



INSTALLATION INSTRUCTIONS ELITE REAR BUMPER & TIRE CARRIER

Part Number: 102190 & 102255

Application: Jeep JL 2018

GENERAL SAFETY PRECAUTIONS

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. **WARNING** and **CAUTION** are signal words that identify the level of hazard. These signal words mean:

▲WARNING signals a hazard that could cause serious injury or death, if you do not follow recommendations. **▲CAUTION** signals a hazard that may cause minor to moderate injury, if you do not follow recommendations.

This guide uses **NOTICE** to call attention to important mechanical information, and **Note:** to emphasize general information worthy of special attention.

▲ WARNING

IMPACT AND MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or death

- **Always** Know Your Winch. Take time to fully read the Instructions and/or Operations Guide, and/or Basic Guide to Winching Techniques, in order to understand your winch and its operations.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Never** use a jack to support the vehicle.
- **Always** use jack stands in pairs to support the vehicle.
- **Always** use jacks or jack stands only on a hard, stable, and level surface.
- **Never** exceed the rated capacity of a jack or jack stands.
- **Always** verify that the parking brake is set, the transmission is in park (automatic) or reverse (manual) and the rear wheels are blocked before working on vehicle.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Always** insure components will remain secure during installation and operation.
- **Always** tighten all nuts and bolts securely, per the installation and operation.
- **Always** perform regular inspections and maintenance on the winch, winch mount and related hardware.
- **Always** replace all worn or damaged parts before operating.
- **Never** operate this WARN product with damaged or missing parts.
- **Always** use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when / if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.
- **Always** use extreme caution when cutting and trimming during fitting.
- **Always** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- **Always** remove jewelry and wear eye protection.
- **Never** lean over battery while making connections.
- **Never** route electrical cables across any sharp edge, through or near moving parts, near parts that become hot.

Read installation and operating instructions thoroughly.

WARN INDUSTRIES, INC. 12900 S.E. Capps Road,
Clackamas, OR USA 97015-8903, 1-503-722-1200, FAX: 1-503-722-3000
Customer Service: 1-800-543-9276
Dealer Locator Service: 1-800-910-1122
International Fax: 1-503-722-3005

⚠ CAUTION

MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury

- **Always** take time to fully read and understand the installation and Operations Guide included with this product.
- **Never** operate this product if you are under 16 years of age.
- **Never** operate this product when under the influence of drugs, alcohol or medications.

Read installation and operating instructions thoroughly.

NOTICE

EQUIPMENT DAMAGE

- **Never** tow vehicle by attaching a tow bar to the eyelets on the bumper.
- **Never** attach tow bars directly to the bumper. Damage to bumper may occur. WARN bumpers are not designed to be used for flat towing. Consult with the manufacturer of your tow bar system for the proper vehicle tow bar brackets..

Read installation and operating instructions thoroughly.

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TOOLS REQUIRED

- Standard and Metric wrenches
- Standard and Metric sockets
- Ratchet
- Extension
- Offset Flex-head Ratchet

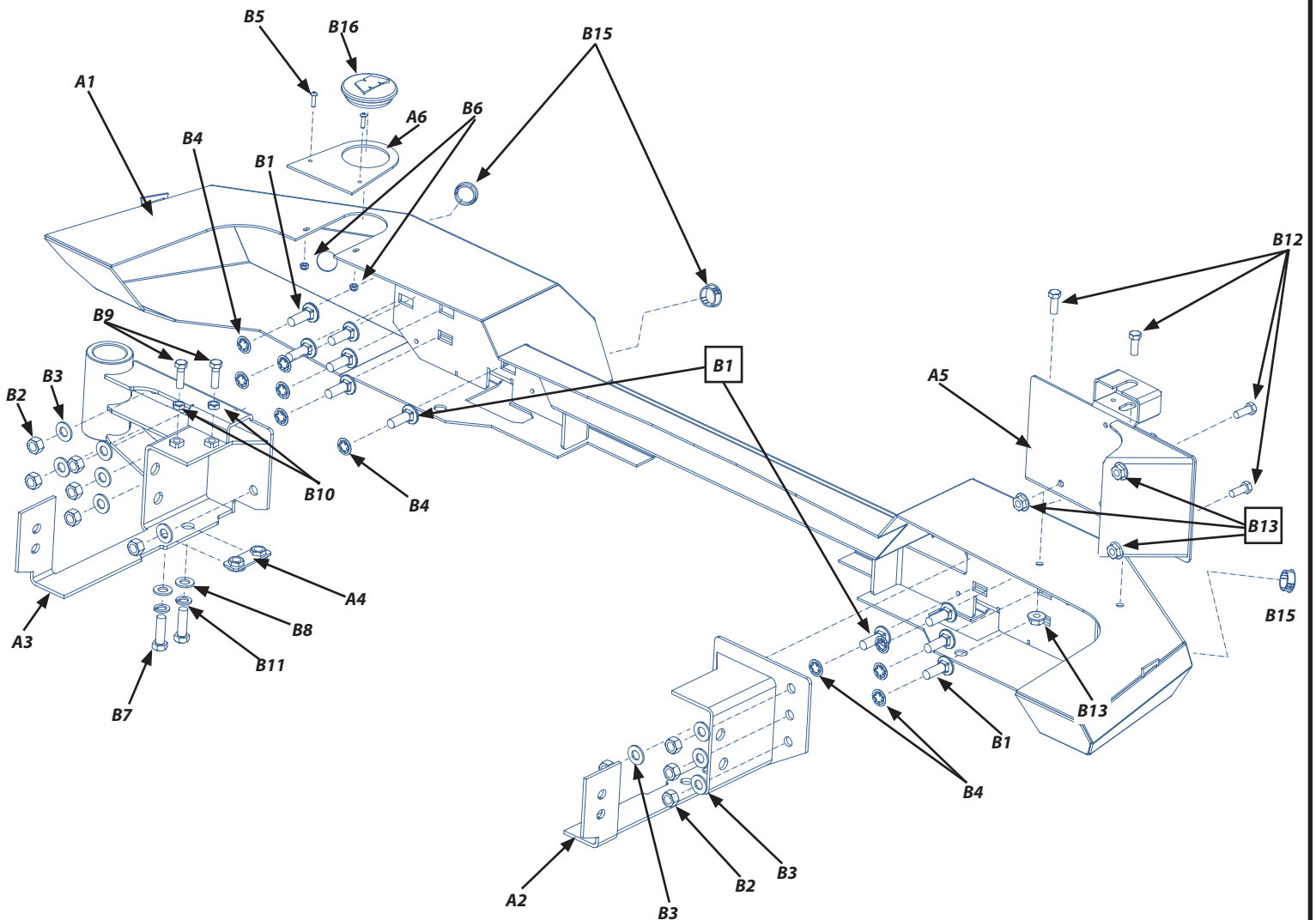
TORQUE SPECIFICATIONS

Please use the recommended torque specifications when assembling this product unless otherwise specified in the instructions.

FASTENER SIZE	FASTENER TORQUE		FASTENER SIZE	FASTENER TORQUE	
	lb-ft	(N.m)		lb-ft	(N.m)
1/4"	8	(11)	M4	(2)	3
5/16"	17	(23)	M5	(4.5)	6
3/8"	30	(40)	M6	(7.5)	10
7/16"	48	(66)	M8	(18)	25
1/2"	74	(100)	M10	(37)	50
9/16"	106	(144)			
5/8"	148	(200)			
3/4"	269	(364)			

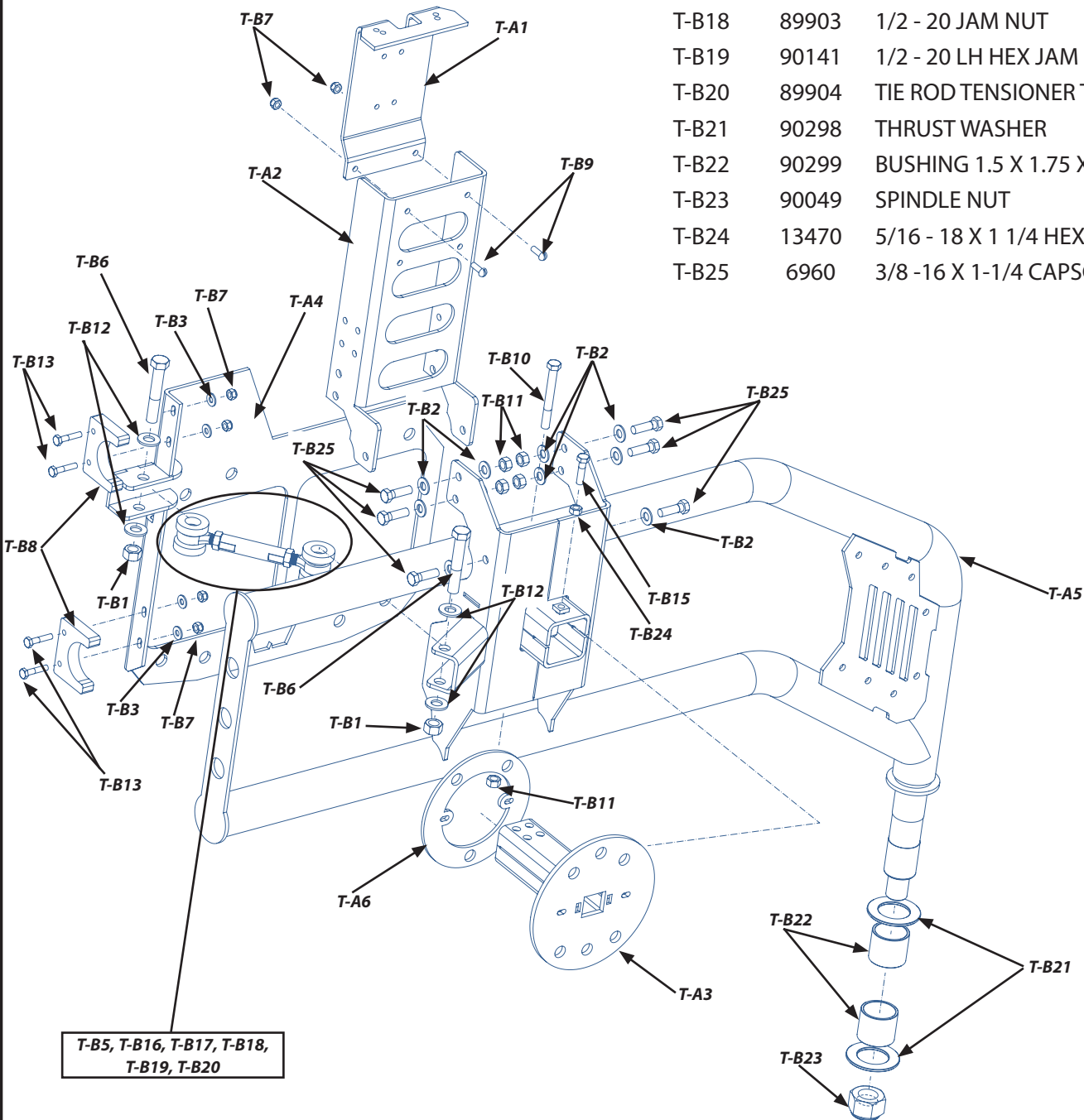
BUMPER PARTS LIST

ID No.	Item No.	Description	Qty.	ID No.	Item No.	Description	Qty.
A1	102180	BUMPER	1	B1	101412	1/2" - 13 X 2 CARRIAGE HEAD BOLT	10
A2	102179	LH FRAME BRACKET	1	B2	29060	1/2" - 13 LOCKING NUT	10
A3	102181	RH FRAME BRACKET	1	B3	9213	1/2" WASHER	10
A4	102443	NUT PLATE	1	B4	101259	1/2" PUSHNUT BOLT RETAINER	10
A5	102188	LICENSE PLATE BRACKET	1	B5	27309	10 - 24 X 3/4 CAPSCREW	2
A6	102192	BUMPER COVER PLATE	1	B6	63241	10 - 24 LOCKING NUT	2
				B7	25552	M12 - 1.75 X 40 CAPSCREW	2
				B8	93106	M12 FLAT WASHER	2
				B9	6960	3/8 - 16 X 1 - 1/4 CAPSCREW	2
				B10	2317	3/8 - 16 JAM NUT	2
				B11	83038	12 MM LOCK WASHER	2
				B12	18116	3/8 - 16 X 1 CAPSCREW	5
				B13	80182	3/8 - 16 FLANGE NUT	5
				B14	64715	CABLE TIE	2
				B15	102248	PLASTIC PLUG	4
				B16	80252	RUBBER PLUG	1



TIRE CARRIER PARTS LIST

ID No.	Item No.	Description	Qty.	ID No.	Item No.	Description	Qty.
T-A1	102429	CARRIER LIGHT BRACKET	1	T-B5	90126	BUSHING .75 X 1.5 X .375	4
T-A2	102428	CARRIER SUPPORT BRACKET	1	T-B6	63399	1/2 - 13 X 3 CAPSCREW	2
T-A3	102425	CARRIER STINGER	1	T-B7	6725	1/4 - 20 LOCKING NUT	6
T-A4	102422	CARRIER TAILGATE BRACKET	1	T-B8	90047	LATCH WEAR BLOCK	2
T-A5	102420	TIRE CARRIER	1	T-B9	1971	1/4 - 20 X 3/4 SCREW	2
T-A6	102438	TIRE BUMPER COVER PLATE	1	T-B10	11709	3/8 - 16 X 3 - 1/4 CAPSCREW	1
				T-B11	6779	3/8 - 16 LOCKING NUT	7
T-B1	29060	1/2" - 13 LOCKING NUT	2	T-B12	9213	1/2 WASHER	4
T-B2	11524	3/8 WASHER	12	T-B13	13253	1/4 - 20 X 1 - 1/4 CAPSCREW	4
T-B3	1320	1/4 WASHER	4	T-B14	29060	1/2 - 13 LOCKING NUT	2
T-B4	13253	1/4 - 20 X 1 - 1/4 CAPSCREW	4	T-B15	2079	5/16 - 18 NUT	1
				T-B16	89902	RH TIE ROD END	1
				T-B17	90037	LH TIE ROD END	1
				T-B18	89903	1/2 - 20 JAM NUT	1
				T-B19	90141	1/2 - 20 LH HEX JAM NUT	1
				T-B20	89904	TIE ROD TENSIONER TUBE	1
				T-B21	90298	THRUST WASHER	2
				T-B22	90299	BUSHING 1.5 X 1.75 X 1.5	2
				T-B23	90049	SPINDLE NUT	1
				T-B24	13470	5/16 - 18 X 1 1/4 HEX HEAD	1
				T-B25	6960	3/8 - 16 X 1-1/4 CAPSCREW	6



INSTALLATION INSTRUCTIONS

1. Remove factory bumper and spare tire.
2. Remove inner panel on tailgate.
3. Unplug top two connectors.

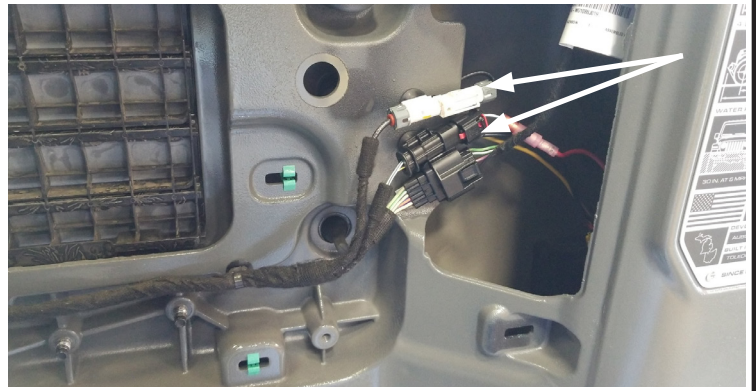


Figure 1

4. Pull wire assembly through tailgate (from the outside of tailgate).
5. Remove stock tire carrier assembly.
 - a. Save tire carrier mounting hardware.
 - b. Save stud plate.
 - c. Save third brake light and hardware.
 - d. Save rear camera, mount and wire harness.

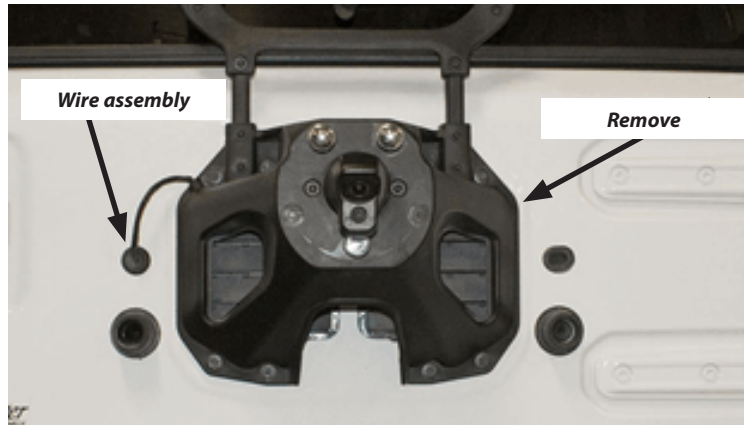


Figure 2

6. Install new tire carrier tailgate bracket (T-A4), using factory hardware.



Figure 3

7. Install nut plate (A4) into right frame tube, being sure to align holes with frame mounting holes.



Figure 4

8. Install mounting brackets (left A2 and right A3) using factory hardware removed in step one.

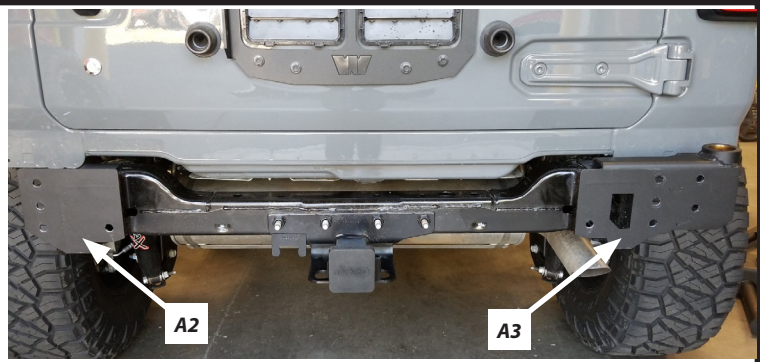


Figure 5

9. **RIGHT mounting bracket side:** Install one bolt (B7), lock washer (B11) and washer (B8) up through the mounting bracket and the vehicle frame's mounting hole that sits the furthest inside. Refer to exploded view on page 3.

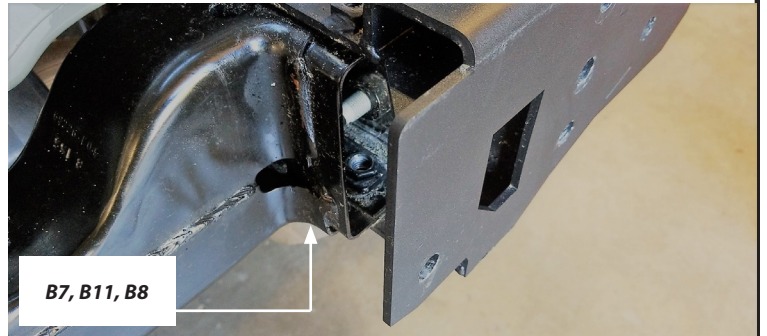


Figure 6

10. **LEFT mounting bracket side:** Install factory bolt up through the mounting bracket and frame's mounting hole that sits the furthest inside.

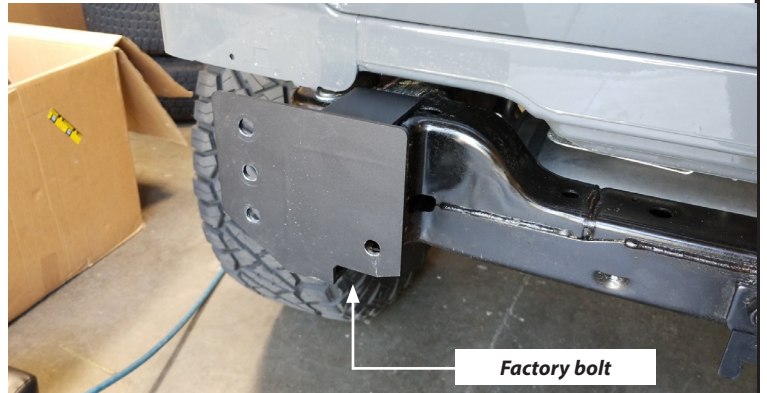


Figure 7

11. Install tire bumper cover plate (T-A6) to tire carrier (T-A5).



Figure 8

12. Install one thrust washer (T-B21) and one bushing (T-B22) to tire carrier.

13. Grease the spindle and bushing.

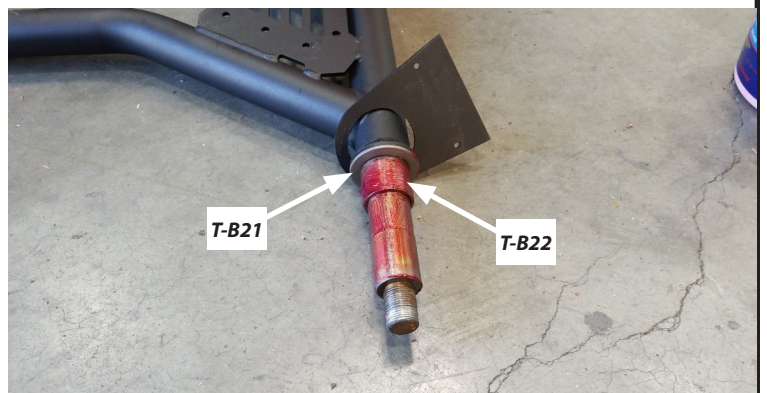


Figure 9

14. Grease the remaining bushing (T-B22) and insert up in the bottom of the right tire carrier bracket.



Figure 10

15. Install tire carrier through the top of the right bracket.



Figure 11

16. Install lower thrust washer (T-B21) and tire carrier spindle nut (T-B23).

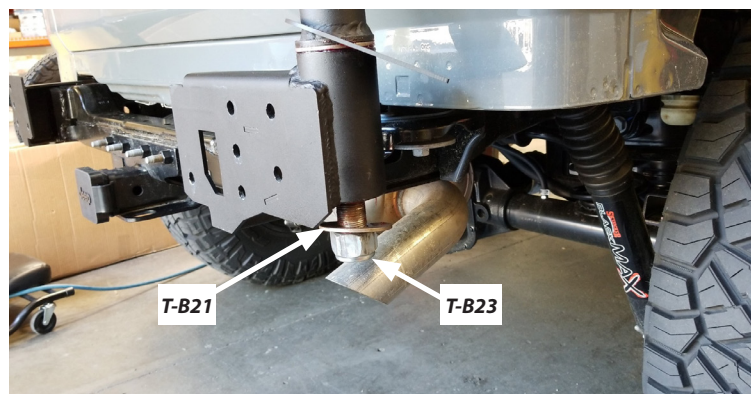


Figure 12

17. Insert two bolts (B9) and two jam nuts (B10) through the right tire carrier bracket and vehicle frame.

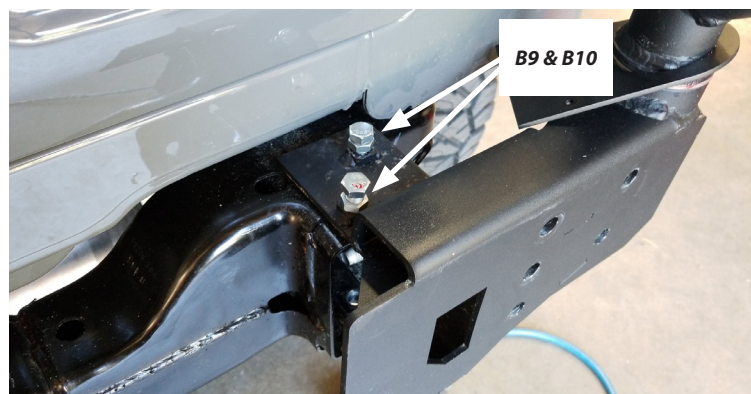


Figure 13

18. Using a level, set tire carrier at desired level.
19. Once desired level has been achieved, tighten the jam nuts.



Figure 14

20. With tailgate open, install linkage (T-B5, T-B16, T-B17, T-B18, T-B19, T-B20).

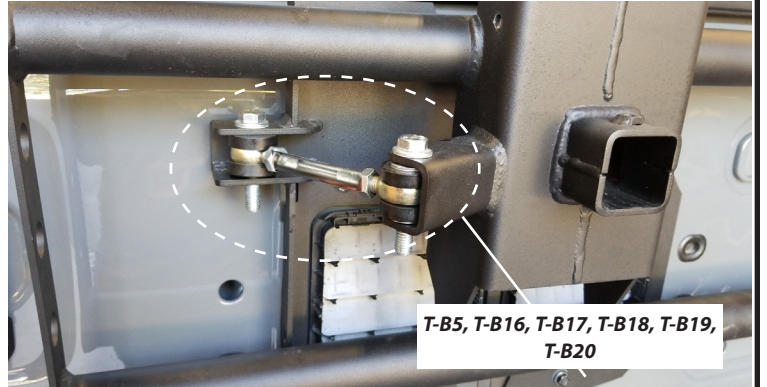


Figure 15

21. Install wear blocks (T-B8) using bolts (T-B6), washers (T-B12) and nuts (T-B1) found hardware in kit. Refer to exploded view on page 4.

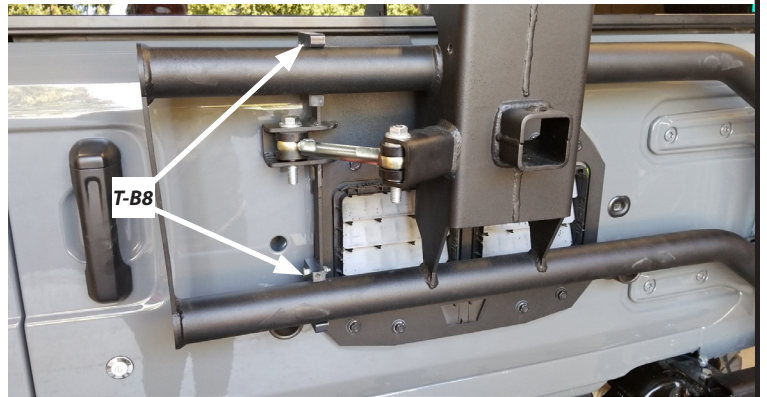


Figure 16

22. Install carrier support bracket using bolts (T-B25), washers (T-B2) and locking nuts (T-B11).

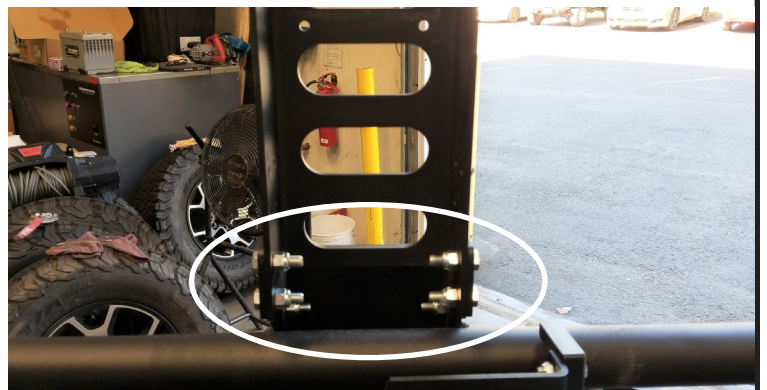


Figure 17

23. Install factory brake light to carrier light bracket (T-A1) using factory hardware.



Figure 18

24. Install brake light bracket to carrier support bracket using two screws (T-B9) and nuts (T-B7).



Figure 19

25. Place the carrier spacer plate (T-A6) on to the factory stud plate.



Figure 20

26. Insert carrier stinger (T-A3) through carrier spacer plate (T-A6)/factory stud plate assembly.

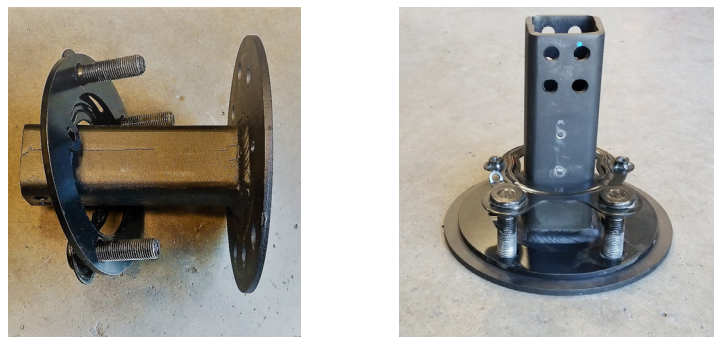


Figure 21

27. Insert the carrier stinger/plate assembly into the tire carrier receiver on the vehicle.
28. Install the stock rear camera mount to the stud plate using factory hardware.
29. Mount the camera to the camera mount using factory hardware. **NOTE: You may need to trim camera housing to fit between bolt pattern.**
30. Route the wire harness behind the carrier and thread through the door. **NOTE: You may need to extend the third brake light wiring in order to plug back into light.**

⚠ CAUTION

- Always use assistance when moving or lifting heavy parts.

31. Choose the correct tire carrier and carrier stinger mounting hole position.
IMPORTANT: Choosing the correct hole position is dependent on the size of tire you have and vital to create optimal stability.

- a. **Temporarily** install your tire to the carrier stinger.
- b. Push on the tire towards the vehicle and against the tire carrier tubes.
- c. While pushing against the tire, check to see what hole (between the carrier stinger and tire carrier) is the best aligned and mark that hole. See Figure 23.
- d. Once a hole has been marked, remove the tire from the carrier stinger.

- e. Once the tire is removed, once again push against the carrier stinger towards the tire carrier tubes and mark a new hole **just past** (towards the vehicle) then the previously marked hole. See figure 24.

32. Insert one 3/8 bolt (T-B10) down through the newly marked hole and tighten with nut (T-B11). See figure 25.
33. Thread one 5/16" nut (T-B15) onto one 5/16" bolt (T-B24) and insert down through the tire carrier receiver's weld nut and carrier stinger. Torque to maximum of 8 lb.-ft.
34. Return tire to carrier stinger and torque lug nuts to a maximum of 60 lb.-ft.

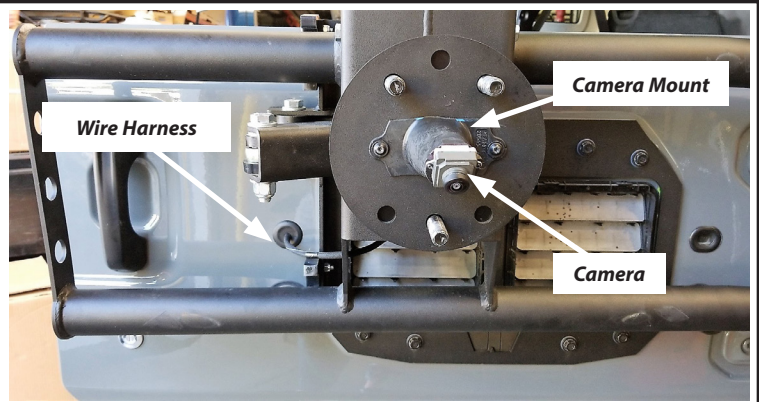


Figure 22

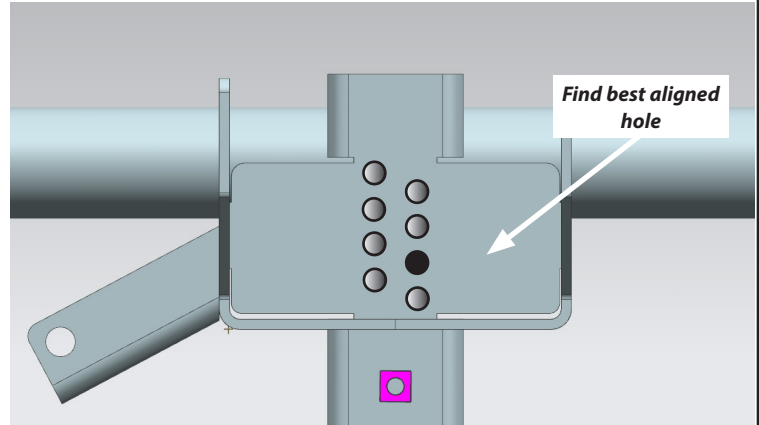


Figure 23

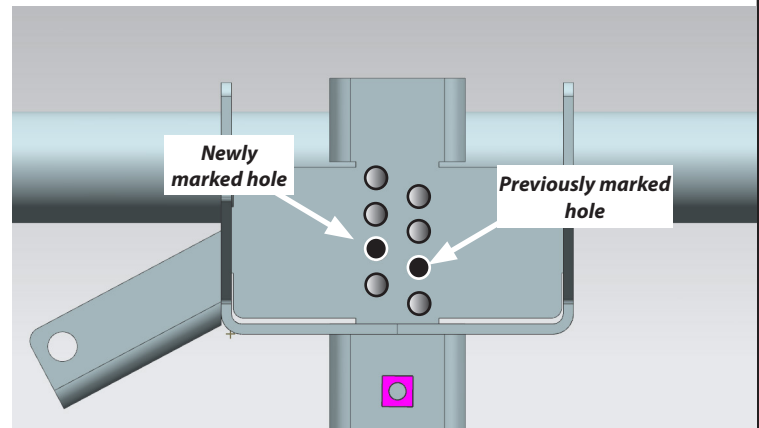


Figure 24

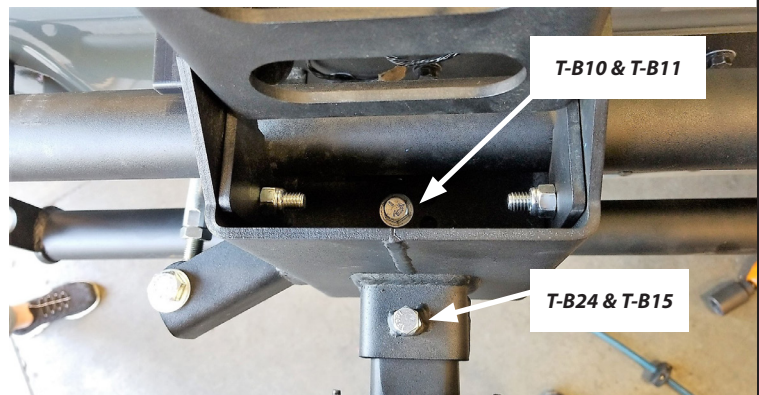


Figure 25

35. Plug in wire harness and third brake light.

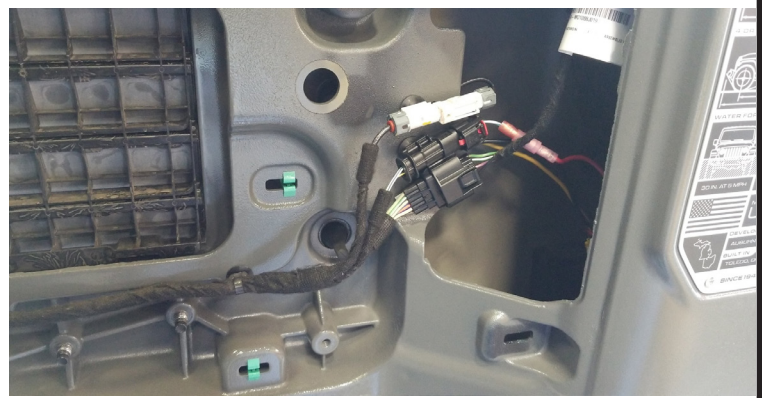


Figure 26

36. Insert 1/2" carriage bolts (B1) and retaining nuts (B4) through front of bumper. **NOTE: There will be 6 on the right side and four on the left side.**

⚠ CAUTION

- Always use assistance when moving or lifting heavy parts.

37. With assistance, carefully lift the bumper (A1) onto the frame rails. Using the installed carriage bolts as a guide, center bumper and fasten to frame using ten 1/2" washers (B3) and nuts (B2). Refer to exploded view on page 3.

Torque to recommended values on page 2.



Figure 27

38. **RIGHT mounting bracket side:** Install second bolt and washer combination (B7, B11 & B8) up through the mounting bracket and frame's mounting hole that sits the closest to the outside (nearest to bumper). Refer to exploded view on page 3.

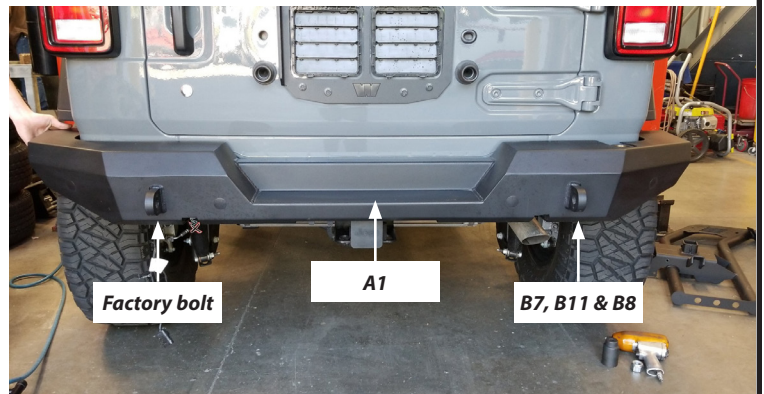
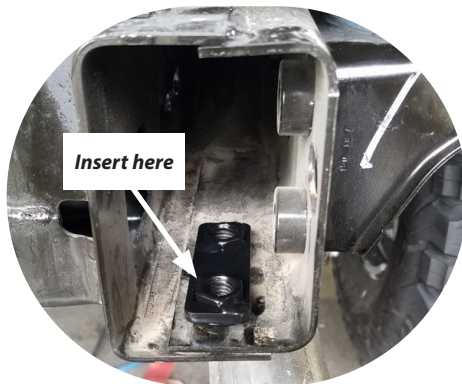


Figure 28

39. **LEFT mounting bracket side:** Install factory bolt up through the mounting bracket and frame's mounting hole that sits the closest to the outside (nearest to bumper).

40. Install sensor carriages* into new Warn bumper in the same orientation as they were removed from stock bumper.
***NOTE: For factory plastic bumper models, you will need to order steel bumper sensor carriages directly from Jeep® in order for sensors to fit in new bumper.**

NOTE: If vehicle is not equipped with sensors, use provided sensor hole plug (B15) to install in new Warn bumper.

41. Install license plate light to license plate bracket (A5) using factory hardware. *TIP: Use included zip ties to keep wiring in place.*
42. Install license plate bracket (A5) with hardware (B12 and B13). **NOTE:** You may need to drill license plate holes larger to match up with bracket holes.
43. Plug in license plate light.
44. Tighten all hardware per torque specifications, unless other torque value was specifically instructed.

Your installation is now complete

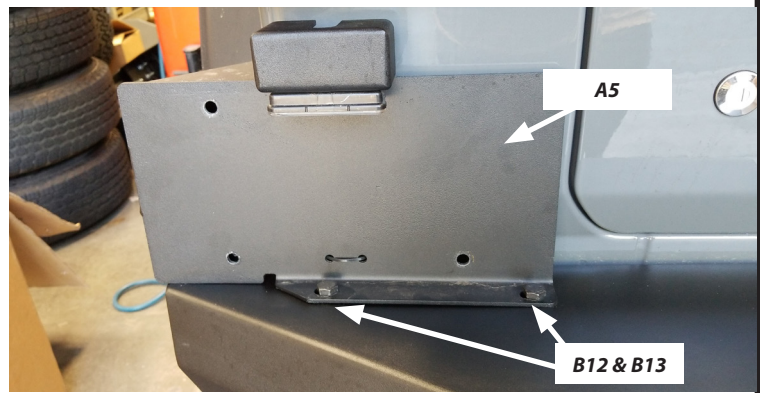


Figure 29



MAINTENANCE / CARE

1. Inspect all parts and related hardware prior to each use. Replace all hardware that appears rusted or deformed.
2. Inspect all nuts and bolts on the winch, winch mount and related hardware prior to each use. Tighten all nuts that appear to be loose. Stripped, fractured, or bent bolts or nuts need to be replaced.
3. Check all cables prior to use. Replace cables that look worn or frayed.
4. Check all moving or rotating parts. Remove debris that may inhibit the part from moving freely.