

## 2ND GEN RAPTOR FRONT TUBE BUMPER

17-20 FORD F-150

FBFR1-01



### TOOLS REQUIRED

- 10mm, 13mm, 15mm, 16mm, 17mm, 19mm, 21mm sockets
- #4, #5, #8 Allen tool/socket
- 13mm, 10mm, 19mm wrenches
- 6"-12" Socket Extension
- Trim Tool
- Safety Glasses

### SKILL LEVEL

- Novice/Intermediate
  - 1 (you) to 2 persons
- Little skill level required, you can easily install it by yourself however, additional help will be useful to prevent injury or damage.

### TIME REQUIRED

- 4.5 Hours
- Time to assemble and install this should only take about four and 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

*DV8 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

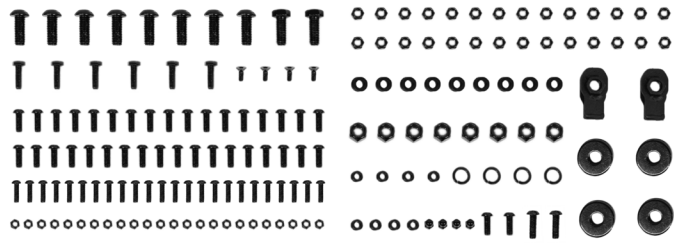


# INSTALLATION MANUAL

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

- |                             |                             |
|-----------------------------|-----------------------------|
| (2) M12x30 Hex Bolts        | (24) M6x20 Allen Head Bolts |
| (2) M12 Clip Nuts           | (24) M6 Nylon Lock Nuts     |
| (4) M12 Spring Washers      | (48) M6 Washers             |
| (8) M12x30 Allen Head Bolts | (37) M8x20 Allen Head Bolts |
| (8) M12 Nylon Lock Nuts     | (2) M8x25 Allen Head Bolts  |
| (18) M12 Oversize Washers   | (28) M8 Nylon Lock Nuts     |
| (4) M6x14 Hex Bolts         | (10) M8 Spring Washers      |
| (4) M6 Cap Nuts             | (73) M8 Washers             |
|                             | (6) M8x25 Hex Bolts         |



**STEP 1** | Start by using a Trim tool to remove Adaptive Cruise Control cover (if ACC equipped vehicles)

**Note:** You will need to use our ACC Relocation Bracket ABFF-02 to reinstall the ACC Sensor.

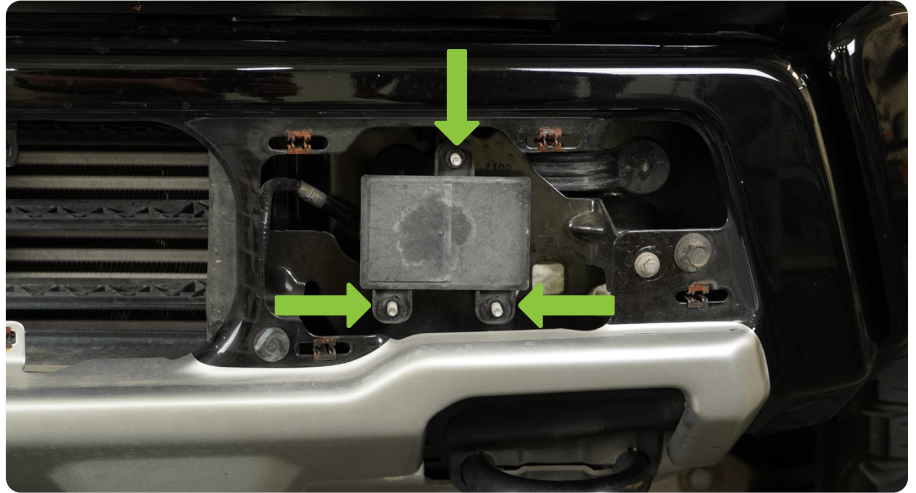


# INSTALLATION MANUAL

**STEP 4** | Using a 10mm socket, removed the 3 nuts holding the ACC sensor.

Some vehicles will have nuts, some will not.

Use a trim tool and pull the sensor off the studs. Ensure to pull off evenly to prevent damaging the ACC mounting tabs.



**STEP 2** | Using a 8mm socket, locate and remove support brackets holding the bumper to the frame on both sides.



**STEP 3** | Using a 21mm socket, removing the (4) nuts on frame holding the bumper.



# INSTALLATION MANUAL

**STEP 6** | When pulling the bumper towards you, remove (2) clips holding the bumper to valence/grille. Use trim tool to remove these clips.



**STEP 5** | Using a 10mm socket, remove the (4) bolts of the intercooler guard.

*Note: You might have to use a 10mm wrench for the top (2) bolts for easier access.*



# INSTALLATION MANUAL

**STEP 8** | Remove the clip holding down the shutter motor.



**STEP 7** | Carefully, pry the motor off the housing. Remove intercooler shutter.

*Note: Leave Shutter Motor attached to harness, you will zip tie it to harness once your DV8 bumper is installed.*



## INSTALLATION MANUAL

**STEP 10** | After the shutter assembly removed. Use the 13mm socket to remove front (4) bolts of the skid plate. Use the 15mm socket to remove the rear (2) bolts.



**STEP 9** | Remove OE diff skid plate rear bolts using a 15mm socket.





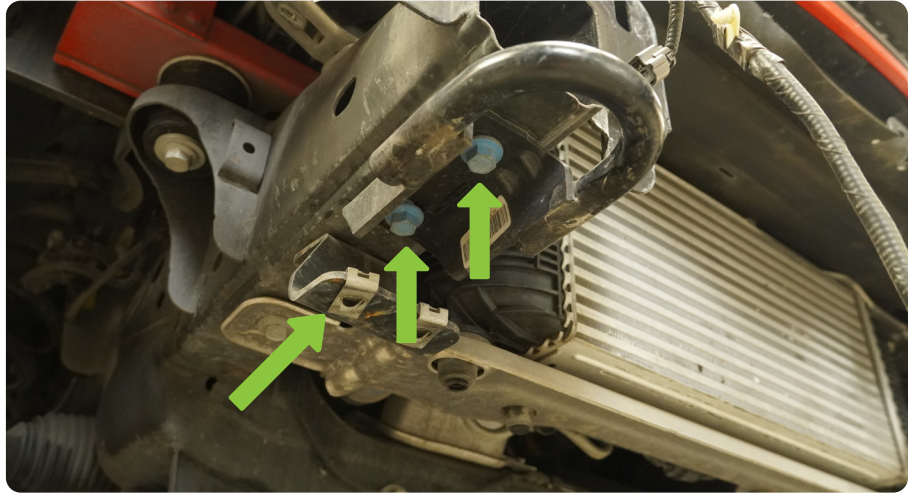
**STEP 11** | Using the trim tool, remove the weather stripping under each headlight.



# INSTALLATION MANUAL

**STEP 14** | Using a 15mm socket, remove both bolts on tow hooks. Using a 13mm socket remove both the skid plate mount behind the tow hooks.

**Note:** Keep this hardware since it will be reused.



**STEP 12** | Keep nut plate as this will be used to install the provided tow points.



**STEP 13** | Using the OE hardware, install the tow points using a 15mm socket.

**Note:** Install this before bumper install for easier access

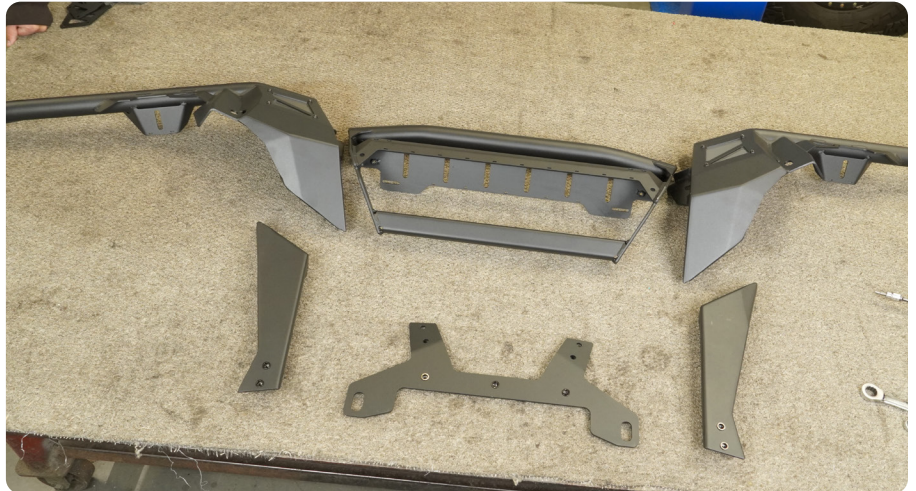


# INSTALLATION MANUAL

**STEP 17** | For bumper assembly, start by attaching the foam padding to the inner part of the wings on both sides.



**STEP 15** | Place the center section and lower frame of the bumper on a soft surface to prevent any damage to the coating.



**STEP 16** | Align one side to the middle section of the tube bumper using the provided M8x20mm allen bolt, washers and nylon nut per side. Install each bolt that connects to the wing part of the bumper using #5 allen key and 13mm socket for nut.

*Note: Leave ALL bolts loose as you will need to align the top of the tube correctly. Having another set of hands helps with the installation.*



# INSTALLATION MANUAL



# INSTALLATION MANUAL

**STEP 19** | Using the M12x30mm allen bolt, washer, and nut, loosely install the side panels to the assembled top portion of the bumper.



**STEP 18** | Using the M8x20mm bolts, split washer, and washer, loosely install the bottom portion of the skid plate.



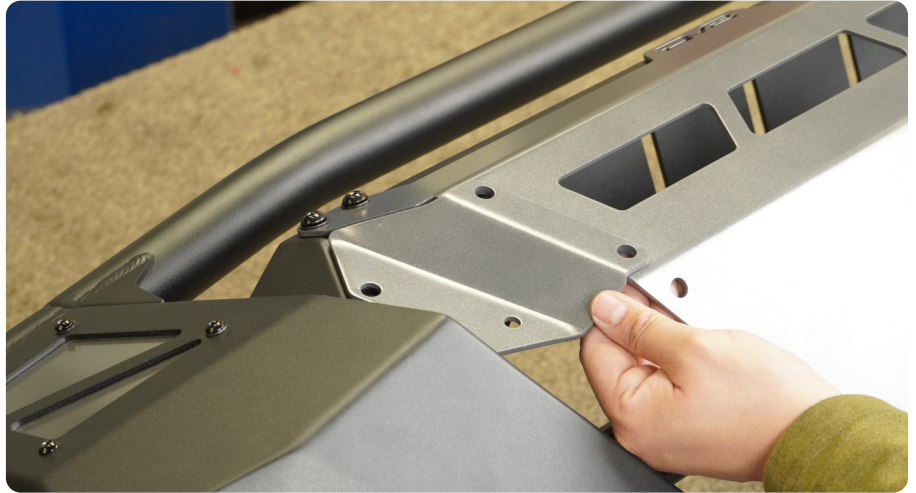


**STEP 20** | Using the M8x20mm allen bolt and washer. Loosely install the middle plate to the bumper frame.



# INSTALLATION MANUAL

**STEP 23** | Place the side section of middle plate. Use the M8x20mm allen bolt, washer, and nut to install plate.



**STEP 21** | Using the M6x20mm allen bolt, washer, and nut, install the top (2) bolts on the black "L" shape looking bracket



**STEP 22** | Position the middle plate underneath the black bracket and over the middle gray plate, use M8x20mm allen bolt, washer, and nut to secure plate.

Install the remaining (4) bolts on the black bracket to the plate.



# INSTALLATION MANUAL

**STEP 26** | Using M8x20mm bolts, washer and nut, install (2) bolts on top on the bottom black bracket to the side plate.



**STEP 24** | Place bottom side plate underneath black bracket and over the gray middle plate. Secure with the (2) M6x20mm allen bolt and washers on the black bracket.



**STEP 25** | Secure the bottom side plate to the main bumper frame using (2) M8x20mm allen bolt, washers, and nuts.



# INSTALLATION MANUAL

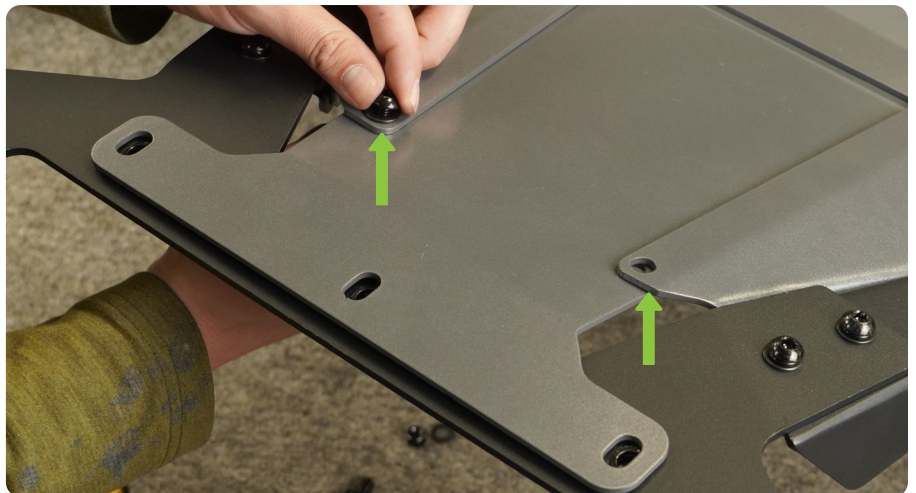
**STEP 29** | Place the lower middle gray skid plate over the black frame as shown.



**STEP 27** | Secure plate on the top with (2) M8x20mm allen bolts, washers, and nuts.

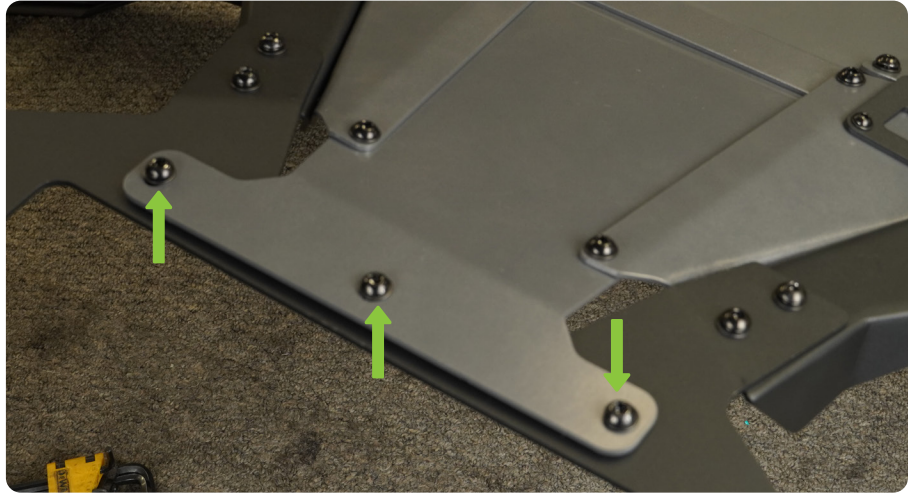


**STEP 28** | Install the bottom (2) M8x20mm allen bolts, washers, and nuts.

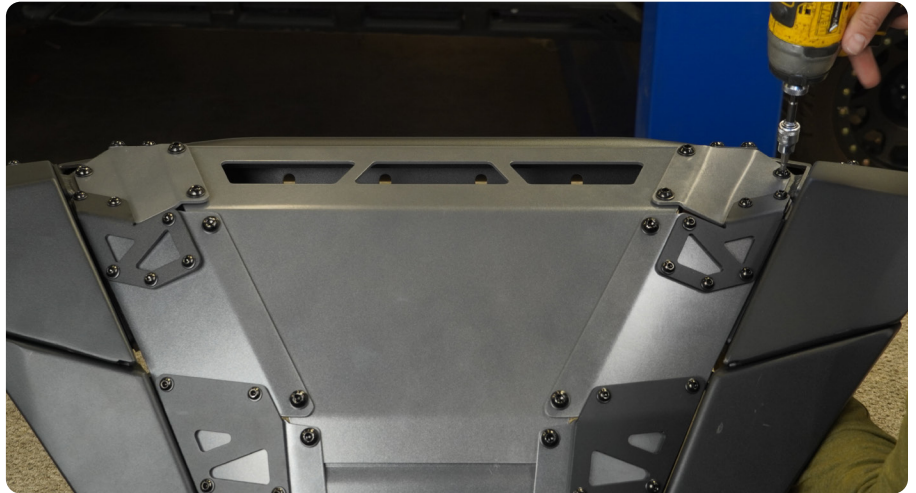


# INSTALLATION MANUAL

**STEP 31** | Using the M8x20mm and washer, install the bottom (3) bolts to the bumper frame.



**STEP 30** | With all the bolts installed, start adjusting and securing all your bolts from the top down. Make sure all parts align with each other.



# INSTALLATION MANUAL



**STEP 32** | After securing all your bolts and making sure everything is aligned.

We provide a optional push bar, if running this, install it now.



# INSTALLATION MANUAL

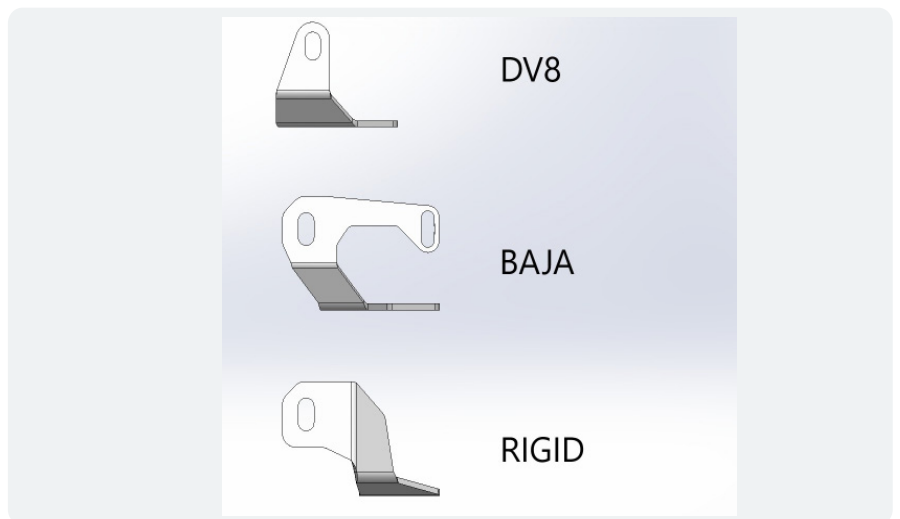
**STEP 34** | Using 13mm socket, install the (6) M8x25mm hex bolt, washer and nut. Secure the bar to the bumper.



**STEP 33** | Optional: We installed a DV8 20" Elite Series LED Light Bar (part # BE20EW200w).

Using the DV8 brackets provided, Install loosely on light bar. Install the (4) M6x20mm allen bolts, washer, and nuts provided to the bumper.

See below for which light bracket for which light brand.



# INSTALLATION MANUAL

**STEP 37** | Each wing is designed to accept a 3" pod light. Using the provided hardware with the light, install them now.

*We installed (2) 3" Amber Elite Pod Light (BE3EW40W-A) using the hardware supplied.*



**STEP 35** | Using the provided M12 flat nuts, install to bumper frame horns as shown.



**STEP 36** | (Optional) If running the DV8 F-150/Raptor Diff Skid (SPFF1-01), replace the two factory nut clips with the provided DV8 nut clips.

*If you are not running the DV8 skid, keep the factory nut clips in place.*





**STEP 38** | Using the (2) M12x30mm allen bolt, washer and bolt, lift the bumper and loosely install the bottom bolt to hold the bumper in place. This is the easiest bolt to access while lifting the bumper.

*Note: We recommend a second pair of hands for this as it could cause self harm or damage to the vehicle or bumper if lifted incorrectly.*



# INSTALLATION MANUAL

**STEP 40** | Use a 17mm socket to install the M12x30mm bolt and washer to the nut clip on the back of the bumper loosely.



**STEP 39** | Install the M12x30mm allen bolt, washers and nut using #8 Allen socket and a 18mm socket for the nut.

Align bumper to vehicle and tighten bolts to secure bumper to vehicle.



# INSTALLATION MANUAL

**STEP 42** | Install the bottom 2 bolts to the frame using the OE bolts using 15mm socket.

*Note: If installing our SPFF1-01 Skid Plate for this vehicle, follow the install guide for the diff skid for the remainder of the install.*



**STEP 41** | Congratulations! You are finished with the install of the 2017-2020 2nd Gen Raptor Front Tube Bumper.

