

#### **21+/FORD BRONCO** KRAWLER REAR BUMPER

R230210030103



#### TOOLS REQUIRED

(Sockets) 9/16, 1/2, 3/4, 1-1/16, 1-1/8, 13mm, 18mm (Box end wrenches) 9/16, 1/2 3/4, 1-1/16, 1-1/8, 13mm, 18mm (Allen wrenches) 5/16 Fastener remover or flathead screwdriver

> Zip ties Ratchet Flat File

Electrical Tape Wire Crimper Tool



-Easy/Intermediate

\*\*This installation requires 2 people for best results\*\*

#### 

- 4 hours for OEM Removal/Bumper Install

-1 Additional Hour to Wire Lights

\*\*Labor Rates are based on a vehicle with no pre-existing damage. Wiring labor is based on a standard wiring procedure with light switches installed in an easily accessible location. Custom light triggering or switch mounting location will result in a greater labor charge.\*\*

#### 🚺 INCLUDED IN KIT

- 2- Hex Head Bolts (3/4-10 X 1 1/2")
- **2** Nylon Lock Nuts (3/4-10")
- 4- Flat Washers (3/4")
- 2- Nylon Lock Nuts (1/2-13")
- 2- Button Head Bolts (1/2-13 X 1 1/2")
- **2** Flat Washer (1/2")
- 4- Hex Head Bolts (3/8-16 x 1")
- 4- Flat Washers (3/8")2- rubber bumper (1")

- 2- Nylon Nut (5/16-18")
  2- Flat Washer (5/16")
- **8-** Flat washer (1/4")
- **4-** Nylon Lock Nut (1/4-20")
- 4- Button Head Bolt (1/4-20 x 1")3- One Foot Section of 20 Gauge
- Black Wire
- 6- 22-18 Gauge Butt Connectors

#### ▲ WARNINGS/CAUTIONS BEFORE STARTING INSTALLATION ▲

#### -BEFORE YOU INSTALL THIS KIT-

Read and understand all instructions, warnings, cautions, & 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 (480) 671-0820 Addictive desert designs is <u>not</u> 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.

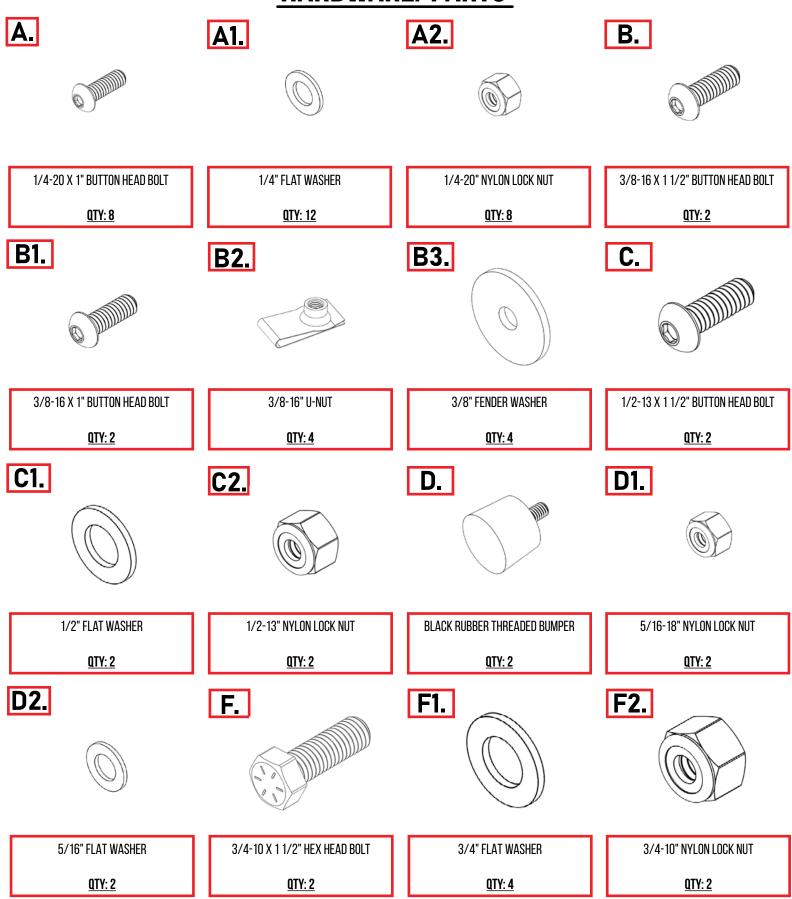
We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. Inspect 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

\*ALWAYS WEAR EYE PROTECTION WHEN OPERATING POWER TOOLS\*









#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### REMOVAL

STEP 1

Disconnect the wire harness on both the driver and passenger sides.





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### REMOVAL

#### STEP 2

Remove the tow hooks using a (18mm socket). **\*\*You can keep the bolts and tow hooks for later on in the install**\*\*





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### REMOVAL

STEP 3

Using a (13mm socket) remove the mounting bolts. You can now fully remove the bumper.



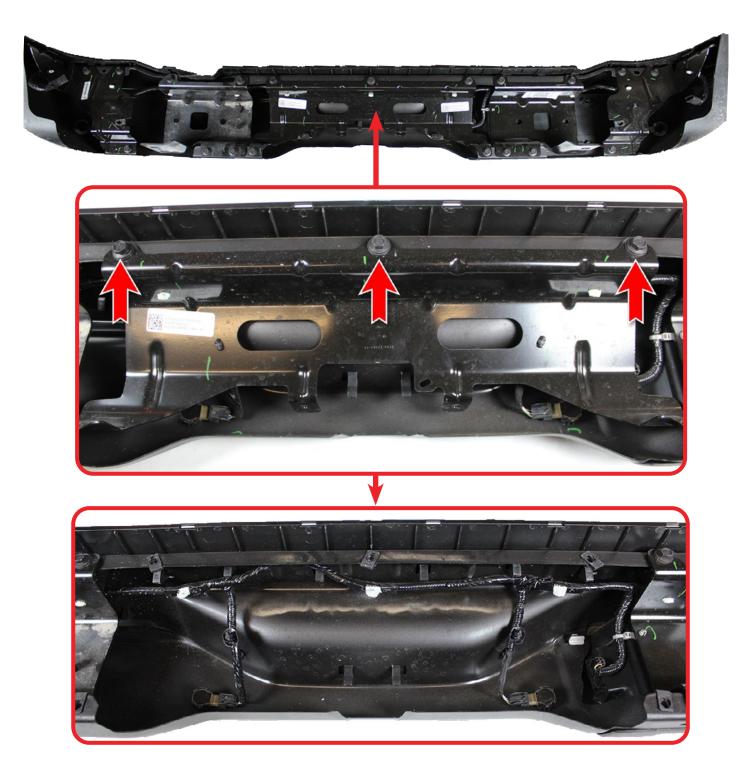


#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### REMOVAL

STEP 4

Remove the middle metal cover using a (13mm socket) to expose the wire harness and sensors.





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### REMOVAL

STEP 5

Remove the sensors from the bezels by spreading the tabs. \*\*Spread carefully\*\*





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### REMOVAL

STEP 6

Disconnect the license plate light by pushing in on the tab and pulling.





#### **KRAWLER REAR BUMPER** 21+/FORD BRONCO

### REMOVAL

STEP 7

Repeat step 5 to remove the sensor. \*\*Remember the orientation for this will be important in step 10\*\*





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

#### STEP 8

Install the supplied mounting brackets using the stock hardware removed from **step 2**. Then install the provided 3/4" bolts, washers, and nylon lock nuts using a (1-1/8 socket) and a (1-1/16 wrench).

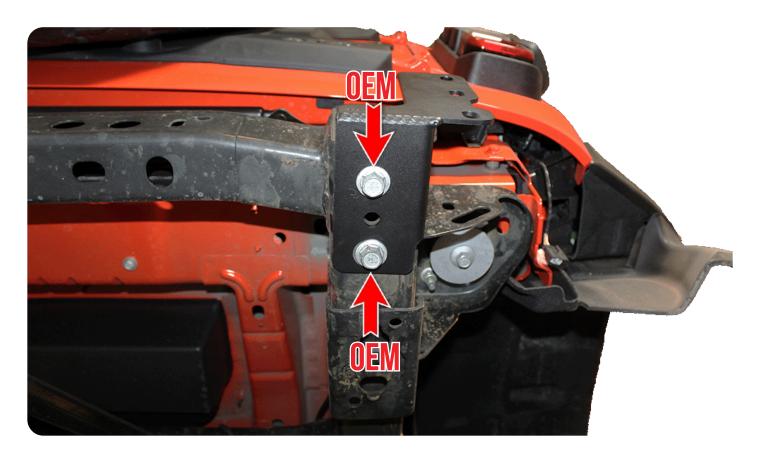


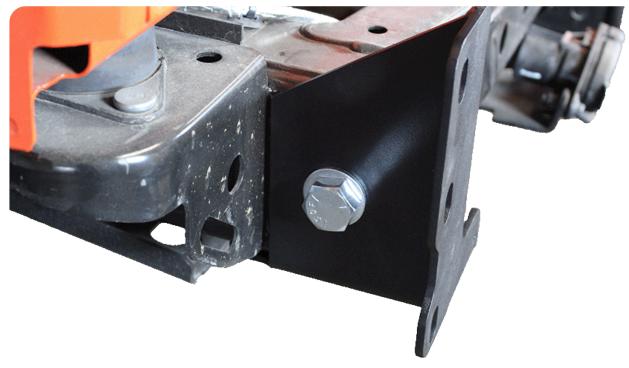




#### KRAWLER REAR BUMPER 21+/FORD BRONCO

## INSTALL







### KRAWLER REAR BUMPER

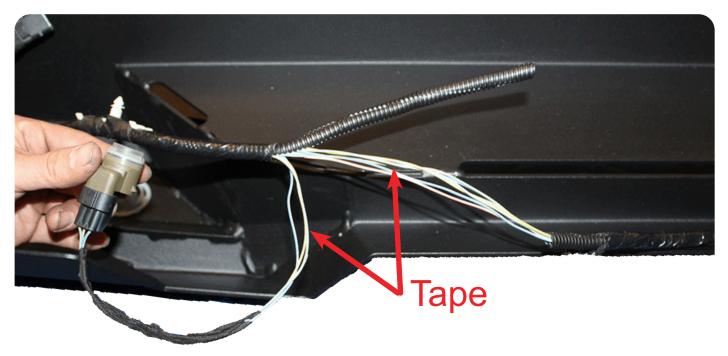
21+/FORD BRONCO

### INSTALL

#### STEP 9

You will notice that the inner sensor on the (passenger side) will not reach the bezel destination, you will need to open up the wiring harness by cutting it to get enough more length to reach the sensor bezel. After you achieve the correct length, tape the exposed wires using electrical tape.





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#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

#### STEP 10

Install the sensor bezels into the ADD bumper. Ensure they are in the same orientation as OEM. \*\*If the bezels do not click into place you may have to trim the tabs to match the thickness of the bumper as shown below\*\*





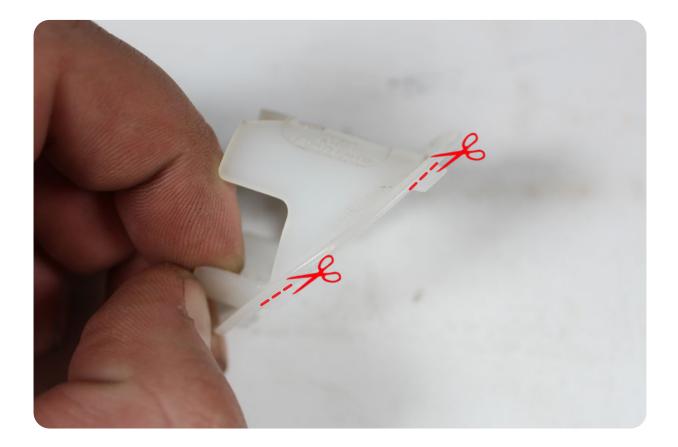
#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

#### STEP 11

For the outer sensor bezels, trim the tabs on the backer by using a (flat file) and install the sensor bezels in the same orientation as OEM. Now you can install the wire harness and push the sensors into the bezels.









#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL





#### **KRAWLER REAR BUMPER** 21+/FORD BRONCO

### **INSTALL**

#### **STEP 12**

Trim the tabs by using a (flat file) as shown below on the license plate light and install on your ADD bumper.





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

STEP 13

Install the provided nut clips in the slots on both mounting plates as shown below.





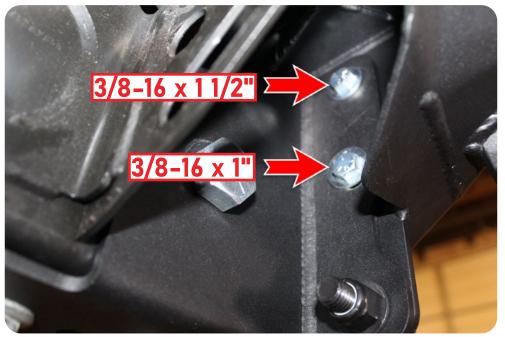
#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

#### STEP 14

You can now install the bumper with the 2x 1/2" button head bolts, washers, and nylon lock nuts using a (5/16 allen wrench) and (3/4 wrench). and also install the 4x provided 3/8" hex head bolts, and washers using a (9/16 socket/wrench).





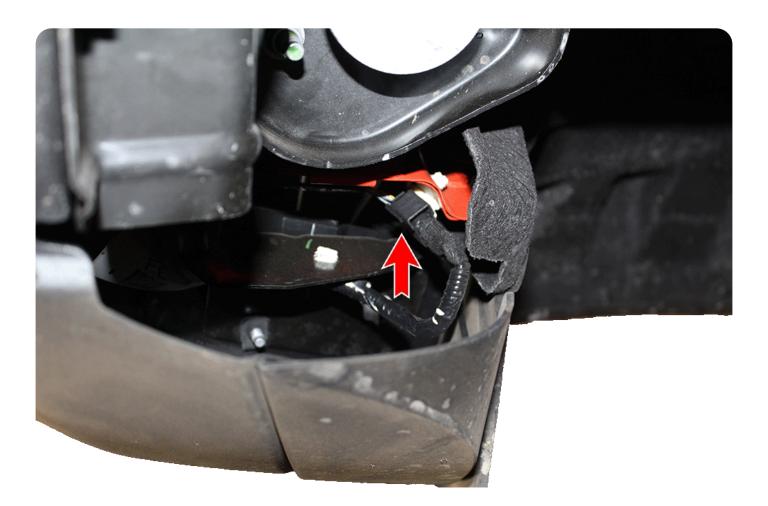


#### KRAWLER REAR BUMPER 21+/FORD BRONCO

## INSTALL

STEP 15

Plug in the wire harness on both the driver and passenger sides.



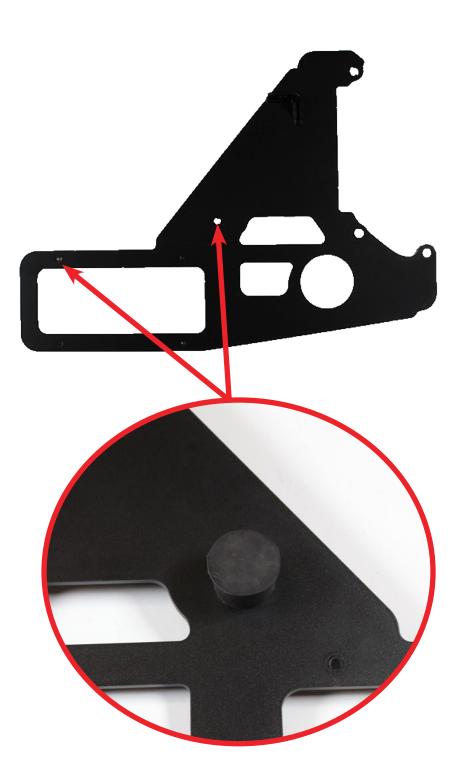


#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

#### STEP 16

Install the 1" rubber bumper in the position shown below **facing behind the bracket** with the provided 5/16-18" nylon lock nut and 5/16" flat washer using a (1/2 socket/wrench).





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### INSTALL

#### STEP 17

Remove the 3x OEM bolts using a (1/2 socket). Then using the same hardware, install the license plate bracket.







#### KRAWLER REAR BUMPER 21+/FORD BRONCO

## INSTALL





#### KRAWLER REAR BUMPER 21+/FORD BRONCO

### FINAL

#### STEP 18

Stand back and enjoy your new ADD Krawler<sup>™</sup> Rear Bumper.

Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.



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FOR ADDITIONAL SUPPORT OR TECHNICAL QUESTIONS, Please Call 480-671-0820 or Email Info@Addictivedesertdesigns.com