

# 2015-20XX FORD F150 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**

- FOLLOW ALL INSTRUCTIONS FOR PROPER ASSEMBLY
- WEAR APPROPRIATE EYE PROTECTION
- EXERCISE CARE WHEN LIFTING COMPONENTS
- USE APPROPRIATE TORQUE FOR BOLTS
- 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	

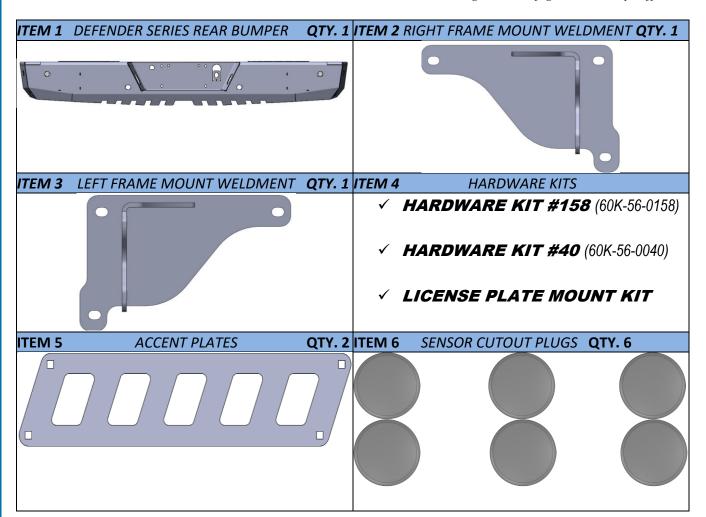


WARNING: Cancer and Reproductive Harm

www.P65Warnings.ca.gov

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

- $\checkmark$  A good friend
- ✓ Basic tool set
- ✓ Blue masking tape
- ✓ 10mm socket
- ✓ 13mm socket
- ✓ 13mm wrench
- ✓ 21mm socket
- $\checkmark$   $\frac{3}{4}$ " socket
- ✓ Ratchet extension

II. TOOL LIST

## III. VEHICLE PREPARATION

- 1. Park vehicle on level surface.
- 2. Engage parking brake and <u>disconnect battery</u>.
- 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. Remove all components from box and compare to parts list above
- 2. Unplug main wiring harness. (located above spare tire)



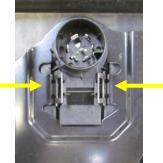
3. Using 10mm socket, remove bolt attaching wiring harness ground to truck. (located outside frame rail on left side)



4. Using a 21mm socket, remove six bolts attaching OEM bumper/receiver hitch to frame. Remove and set aside face down on foam or cardboard.



- 5. Unplug four OEM sensors (if applicable) and two license plate lights.
- 6. Unplug trailer plug wiring harness.
- 7. Remove trailer plug from bumper by squeezing metal tabs inward. Set aside.

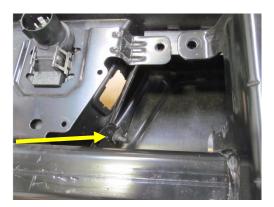


- 8. Remove license plate lights by gently squeezing two plastic tabs inward. Set aside.
- 9. Using a 13mm socket, remove 12 bolts attaching hitch to bumper.

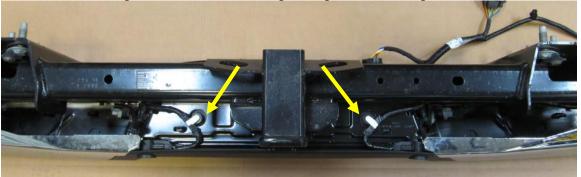


10. Using a 13mm wrench, remove two bolts attaching metal portions of bumper to receiver hitch. They are located behind the OEM license plate lights. Note: They are difficult to remove. Remove the spring nuts after removing the bolts. They will rattle if not removed.

### Page 6 of 8



11. Rotate bumper 90°. The top of the bumper will now be on the foam or cardboard surface. Detach two plastic connectors from plastic portion of bumper.



- 12. Using pliers disengage four plastic tabs from hitch and separate the hitch from the bumper. Pick up on hitch to remove it from bumper.
- 13. Carefully remove sensors and grommets one at a time from OEM bumper and place in Hammerhead bumper. Keep them in order.(If sensors not present. Plug sensor holes with provided Sensor cutout plugs.)

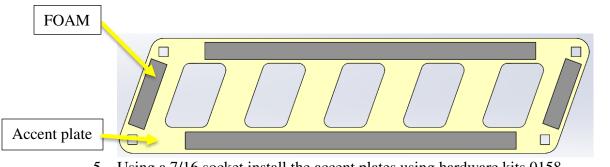
### V. INSTALLATION OF HAMMERHEAD BUMPER

- 1. Install License plate lights, license plate mounting kit, and trailer connection in Hammerhead rear bumper.
- 2. Reinstall OEM hitch using OEM hardware.

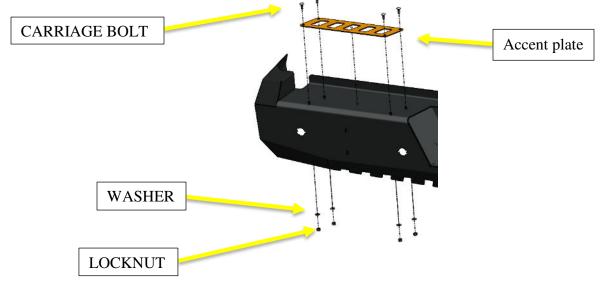
Note: Center hitch in frame slots and tighten hardware.

- 3. Using 10mm socket and OEM bolt, reattach ground wire removed in previous step 3
- 4. 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.

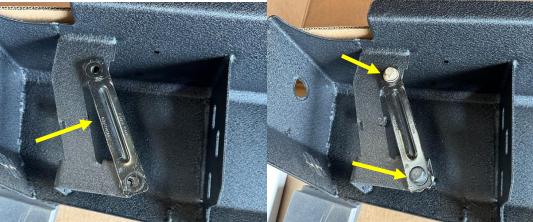




5. Using a 7/16 socket install the accent plates using hardware kits 0158.



6. Using the spring nuts and OEM brackets from the OEM bumper attach to the end supports on the Hammerhead bumper using a 13mm socket. (One OEM bracket maybe a parking sensor/speaker depending on vehicle configuration.)



7. Layout Hammerhead frame mounts as shown. The next two steps will use hardware from kit #40. Using six 7/16"-14 x 1.5" bolts, twelve 7/16" flat washers, six 7/16" lock washers, and six 7/16"-14 nuts attach Hammerhead frame mounts to OEM receiver hitch. Use 5/8" wrench and socket. Do not fully tighten



- 8. Using six ½"-13 carriage head bolts, six ½" flat washers, six ½" lock washers, and six ½"-13 nuts fasten Hammerhead bumper to Hammerhead frame mounts. Align bumper horizontally and vertically and tighten nuts using ¾" socket. Note: Open tailgate slowly to ensure minimum of 3/8" clearance below tailgate and minimum of 3/8" clearance from truck body. NOTE: If bumper is too low when pushed all the way up, receiver hitch hardware can be loosened and hitch/bumper can be moved up.
- 9. Tighten ALL hardware.
- 10. Plug in trailer connector, license plate lights, and sensors.
- 11. Reconnect battery



## Congratulations! Your product installation is now complete. Thank you for your purchase!

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