INSTALLATION INSTRUCTIONS
ELITE SERIES REAR BUMPER AND TIRE CARRIER
Part Number: 89525/89800
Application: 2007+ Jeep JK

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.

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⚠ CAUTION

MOVING PARTS ENTANGLEMENT HAZARD

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

- Part edges may be sharp!
- Always use proper posture / lifting technique or get lifting assistance while handling and installing product.

Read installation and operating instructions thoroughly.

NOTICE

EQUIPMENT DAMAGE

- **Never** tow vehicle by attaching a tow bar to the eyelets on the bumper.
- Do not 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.

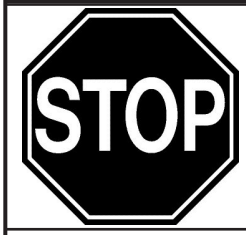
Read installation and operating instructions thoroughly.

NOTES

The WARN Rock Crawler Rear Bumper is designed to mount over the factory towing receiver. A WARN Tire Carrier (PN 89800) must be installed before installation of the bumper.

NOTE: The Highlift Jack Mount (PN 90030) is sold separately.

BEFORE YOU BEGIN



This product may interfere with driver assist systems such as adaptive cruise control and parking assist systems that have sensors or cameras installed in the bumpers or front grill area. If your vehicle is equipped with any of these systems or features, consult your vehicle owner's manual before installing this product. These systems may need to be disabled as a result of installing this product.

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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)			

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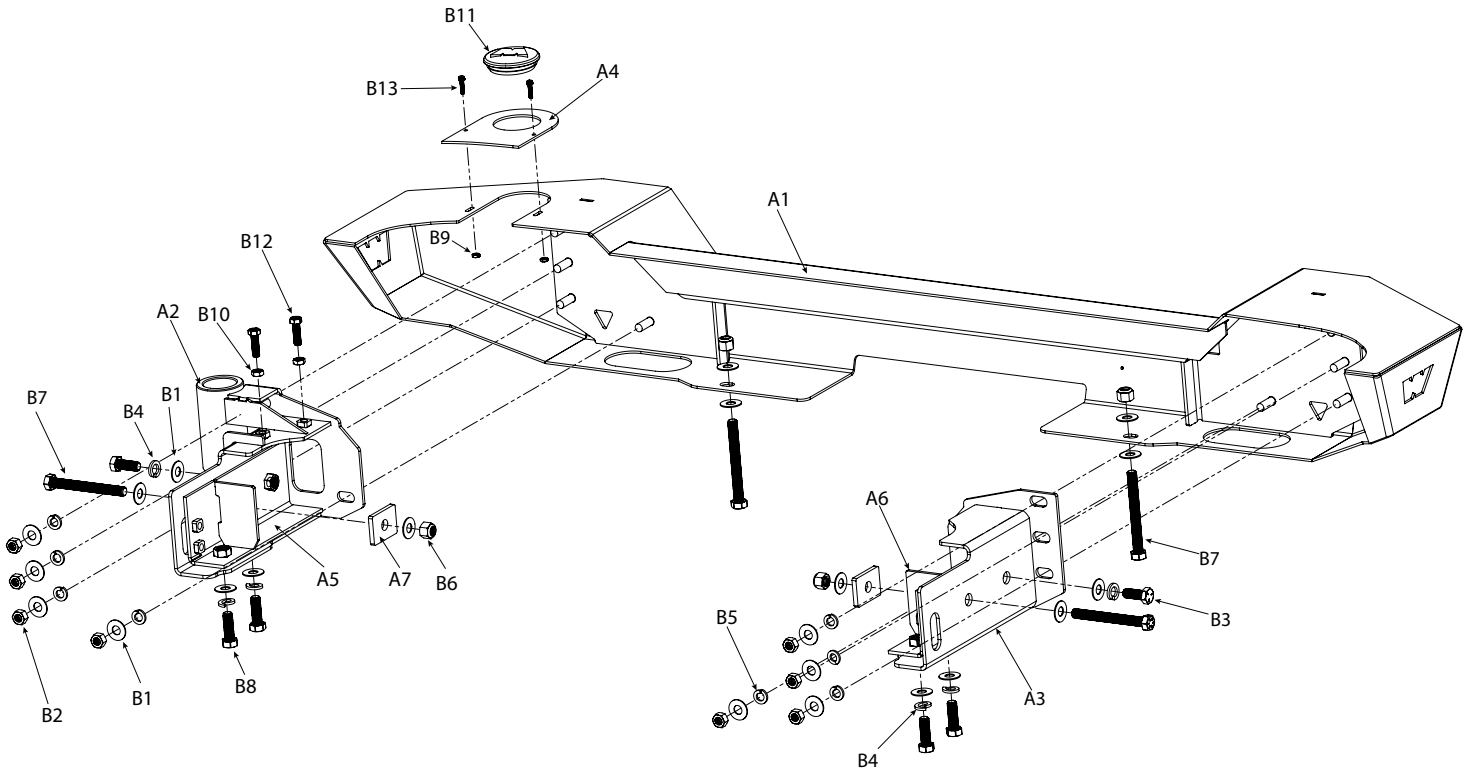
TOOLS REQUIRED

- Standard socket set
- Metric socket set
- 3/8 Ratchet
- 3/8 Extension
- Drill motor and bits (1/4" and 1/2")
- Wire stripper crimpers

BUMPER PARTS LIST

ITEM	PN	DESCRIPTION	QTY
A1	88935	REAR BUMPER	1
A2	89824	OUTER FRAME BRACKET PASSENGER SIDE	1
A3	89896	OUTER FRAME BRACKET DRIVER SIDE	1
A4	89985	BUMPER COVER PLATE	1
A5	109434	INNER FRAME BRACKET PASSENGER SIDE	1
A6	109437	INNER FRAME BRACKET DRIVER SIDE	1
A7	74272	FRAME PLATE	2

ITEM	PN	DESCRIPTION	QTY
B1	7676	7/16 FLAT WASHER	28
B2	89488	7/16 HEX NUT	8
B3	6959	1/2 X 1-1/4 HEX CAPSCREW	2
B4	2596	1/2 LOCK WASHER	6
B5	2146	7/16 LOCK WASHER	8
B6	29060	1/2 NYLOCK NUT	4
B7	710269	1/2 X 4-1/2 HEX CAPSCREW	4
B8	6818	1/2 X 1-1/2 HEX CAPSCREW	4
B9	63241	10-24 NYLOCK NUT	2
B10	2317	3/8 HEX NUT	2
B11	80252	RUBBER INSERT	1
B12	6960	3/8 X 1-1/4 HEX CAPSCREW	2
B13	27309	10 X 3/4 HEX CAPSCREW	2

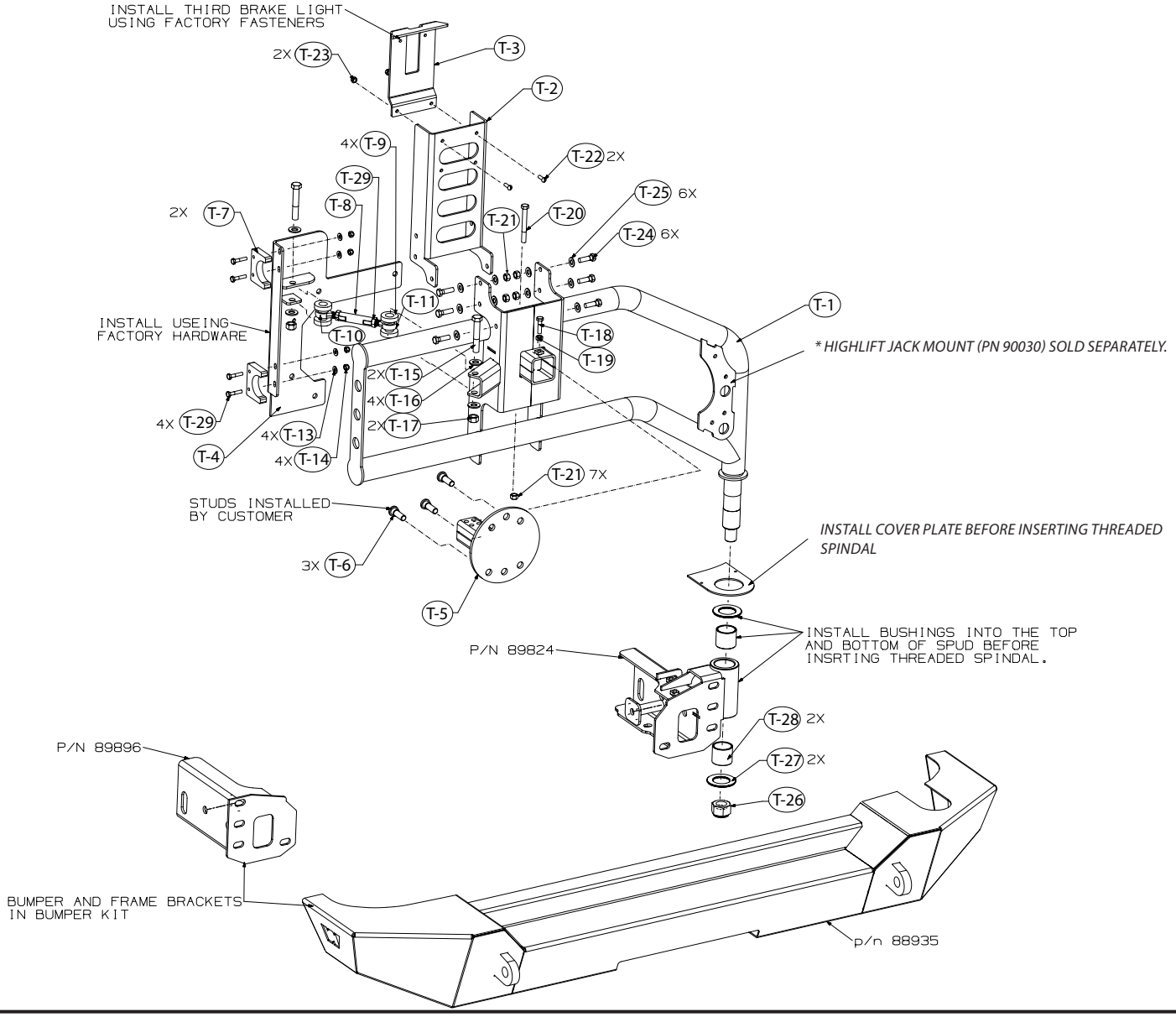


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TIRE CARRIER PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QTY
T-1	89794	TIRE CARRIER	1 EA
T-2	89788	TIRE SUPPORT BRACKET	1 EA
T-3	90038	BRAKE LIGHT BRKT	1 EA
T-4	89792	TAILGATE BRACKET	1 EA
T-5	89790	TIRE MOUNT	1 EA
T-6	36325	WHEEL STUD	3 EA
T-7	90047	WEAR BLOCKS	2 EA
T-8	89904	TENSIONER TUBE	1 EA
T-9	90126	BUSHINGS	4 EA
T-10	89902	TIE ROD END	1 EA
T-11	90037	TIE ROD END	1 EA
T-12	13253	HEX BOLT ¼-20	4 EA
T-13	1320	FLAT WASHER ¼-20	4 EA
T-14	6725	HEX NUT NYLOCK ¼-20	4 EA
T-15	63399	HEX BOLT ½-13 X 3.0	2 EA
T-16	9213	FLAT WASHER ½"	4 EA
T-17	29060	HEX NUT NYLOCK	2 EA
T-18	13470	HEX BOLT 5/16 X 1	1 EA
T-19	2079	HEX NUT 5/16	1 EA

ITEM	PART NUMBER	DESCRIPTION	QTY
T-20	11709	HEX BOLT 3/8 X 3 ¼	1 EA
T-21	6779	HEX NUT NYLOCK 3/8	7 EA
T-22	1971	CAP SCREW ¼-20	2 EA
T-23	6725	NUT LOCK ¼-20	2 EA
T-24	6960	HEX BOLT 3/8-16 X 1 ¼	6 EA
T-25	11524	FLAT WASHER 3/8	12 EA
T-26	90049	HEX NUT NYLOCK	1 EA
T-27	90298	THRUST WASHER	2 EA
T-28	90299	OIL LITE BUSHING	2 EA
T-29	89903	½-20 JAM NUT RH	1 EA
T-30	90141	½-20 JAM NUT LH	1 EA



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1. Remove the factory rear bumper and brackets from the vehicle. See Figure 1.

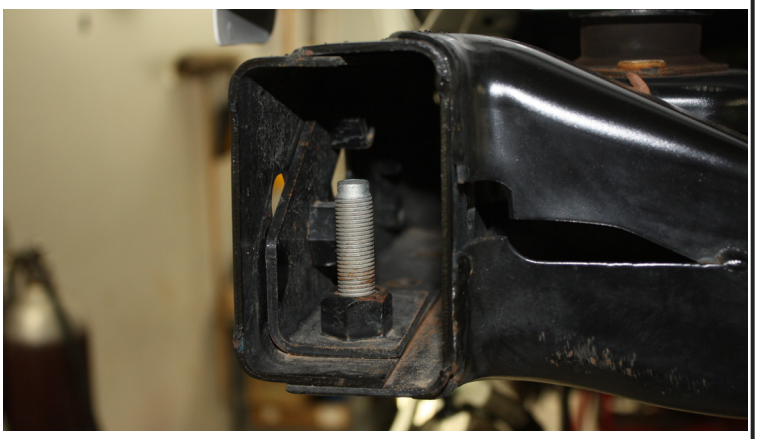


Figure 1

2. Disassemble the third brake light and unplug it from the wire loom that comes out of the tailgate. Retain hardware for later re-install.

3. ***If installing the Tire Carrier***, remove the factory tire mount from the tailgate. Save hardware. ***NOTE: You do not need to remove the factory tire mount if you are only installing the rear bumper.***



Figure 2

4. Insert the driver's side inner frame bracket (A6) into the driver's side frame rail until the holes on the bracket align with the frame rail holes.

5. Repeat step for passenger's side bracket (A5).

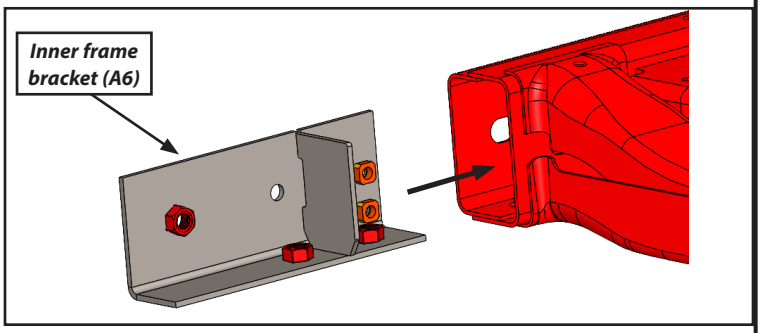


Figure 3

6. Place the outer frame bracket (A3) on the outer side of the driver's side frame rail.

WARNING Always wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.

NOTE: If your vehicle's frame does not have the two bottom holes:

- ***Loosely place two 1/2" bolts to align the outer frame bracket with the inner frame bracket.***
- ***Use a punch or pen paint to mark the two bottom hole locations on the frame.***
- ***Remove the outer and inner frame bracket.***
- ***Use a 5/8" drill bit and drill to create the holes. DO NOT drill through the weld nuts on the inner frame bracket.***
- ***Reinsert the inner and outer brackets.***

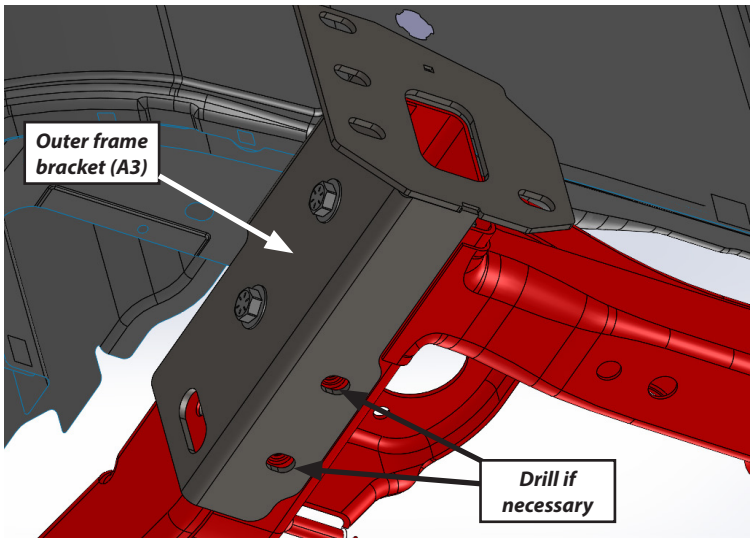


Figure 4

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7. Place the passenger's side outer frame bracket (A2) on the frame rail.

8. Insert the two bushings (T-28) in the passenger's outer bracket.

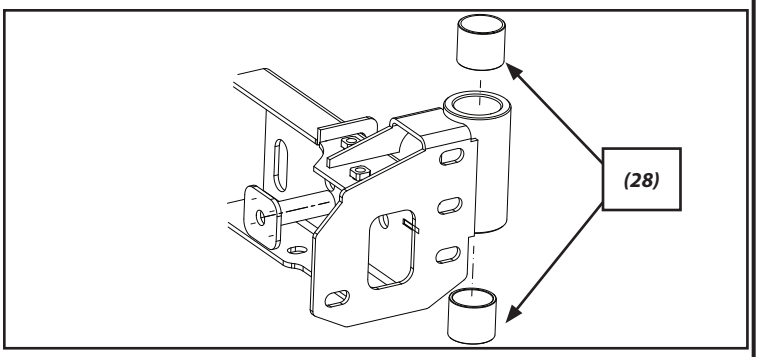


Figure 5

9. Insert one 1/2" x 4-1/2" bolt (B7) with washer (B1) through the outer frame bracket, inner frame bracket and vehicle frame's forward most hole. Secure bolt with one frame plate (A7), washer (B1) and 1/2" lock nut (B6).

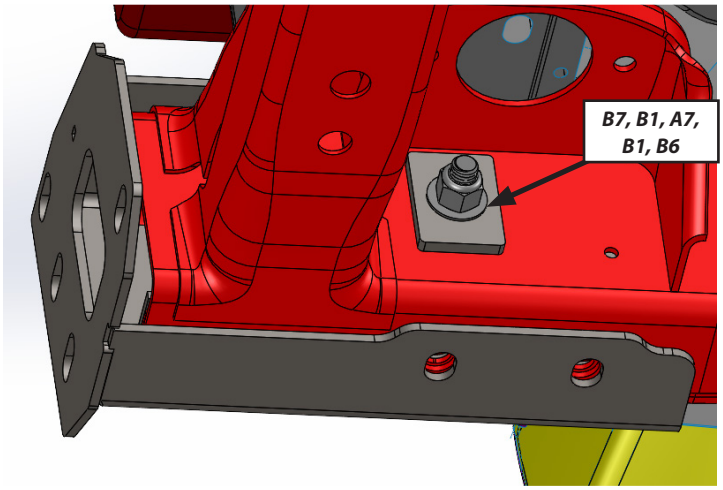


Figure 6

10. Insert one 1/2" x 1-1/4" bolt (B3), lock washer (B4) and flat washer (B1) through the outer frame bracket's and frame's rear most hole and into weld nut.

NOTE: Do not tighten the frame bracket mounting hardware at this time to allow for adjustments. Tighten the hardware just enough to take most of the slack out of the fit between the vehicles frame and the frame bracket.

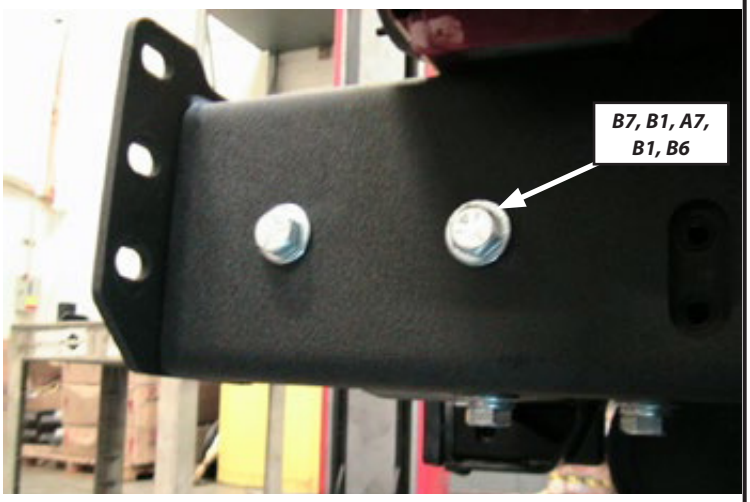


Figure 7

11. Install two 3/8 x 1-1/4 bolts (B12) and nuts (B10). These are used to align the frame bracket tube. This will allow you to align the frame bracket tube to the tailgate hinges for a smooth operation. Do not tighten at this time.

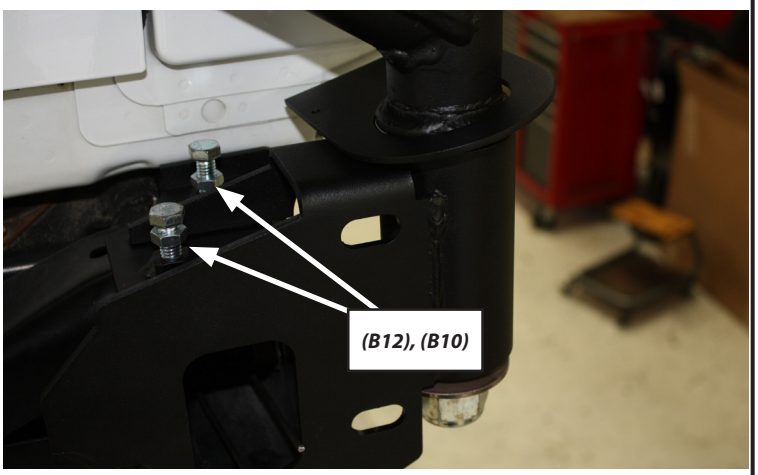


Figure 8

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12. Install the tailgate bracket (T-4) using your factory tire mount hardware.

13. Install the two wear blocks (T-7) using four ¼-20 bolts (T-12). Do not tighten the wear blocks completely because you will need to adjust them to the tube after you adjust the frame bracket. Refer to exploded view on page 4.

    NOTE: Reinstall the rest of the factory tire mount hardware into the tailgate, where there are open holes.

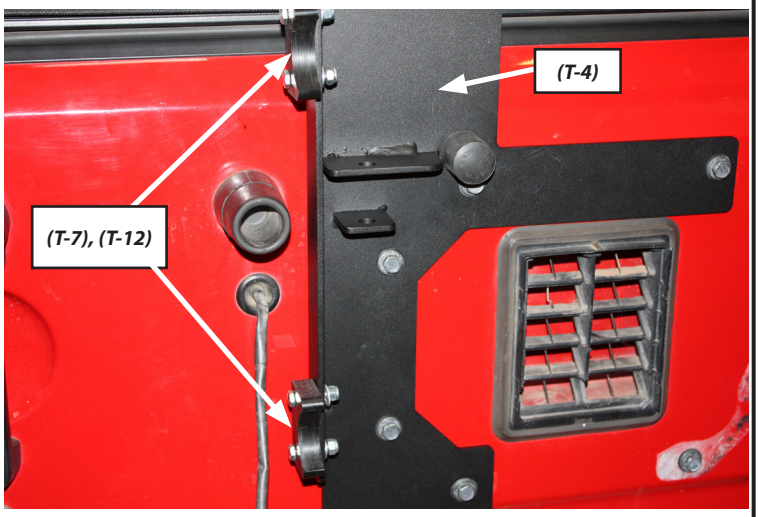


Figure 9

14. To aid in the installation of the tire carrier (T-1), grease the threaded spindle of the tire carrier before you install it into the tire carrier frame bracket.

NOTE: Install the bumper cover plate (A4) and one of the thrust washers (T-27) over the spindle BEFORE installing the tire carrier into the bracket.

15. Install the tire carrier with cover plate and washer into the bushing/ frame bracket. Once you have the tire carrier's spindle all the way in, install the second washer and the nylock nut (T-26). Tighten until the slack is out of the tire carrier making sure it swings easily.

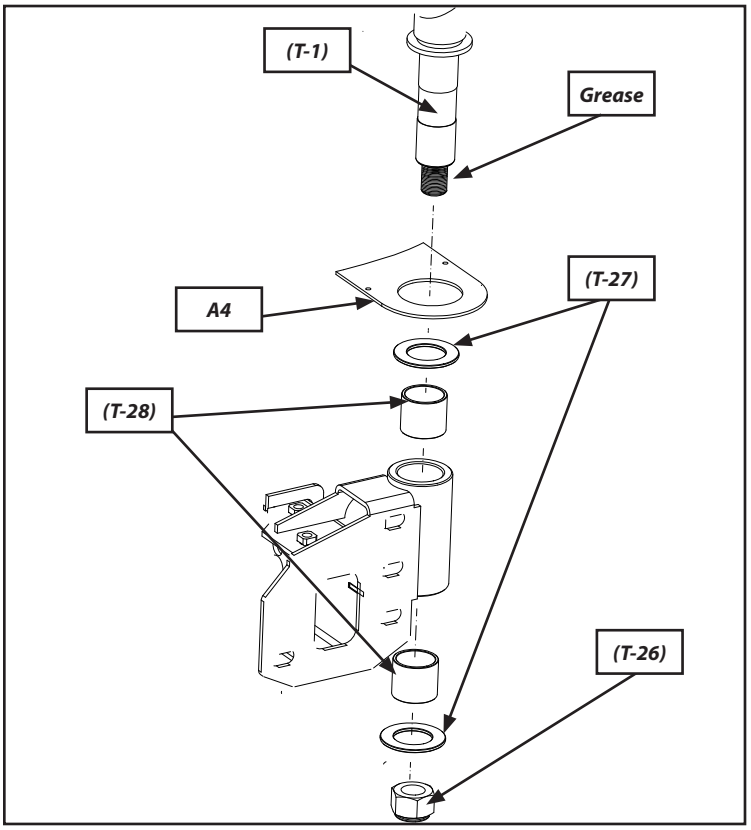


Figure 10

16. Swing the tube assembly toward the tailgate; you will notice that the tube assembly does not line up with the body lines of the tailgate.

    Adjust the screws (installed in step 11) on the frame bracket and tighten the nuts until the tube assembly lifts into a suitable position that matches the lines of the vehicle. You may now set the wear blocks by tightening the wear block hardware, installed in step 13.

17. Once the tire carrier has been aligned, tighten the passenger side frame bracket completely. Be sure the tube assembly stays in alignment.

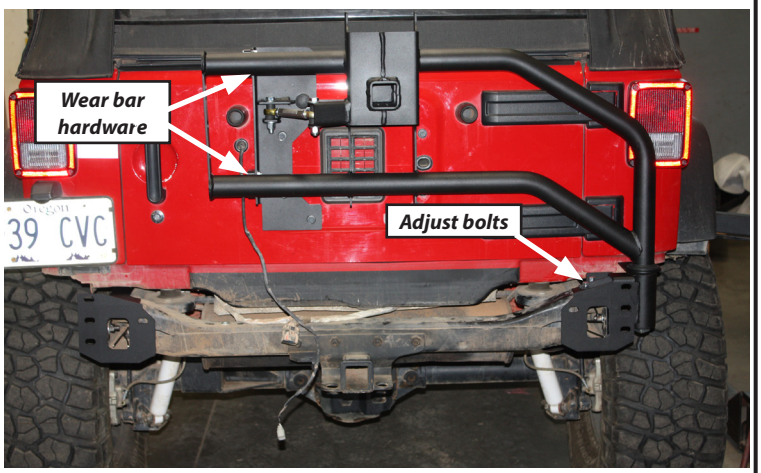


Figure 11

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18. Connecting the tire carrier to the tailgate bracket:

NOTE: Please note that there is a left and right hand jam nut and tie rod end. Do not force thread any of these items. The tensioner tube also has a left and right hand threads in it as well.

- Install the left and right hand ½-20 jam nuts (T-29 &T-30) to the left and right hand tie rod ends (T-10 &T-11).
- Thread the tie rod ends into each end of the tube (T-8).
- Wait to tighten the jam nuts until you have attached the assembly to the vehicle to allow for adjustment.
- Attach the assembly to the tailgate bracket, using four rubber bushings (T-9), two ½-13 hex head bolts (T-15), four flat washers (T-16) and two ½-13 nylock nuts (T-17). Refer to exploded view.
- **Adjustment**: The tubes should hit the wear block about an inch to an inch and a half before the door fully closes. This will give an accurate and tight fit. Once fit has been achieved, tighten the jam nuts.

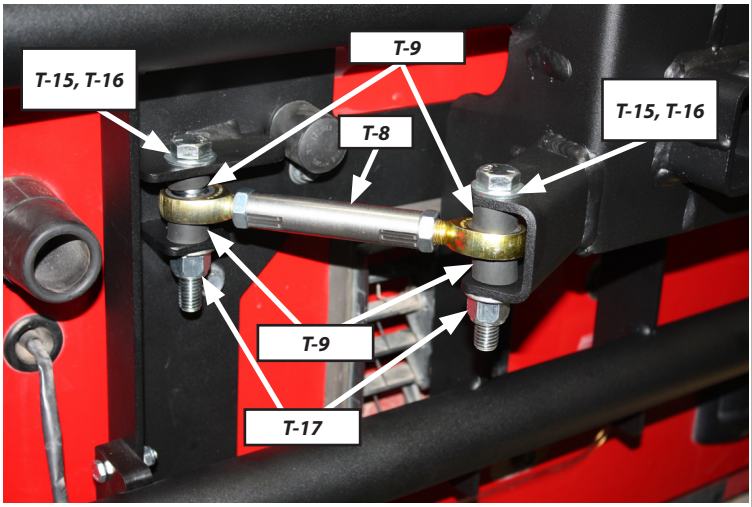


Figure 12

19. You can now install the tire support bracket (T-2) with the 3/8 hex head bolts (T24), washers (T-25) and nuts (T-21). Refer to exploded view.

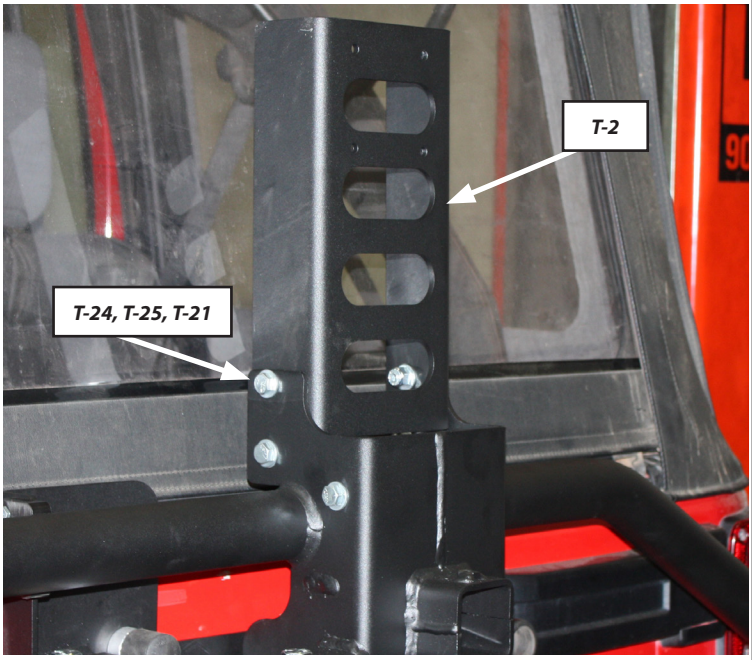


Figure 13

20. Install the third brake light to light bracket (T-3) using factory hardware. ***NOTE: You may have to cut the plastic on the light to make it fit the new bracket.***
NOTE: It will be required to lengthen the wiring to the third brake light. Use approximately two twelve inch long 18ga. wires and four butt connectors. Make sure you reconnect the wire harness to the light, and route the harness so it does not interfere with the function of the tire carrier.

21. Install light bracket to tire support bracket using two ¼-20 bolts (T-22) and ¼-20 lock nuts (T-23).

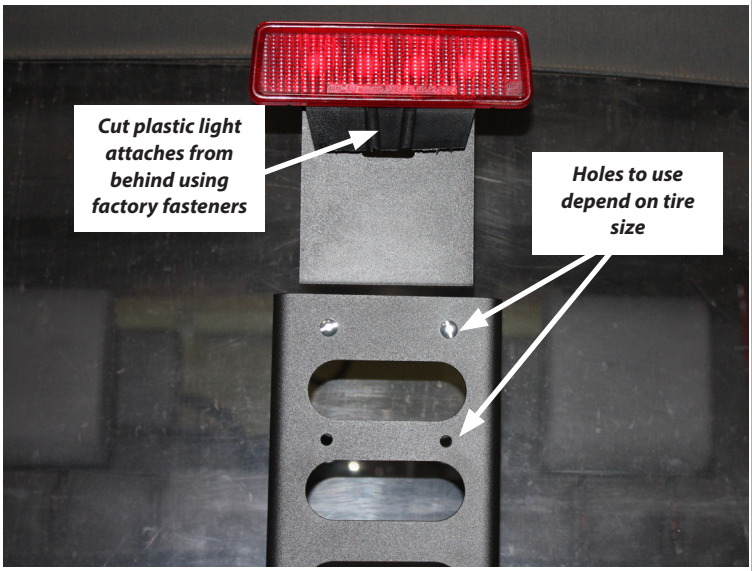
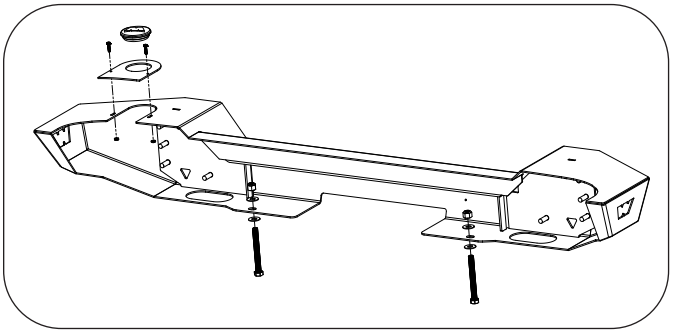


Figure 14

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⚠WARNING Always use assistance when moving or lifting heavy parts.

23. Before installing the spare tire mount and tire, attach the bumper. ***NOTE: Remember the driver's side frame bracket is still loose, it will need to be tightened after the bumper is in position.*** Trim the wires off the wire nut assemblies using a pair of side cutters, and bending the wire at the same time. You'll notice that the bumper has studs that will align with the frame brackets. Have someone help you slide the bumper onto the frame brackets.
24. Secure bumper cover plate with hardware (B9 & B13).
25 Secure bumper using the 7/16 flat washers (B1), lock washers (B5) and nuts (B2) onto the bumper studs. Center the bumper and tighten all hardware including the frame bracket.
26. If you are not installing the tire carrier, insert the rubber insert (B1) into the tire carrier hole.
27. Using the bottom of the bumper as a guide, drill a 1/2" hole through the rear cross member of the frame. Drill through the bottom and top of the cross member.
28. Install 1/2" x 4 1/2" bolts (B7), flat washers (B1) and nylock nuts (B6) at this time.



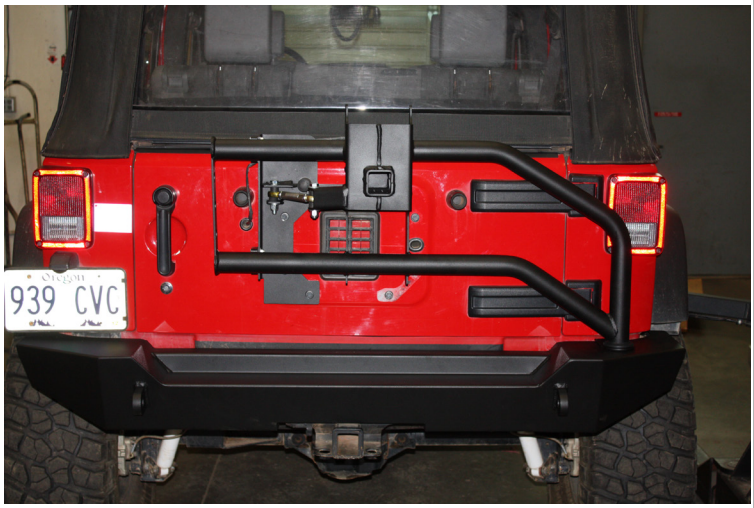


Figure 15

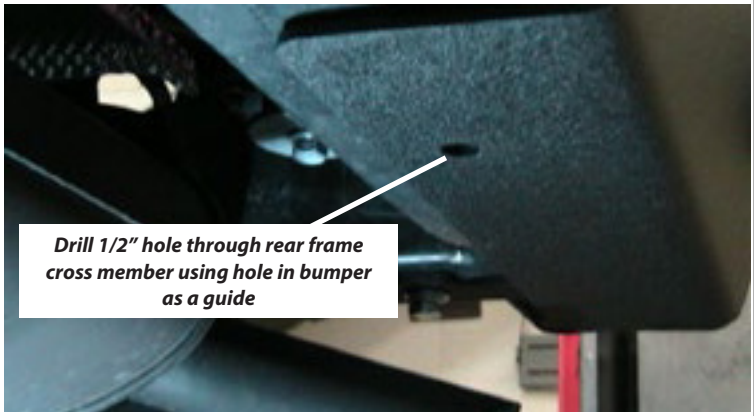


Figure 16

29. Install the three wheel studs (T-6) into the tire mounting bracket (T-5) by aligning the holes in the bracket to the hole in your wheel. You will have one of two patterns.
30. Place the plate to the back of the wheel and use your lug nuts to draw the studs into the plate. You can also press the studs in using a press or a vise and a hammer. If you are using a 5 on 5 ½ wheel use the outer hole pattern. If you are using the 5 on 5 wheel, use the inner hole pattern.
31. After the wheel studs are installed, mount the tire to the bracket.
32. Lift the tire and the bracket up and insert into the tire receiver.
33. There are a set of holes behind the receiver, you want to mark the hole that would require you to push the tire about 1/4" to 3/8" more, but you can't at this time.

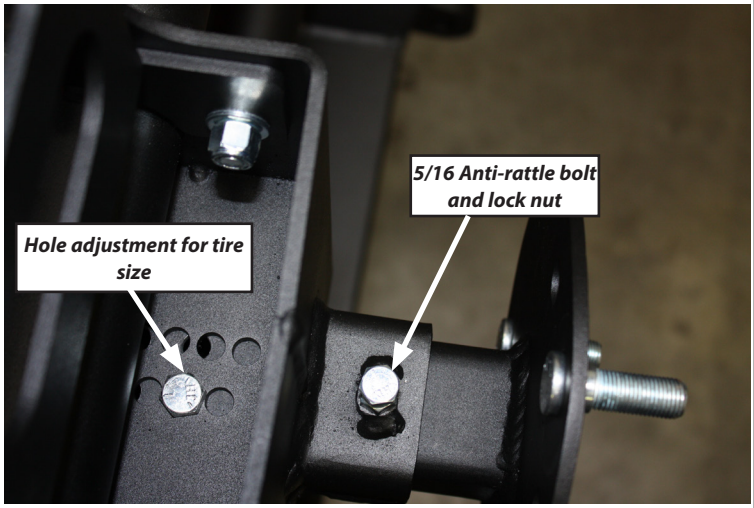


Figure 17

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34. Remove the tire w/ bracket from the receiver and remove the bracket from the wheel. Place the bracket back into the receiver aligning the hole that you marked and insert the long 3/8 bolt (T-20). Secure with the 3/8 lock nut (T-21) and tighten.

    NOTE: Depending where the hole location lands for your wheel, you may have to run the bolt up through the bottom of the center bracket. Also in the event that you can't find a hole to align with you may have deflate tire and reinflate after mounting.

35. Reinstall the tire to the bracket, if adjusted correctly, the tire should compress to the tire carrier as you tighten your lug nuts.

    NOTE: The plastic inner fender on the rear wheel well hangs out. We recommend that you trim this off using a hacksaw blade or a good pair of tin snips.

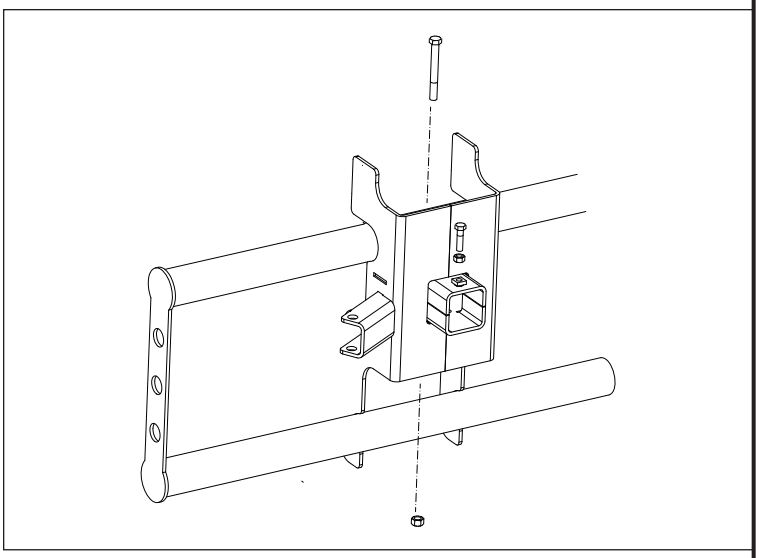


Figure 18



MAINTENANCE / CARE

1. Inspect all parts on the bumper, bumper mount, 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.

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.

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