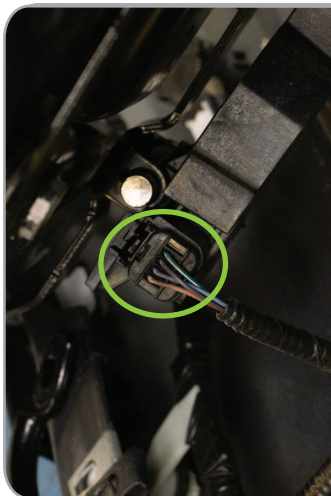
# INSTALLATION MANUAL

**STEP 11** | Using a 13mm socket, remove the four bolts holding each bumper bracket. Remove brackets and set off to the side.



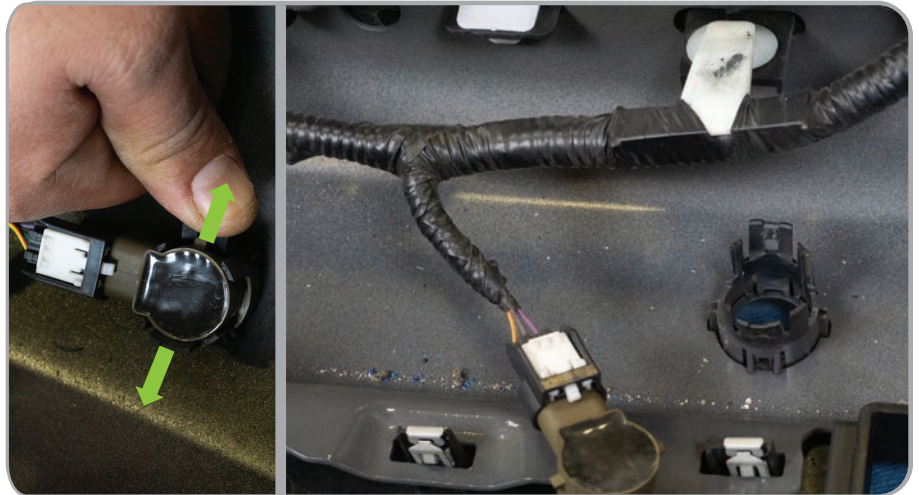
**STEP 12** | If you have an adaptive cruise control (ACC) module, unplug this off the driver side bracket and set off to the side since this will not be a part of the bumper install.

**NOTE:** To relocate the ACC module, you will need the ABFF-01. Use the ABFF-01 instructions for relocation steps before you continue with remainder of bumper install.

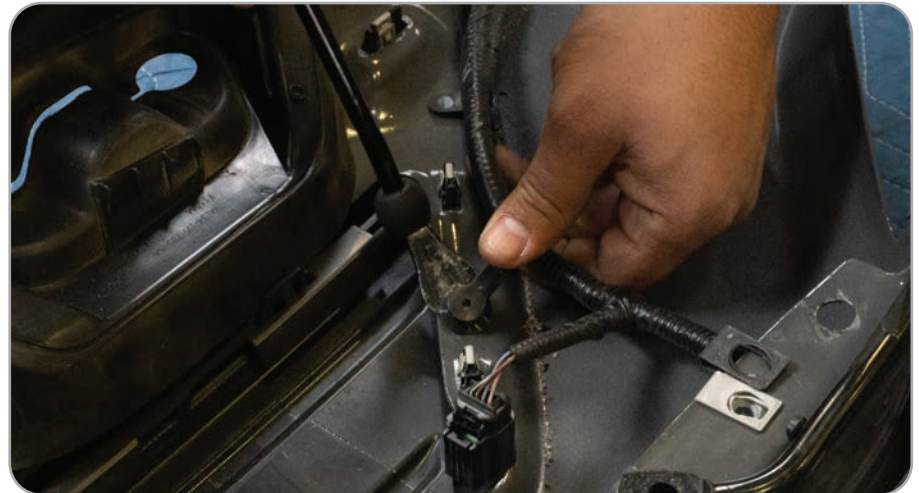


# INSTALLATION MANUAL

**STEP 13** | After you have full access to the bumper wire harness, unclip each sensor from the bracket by spreading the side of the sensor bezels. Do not overextend these tabs since they can break.



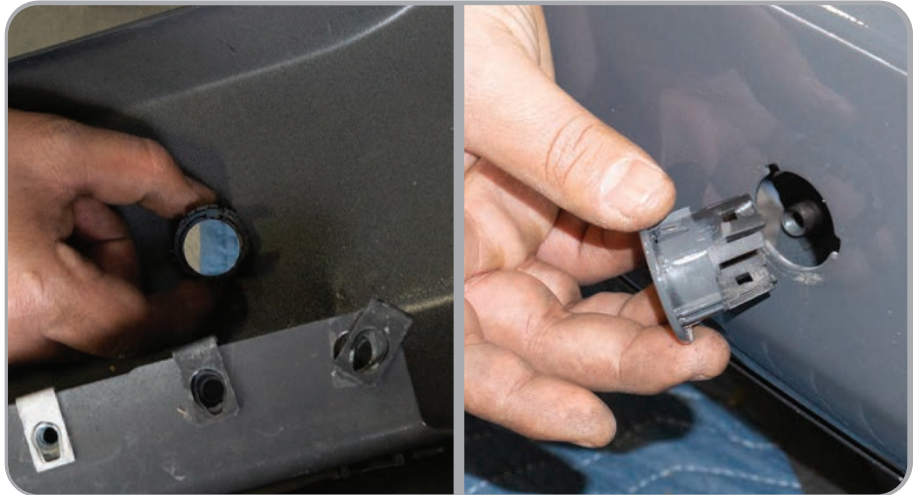
**STEP 14** | Using the push pin tool, remove the harness from all points on the factory bumper.



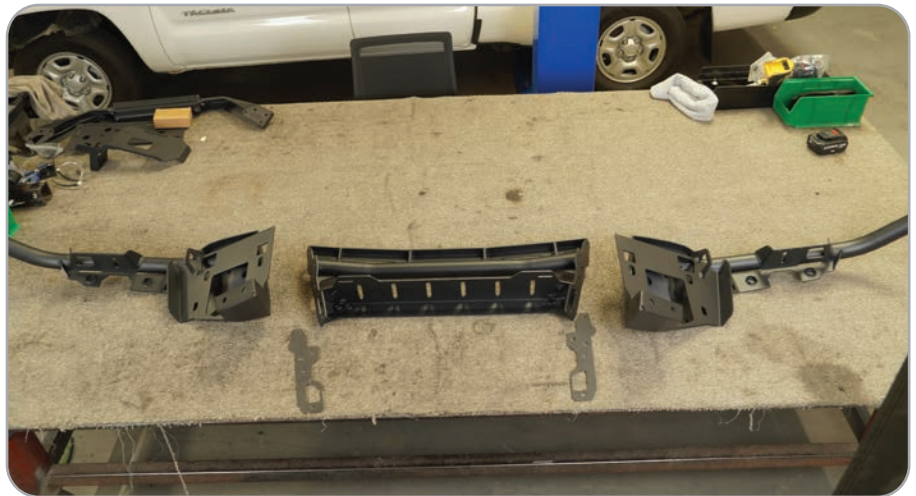
## INSTALLATION MANUAL

**STEP 15** | To remove the sensor bezels from the bumper, squeeze the side of the bezel from the back and pull the face from the front.

The uninstal of the bumper is complete.



**STEP 16** | Set bumper on a soft surface to prevent damage.



**STEP 17** | Locate the center section and the provided foam, peel the backing on the foam, and place it on the mounting surface on the ends.



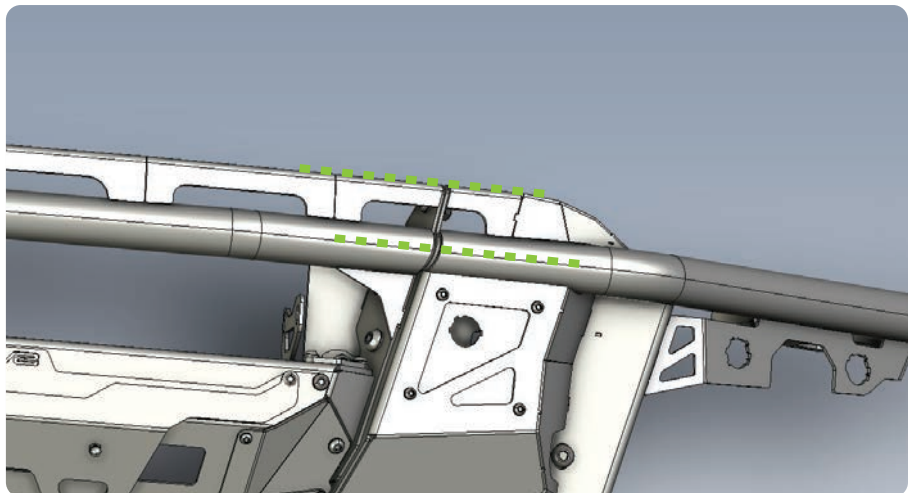


**STEP 18** | Install loosely the (5) M8x20 bolt, washer, and nut using #5 allen socket and 13mm wrench or socket. Repeat the process on the other side.



**STEP 19** | Once both sides are attached, align the wings with the center piece and secure the bolts and nuts in place.

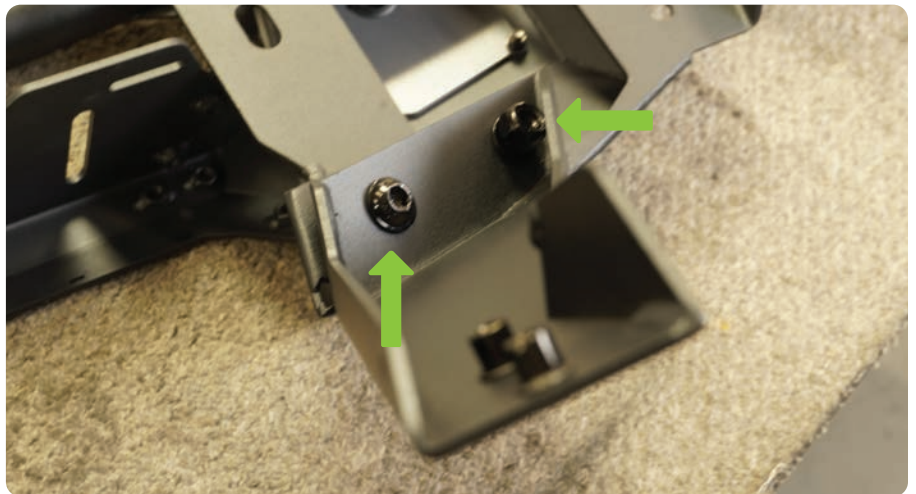
Ensure the top of the tube and the top bracket are as inline as possible.



## INSTALLATION MANUAL

**STEP 20** | Install the side piece of the skid plate. Use a #5 allen socket/wrench and a 13mm wrench for the (2) M8x20 bolt, washer, and nut per side.

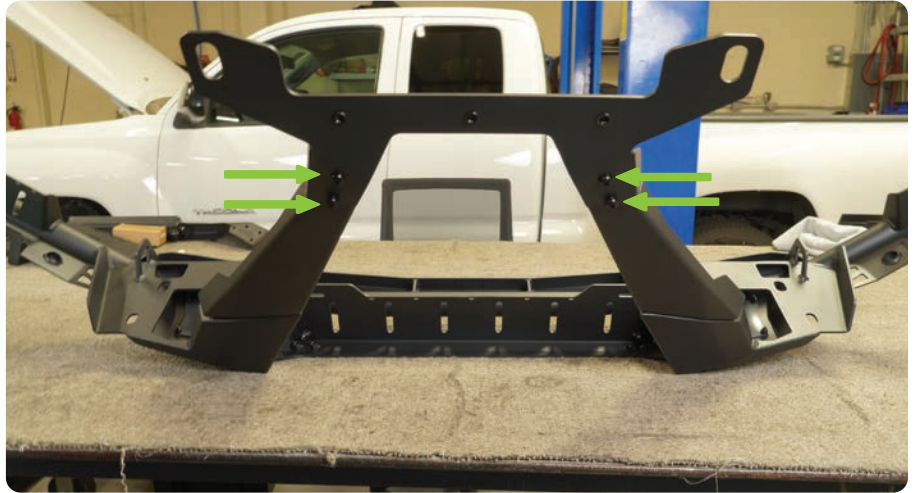
*Note: We did 2 different attachment styles as it was easier to install the bolts and nut in those inner angles.*



**STEP 21** | Once secured, install the bottom part of the skid plate using #4 allen for the (4) M6x20 bolt and washer.

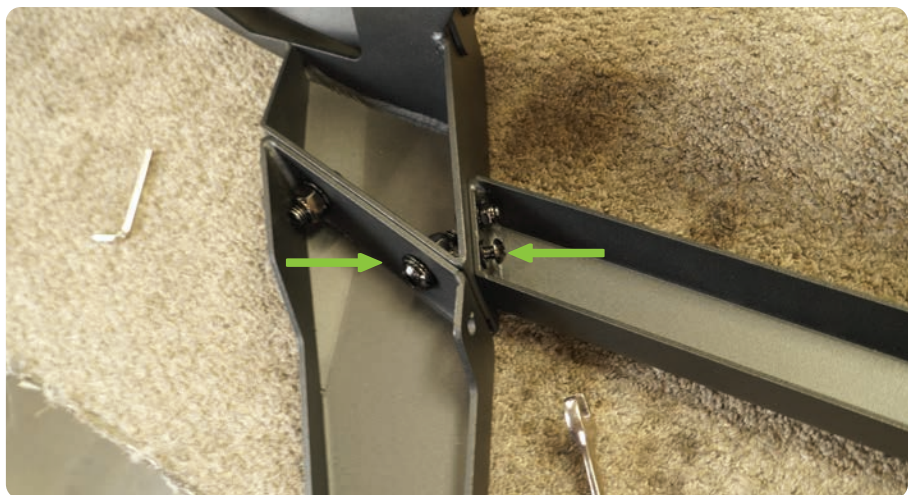


# INSTALLATION MANUAL



**STEP 22** | Install the middle bar of the skid plate using a #4 allen and 10mm wrench to install the (2) M6x20 bolt, washer, and nut on each side.

*Note: We do recommend removing the inner bolt or installing this piece before the side parts of the skid plate which helps with access to the nut or bolt.*



## INSTALLATION MANUAL

**STEP 23** | Install the middle portion of the skid plate using #5 allen socket for the (4) M8x20 bolts and washer.

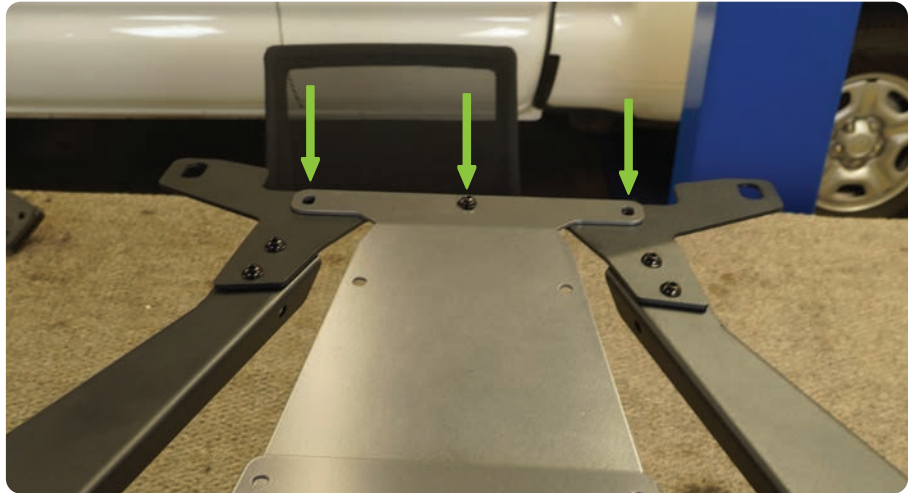


**STEP 24** | Install the pair of side gray skid plate using a #5 allen socket and a 13mm wrench for the (6) M8x20 bolt, washer, and nut.

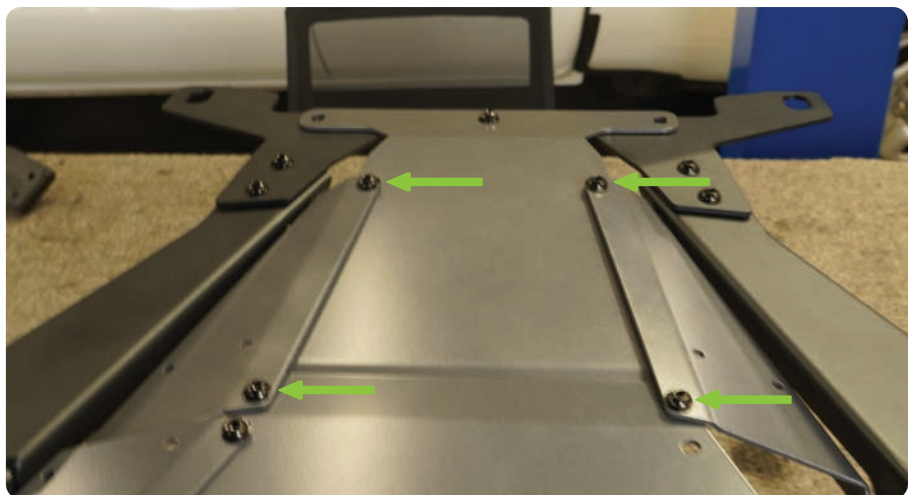




**STEP 25** | Install the bottom gray middle section of the skid plate using #5 allen socket for the (3) M8x20 bolt and washer at the bottom to hold it in place.



**STEP 26** | Install the side gray skid plate parts with the middle section using #5 allen socket and 13mm socket/wrench for the (4) M8x20 bolt, washer, and nut.



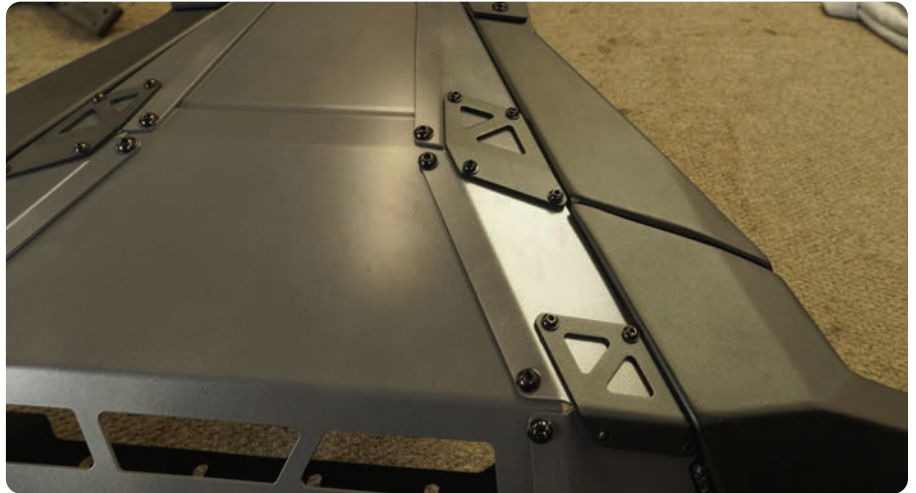
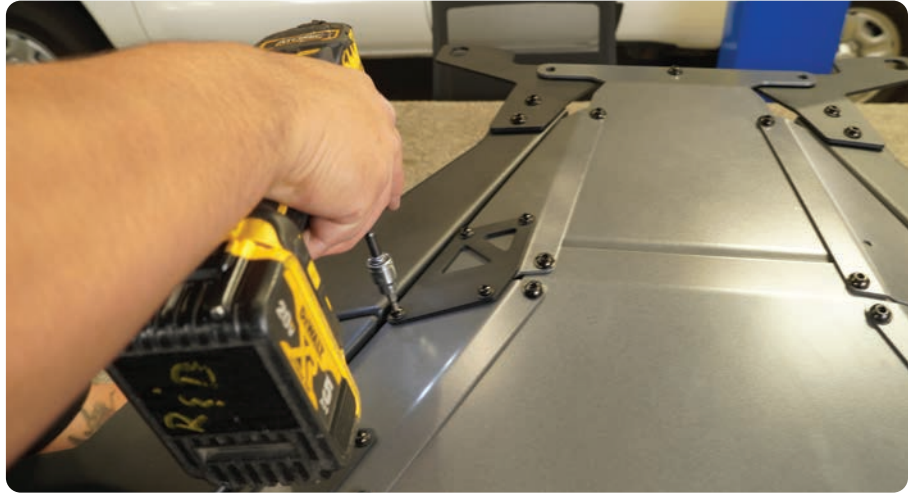
# INSTALLATION MANUAL

**STEP 27** | Using a #5 allen socket and 13mm wrench, install the (4) M8x20 bolts, washer, and nuts on the back of the skid plate.



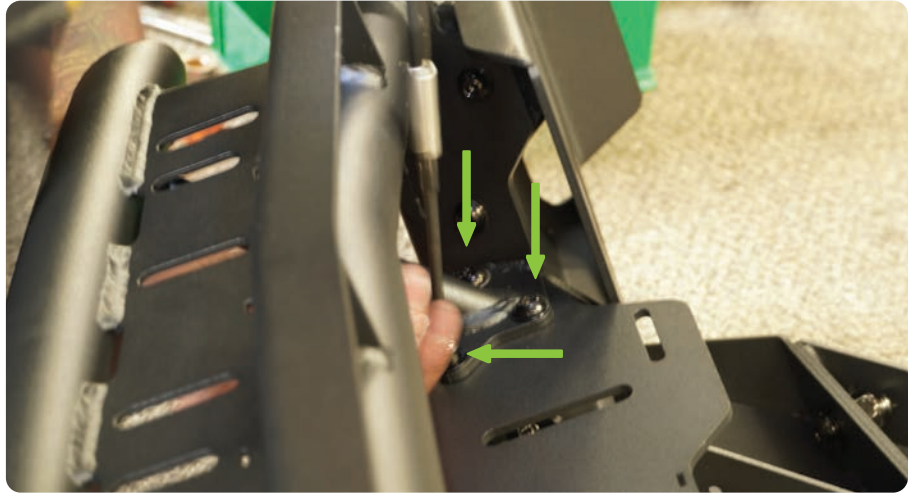
**STEP 28** | Install the black brackets using the #4 allen socket and 10mm wrench/socket for the M6x20 bolt, washer, and nuts.





**STEP 29** | Installing the bull bar, use a #4 allen for the (6) M6x20 bolt and washer.





**STEP 30** | Once bull bar is installed, attach the nut clips to the top opening of the bumper.



# INSTALLATION MANUAL

**STEP 31** | Working on the shutter motor bracket now. Install one of the side brackets with the provided M6x60mm bolt and washer.



**STEP 32** | Flip the assembly over and slide the provided gear into the shutter housing.



**STEP 33** | Place the top bracket over the assembly and using two M6 bolts, secure rear and top brackets together.





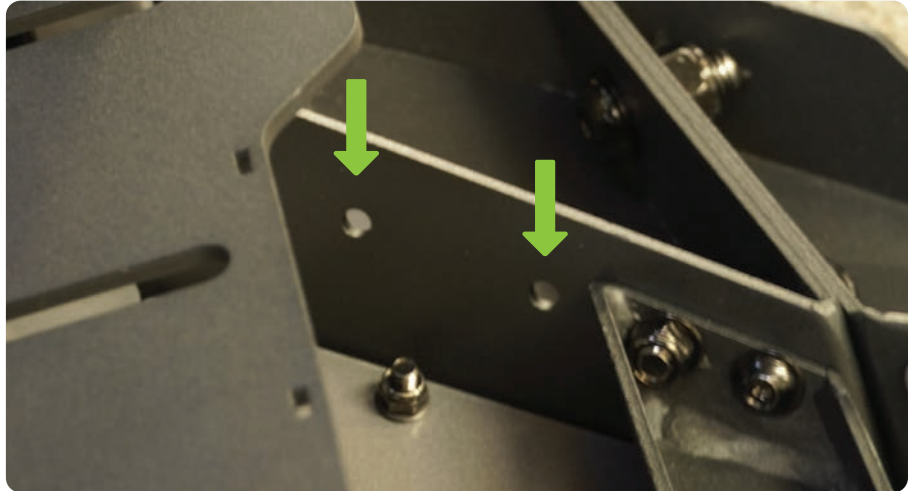
**STEP 34** | Lastly, place the gear stop bracket over the gear bolt and secure using a #4 and 10mm socket/wrench.

*Note: Tighten the bolt so that the bracket moves with the assembly, but do not over-tighten to prevent damage to the bolt threads or aluminum gear.*



# INSTALLATION MANUAL

**STEP 35** | Install the assembled shutter motor bracket to these holes on the bumper.



**STEP 36** | If you have front sensor, the OE bezels will need to be modify slightly to fit into the opening.

Start by trimming down the tabs on the side of the bezel. Trim the smallest amount off the ends to allow the bezel to clip to the bumper.



# INSTALLATION MANUAL

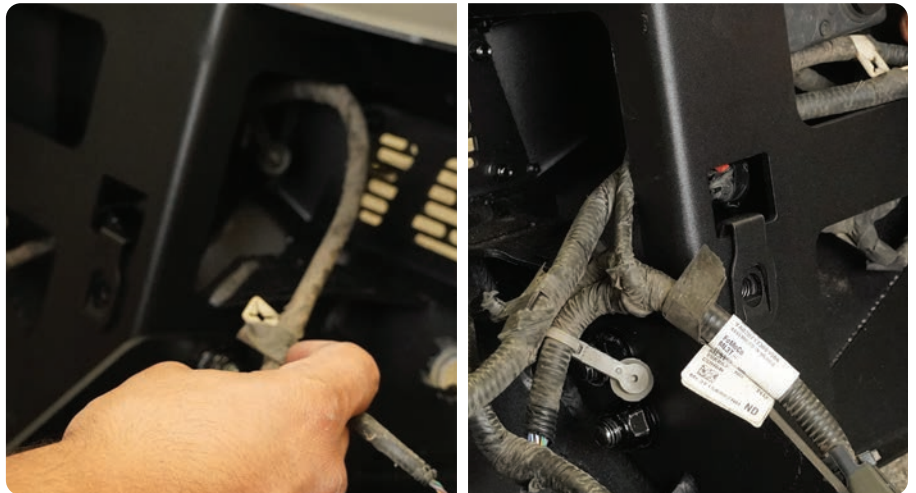
**STEP 37** | Install the bezels from the front in the same spots as factory.

*Note: OE Bezels are differently shaped to fit in certain spots. We do offer our Motorcraft Bezels (MCFSNSR-01) if one of the bezels break during removal.*



**STEP 38** | Start feeding the harness into the bumper. Each sensor plug should land near the bezel placed before.

Use zip ties to secure your harness to the bumper. There is provided opening on bumper for wiring management.



**STEP 39** | Make sure your sensors and bezels installed firmly into place.



## INSTALLATION MANUAL

**STEP 40** | If you are planning on running pod lights, mount your pod light now using the hardware provided with the light

**Note:** We use our 3" Elite Series LED Pod Light (BE3EW40W) on this bumper.



**STEP 41** | If you are planning on installing a light bar, the bumper comes with provided light bar brackets to install.

**Note:** We are installing our 20" Halo Elite Dual Row Light Bar w/accent light (BE20EW200W-H) with the provided hardware.



# INSTALLATION MANUAL

**STEP 42** | Mount the light bar within the bumpers center section using a #4 allen tool and 10mm wrench with the provided M6 hardware.



**STEP 43** | If you wish to run light along the push bar, install your lights at this time using the hardware included with the lights.

*Note: We chose the DV8 7" Halo Elite Round Light with accent halo. (BE7RW108W-H)*



**STEP 44** | Run the pigtails through the gaps. The bull bar has small slit for zip ties to help with wiring management.





**STEP 45** | Once you have secured all your bolts and nuts, and wired your lights to your preference, install your bumper to your vehicle.

*Note: We recommend having a second pair of hands to help with the installation to avoid injury or damage to the bumper or vehicle.*



**STEP 46** | Install (2) M10x25mm allen bolt, washers, and nuts using a #6 allen socket and 17mm in the front to hold bumper.

Install the (4) M10x25mm hex bolt and washer on the back of the bumper.





**STEP 47** | Install the (2) OE bolts at the bottom of the skid plate using a 15mm socket. Secure them in place.



# INSTALLATION MANUAL

**STEP 48** | Align your bumper, and secure your bolts.



**STEP 49** | Install your tow hooks using the factory bolts using 15mm socket.



# INSTALLATION MANUAL

**STEP 50** | Congratulations! You have finished installing your DV8 F-150 Front Tube Bumper.

