

6-10-2020 REV.B



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PART #	DESCRIPTION
95150	2017-UP FORD F150 RAPTOR IMPACT SERIES FRONT BUMPER

COMPONENTS INCLUDED			
(1) 17+ RAPTOR IMPACT SERIES FRONT BUMPER			
HARDWARE INCLUDED			
	BAG 1		
(2) 12MM NUT PLATES			
(1) DADAD DELOCATION DDACKET	BAG 2		
(1) RADAR RELOCATION BRACKET	BAG 3		
(1) RADAR MOUNT BRACKET BAG 4			
(10) 12MM HEY HEAD BOLTS V 45MM	(10) 12MM SPLIT LOCK WASHERS		
(10) 12MM HEX HEAD BOLTS X 45MM (6) 12MM NUTS	(16) 12MM SPETT LOCK WASHERS (16) 12MM FLAT WASHERS		
BAG 5			
(2) 8MM HEX HEAD BOLTS X 30MM (1) 8MM HEX HEAD BOLT X 25MM (4) 8MM NYLOCK NUTS (3) 8MM BUTTON HEAD BOLTS X 20MM (2) 6MM HEX HEAD BOLTS X 20MM (1) 6MM CARRIAGE BOLT X 20MM	(5) 6MM FLAT WASHERS (3) 8MM SMALL OD WASHERS (6) 8MM MEDIUM OD WASHERS (4) 8MM LARGE OD WASHERS (1) 4MM ALLEN WRENCH (1) 5MM ALLEN WRENCH		
BAG 6			
(4) WASHER .344 X 1.25 X 42 (4) 3/8-16 X 1.00 CARRIAGE BOLT (3) 5/16-18 1.00 BOLT (3) 5/16-18 LOCK NUT (15) 5/16 FLAT WASHER	(1) RADAR ADAPTER (3) C-WASHER (4) 3/8 SAE FLAT WASHER (4) 3/8-16 NYLOCK NUT (4) L-BRACKET SLOTTED 3.25		
TOOLS REQUIRED			
ZIP TIES DRILL 3/8" DRILL BIT 1.5" HOLE SAW TORQUE WRENCH 5MM ALLEN WRENCH 6MM ALLEN WRENCH 8MM SOCKET / WRENCH	10MM SOCKET / WRENCH 11MM SOCKET / WRENCH 12MM SOCKET / WRENCH 14MM SOCKET / WRENCH 15MM SOCKET / WRENCH 16MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH		
TECH NOTES			
1. RELOCATING RADAR/ADAPTIVE CRUISE CON	VTROL REQUIRES FACTORY RECALIBRATION.		



WARNING!

- ** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!
- ** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.
- ** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

INSTALLATION

FIG.1

- 1. Ensure the vehicle is placed on a level surface with the transmission in PARK, the tires chocked, and the emergency brake ON. Open the hood and disconnect the negative terminal on the battery using a 10mm wrench.
- 2. Remove the factory skid plate using a 13mm & 15mm. [FIGURE 1]



FIG.2

3. Use an 8mm to disconnect the support rods from the wings of the factory bumper and the frame. [FIGURE 2]

4. Unclip the shroud from both sides of the factory bumper. [FIGURE 3]



FIG.3

FIG.5

FIG.7



FIG.4

- 5. Remove the front plastic cover from the factory bumper. [FIGURE 4]
- 6. Remove the (3) nuts holding the radar sensor in place using an 11mm. [FIGURE 5]





FIG.6

- 7. Gently pry the radar bracket out of the ball sockets on the (3) studs. [FIGURE 6]
- 8. Disconnect the wire connector and set the radar sensor aside. [FIGURE 7]





FIG.8

- 9. Remove the skid plate brace from the bottom of the frame. [FIGURE 8]
- 10. Remove the (6) nuts that connect the bumper to the frame using a 21mm. Slide the bumper forward and off of the frame horns. Be careful as the bumper is heavy. Don't damage any wires.
- 11. Remove the (10) plastic clips holding the molded cover to the top of the grill. Remove the plastic cover from the top of the grill. [FIGURE 9]





FIG.10

12. Remove the (4) screws under the grill cover using a 10mm. [FIGURE 10]

13. Remove the plastic clip from the front top of the headlight as shown. Gently pull the headlight/grill trim back allowing access to the lower grill mounting screws. [FIGURE 11 & 12]



FIG.11

FIG.13



FIG.12

14. Using an 8mm and an extension, remove the lower grill mounting screws. [FIGURE 13 & 14]





FIG.14

15. Remove the (6) plastic clips holding the rubber side of the shroud to the grill. [FIGURE 15]



FIG.15

16. Disconnect the wire connectors for the intercooler shutter motor and grill lights and the small vacuum hose. [FIGURE 16 & 17]





17. Lift and remove the grill from the vehicle. Be careful not to damage anything as it is being removed. [FIGURE 18]



FIG.18

18. Set the grill face down on a moving blanket (or similar) so that it will not get scratched or scuffed.

19. Carefully remove the (6) lower radiator shutter flaps one at a time from the driver side of the grill. First, pull the retainer clip of the fin guide rail to the side and pop the fin out of the guide rail by rotating it out. Flex the fin in the center to pop the hinge pins out of their sockets. [FIGURE 19]





FIG.20

- **20**. Remove the (2) plastic rivets from the driver side on top of the grill. Lift the center portion up and then the rivets can be removed. [FIGURE 20]
- 21. Remove the (3) plastic ball sockets from the radar sensor.

FIG.19

FIG.21

- **22**. Mount the radar to the bracket using the supplied 8mm button head bolts and 8mm small diameter washers. Use a 5mm allen and a 13mm to tighten.
- 23. 2019-UP MODELS ONLY: Use the supplied radar adapter as shown. Use 3 of the supplied 5/16" washers in the cavities of the radar mounting tabs to prevent damage when tightening. Mount the radar to the adapter using the supplied 5/16" hardware. [FIGURE 21 23]









24. Mount the radar bracket to the radar mount using the supplied 6mm hardware. The 6mm carriage bolt is used in the adjustment slot hole. Tighten using a 10mm. [FIGURE 24]



FIG.24

FIG.26

FIG.28

FIG.30



FIG.25

25. Use the supplied drill template to drill a 3/8" hole through the top of the grill as shown. [FIGURE 25]

26. Mount the radar mount to the grill using the supplied 8mm hardware. Use the supplied 8mm large diameter washers (2 on each side) to space the mount off from the recessed holes in the plastic. Use the 8mm medium diameter washers on the 3 bolts.

27. Use a 1.5" hole saw to cut a hole in the driver side lower surface of the grill as shown. [FIGURE 26 & 27]





FIG.27

28. Disconnect the plastic retainer holding the radar wire loom/connector to the intercooler shroud.

29. Use a utility knife to cut the intercooler shroud along the corners as shown. Only cut the soft rubber portion. [FIGURE 28 - 31]





FIG.29





30. Carefully set the grill in place being sure not to pinch or damage any wires or vacuum lines. With the grill tilted out, feed the radar wire connector through the new hole in the bottom of the grill and connect to the radar sensor.

31. Connect and route the radar wire harness using zip ties. [FIGURE 32]





FIG.33

32. Carefully reconnect the intercooler shutters. [FIGURE 33]

FIG.32

FIG.34

FIG.36

FIG.38

- 33. Line up all of the mounting holes. Mount the grill with an 8mm using the factory hardware in the lower mounting holes.
- 34. Gently push the headlight trim into place. Fasten the headlight trim using the factory plastic clips. [FIGURE 34]





FIG.35

35. Connect the rubber side shrouds using the factory plastic clips. [FIGURE 35]

36. Install the (4) upper mounting screws using 10mm. [FIGURE 36]





FIG.37

37. Set the grill cover in place and fasten using the (10) plastic rivets. [FIGURE 37]

38. Connect the grill lights, intercooler shutter motor, and the small vacuum line. [FIGURE 38]





39. Install the factory upper grill cover using the (10) factory plastic clips. [FIGURE 39]

40. Place nut tabs in frame rails as shown. [FIGURE 40]



FIG.40

41. Mount the bumper to the flange on the end of the frame horns with an 18mm and the supplied hardware. [FIGURE 41 & 42]



FIG.41

FIG.43



FIG.42

42. Install the U-nuts onto the 2 hole side of the skid plate brace as shown. Mount the skid plate brace using factory U-nuts and supplied 12mm button head bolts. (6mm allen) Note: There is a left and right brace. The lowest side should be towards the inside of the frame rail. Do not fully tighten yet. [FIGURE 43]





FIG.44

- 43. Install the U-nuts onto the holes on the leading edge (towards the front of the vehicle) of the skid plate. [FIGURE 44]
- 44. Remove the factory U-nuts from the crossmember of the frame and install the supplied U-nuts.

45. Using the adjustment slots, adjust the wings to match the rubber strip on the bottom of the fender and grill (13mm). This allows the bumper adequate room for the body to move without damaging it in contact. If more adjustment is required, use the supplied shims between the wing and the bumper mounting surface to fine tune fitment. [FIGURE 45]



46. Mount the lights of your choice to the slots inside of the bumper wings. [FIGURE 46 & 47]



FIG.46



FIG.47

47. With the bumper fully mounted and tight, loosely install the skid plate. The supplied spacers go between the skid plate and the crossmember

48. Once all screws are started, tighten the skid plate and skid plate brace. (6mm allen, 16mm)

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.

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