

## **Instructions**

### JEEP JL/JT + JK MODULAR FRONT BUMPER

Thank you for purchasing your JL/JT or JK Modular Front Bumper from AAL! We greatly appreciate your trust in our company. We take that purchase and your commitment to us very seriously. If you have any questions along the way, please don't hesitate to give us a call at 385.202.4188.

\*\*Please read these instructions thoroughly before starting this project.\*\*

\*\*These instructions cover both Jeep JL/JT and JK models. Steps specific to each model will be clearly labeled as such to avoid confusion.\*\*



### NOTE: Some cutting or drilling may be required for your install!

### **Tools Required:**

There is more than one tool for every job, but below is the list of tools we use for this installation.

Some will apply to both models, some will be model specific. Tools listed are for bumper assembly only, as disassembly tools will vary.

- Impact Wrench or Ratchet
- Additional Ratchet
- 19mm Deep-Well Socket
- 16mm Socket
- 3in Extension
- 19mm Wrench
- 13mm Wrench

- 10mm Wrench
- 4mm Allen
- 5mm Allen
- Rivnut Installation Tool
- Needle-Nose Plyers
- Angle Grinder/Recipricating Saw
- Drill w/ 3/8" drill bit

### What's included:

Winch Tray	1	Fascia Spacer Plates (JL/JT)	2
Front Fascia Plate	1	M12 x 50mm Hex Bolts	8
Optional End Caps (Left & Right)	1 ea	M12 x 25mm Hex Bolts (JK)	2
Vacuum Pump Bracket (JK)	1	M12 Flat Washers	18

M12 nylon-insert locknuts	10	M6 x 14mm Button Head Flange Bolt	2
M8 x 20mm Button Head Bolts	9	M6 nylon-insert locknuts	12
M8 nylon-insert locknuts	9	M6 Rivnut	2
M6 x 35mm Button Head Bolts	4	End Cap Spacers	4
M6 x 20mm Button Head Flange Bolt	8	Fascia Hole Plug	2

\*\* If you purchased the optional Light Pod Brackets, have no fear, their hardware is here!

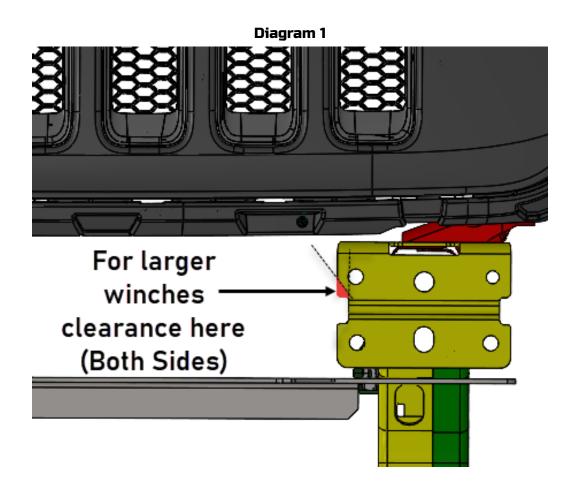
If you didn't, you will have some extras.\*\*

### **Step 1 - Teardown and Prep**

Start by removing the factory front bumper. If equipped, you will need to disconnect and remove the factory fog lights along with any factory skid plates or splash guards.

**JL/JT Only:** You will need to hang on to (2) of the (4) OEM M10x27mm(16mm head) bolts that were used to secure the (4) bumper reinforcement brackets to the frame.

**Note** – If you're running a larger bodied winch, you may need to clearance one of the inner ears on the frame horns a little. See *Diagram 1 for identification*. After cutting, de-bur the remaining bracket, and paint any exposed metal to prevent rust.



### JK Only: If you have a JL/JT, move on to Step 2.

Next, unbolt the factory vacuum pump located on the inside of the driver's side frame rail and set it aside. Using a paint maker or soapstone, mark, and, using a reciprocating saw or cut off wheel, remove the shaded section of the bracket as shown in Diagram 2. De-bur the remaining bracket, and paint any exposed metal to prevent rust.

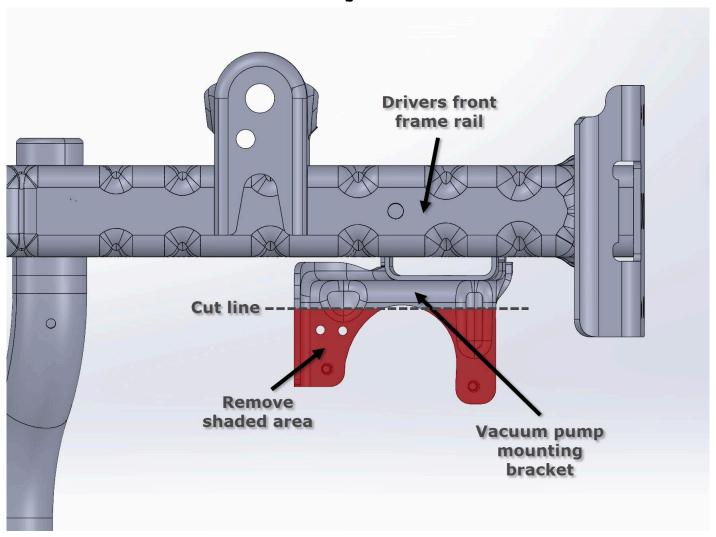


Diagram 2

### **Step 2 - Winch Tray Installation**

Now that everything has been removed, locate the winch tray and the applicable hardware.

**JL/JT**: (2) M10 OEM bumper reinforcement bracket bolts you saved from the teardown.

JK: (2) M12x25mm hex head bolts, (2) M12 washers, and (2) M12 nylon-insert locknuts.

Place the winch tray between the frame rails, as shown in Diagram 3, and hand tighten the hardware mentioned above. *Diagram 3 shows the JK assembly, but the JL/JT will go in just the same.* 

## (JK)M12 Nylock Nuts (JK)M12x25mm Bolts & Washers (JL/JT) 0EM M10 Bolts Relocation Bracket

Diagram 3

Caution - Be mindful of any wiring that may need to be rerouted to avoid pinching the harness once the winch tray is installed.

### JK Only: If you have a JL/JT, move on to Step 3.

Winch Tray (JK Shown)

Next, locate the vacuum pump relocation bracket and attach it to the pump using (2) M6x35mm button head bolts and (2)M6 nylon-insert locknuts. *NOTE - The pump will live on the bottom side of the relocation bracket tabs*.

Once assembled, mount the vacuum pump/bracket to the back of the winch tray using (2) M6x20mm button head flange bolts and M6 nylon-insert locknuts. Hook up all connections and tighten bolts.

**NOTE** - Make sure that the vacuum pump is not contacting anything. If so, make any necessary adjustments by, simply, bending the bracket a little.

### Step 3 - Front Fascia Plate Assembly

Locate the Front Fascia Plate. **Note -** It is recommended to go ahead and install your fairlead using the hardware provided with it.

Locate (2) M12x50mm bolts, (2) M12 Nulock nuts, (5) M8x20mm button head bolts, (5) M8 nylon-insert locknuts, and (2) Fascia Plate Spacers (JL/JT Only). Using the M12 bolts on opposite sides for alignment into the frame horns, install the Fascia Plate onto the frame.

**JL/JT Only:** The Fascia Plate Spacers will be installed between the Fascia Plate and the frame. *See diagram 4.* 

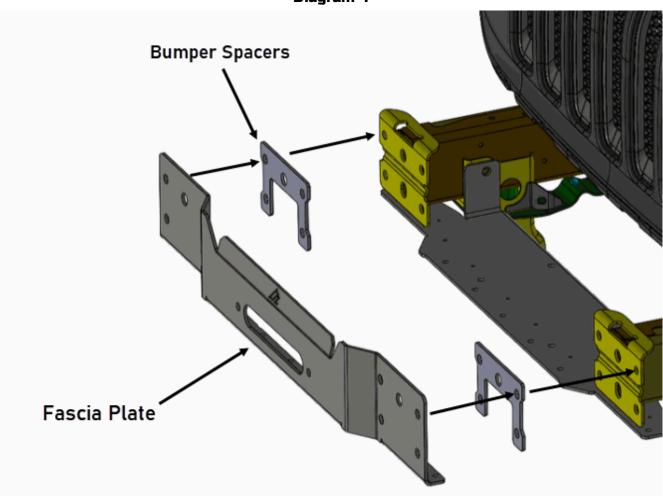


Diagram 4

NOTE - The lower flange will land **under** the winch tray.

Next, install (5) M8x20mm button head bolts with M8 nylon-insert locknuts in the orientation and locations shown in Diagram 5 and tighten.

# Diagram 5 M12x50mm bolts go here for alignment Front Fascia Plate (5) M8x20mm Button Head Bolts

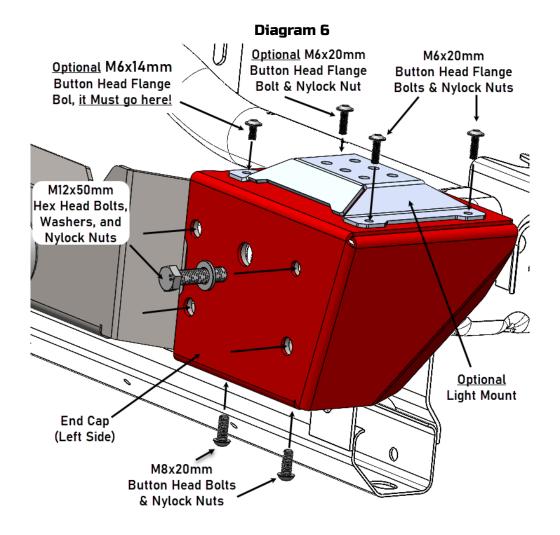
Using (2)M12 nylon-insert locknuts, snug the (2)M12 alignment bolts. This will locate the winch tray and fascia plate to the frame. Now, tighten the (2)M12x25mm bolts(JK) or (2)M10 OEM bumper reinforcement bracket bolts (JL/JT) that were installed in the winch tray in the previous step.

### Step 4 - End Cap Assembly and Installation

For this step, you'll need the left and right bumper end caps, (4) M6x20mm button head flange bolts, (4) M6 nylon-insert locknuts, (2) M6 Rivuts, (2) M6x35mm button head bolts, (4) M8x20mm button head bolts, (4) M8 nylon-insert locknuts, (8) M12x50mm hex head bolts, (16) M12 washers, and (8) M12 nylon-insert locknuts.

Before installing the end caps on the bumper, it is easier to first install the (2) M6x20mm button head flange bolts as shown below.

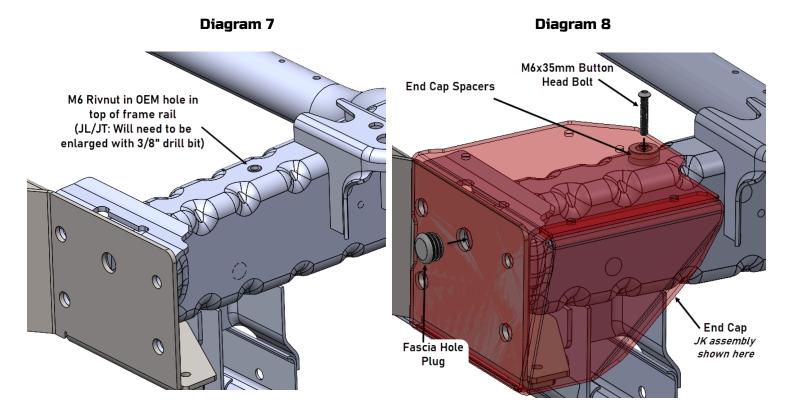
**NOTE -** If you purchased the optional light pod mounts, it is recommended to install them to the end caps now using (1)M6x14mm button head flange bolt, (3) M6x20mm button head flange bolts, and (4)M6 nylon-insert locknuts. Repeat for both end caps. See Diagram 6 for specific bolt locations and bracket orientation.



### Next,

<u>JK:</u> Using a suitable tool, install the M6 rivnuts in the OEM holes in the top of the frame rails as shown below.

<u>JL/JT:</u> Using a %" drill bit, enlarge the holes in the top of the frame rails, then install the M6 rivnuts in the OEM holes in the top of the frame rails as shown in diagram 7. The image is of the JK assembly, but the hole on the JL/JT will be in a similar location.



Remove the two M12x50mm "alignment bolts" from the front of the winch plate. You can now place the end caps over the ends of the winch plate and install with (4) M12x50mm hex bolts, (8) washers, and (4) nylon-insert locknuts as shown in Diagram 6. **Note - If installing optional shackle mounts, install them at this time on the outside of the end caps.** 

Next, place the supplied spacer(s) between the previously installed rivnut and the end cap, as shown in Diagram 8, and install with a M6x35mm button head bolt. *Note - this hole location is a little different between the JK and JL/JT, but we have made provisions for both, but only one will line up for your application.* 

If you are not installing optional shackle mounts, insert the supplied rubber plug into the shackle alignment hole as shown in Diagram 8.

Repeat this process for both sides, but leave hardware loose until everything is in and started; then you can tighten all hardware.

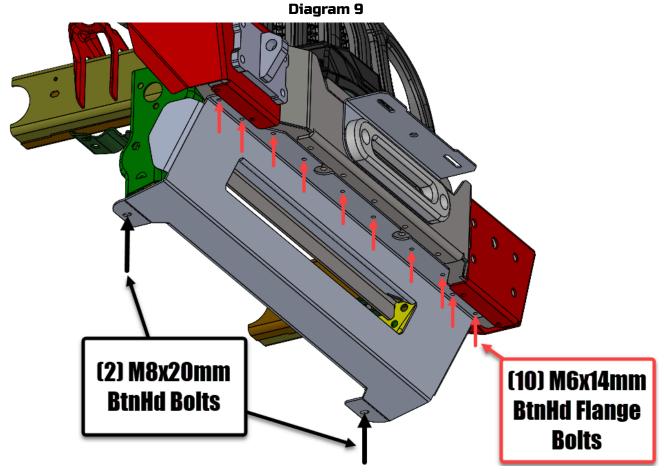
### **Step 5: Install Your Winch**

Prepare the winch for installation according to the manufacturer's specifications and place it into the winch tray, install the manufacturer's hardware, and tighten according to the manufacturer's specs.

### **Splash Guard Installation:**

### \*\*Currently only available for the JL/JT Modular Front Bumper\*\*

If you purchased the optional Splash Guard, assemble as shown in diagram 9. Using the hardware you received with your Splash Guard.



There are multiple ways to mount a light bar. We've added basic provisions to mount a 20" single row light bar, but we leave it up to the customer's discretion on how they install their light bar.

### **Step 6: Share Your Photos**

We take great pride in building our products and we hope that pride extends to you after installing your Modular Front Bumper. If you are able to share your photos online (Facebook and Instagram), please tag **@AmericanAdventureLab**. We would love to see how it turned out and give you some reciprocal attention in return!

Congrats! You're all done!

### Thank you!

At American Adventure Lab, we strive to improve anywhere we can. If you experience any issues with this product or have any suggestions, please let us know.

If you have any questions or concerns, please don't hesitate to reach out to us at 385.202.4188 or via email at <a href="mailto:Support@erp.adventurelab.com">Support@erp.adventurelab.com</a>.

