

CAVFAB

JL ELITE SERIES BODY-MOUNTED TIRE CARRIER INSTALLATION MANUAL





Designed, Engineered, Built, and Tested in the USA

Fitment

2018-current Jeep JL / JLU

Capacity

Up to 42 in. tire

Hardware

All mounting hardware included

Before You Begin

CavFab-specific tool list

Only tools explicitly supported by the supplied CavFab procedure are called out by size below. Tool sizes from other tire-carrier brands were not used to fill gaps.

Tool / item	CavFab-specific use
10mm socket	Confirmed by CavFab procedure for the taillight bolt.
9/16 in. wrench/socket	Confirmed for the CavFab hinge hardware.
7/16 in. wrench/socket	Confirmed for the one added bolt at each hinge.
Press or vise	Used to install the hinge bushings.
Torque wrench	Required for the documented 100 ft-lb lug-nut torque.
Trim tool	For removing the interior panel without damaging trim.
Fresh razor blade	For carefully removing the OEM grommet from the harness.
Masking tape	Used to maintain tailgate alignment and to cover hinge-bolt holes.
Marker	Used to mark the top/orientation of the OEM camera.
Clean microfiber rag	Used to clean the tailgate after carrier removal.
Hand tools for OEM fasteners	The CavFab source does not specify every factory fastener drive size; use the correct OEM driver for your Jeep rather than assuming a size from another brand.
Second person	Recommended/required by the source procedure when positioning the carrier into the OEM holes.

Important pre-install checks

- Keep all OEM hardware identified by the procedure; it is reused later.
- Once the factory hinge bolts are removed, do not open the tailgate until the CavFab carrier is installed and aligned.
- The lower CavFab hinge should have the stopper hinge installed. CavFab notes this stopper prevents the hinge/carrier from colliding with the taillight.
- Protect the camera. It is delicate and must be marked for orientation before reinstallation.
- Use hand tools on the taillight fastener. The source warns that power tools can damage the plastic threads.
- Only the 100 ft-lb lug-nut torque is specified in the supplied procedure. Do not invent torque values for other fasteners; use CavFab-supplied specifications when available.

Current product-specific notes

CavFab currently lists the JL carrier for 2018-current JL/JLU 2-door and 4-door models, with capacity for up to a 42 in. tire. The carrier includes the license-plate and backup-camera mount kit and accommodates the factory 3rd brake light. CavFab also notes that a 1 in. spacer may be required with some OEM wheels because of deep offset.

1. Remove the Factory Spare Tire Carrier

01 Remove the camera cover.



02 Remove the spare tire.



03 Remove the spare tire mount bolts.



04 Remove and discard the OEM rubber bumpers.



Step 5-8

05 Remove the plastic inside the tailgate by gently pulling it off. Unplug the camera and 3rd brake light connectors as shown. There is another connector that can remain plugged in.



06 Pull the grommet out and carefully pull the wiring to the outside of the vehicle.



07 After the factory carrier is removed, clean the tailgate with a clean microfiber rag.



08 Save all OEM hardware for reuse. The source procedure shows 8 bolts to save.



2. Prepare Tailgate Interior and Taillight

09 Remove the center carpet by lifting and pulling it toward you.



10 Remove the tie-down brackets and the panel. Use a trim tool to carefully pop the panel up.



11 Pop up this panel to expose the taillight bolt.



12 Gently pull this panel to remove it. You may need to partially remove the weatherstrip from the flange to get the panel out.



Step 13-16

13 With the panel removed, expose the taillight bolt.



14 Subwoofer configuration note: the original CavFab procedure flags an additional step here for the subwoofer area. Do not force the panel; verify access for your JL configuration before proceeding.



15 Use a 10mm socket to remove the taillight bolt.



16 Remove the taillight and unplug it. Set it aside in a safe location.



3. Prepare and Install the CavFab Hinge System

17 Reinstall the weatherstrip and close the tailgate.



18 Remove the tape covering the hinge bolts. Do not remove the tailgate bolts at this time.



19 Close the tailgate and apply masking tape to the tailgate to keep it aligned during bolt removal.

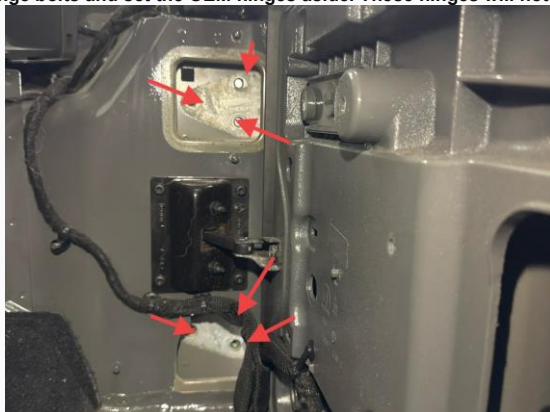


20 With the tailgate closed, remove the 6 side hinge bolts. Do not open the tailgate again until the new carrier is installed.



Step 21-24

21 Remove the 4 hinge bolts and set the OEM hinges aside. These hinges will not be reused.



22 Make sure the hinge mating area is clean and free of powder coat.



23 Install the supplied bushings into the hinges. Use a press or vise to install them.



24 Install the sleeves into the bushings.



Step 25-28

25 Install the hinges onto the CavFab carrier using 9/16 in. bolts, washers, and lock nuts. Tighten until there is slight drag on the hinges. The hinge should just hang when pulled up.



26 Note the direction of the hinge before installing the carrier to the Jeep.



27 With the help of a friend, place the hinges into the OEM holes. Install the OEM bolts plus one 7/16 in. bolt on each hinge. Do not overtighten the OEM bolts.



28 Hold both hinge spacers in position and slide the bolts through to hold them in place.



4. Install and Align the CavFab Carrier

29 Carefully move the carrier toward the tailgate and start the bolts.



30 Use the alignment tape to keep the tailgate in the correct position and tighten all bolts.



31 Put a small amount of weight on the carrier to simulate tire weight. Open and close the tailgate to confirm smooth movement and proper latching.



32 Cover the hinge-bolt holes with appropriate tape. Leaving these holes open can cause cabin noise while driving.



Step 33-36

33 Reinstall all plastics and tighten the tie-down points.



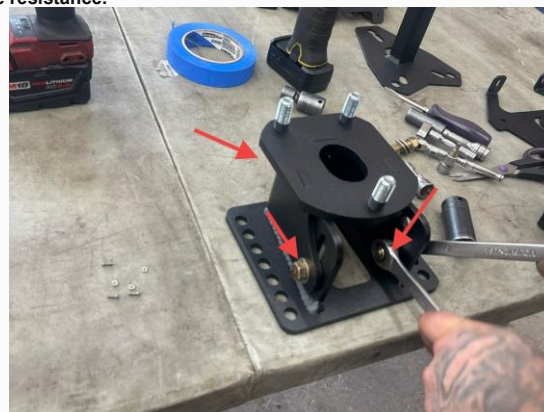
34 Reinstall the taillight. Use hand tools when tightening the bolt. The fastener threads into plastic and power tools can damage the threads.

No source photo provided for this step.

35 Take a rough measurement from the ground to the center of the wheel/tire combination.



36 Assemble the adjustable portion of the carrier and snug the 3 bolts. The bracket should be able to move but have some resistance.



5. Set Tire Height and Transfer Factory Components

37 Use the measurement from Step 35 to set the tire carrier height from the lowest point at the top of the bumper. Add 1 inch so the tire does not rub the bumper. Double-check and tighten the hinge bolts. It is okay if the bolt holes do not line up.



38 Install the tire carefully and set the tire depth so there is slight preload on the tire against the carrier. Carefully remove the tire without moving the adjustable hinge portion, then tighten all 3 bolts.



39 Remove the two Torx bolts and carefully tap the studs to remove the camera. The camera is very delicate.



40 Remove all Torx bolts from the OEM tire carrier as shown. There are additional bolts that may not be visible in the photo.



6. Transfer the 3rd Brake Light and Camera

41 Separate the 3rd brake light portion of the carrier by pulling the sections apart.



42 Flip the 3rd brake light over and remove the two Torx bolts. Remove the light and save the bolts; they will attach the brake light to the CavFab assembly later.



43 With the camera mount removed from the OEM carrier, unbolt the camera as indicated.



44 Unplug the camera. Mark the top of the camera so its orientation can be preserved during installation, then set it aside safely.



Step 45-48

45 Remove the wiring harness from the OEM carrier assembly.



46 Using a fresh razor blade, carefully remove the OEM grommet from the harness.



47 Slide the harness through the center of the tire carrier and route it into the vehicle through the vents.



48 Plug in the camera and 3rd brake light.



7. Finalize the Carrier, Camera, and Lighting

49 Reinstall the tire and torque the lug nuts to 100 ft-lb. Make sure the tire is pressing up against the hinge section. Failure to do so can cause premature wear and rattles.



50 Bolt the OEM 3rd brake light onto the CavFab mount using the OEM screws. The alignment pins orient the brake light correctly.



51 Confirm the 3rd brake light is installed into the CavFab bracket.



52 Use the supplied hardware to attach the OEM camera to the CavFab bracket as shown.



Step 53-56

53 Use the supplied hardware to attach the camera mount as shown.



54 Confirm the front of the assembly after the camera is bolted together.



55 Use the supplied hardware to attach the camera mount to the license plate mount.



56 Confirm the license plate / camera assembly is fully bolted together.



8. License Plate Mount and Final Checks

57 Place the license plate assembly onto the carrier as shown. It is retained by a button-head screw. Lightly install the bolt and plug in both the camera and brake light.



58 Set the depth for the license plate mount and tighten the button-head bolt.



59 Pull any wiring slack to the inside of the vehicle and reinstall the tailgate plastic panel.

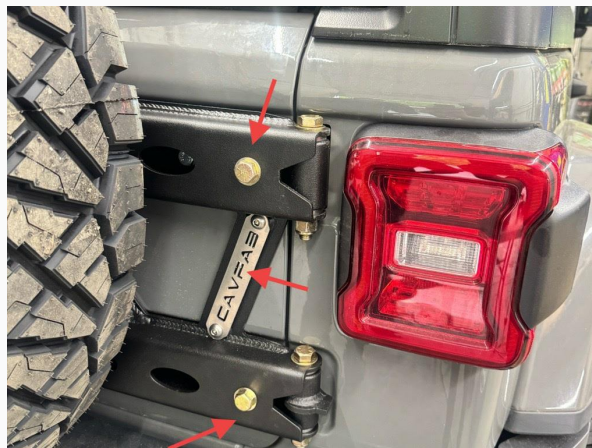


60 Open and close the tailgate to confirm smooth operation and proper latching.



8. License Plate Mount and Final Checks

61 Install the hex bolts and CavFab logo plate.



62 Test the reverse camera for proper orientation and operation, and verify the 3rd brake light works. Go over the installation and confirm all bolts are tight.

No source photo provided.

Final installation checklist

- ☐ Confirm both hinges are fully seated and the carrier swings smoothly.
- ☐ Confirm the tire has slight preload against the carrier and does not contact the bumper.
- ☐ Confirm the tire is torqued to 100 ft-lb at the lug nuts.
- ☐ Confirm the backup camera image is correctly oriented and the camera functions.
- ☐ Confirm the 3rd brake light functions.
- ☐ Confirm the license plate mount is secure and the wiring has no tension or interference.
- ☐ Confirm the tailgate opens, closes, and latches smoothly with the tire installed.
- ☐ Confirm all accessible bolts are tight and all trim panels are fully seated.

Travel farther. Hit the trail harder.

