



EVO Manufacturing
Jeep Wrangler JL/JLU
Rear Alumilite Bumper
EVO- 3111AL





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 MANUFACTURING. 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

Cutting and grinding will be necessary for this installation.

May need to use a second person to ease install.

Keep all mounting bolts loose (installed but not torqued) we will torque later at the end of complete installation

READ BEFORE INSTALL:

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.

On aluminum bumpers, heat should not be applied due to aluminum properties



Parts included: Table below shows EVO Alumilite JL JLU Bumper.

Description	Part # AL	Quantity
JL JLU Alumilite Bumper	EVO-12498AL	1
JL JLU Alumilite Bumper Insert	EVO-12499AL	1
JL JLU Rear D Ring Shackle Plates	EVO-12500	2
Alumilite Bumper Mount, Left	EVO-12501	1
Alumilite Bumper Mount, Left	EVO-12502	1
JL JLU Rear Bumper Frame Insert Nut Plate, Right	EVO-12504	1
Backup Senser Mounts	EVO-12503	4
JL JLU Alumilite Bumper Hardware	EVO-770098	1





Recommended Tools:

- Allen set/ Driver Sockets
 - Metric/Standard sockets and wrenches
 - Grinder
 - Mallet/Hammer
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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 worn 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.
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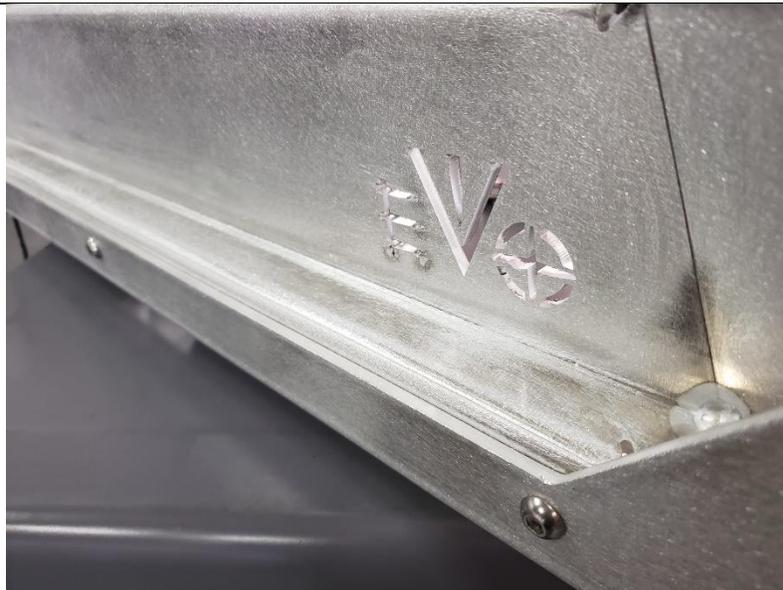
Safely park car on flat ground, put in park and chock wheels.

Various factory bumper options are available. Factory bumper removal steps therefore will vary. This is just a guide, follow factory manual if further instruction is required.

PAY ATTENTION TO BACKUP SENSOR ORIENTATION. THEY WILL NEED TO BE INSTALLED IN THE SAME WAY LATER.

INSTALL:

1. Install center insert onto main bumper using 6 supplied button head bolts and nuts.



2. IF INSTALLING BACKUP SENSORS:

Using small button head screws. Install backup sensors in the same origination as they were removed from vehicle.

If not installing sensor. Install plastic plugs into 4 sensor holes.



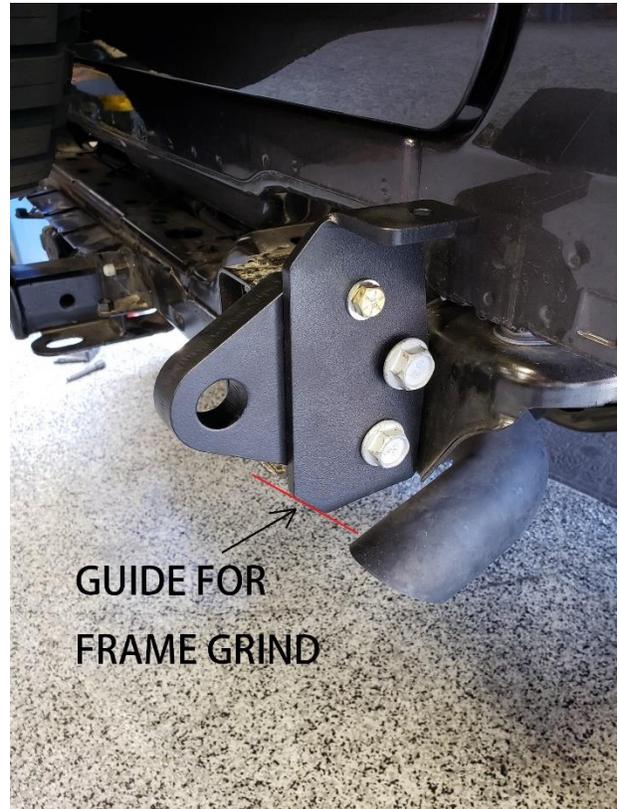
Careful when installing sensor hardware. Use a well fitted wrench and lightly tighten.



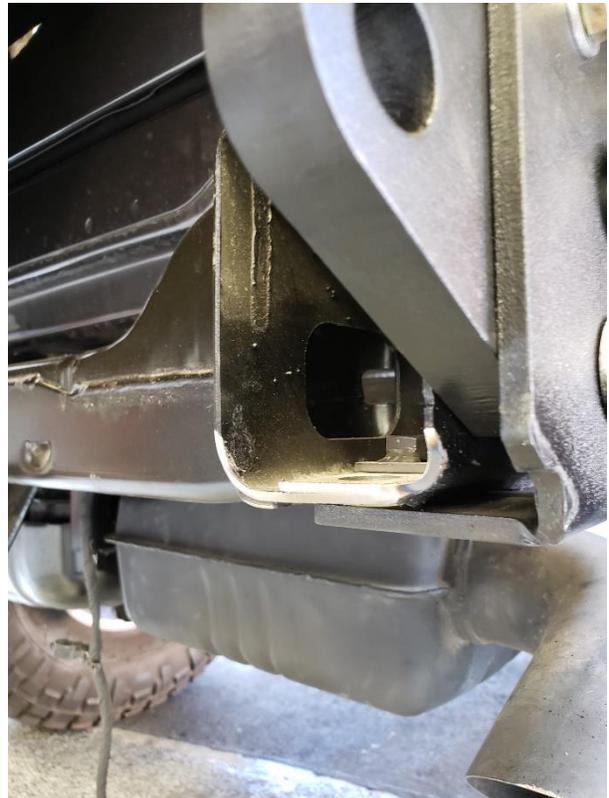
3. Install D Ring Shackle mounts and Bumper install plate as shown using supplied 3/8" bolt on upper hole and factory bolts for frame holes.

Both sides of vehicle.

Torque these bolts to factory specification for factory bolts and tab for supplied bolts.

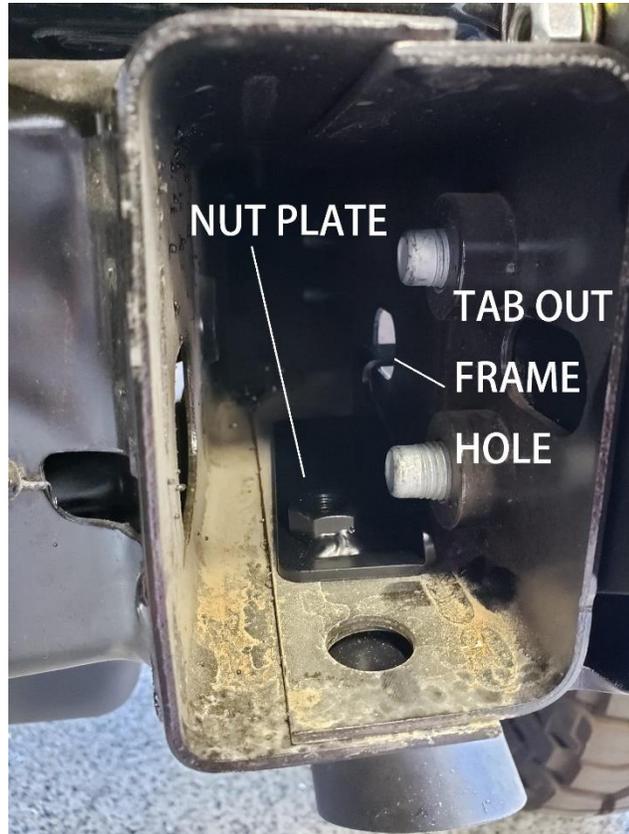


4. Using the bumper install plate lower 45-degree edge as a guide. Grind lower/bottom edge of frame to match mounting plate.
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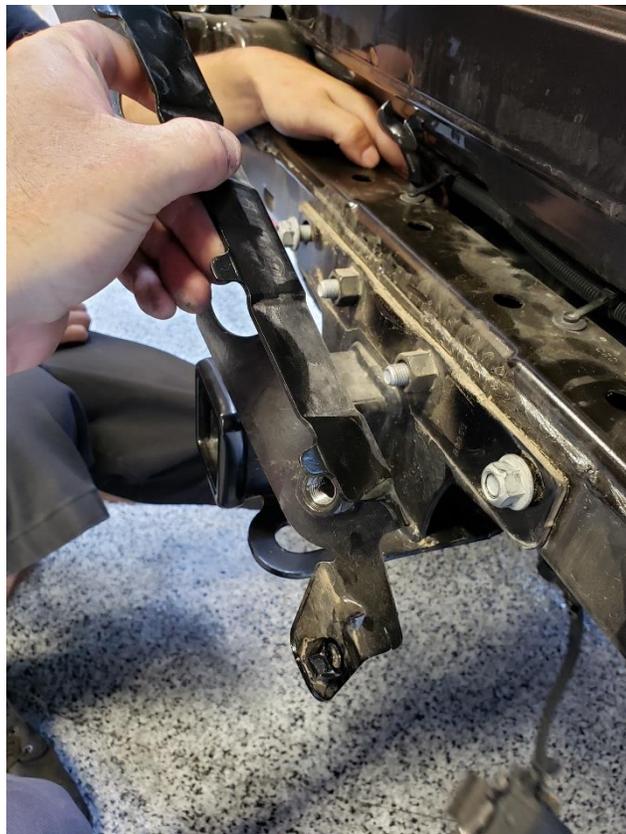




5. Insert nut tab plate into right side frame. Nut over hole in bottom of frame and tab extension through hole inside of frame



Remove Trailer Hitch Tab Plate
If Equipped



6. Slide Preassembled bumper over previously installed D Ring Shackle Tabs previously installed on the frame. This may take some manipulation and tabs with mallet.

Frames do vary. Therefore, some manipulation of frame/tab angle may be needed to insert into bumper. Use of a mallet/hammer to adjust angle/width of tabs to insert into bumper may be needed. Do so as needed.



Be cautious of sensor wiring. Do not pinch wires when installing bumper.





Install Supplied Button heads into top 2 bumper mounting holes.

Reinstall factory bolt under lower driver side frame

Install supplied M12 bolt on passenger side into previously installed nut tab. Hold nut tab through side of frame.



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 completed 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