2018-20XX Jeep Wrangler JL

RAVAGER FULL WIDTH REAR BUMPER INSTALLATION INSTRUCTIONS



SAFETY

Know safety, no injury. Know injury, no safety. ~Author Unknown

- READ ALL SAFETY INSTRUCTIONS BEFORE INSTALLATION
 - FOLLOW ALL INSTRUCTIONS FOR PROPER ASSEMBLY
 - WEAR APPROPRIATE EYE PROTECTION
 - EXERCISE CARE WHEN LIFTING COMPONENTS
 - USE APPROPRIATE TORQUE FOR BOLTS
 - BLUE THREAD LOCKING COMPOUND IS RECOMMENDED ON ALL BOLTS
 - CHECK TORQUE AFTER FIRST 100 MILES



DO NOT PAINT OVER THIS LABEL. REPLACE IF DAMAGED OR LOST

DKB150_00

Rev 00 6-4-18



Suggested Torque Values For Steel Grade 5 Standard Bolts					
BOLT DIAMETER	THREADS PER INCH	TORQUE			
(INCH)	INKEADS PER INCH	(POUND - FEET)			
1/4	20	7			
5/16	18	14			
3/8	16	25			
7/16	14	40			
1/2	13	60			
9/16	12	88			
5/8	11	120			
3/4	10	200			
7/8	9	302			
1	8	466			

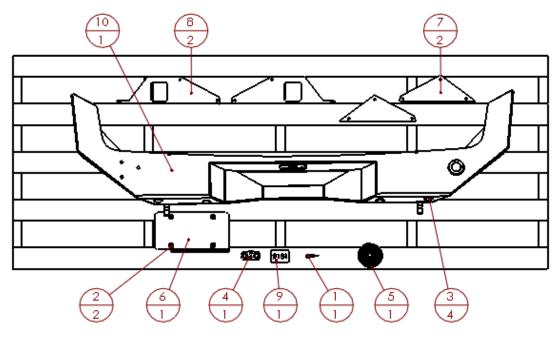
Suggested Torque Values For Steel Grade 8.8 Metric Bolts

BOLT DIAMETER	THREAD PITCH	TORQUE
(mm)	(mm)	(POUND-FEET)
6	1.0	7
8	1.25	16
10	1.5	32
12	1.75	55
14	2.0	88
16	2.0	140
18	2.5	195
20	2.5	275
22	2.5	375
24	3.0	475

1. Parts List

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ITEMNO.	QTY.	PARTNUMBER	DESCRIPTION
1	1	307-07-0008	12V COOL WHITE LED 120DEG BLK
2	2	443-01-0086	LICENSE PLATE MOUNTING KIT
3	4	601-56-2316	OUTSIDE PLUG
4	1	601-56-3731	WELD NUT TAB 7
5	1	601-56-3744	3048MM LENGTH FOAM ROLL
6	1	601-56-4400	LICENSE PLATE BRACKET
7	2	601-56-4433	SID E A C CENT PLATE
8	2	601-56-4434	MIDDLE ACCENT PLATE
9	1	60K-56-0151	HARDWARE KIT#151
10	1	60P-56-0784	JP JL RAVAGER FW REAR BUMPER W/ PLATES





REMOVE CONTENTS FROM BOX AND VERIFY ALL PARTS ARE PRESENT. If there are any questions, call 1-855-HHTOUGH or email HHORDERS@hammerheadarmor.com

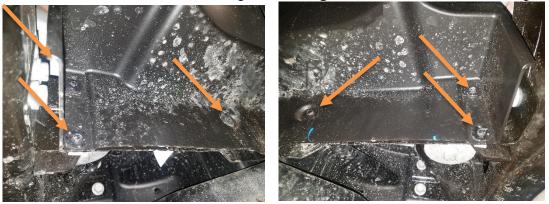
2. TOOL LIST

- 1. 18mm socket
- 2. 15mm socket
- 3. 8mm socket
- 4. ³⁄₄" socket
- 5. 21mm socket
- 6. 13mm wrench
- 7. 7/16" socket
- 8. 10mm wrench
- 9. T40 socket

3. REMOVAL OF OE REAR BUMPER

1. Remove the three screws in the plastic covers on both back sides of the rear bumper with an 8mm socket. Remove the plastic covers.





2. Remove the 4 bolts attaching the side reinforcement with a 15mm socket. Remove the plate from both sides.



3. Remove the 2 bolts on each side that attach the bumper. Use a 15mm socket.





4. Unplug the license plate lights and sensors (if applicable). Remove the OE rear bumper.



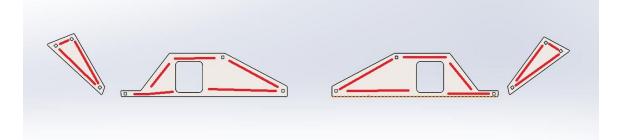
5. Remove the brackets and the OE tow hook from the frame. There are four bolts on the left side. Use an 18mm socket to remove them. There are two bolts on the right side. Use a 21mm socket to remove them.



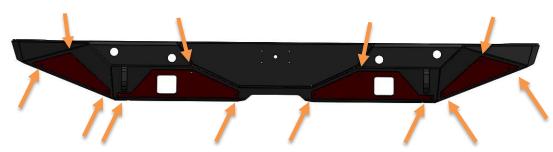


4. **PREPPING THE BUMPER**

1. Start by placing the provided foam on the accent pieces as shown (MAKE SURE NOT TO PUT ON THE WRONG SIDE)



2. Install the accent plates on the bumper with the provided 12 black ¹/₄" carriage head bolts and ¹/₄" nylock nuts. Use the 7/16" socket to tighten nuts.



- 3. Install the provided led light on the license plate bracket with a 10mm wrench as shown with the red arrow.
- 4. Install the license plate bracket with two black 8mm bolts, washers, and nylock nuts using a torx 40 and a 13mm wrench as shown by the orange arrows.

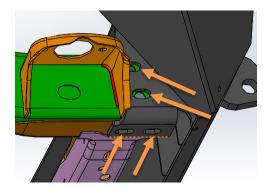




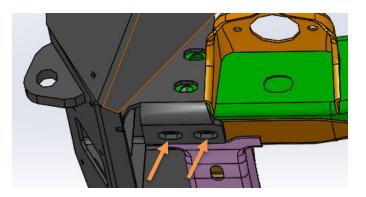
2018-20XX Jeep JL Ravager Full Width Rear Bumper5. Install lights in bumper according to their directions

5. INSTALLATION OF HAMMERHEAD BUMPER

- 6. Place provided weldnut tab in the right frame.
- 7. Place Hammerhead bumper on the frame and install the 4 OE bolts in the left side with an 18mm socket. Install the 2 OE bolts in the right side with a 21mm socket.



8. Install the provided two ½" bolts, two ½" washers, and two ½" lock washers in the bottom of the right side frame. Tighten with 3/4 " socket



9. Align bumper and torque all bolts to spec.





CONGRATULATIONS!

Your Hammerhead rear bumper installation is now complete. Thank you for your purchase.