

# INSTALLATION INSTRUCTIONS ELITE FRONT BUMPER

Part Number: 101410, 101450, 101465 and 101420

**Application: JK Wrangler Elite Front Bumper** 

# 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:

**AWARNING** signals a hazard that could cause serious injury or death, if you do not follow recommendations. **ACAUTION** 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 A **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. 🗚 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.

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#### 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.

# ΝΟΤΕΣ

The Warn Elite Bumper for the Jeep JK will accept a large range of mid frame winches with up to 12,000 lb. capacities. The Bumper has been designed to accommodate the standard  $4-1/2 \times 10^{"}$  feet down mounting pattern as well as the  $4-1/2 \times 6^{"}$  short drum pattern. The Warn PowerPlant, 8274 and 9.5 CTI are NOT compatible with this bumper.

#### BEFORE YOU BEGIN

- The Elite Bumper provides standard 4 ½" x 10" and 4 ½" x 6" short drum mounting holes. Installation of some winches may require sheet metal trimming. The Warn ZEON winches require trimming of both mounting flanges, instructions for doing so are included.
  Full width Elite Bumpers are compatible with factory fog lamps using provided brackets. Stubby Elite Bumpers do not reuse factory
- fog lamps. Both Elite Bumpers provide mounting locations for aftermarket lights on the top of the bumper.
- Both Elite Bumper styles are not compatible with the factory skid plate. It will not be reinstalled after installation of the Warn Elite Bumper.

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# TOOLS REQUIRED

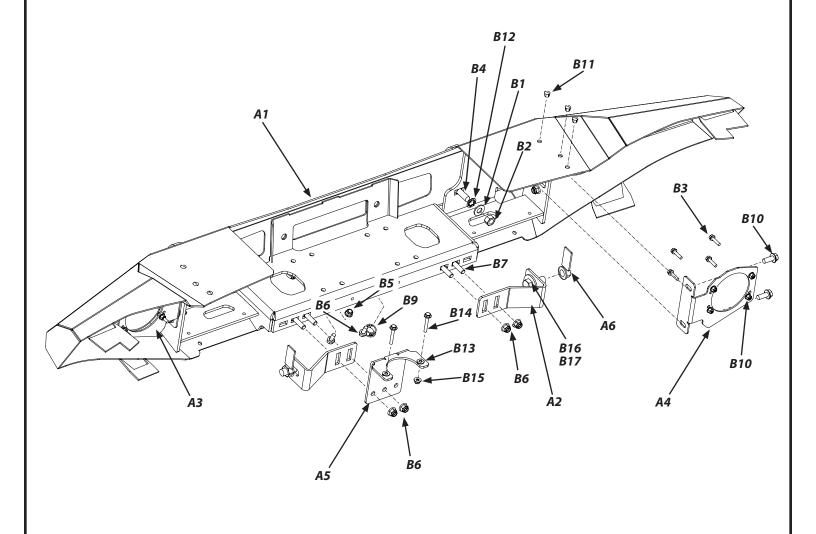
- Ratchet, extensions, universal
- Sockets: Standard and Metric
- End Wrenches: Standard and Metric
- Phillips Screwdriver
- Metal cutting saw

#### TORQUE SPECIFICATIONS

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

| FASTENER SIZE FASTENE |       | VER 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)       | М6            | (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)      |               |                 |       |

| _  |                |                      | ΡΑΚΤΣ | LIST |                |                             |      |
|----|----------------|----------------------|-------|------|----------------|-----------------------------|------|
| ID | Part<br>Number | Description          | Qty.  | ID   | Part<br>Number | Description                 | Qty. |
| A1 | 101414         | BUMPER               | 1     | B1   | 9213           | FLAT WASHER                 | 6    |
| A2 | 101453         | ANTI NOD BRACKET     | 2     | B2   | 29060          | NYLOCK NUT                  | 6    |
| A3 | 101455         | LH FOG LIGHT BRACKET | 1     | B3   | 64108          | M6 FLANGE HEX CAPSCREW      | 8    |
| A4 | 101454         | RH FOG LIGHT BRACKET | 1     | B4   | 101412         | 1/2" CARRIAGE BOLT          | 6    |
| A5 | 101448         | VACUUM PUMP BRACKET  | 1     | B5   | 71588          | M8 HEX FLANGE NUT           | 2    |
| A6 | 88041          | NUT PLATE            | 2     | B6   | 78648          | M8 HEX FLANGE BOLT          | 2    |
|    |                |                      |       | B7   | 81707          | M10 CARRIAGE BOLT           | 4    |
|    |                |                      |       | B8   | 83125          | M6 FLANGED NUT              | 8    |
|    |                |                      |       | B8   | 87166          | M10 ELASTIC NUT             | 8    |
|    |                |                      |       | B9   | 90846          | PLASTIC LOCKING PLUG        | 4    |
|    |                |                      |       | B10  | 93078          | M10 CAPSCREW                | 4    |
|    |                |                      |       | B11  | 100772         | LOCKING PLUG                | 6    |
|    |                |                      |       | B12  | 101259         | 1/2" PUSH NUT BOLT RETAINER | 6    |
|    |                |                      |       | B13  | 82930          | M6 FLAT WASHER              | 6    |
|    |                |                      |       | B14  | 65988          | M6 HEX CAPSCREW             | 2    |
|    |                |                      |       | B15  | 87167          | M6 ELASTIC NUT              | 2    |
|    |                |                      |       | B16  | 6819           | 5/8 HEX CAPSCREW            | 2    |
|    |                |                      |       | B17  | 9471           | 5/8 FLAT WASHER             | 2    |



1. Remove the original skid plate cover by removing four plastic skid plate fasteners across the front of the cover.

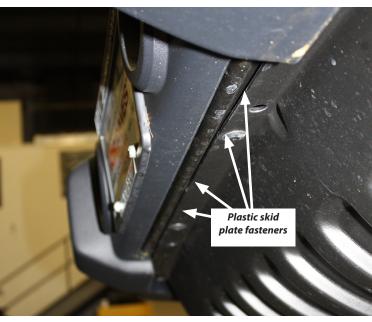


Figure 1

2. Remove skid plate fastener (one on each side) by the wheel well. Set aside plastic skid plate cover.



Figure 2

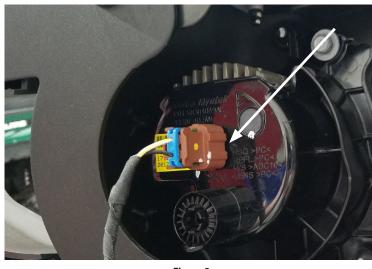


Figure 3

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If your vehicle came equipped with factory fog lights, locate the wiring harness and unplug.

3.

4. Detach wire harness from the bumper (held in place by four retaining clips). Let harness hang.



Figure 4

# A CAUTION

• Always use assistance when moving or lifting heavy parts.

5 Using an 18mm socket, remove the bumper nuts (8 total). *Two on the inside and two on the outside of each frame rail* (*each side*)



Figure 5



Figure 6



Figure 7

- 6. With assistance, remove bumper.
- 7. Remove the two plastic fasteners securing the top plastic cover in place. Remove and set aside.

8. If planning on reusing fog lights, be sure to remove from stock bumper.



Figure 8

9. The factory fog light must be trimmed to match the supplied fog light bracket as shown.

Using a 7mm or 17/64" size drill, enlarge factory mounting holes.

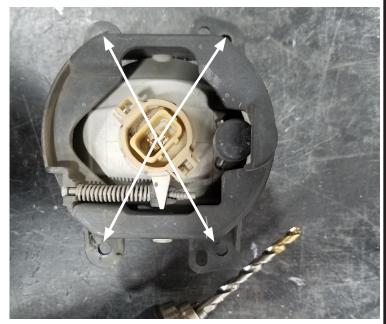


Figure 9

10. Install factory fog lights onto the new fog light brackets (A3 and A4) using supplied hardware (B3 and B8).



Figure 10

11. Mount fog light assembly to new bumper with hardware B10 and B8. *The brackets are side orientated.* 

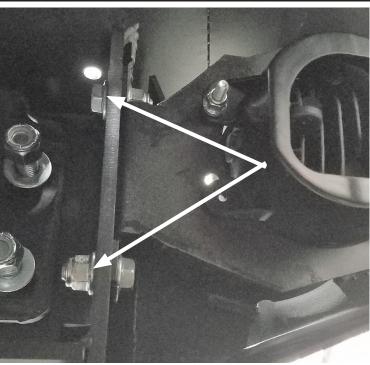


Figure 11

NOTE: The next few steps are for the removal of the vacuum pump. If your vehicle is <u>not</u> equipped with a vacuum pump, move to step 17.

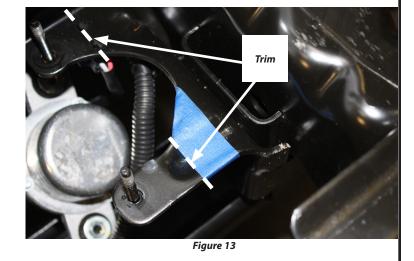
12. Remove the vacuum pump from factory bracket. Do not remove any connections. Place pump up and out of the way for now.



Figure 12

#### M WARNING Always use extreme caution when cutting and trimming.

13. Use a saw to trim the left and right pump bracket arms. Be careful not to damage any lines or wires.



- 14. Touch up raw edge with paint to prevent rust.
- 15. Carefully disconnect the hoses and electrical connection. Be careful not to strain or kink the lines, wires or fittings.

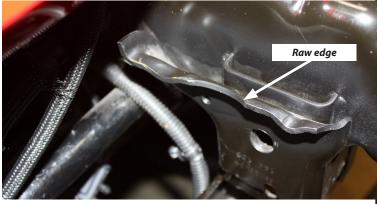


Figure 14

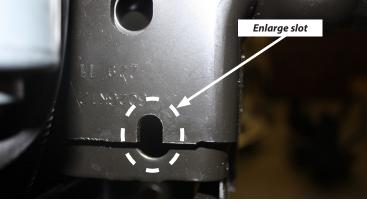


Figure 15



Figure 16

20. To install the anti-nod bracket, first insert the nut plate (A6) into the frame.

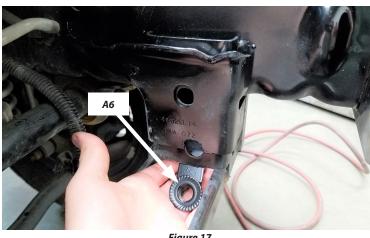


Figure 17

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16. Use a grinder or file to enlarge the slot in the factory pump bracket to match the frame hole behind it, about 5/8" diameter. Touch up raw edge with paint to prevent rust.

- 17. You will need to cut a portion of factory bumper frame mount in order for new bumper to fit.
- 18. Using a paint pen to trace out where the bumper will sit.
- 19. Using a metal reciprocating saw carefully cut marked section. Be sure to not damage any lines or wires. Touch up raw edges with paint to prevent rust.

21. Line anti-nod bracket (A2) holes up with nut plate. Insert bolt (B16) and washer (B17) through bracket, frame and nut plate and tighten.



Figure 18

B4, B12, B1

and B2

- 22. Install six carriage bolts (B4) through new bumper mounting holes.
- 23. With assistance, fit up bumper to vehicle mount frame bracket.
- 24. Secure bumper in place with bolt retainer (B12), washer (B1) and nut (B2). Tighten according to torque specification on page 2.

- 25. If your vehicle is equipped with a vacuum pump, install the vacuum pump bracket (A5) behind the anti-nod bracket.
- 26. Install two M10 bolts (B7) through vacuum pump bracket, anti-nod bracket and bumper. Secure with nuts (B8).

NOTE: For other side you will not have a vacuum pump bracket. You will be securing the anti-nod bracket to bumper with two bolts (B7) and nuts (B8)

- 27. Secure canister to bracket with two screws (B14), washers (B13) and nuts (B15).
- 28. Tighten ALL hardware at this time.

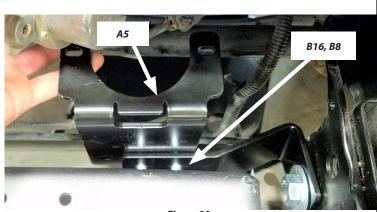


Figure 19





Figure 21

- 29. Place winch in place. Install winch according to winch installation directions.
- 30. Be sure winch is not hitting on vehicle mounting bracket. If winch is interferring with bumper bracket, remove winch and trim off more bracket. *Refer to steps 17-19*.
- 31. Once fit up is confirmed with no interference, tighten ALL hardware again.

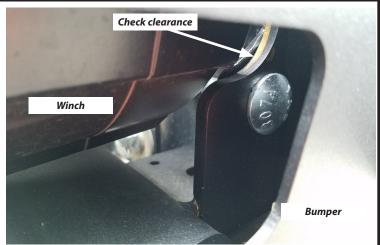


Figure 22

- 32. Install fairlead per installation instructions.
- 33. Reconnect the plug for the fog light harness. *NOTE: For* original fog lights, the driver side of the electrical connector may need to be lengthened. This can be done by cutting the corrugated wire loom to allow the electrical connection to not be restricted by the wire loom.
- 34. If aftermarket lights are being installed, holes are provided on top of the bumper. Use provided plugs (B11) if aftermarket lights will not be used.
- 35. Installation is now complete.



Figure 23

# MAINTENANCE / CARE

- 1. Inspect all parts on the winch, winch 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.

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