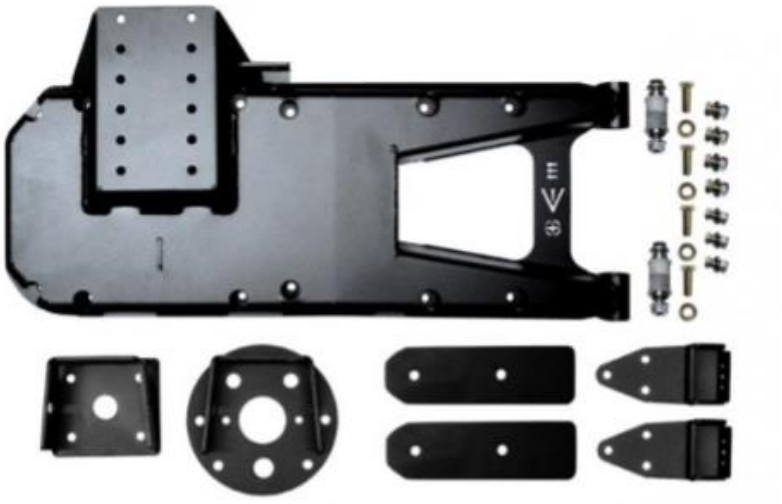
EVO Manufacturing

Jeep Wrangler JL/JLU

JL/JLU Spare Tire Carrier

EVO- 3032/3032B



Before starting installation procedure please read http://evomfg.com/Returns-Warranties-Shipping

CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL AND KEEP FOR FUTURE REFERENCE. IF YOU HAVE ANY QUESTIONS ABOUT THE PRODUCT CALL EVO MANUFACTURURING. FAILURE TO FOLLOW GUIDELINES COULD RESULT IN MALFUNCTION OF PARTS OR INJURY. PLEASE HAVE A TRAINED PROFESSIONAL ASSIST WITH OR INSTALL ALL PRODUCTS. INSTALLING EVO MFG PRODUCTS OR KITS DEMANDS SPECIFIC KNOWLEDGE, TOOLS AND EXPERIENCE. GENERAL KNOWLEDGE OF HOW TO USE LATER SPECIFIED TOOLS AND/OR LIMITED EXPERIENCE WITH EVO MFG PRODUCTS MAY NOT BE ENOUGH TO PROPERLY COMPLETE THESE TASKS. SOME OF EVO MFG PRODUCTS MAY REQUIRE TWO OR MORE PEOPLE TO INSTALL SAFELY AND CORRECTLY. DO NOT ATTEMPT ALONE, ALWAYS ENLIST THE HELP OF TRAINED PROFESSIONAL WHEN NEEDED.

Notes: Set Up Before installation

Carefully remove factory spare tire, use proper precaution

Unless otherwise specified, keep all mounting bolts loose (installed but not torqued) we will torque later at the end of complete installation

READ BEFORE INSTALL:

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*Some backspacing wheels/tire width combinations (small backspacing/wide tires) may require a single wheel spacer to properly mount to tire carrier. While this tire carrier will mount/clear a larger tire, we currently are recommending max 37”.

*Powder coated tire carriers are coated exterior only, additional coating/paint should be checked and sprayed by installer before install.

*You will need a Torx bit set ranging from T6– T55 to complete installation.

*It is recommended to NOT open tailgate until installation is complete. Some preload adjustments may need to be made after complete installation. Do so as needed.

*It is generally a good idea to apply Loctite to all threaded bolts.

*ALWAYS wear safety glasses and other approved safety gear when working on a vehicle.

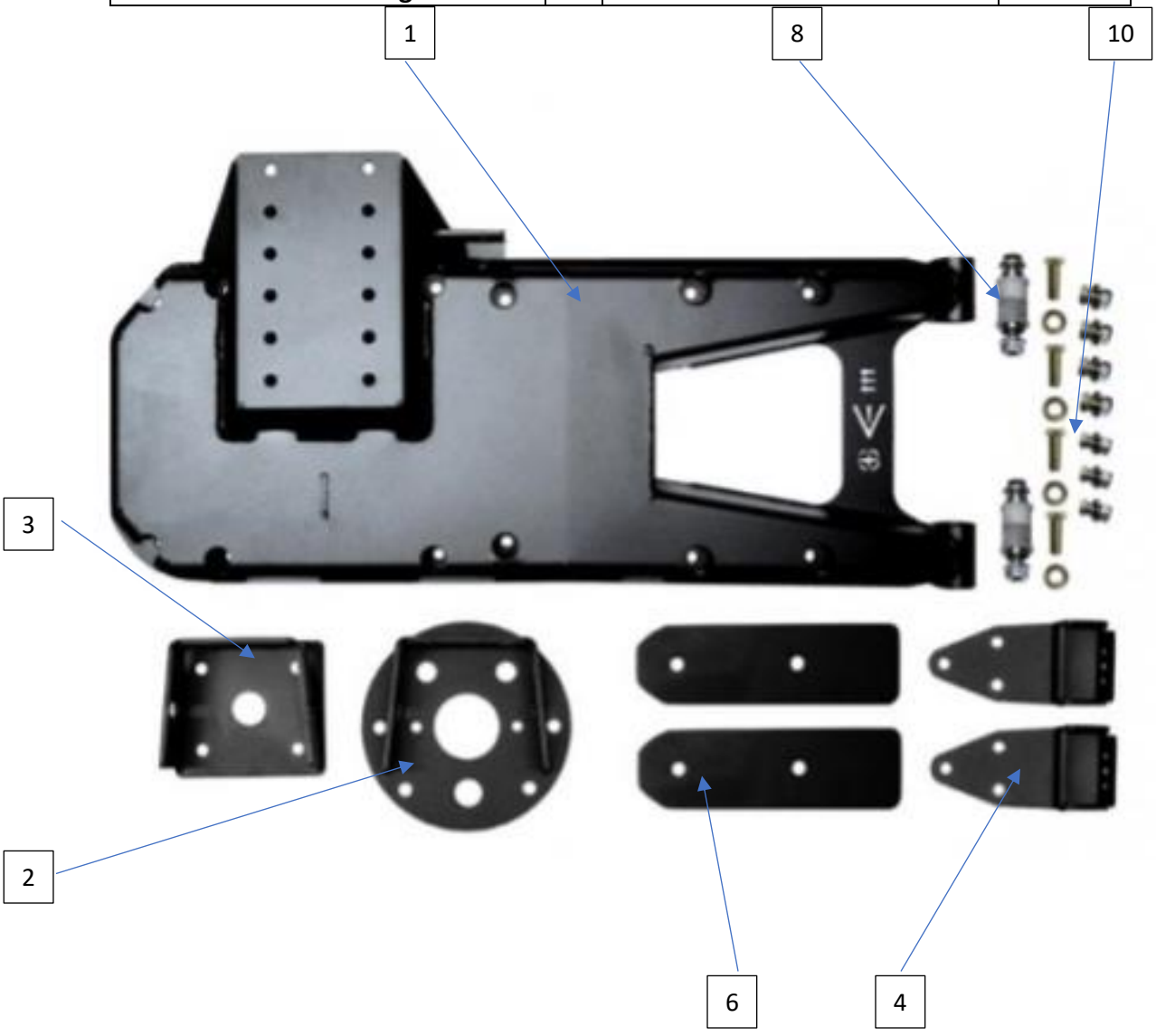
*All supplied bolts torqued according to chart at end of instruction.

*It is recommended all installation be performed by a trained professional. Some modification may have to be done.

*Paint all unfinished surfaces after install is complete.

Parts included: Table below shows black (painted) JL Spare Tire Carrier.

Description	#	Part #	Quantity
Tire Carrier	1	EVO-12344/B	1
Front Wheel Mount	2	EVO-12345/B	1
Rear Wheel Mount	3	EVO-12346/B	1
Hinge	4	EVO-12347	2
Hinge Pad	5	EVO-760057	2
Spacer Plate	6	EVO-12348	2
Hinge Tube	7	EVO-12167	2
Sleeve Bearing	8	EVO-900390	4
Shims	9	EVO-12376	2
Hardware Bag	10	EVO-770082	1



Recommended Tools:

- Allen set
- Impact with standard sockets
- Standard/Metric Sockets
- T5-T55 Torx bit

Safety Steps for installation

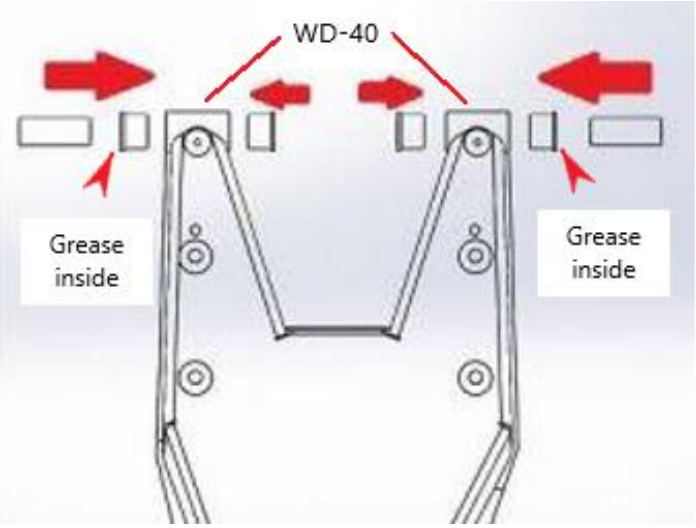
- For installing EVO MFG products always use wheel chokes to block rear tires from rolling.
- Always make sure you have everything necessary ready before install.
- If you have to, carefully lift front of vehicle by front frame rails extending suspension until tires leave the ground, place frame on approved jack stands for vehicle. Verify all lines/wires are not over extended.
- Remove tires if needed for easier install.
- Make sure to wear safety equipment (eye protection, hand protection, foot protection etc.) at all times during installation.
- Make sure all safety precautions have been taken.
- Always check and replace any part of vehicle that is warn or broken before starting install.
- Do not mix anything EVO with weaker alternatives.
- It is generally a good idea to apply liquid threadlock to all bolts.
- Tighten included hardware to torque specifications in bottom table unless it is otherwise specified, factory bolts should be torqued to factory Jeep specifications.

INSTALL

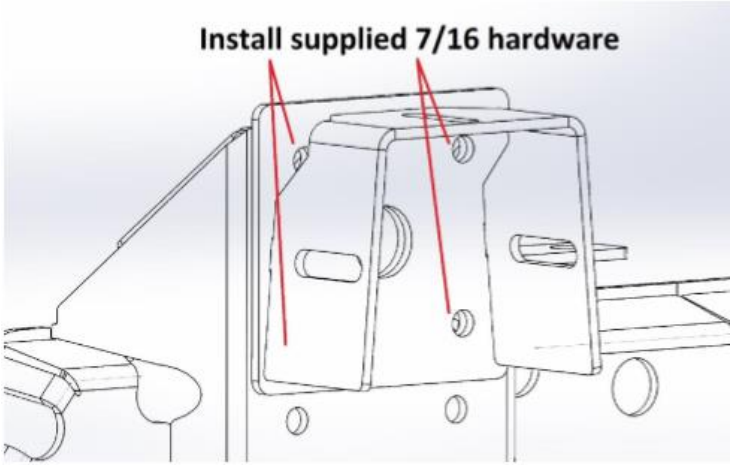
Park vehicle on flat ground, put in park and apply emergency brake.

1. Check that the barrels on tire carrier are clean and free of coating. Light sanding inside may be required.

2. Install the 4 hinge bushings and 2 inner sleeves into both hinge barrels. Use a light oil (WD-40) inside the barrel, apply small amount of grease on to inside diameter of hinge bushing, these should have a snug fit. A light tap with a rubber mallet may be required to seat the bushings, but do not force them. Hand install at first and only tap to seat them.



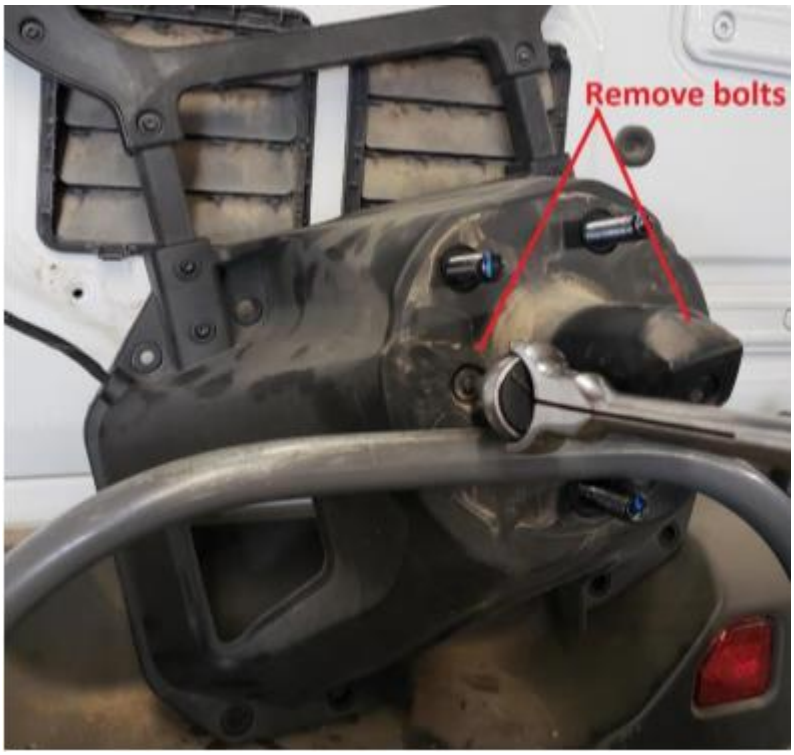
3. Using 4 supplied 7/16 bolts, 4 lock nuts, and 8 washers (11/16 wrench and socket), secure the bolt plate to the tire carrier.
4. There are three wheel mount location options, your combination of tire size and bumper may vary. Highest location is recommended for clearance and large tire sizes. Two lower locations may be an option for your specific setup and could possibly increase rear window visibility.
5. You will need to access the inside of the Tailgate Tire Carrier to reach the nuts so be sure to do this before bolting it to the tailgate.



6. Install rubber bumpers to hinge assemblies using the supplied button head bolts and washer.

7. Safely remove tire from factory rear tire mount, two people may ease removal.

8. Using T25 Torx bit, remove 2 small screws on left and right side of wheel studs holding wheel stud plate to tire mount.



9. Using a flat head screwdriver or something similar, press just on the outside of each of the wheel studs (ring between wheel stud and wheel mount on each of the 3 studs) until the wheel stud plate/camera mount free itself from the wheel mount.

This will take some pressure so support wheel mount.

10. Remove rear camera cover if applicable with T40 Torx bit from underside of cover turning clockwise to the unlocked symbol. Pull outward to remove.

11. Remove 8 13mm hex bolts (2 at each corner) holding the factory tire mount to tailgate.

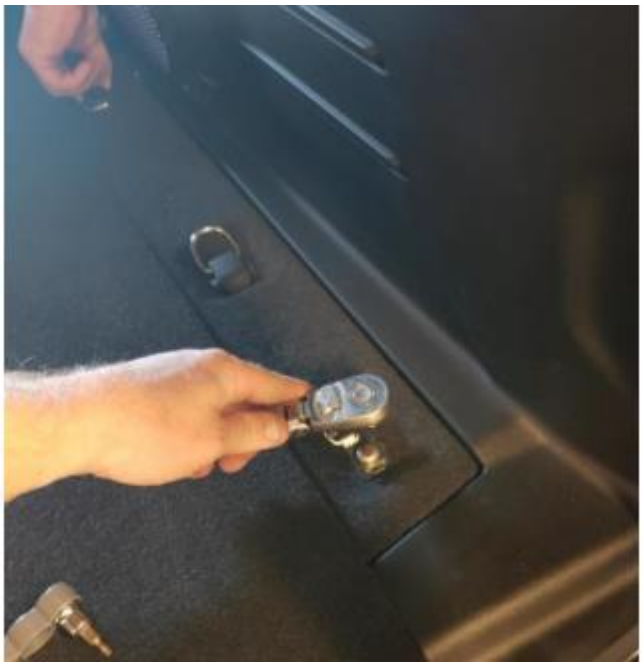
12. Using T25 Torx bit, remove 7 screws holding 3rd brake light assembly halves together.

13. Carefully pry the third brake light assembly apart revealing light mount.

14. Remove 2 screws (keep screws) holding light to mount.

15. Disconnect wiring from retainers. This should allow the wheel mount to separate from vehicle.

16. Open tailgate. On passenger side. Remove 3 bolts/floor hooks from floor. Remove floor panel and set aside.



17. Remove single screw in rear trunk panel on side of vehicle just rearward of rear passenger door jam.

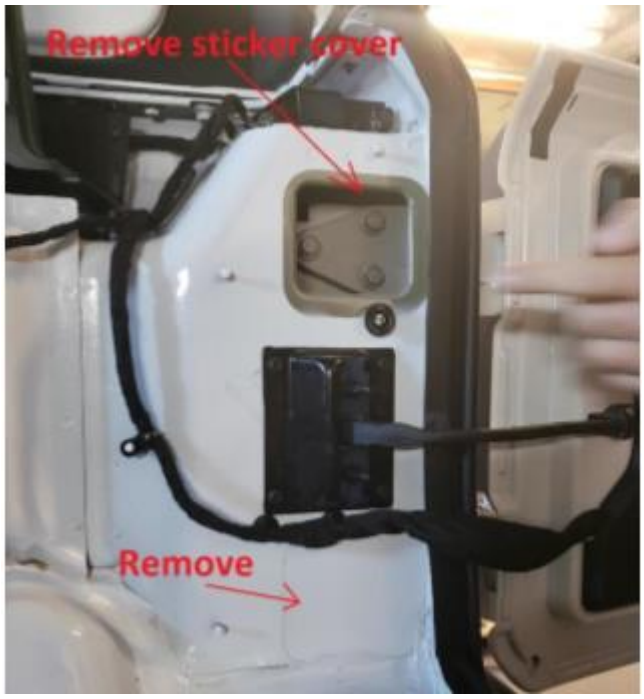
18. At rear roll bar where seat belt enters plastic side panel lift up on square plastic cover to unclip from main cover.

19. With a sharp and firm pull, pull main panel away from side of vehicle.

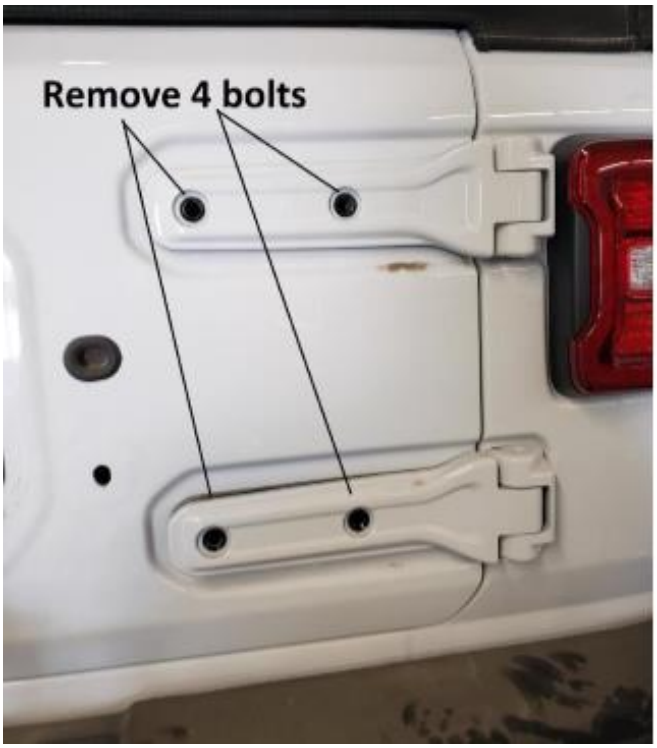
This panel is held to body with retaining clips internally. It will need to be pulled to disconnect these clips. Gently and strategically pull down the line until panel is free from body. Pay attention to clips as this will need to be reversed at end of installation.

If equipped with subwoofer reach behind and disconnect wiring. Set panel aside.

20. At the rear there are 2 square stickers covering the access to the tailgate hinges. Carefully remove these stickers, they can be reused or replaced after install. Place in safe place sticker side up.



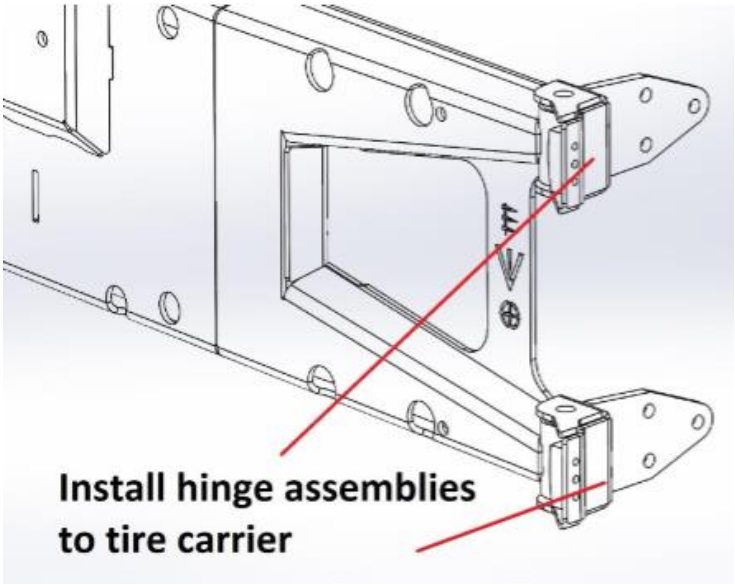
21. With tailgate closed and rear window open, using a Torx Bit (T55) remove the 2 bolts holding the hinges to tailgate, both top and bottom. From here out it is recommended to not open the tailgate until complete.



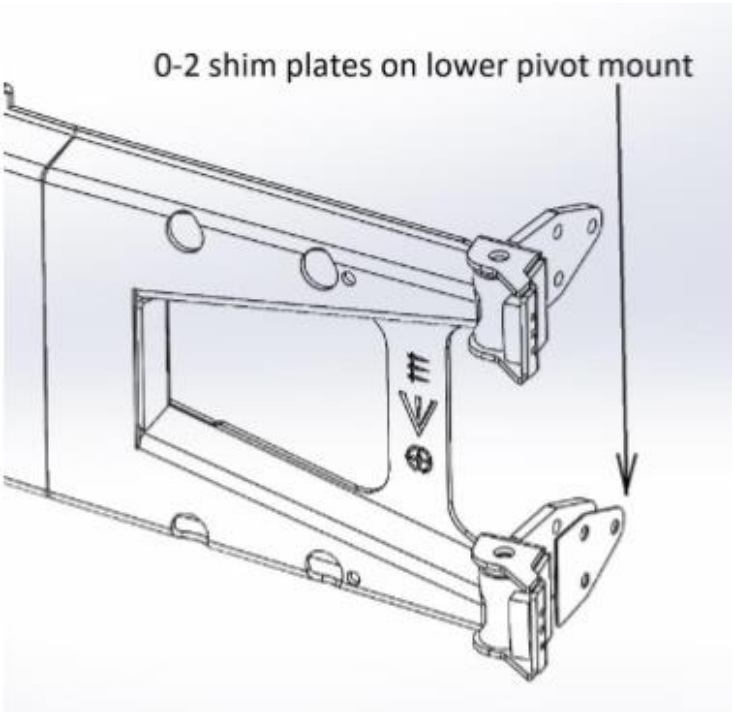
22. While tailgate is still closed and rear window open. Reach inside using a socket on extension, remove the 3 bolts both top and bottom through the square access holes removing the hinges from the vehicle. Retain 6 bolts to attached EVO Hinges later in instruction.

23. Loosely install hinge brackets to assembled tire carrier, top and bottom pivots, using supplied 9/16 bolts washers and nuts. Insert bolts from the top down

24. With hinges loosely installed to tire carrier pivots, insert hinge bracket bolt flanges into JL body holes. Loosely install the factory 3 bolts securing the hinges top and bottom to vehicle.



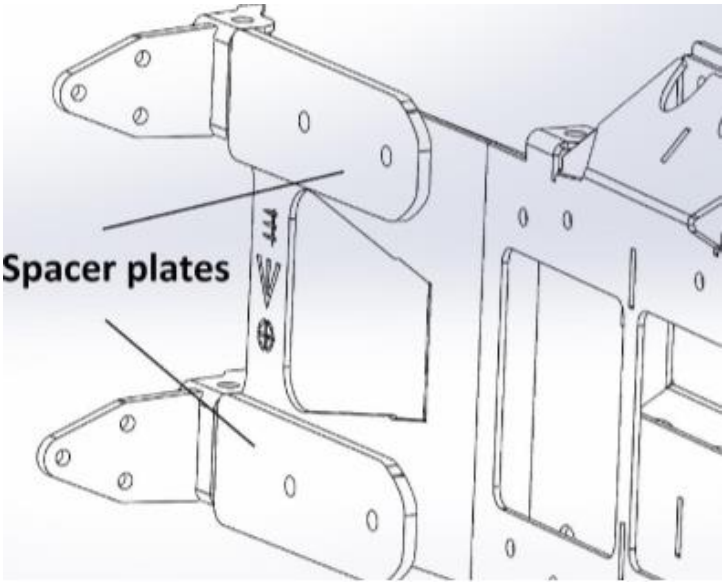
25. Lower hinge bracket may require 0-2 shim plates on body side of mounting, depending on additional tire weight. We have found generally 33-35s are best with 1 shim plate and 36-37 are best with 2, but your setup weight may require different, start with above and adjust if needed. These should be installed on the lower hinge bracket only between EVO Bracket and the body.



26. Swing tire carrier towards tailgate and route wire for camera and brake light (if applicable as shown through carrier holes) out of camera tube.

Camera wire should be run through end of camera tube. Brake light wire should be run through camera tube and out the bottom.

27. Using the supplied M10 bolts, insert into 4 right side bolt holes (2 on top leg and 2 on bottom leg of tire carrier). With bolts protruding from the mounting face of the tire carrier slide on spacer plates to bolt top and bottom bolts.



28. Carefully swing tire carrier towards tailgate and align 4 bolts with tailgate right side hinge bolt holes. Loosely thread all 4 bolts into tailgate.

29. Loosely install the 8 factory 13mm Hex bolts through tire carrier into original wheel mounting holes on tailgate.

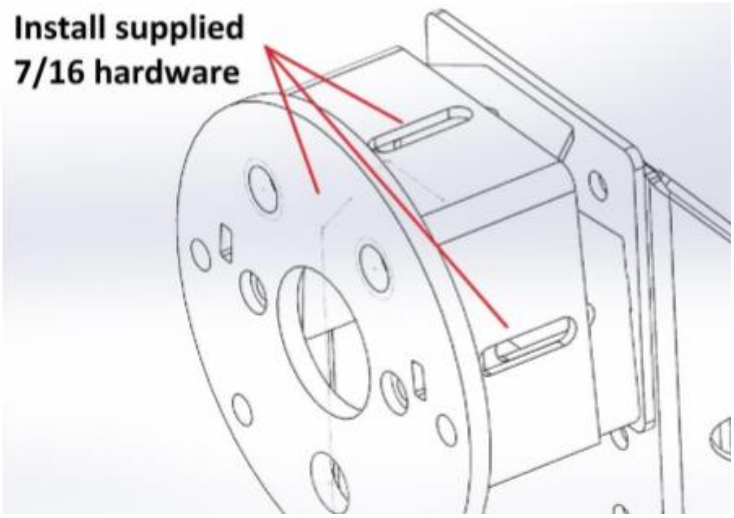
30. With all tire carrier mounting bolts loosely installed. Using a flat head screw driver or small pry bar etc (apply protective tape on end to prevent scratching). Lift up on tailgate until the body lines are acceptable to you.

31. While tailgate is lifted in alignment, tighten all bolts into tailgate and 6 inside hinge bracket bolts to factory specifications. Then tighten the large 9/16" pivot bolts to 129 ft/lbs.

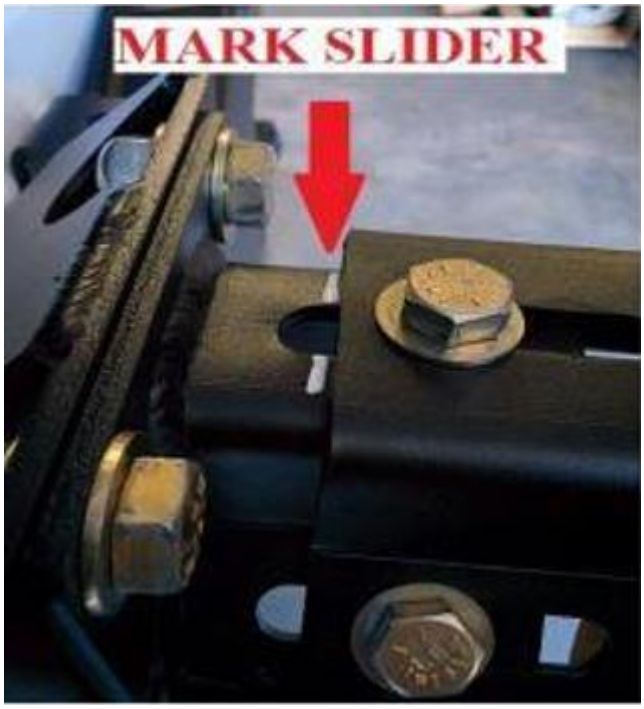
32. Install wheel stud plate/camera into EVO wheel mount as shown using 2 factory bolts at counterbore locations.

33. Place the wheel mount over the EVO tire carrier bracket

34. Loosely install the supplied 7/16 bolts, washer nuts into the 3 slotted holes.



35. Install your wheel and tire and fully tighten the lug nuts to the wheel mount. With the tire secured, slide the wheel assembly toward the tailgate until the tire contacts the tire carrier on passenger side. On the slider/EVO Wheel mount, mark the plate where it stops (this is easier to mark with the tailgate open). Note: If your wheel/tire combo is beyond the reach of the support mount, you will need to use a wheel spacer.



36. Once slider is marked, remove the wheel and tire.

37. Move the slider back (toward the tailgate) to cover the mark you made in previous step (you should move it back around 3/16” inward covering your mark). Fully tighten the 3 bolts on the slider so that it can no longer move. This will make sure the tire is tightly compressed against the tire carrier.

These previous tire/wheel step are very important. Do not overlook. The tire must be firmly mounted into the tire carrier face to prevent rattles, noise and fatigue of components.

38. Reinstall wheel to mounting studs.

39. Open/close tailgate and check proper alignment at door catch. Some adjustments to hinge and or door latch may need to be made at this time to allow for smooth operation. Do so at this time.

40. Reversing previous steps, Reapply or replace rear access stickers to inside body panel.

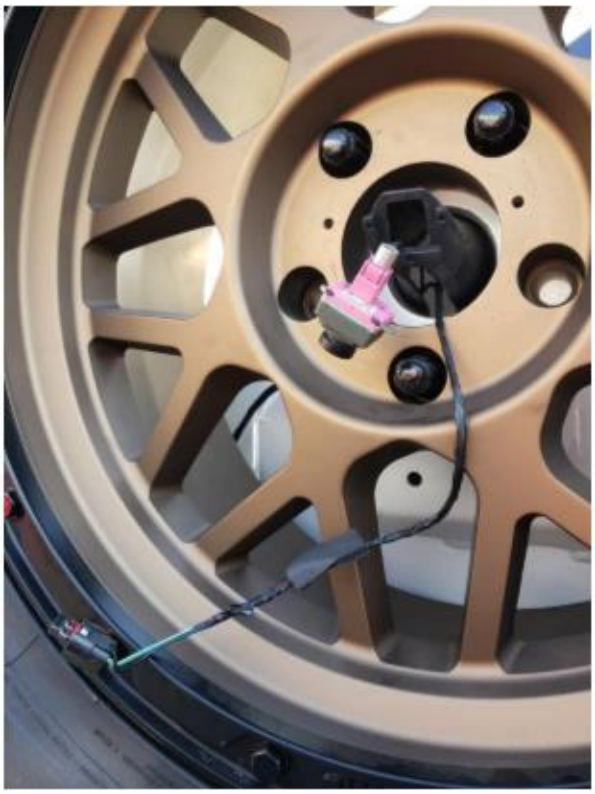
41. Reinstall inner plastic interior side panel to vehicle using factory clips. (reconnect subwoofer wiring if applicable). Align and press in until panel clip reattached.

42. Reinstall removed rear panel screw just rearward of passenger side rear door jam.

43. Reinstall seat belt panel cover

44. Reinstall rear floor panel, 3 floor hooks/bolts.

45. If equipped with rear camera. Route wiring as shown.



46. Install camera and supplied EVO brake light bracket to factory brake light.

47. Install Camera with brakelight bracket on top using supplied small stainless steel screws to camera tube.

Slight lowering of the tailgate after installing heavy tire and wheel may occur. Adjusting tire preload to ease closure if needed can be done by loosening the 9/16" pivot bolts. Lifting tailgate until resistance is felt and torqueing bolts while lift up.

Check/retorque all bolts after 500 miles

After Install:

- Tighten all bolts securing purchased parts to specified locations.
- After completing installation using provided instructions, go through all steps again to make sure nothing was missed, not tightened or improperly assembled.
- Some components may need to be purchased separately.
- Check turn signals, headlights, fog lights (if applicable), taillights, blinkers and windshield wipers.
- Adjust mirrors, speedometer and headlights if needed.
- Make sure all gauges are fully operational.
- Drive the vehicle slowly for a couple minutes, looking and listening for abnormal noises while driving. After modification of a vehicle there will be differences in driving experiences and capabilities, be mindful of that.
- Inspect and Retorque all Bolts after 500 miles of competed installation and regularly thereafter.
- Some modification may be required.

Recommended Torque:

Size	Grade 2		Grade 5		Grade 8		18-8 S/S	
	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
#4*	-	-	-	-	-	-	5.2	-
#6*	-	-	-	-	-	-	9.6	-
#8*	-	-	-	-	-	-	19.8	-
#10*	-	-	-	-	-	-	22.8	31.7
1/4	4	4.7	6.3	7.3	9	10	6.3	7.8
5/16	8	9	13	14	18	20	11	11.8
3/8	15	17	23	26	33	37	20	22
7/16	24	27	37	41	52	58	31	33
1/2	37	41	57	64	80	90	43	45
9/16	53	59	82	91	115	129	57	63
5/8	73	83	112	128	159	180	93	104
3/4	125	138	200	223	282	315	128	124
7/8	129	144	322	355	454	501	194	193
1†	188	210	483	541	682	764	287	289