555 E Queen Creek Rd Bldg A Chandler, AZ 85286 WWW.DV80FFROAD.COM

# INSTALLATION MANUAL

#### **HD BODY MOUNTED TIRE CARRIER**

21+ FORD BRONCO TCBR-02



#### **TOOLS REQUIRED**

- T-20, T-25, T-30 Torque head socket
- 13mm, 10mm, 21mm Sockets
- -8mm, 10mm, 22mm Wrenches
- #4,#6 Allen Tool
- Torque Wrench
- Trim Clip Tool/flat head screwdriver
- Safety Glasses

#### **SKILL LEVEL**

- Novice/Intermediate
- 2 persons

Little skill level required, additional help will is required.

### TIME REQUIRED

-4 Hour

Time to install this should only take about four 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

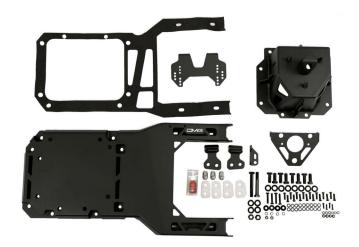




Begin by unpacking all items and inspecting for missing pieces or damage. If you have any concerns, please contact the company the product was purchased from. Extra hardware may be included with the product.

#### HARDWARE INCLUDED

- (8) M14x35mm Hex Bolts
- (2) M14x95x35mm Hex Bolts
- (2) M14 Lock Nuts
- (12) M14 Flat Washers
- (16) M8x25mm Allen Head Bolts
- (2) M8 Nylon Lock Nuts
- (18) M8 Flat Washers
- (4) M8x40mm Hex Bolts
- (4) M8 Spring Washers
- (4) M8 Flat Washers
- (4) M6x20 Allen Head Bolts
- (6) M6 Washers
- (4) M6 Serrated Nuts
- (3) M12x1.5 Wheel Lug



# STEP $1 \mid$ Remove the spare tire.

Remove the tailgates inside trim panel using a trim clip tool to gain access to the rear camera and third brake light wiring harness plugs.

Disconnect the rear camera and third brake light wiring harness plugs.











STEP 2 | Push the rear camera and third bake light wiring harness through and out the front of the tailgate.



STEP 3 | Use a 13mm socket to remove the factory spare tire mount.









STEP 4 Use a T30 torx tool to remove the (4) bolts securing the factory third bake light housing. Separate the third brake light housing from the factory spare tire mount.





STEP 5 Use a T30 torx tool to remove the (2) bolts securing the factory wheel stud plate.

Tech Tip: Using a socket helps to press out the wheel stud plate.









STEP 6 | Remove the rear camera housing with the wheel stud plate from the factory spare tire mount.

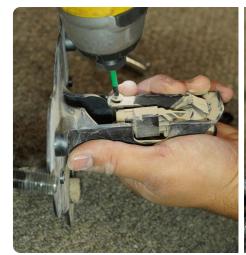
Separate the wheel stud plate from the rear camera housing using a trim clip tool.





STEP 7 Use a T20 torx tool to remove the rear camera from its housing.

Disconnect the rear cameras wiring harness and free the harness from the wheel stud plate. The wheel stud plate will not be reused.











STEP 8 | Reinstall the rear camera into its factory housing using a T20 torx tool and reconnect the camera harness.

Install the provided camera mounting plate onto the factory rear camera housing using (2) of the provided M6 Allen head bolts and M6 serrated nut.

Note: Use 2 washers per M6 Allen head bolt and bolts only need to be hand tight.



STEP 9 | Carefully install the rear camera housing into the DV8 spare tire mount.

If the DV8 camera mounting plate is a tight fit, a small amount of lithium grease can be used to help slide the camera into place.

Note: Do not force the camera housing into place as it could cause damage to the rear camera.









STEP 10 | Mount the camera in the DV8 spare tire mount so that the camera is flush as shown. Use (4) of the provided M8x25 Allen Head bolts to secure the camera in place.

Note: Use 1 M8 washer per Allen head bolt.





STEP 11 | Mount the third brake light mounting bracket to the DV8 spare tire mount using (2) M6x20 Allen head bolts, (2) M6 serrated nuts, a #4 Allen tool and 10mm wrench.

Note: Use (1) M6 washers per bolt.





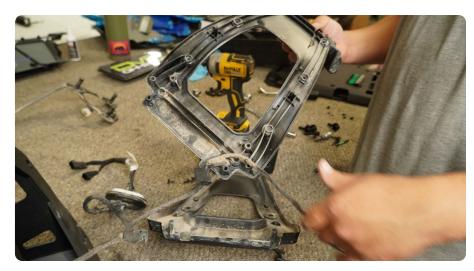


STEP 12 | Use a T25 torx tool to disassemble the third bake light housing.





STEP 13 | Remove the third brake light harness from the brake lights housing.





STEP 14 | Route the third bake light harness connector through the DV8 spare tire mount as shown and back on to the factory third bake light housing.





STEP 15 | Reassemble the third brake light housing using a T25 torx tool.

Mount the third bake light to the DV8 bake light bracket on the DV8 spare tire mount using the factory hardware and a T30 torx tool.

Note: The height of the third bake light can be adjusted depending on the tire size.









STEP 16 | Route the rest of the rear camera and third bake light wiring harness through the provided cut out on the side of the DV8 spare tire mount.



STEP 17 | Mount the spare tire mount on to the DV8 tailgate bracket using (8) of the provided M14x35mm hex bolts and a 21mm socket.

Note: Use 1 M14 washer per bolt. Use a small amount of the provided thread locker on each M14 bolt.









 $\begin{array}{c|c} \text{STEP 18} & \text{Install the provided peel} \\ \text{and stick foam piece on to the back of the} \\ \text{tailgate hinge bracket as shown.} \end{array}$ 





STEP 19 | Remove the tailgates gas shock using a pick or flat head tool to pry open the snap clips that secure the gas shock in place.











STEP 20 | Use a trim clip tool along the bottom to remove the trim cover panels on the tailgate. Be careful not to damage any retaining clips.







STEP 21 | Disconnect the tailgate latch sensor harness and third brake light plugs.





STEP 22 | Use a trim clip tool to remove the harness connector plugs from the tailgate.



STEP 23 | Pull the wiring harness back through the tailgate while using the trim clip tool to remove any harness clips retaining the wiring harness to the tailgate.







STEP 24 | Use a Phillips head screwdriver to remove the (2) spare tire rubber bumpers.

Now is a good time to clean off any dirty from the tailgate to prep it for the DV8 tire carrier.









STEP 25 | Ford states to use a T47 torx tool on the hinge to tailgate bolts, due to the bolts being painted it can be tough to use a T47. For our install we used a T45 torx tool and a ratchet to breaks these (4) hinge to tailgate bolts loose. Do not remove these bolts yet.

Tech Tip: Is is best to use hand tools to break these (4) bolts loose.



STEP 26 | Use a Phillips head screwdriver to remove the (4) push pins retaining the main hinge cover.

Use a 10mm socket to remove the (2) bolts securing the cover to the vehicles body.











STEP 27 | Remove the hinge cover.

Prep to remove the tailgate from the vehicle. Layout moving blankets or something similar to lay the tailgate on so the paint is protected.



STEP 28 | Use a 13mm socket and a ratchet wrench to break loose the (4) hinge to vehicle body bolts.

With assistance have a person support the weight of the tailgate while you remove the (4) hinge to vehicles body bolts.

Lay the tailgate onto the moving blankets.



STEP 29 | Use a T47 torx tool to remove the factory hinges from the tailgate.







STEP 30 | Place a small amount of provided thread locker on to the factory hinge bolts



STEP 31 | Place (2) of the provided hinge shims between the provided lower bottom hinge and the vehicles body.

Note: Four shims are included and can be used as necessary depending on the vehicle. All vehicles will be slightly different.





STEP 32 | Install the top hinge without any shims as shown.

See next page for hinge orientation/placement.









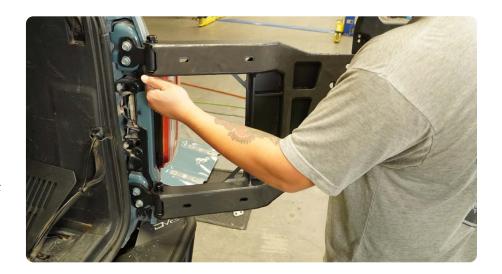


NEED HELP?

STEP 33 | Mount the tire carrier on to the hinge brackets previously installed using the (2) provided M12x95 bolts.

Use (2) flat washers per bolt and (1) Nylon Lock Nut per bolt.

Note: The (4) factory hinge bolts should be secured enough so that the tire carrier does not move on its own but loose enough so that adjustment can be made with a firm grip.

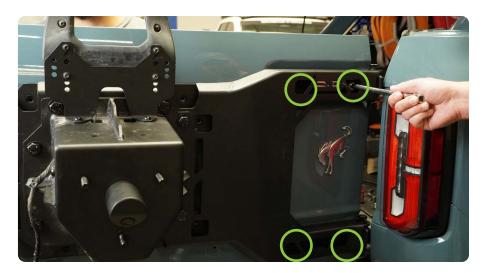




STEP 34 | With assistance, have one person hold up the tailgate up to the DV8 tire carrier while the second person installs the (4) provided M8x40 tailgate hex bolts using a 13mm socket.

Use (1) Large M8 washer per bolt.

Note: The (4) M8x40 provided bolts should be secured enough so that the tailgate does not move on its own but loose enough so that adjustment can be made with a firm grip.

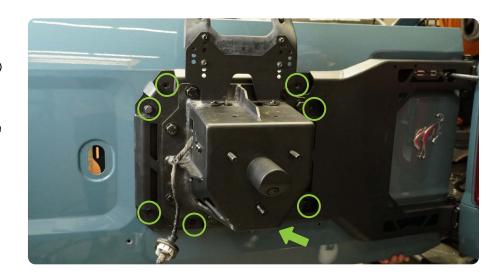






STEP 35 | Loosely secure the rest of the tire carrier to the tailgate using the (8) factory bolts and a 13mm socket.

Note: The (8) factory bolts should be secured enough so that the tailgate does not move on its own but loose enough so that adjustment can be made with a firm grip.



STEP 36 | Carefully close the tailgate ensuring the tailgate does not crash against the body so no damage is done to the paint.



 $\begin{array}{c|c} \text{STEP 37} & \text{Ensure the tailgate is flush} \\ \text{with the vehicle body.} \end{array}$ 

To adjust the pitch of the tailgate, open the tailgate 90 degrees so that the tire carrier/tailgate is in line with the vehicle. Lift or pull down on the tire carrier in small increments in the direction needed to make the tailgate flush with the vehicles body.

Once the tailgate is flush secure the (4) factory hinge bolts that thread into the body using a 13mm socket hand tight.

For this install we lifted up on tire carrier to bring the bottom of our tailgate out and flush with the vehicles body.











STEP 38 | Check the tailgates side to side gap. If they look as shown on either side adjust the tailgate with a firm grip in the direction needed to evenly space out tailgate to vehicle body gaps. Move the side to side with the door latched.

For this example we adjusted the tailgate over to the passenger side.





STEP 39 | With the tailgate to body gaps even, secure the (12) tire carrier to tailgate bolts hand tight using a 13mm socket.









STEP 40 | Secure the (2) M12 hinge bolts hand tight using a 21mm socket and 22mm wrench.

Open and close the door a few times checking to ensure it latches easily and the door is not making contact with the body and no seals are being pinched.

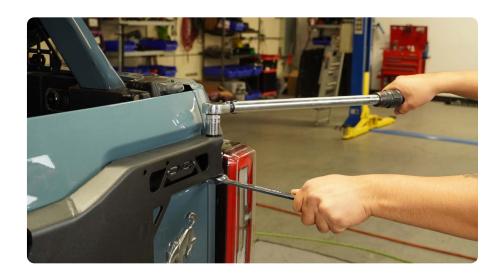




STEP 41 | Once all adjustment have been made torque down all hardware to the below specs.

#### **Torque Specs:**

- (2)M12x95x35 Hinge bolts= 105 Ft Lbs
- (8) Factory tailgate bolts = 22 Ft Lbs
- (4) M8X40 tailgate bolts= 22 Ft Lbs
- (4) Factory inner hinge bolts= 30 Ft Lbs



STEP 42 | (Optional) Mount the Antenna/Whip mount on to the DV8 tire carrier using (2) of the provided M6 Allen head bolts and a #4 Allen tool.

Use (1) washer per M6 Allen head bolt.









STEP 43 | Install the rear camera/ third brake light wiring harness into the tailgate.





STEP 44 | Reinstall the interior factory wiring harness and hinge bolt cover in the reverse order they were removed.



STEP 45 | Reconnect the latch sensor harness, rear camera harness, and third brake light harness.





STEP 46 | Reinstall both inner tailgate trim covers and the tailgate gas shock. The gas shock will snap back onto the ball studs with moderate pressure.











STEP 47 | With assistance install the spare tire on to the DV8 tire carrier. Use the provided lug nuts to secure the spare tire in place.

Note: The tire carriers wheel studs match the factory wheel stud thread pitch so wheel locks can be utilize if you wish.



STEP 48 | Double check that all hardware is secure and torqued down to the provided torque specs.

Congratulations, installation of the DV8 HD Body Mounted Tire carrier is now complete.



