



# 2019-20XX RAM 1500 **DEFENDER SERIES REAR BUMPER**

**INSTALLATION INSTRUCTIONS** 



# **SAFETY**

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

If there are any questions, call 1-855-HHTOUGH

#### **READ ALL SAFETY INSTRUCTIONS BEFORE INSTALLATION**

- o FOLLOW ALL INSTRUCTIONS FOR PROPER ASSEMBLY
- WEAR APPROPRIATE EYE PROTECTION
- o EXERCISE CARE WHEN LIFTING COMPONENTS
- USE APPROPRIATE TORQUE FOR BOLTS
- o RE-TORQUE HARDWARE AT EVERY OIL CHANGE.

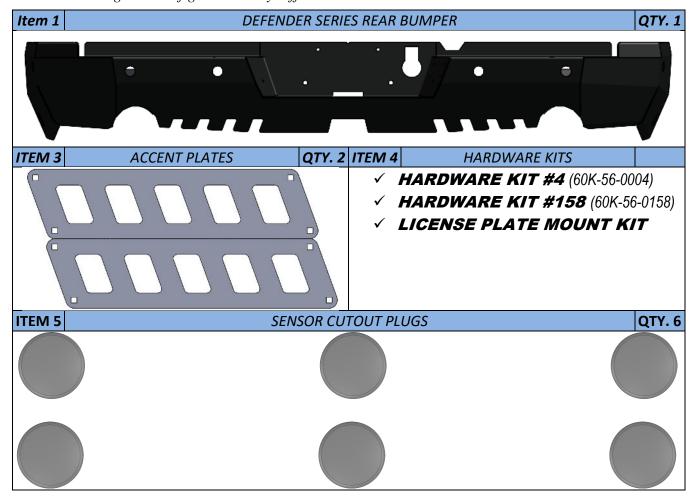
Suggested Torque Values For Steel Grade 5 Standard Bolts		
BOLT DIAMETER	THREADS PER INCH	TORQUE
(INCH)		(POUND - FEET)
1/4	20	7
5/16	18	14
3/8	16	25
7/16	14	40
1/2	13	60
9/16	12	88
5/8	11	120
3/4	10	200
7/8	9	302
1	8	466

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



#### I. PARTS LIST

Note: Brush guard configuration may differ.



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

#### II. TOOL LIST

- ✓ A good friend
- ✓ Basic tool set
- ✓ Blue masking tape
- ✓ Torx 30 bit
- ✓ 13mm socket
- ✓ 15mm socket
- ✓ 21mm socket
- ✓ 3/4" socket
- ✓ Ratchet extension

## III. VEHICLE PREPARATION

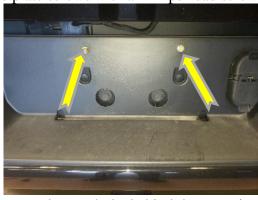
- 1. Park vehicle on level surface.
- 2. Engage parking brake and disconnect battery.
- 3. Using blue masking tape, mask along the profile of your truck above the bumper. This will help protect your truck from any accidental scratches.

#### IV. REMOVAL OF OE BUMPER

1. Unplug large wire connector on the driver's side of the vehicle as shown below.



- 2. Undo the two Christmas trees holding the above wire to the frame
- 3. Remove the two license plate screws with a Philips head screwdriver.



4. Remove the two bolts behind the tag using a 15mm socket



5. Remove the two nuts holding the bumper to the frame on both sides. You will use a 16mm socket.



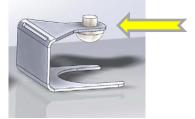
6. Bumper is now ready to remove.

### V. INSTALLATION OF HAMMERHEAD BUMPER

- 1. Place bumper on a carpeted surface or piece of cardboard. Install all OE and optional accessories at this time (sensors, trailer plug, LED lights)
- 2. For bumpers with sensors, install rubber grommets in bumper. Place a drop of dish washing soap on each sensor to lubricate it. Install OE sensors in bumper. The sensor's plugs need to be oriented the same way they are in the OE bumper.

NOTE: DO NOT TWIST SENSOR WHILE INSTALLING. THIS WILL DAMAGE IT.

3. Install rubber bumper (arrow) in sensor clip. Some trucks have four sensors and some have six. For trucks with four sensors, leave sensor plugs in side holes.

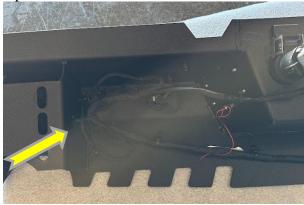


4. Slide sensor clip over grommet and ensure rubber bumper touches the back of the sensor. This clip will retain the sensor in the grommet.





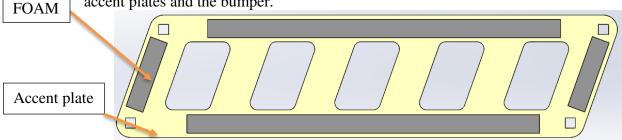
5. Install OE wiring harnesses and plug sensors in. Use zip ties to hold the harness up to avoid it dangling below the bumper.



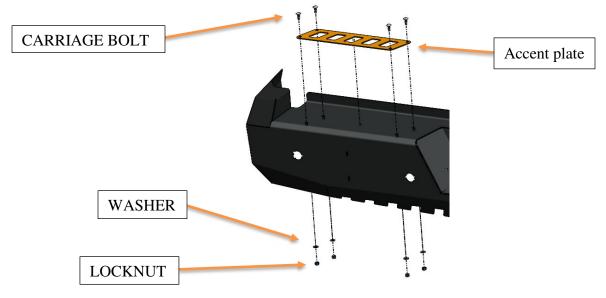
6. In this step, you will install the trailer plug connector. Use a small flathead screwdriver to remove the small stainless clips on the plastic housing. Gently pry up on the middle of the clip and slide the clip away from the housing. (In the direction of the arrow) (Both sides) Place the plastic housing in the bumper and replace the slips. You will need to pry outward on the clips to get them to seat correctly.



7. Install accent plates: Start by applying the foam weather stripping included in the install kit to the edges of each accent plate as shown in the picture below. This prevents rubbing between the accent plates and the bumper.



8. Using a 7/16 socket or wrench install the accent plates using hardware kits 0158.



- 9. Lift bumper onto the truck and have a friend hold the bumper in place
- 10. Install (4) bolts, (8) flat washers, (4) lock washers, and (4) hex nuts from hardware kit #4 into the bumper mounts.



11. Align and level bumper with the truck. Tighten the center bolts with a 15mm socket and bumper mount bolts with a 3/4 wrench and socket. Install license plate mounting kit and license plate on bumper.



Congratulations! Your Installation is now complete.
Thank You for your purchase!