

INSTALLATION MANUAL VENGEANCE FRONT BUMPER PRODUCT NUMBER: D485X APPLICATION: 2019+ FORD RANGER



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#### **IMPORTANT SAFETY GUIDE** Your safety and the safety of others is very important.

In order to help you make informed decisions about safety, we have provided the following warnings, safety precautions, installation instructions, and other important information to alert you to potential hazards that could hurt you or others.

Please do a job safety analysis before each task to identify potential hazards for your situation and remove/protect against them. Use own good judgment and take your time. Check packaged materials immediately upon arrival to ensure that all listed parts are included and undamaged.

Read and understand all warnings, safety precautions, and instructions before installing this product.

SENSORS FIELD OF VIEW MAY BE ALTERED WITH USE OF THE REPLACEMENT BUMPER.

#### WARNINGS

- Failure to observe the following warnings and instructions provided in this manual could lead to severe injury and/or death.
- For professional installation only. Careless installation and/or operation can result in serious injury, death, and/or equipment damage. All liability for installation and use rests with the user or consumer.
- Fab Fours, Inc. only approves installing this product according to these written instructions with the hardware provided. Failure to install according to these instructions will invalidate the warranty. This includes, but is not limited to, using alternative installation methods, hardware, or materials.
- This product is for off road use only.

#### **SAFETY PRECAUTIONS**

- Always remove jewelry and wear eye protection.
- Always use extreme caution when jacking up a vehicle for work. Set emergency brake and use tire blocks. Locate and use the vehicle manufacturers designated lifting points. Use jack stands.
- Always use appropriate and adequate care in lifting components into place.
- Always ensure components will remain secure during installation and operation.
- Always wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause serious eye injury.
- Always use extreme caution when drilling a vehicle. Always disconnect power before welding. Thoroughly inspect the area to be drilled (on both sides of material when possible) prior to drilling, and relocate any objects that may be damaged.

- Always use extreme caution when welding a vehicle. Thoroughly inspect the area to be welded (on both sides of material when possible) prior to welding, and relocate any objects that may be a fire hazard. When welding in a cab, make sure the interior surfaces are covered (e.g., welding blanket) and a fire extinguisher is at hand.
- Always use extreme caution when cutting and trimming during fitting.
- Always tighten all nuts and bolts securely per installation instructions.
- Always route electrical cables carefully. Avoid moving parts, components that become hot, and rough or sharp edges.
- Always insulate and protect all exposed wiring and electrical terminals.
- Perform regular inspections and maintenance on mounts and hardware.

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## A MESSAGE FROM THE OWNER



Fab Fours' was born out of a passion for customizing vehicles and a love of the outdoors. Our engineering team uses the latest 3D design software to turn new product ideas into reality. In our factory, designs come to life with the combination of cutting edge technology for metal cutting and forming and an American workforce that puts its' heart and pride into every product.

From design and manufacturing, to quality and delivery, Fab Fours' mission is to be the market leader for steel truck and jeep accessories. We make sure a quality product is delivered on time, more than expected, better than expected to our customers.

Enjoy your new Fab Fours product. Welcome to the family!

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FOUNDER, FAB FOURS

# **GETTING STARTED**

Before you begin the installation process of your new Fab Fours product, we suggest laying out all materials and parts on a pad or protective surface.

Failure to fully account for all components before beginning installation may leave vehicle immobile until part is acquired. Refer to the next pages as an inventory check.



## **PROVIDED MATERIALS**





21881



### HARDWARE KIT | 50181

FAB FOURS Identification	COMPONENT Description	QTY
50181-HW	3/8"-16 X 1.25", Yellow-zinc, Grade 8, Hex head cap screw	2
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50181-HW	3/8"-16, Yellow-Zinc, Grade 8, Hex nut	2
50181-HW	3/8", Yellow-zinc, Grade 8, Lock washer	2
50181-HW	3/8", Yellow-zinc, Grade 8, Flat washer	4

### **TOOLS REQUIRED**

- Plastic panel pry tool
- 8mm socket wrench
- 10mm socket wrench
- 15mm socket wrench
- 21mm socket wrench
- 9/16" socket wrench
- Flat head screw driver

### ASSISTANCE

We recommend two people perform the installation as items are heavy and may need to be held in place while installing.

### ORGANIZATION

Disassemble the vehicle where you can catalog and store everything. We suggest labeling and bagging all the OEM bolts when removing from the vehicle. Failure to keep track of parts could lead to an inability to properly reinstall components.

### DISASSEMBLY

1. Using a 15mm socket wrench, remove the four (4) bolts attaching the skid plate to the vehicle (if equipped). (Figure 1)



2. Using an 8mm socket wrench, remove the screw attaching the plastic valance under the bumper to the bracket on the frame. (Figure 2)





3. Using a 10mm Socket wrench, remove the five (5) screws from the bottom of the center plastic trim piece. (Figure 3)



Figure 3

4. (If equipped) Using a 10mm socket wrench, remove the two (2) screws that attach the tag bracket to the bumper. (Figure 4)



Figure 4

5. Using a plastic body panel pry tool, remove the five (5) plastic body panel rivets by prying up on the center pin and then pulling the rivet out. (Figure 5)



Figure 5

6. Using a plastic body panel pry tool, pry the plastic bumper cover away from the metal frame. There are ten clips that hold the cover to the frame. (Figure 6)



Figure 6

7. Unplug the intermediate sensor harness from the main harness by depressing the tab on the connector. (Figure 7)



Figure 7

8. Remove the two (2) rubber tow hook covers by pulling straight out from the vehicle. (Figure 8)



Figure 8

9. Using a 21mm socket wrench, remove the six (6) nuts that attach the bumper the frame. (Figure 9)



Figure 9

10. Once the bumper is lowered from the vehicle, the main wiring harness is accessible on the driver side. Disconnect the connector by depressing the tab and pulling. (Figure 10)



Figure 10

11. Using a 15mm socket wrench, remove the two (2) tow hooks by removing the four (4) bolts holding them to the frame. (Figure 11)



Figure 11

12. Using a flathead screw driver, break off the bolt retaining plates and remove the bolt plates from the frame horn. (Figure 12) Repeat this process on the passenger side frame rail.



Figure 12

13. Remove the park sensors from the bumper by first disconnecting the harness from each sensor. Depress the tab on the harness plug and pull to release the harness from the sensors. (Figure 13)



Figure 13

14. Remove each sensor from its housing by spreading the two (2) tabs and pulling outward on the sensor. (Figure 14)



Figure 14

15. Remove each sensor housing from the bumper shell by compressing the two (2) tabs that were spread in step 14 while pulling on the locking ring. (Figure 15)



Figure 15

# INSTALLATION

16. If installing accessory lighting do so now using the lighting manufactures instructions and hardware.

17. Reinstall the sensor housings into the new vengeance bumper by reversing the removal process outlined in steps 13-15 in the disassembly section. (Figure 16-18)



Figure 16



Figure 17



Figure 18

18. Reinstall the OEM bolt plates in the vengeance bumper in the opposite orientation that they were removed from the OEM bumper. (Figure 19)



Figure 19

19. Using a 21mm socket wrench, install the bumper on the vehicle and tread the three (3) OEM nuts per frame rail onto the OEM bolt plate. (Figure 20) With assistance, adjust the bumper so that there is an even 1/4-inch gap between the bumper and valance and then tighten all hardware.



Figure 20

20. Using a 15mm socket wrench, install the two (2) provided skid plate brackets (21889) to the bottom of the frame rails in place of the OEM tow hooks using the OEM tow hook bolts removed in step 11 of the disassembly section. (Figure 21)

21. Using a 15mm socket wrench, reinstall the factory skid plate by installing the two (2) OEM bolts at the rear of the skid plate into the cross-

member. (Figure 22)



Figure 21



Figure 22

22. Using a 9/16" socket wrench, finish installing the factory skid plate by installing the two (2) provided 9/16" yellow-zinc grade 8 bolts, flat washers, lock washers, and nuts (50181-HW) through the front of the skid plate through the provided bracket (21889). (Figure 23-24)



Figure 23



Figure 24

23. Recheck all hardware to insure it is tight.

24. If your vehicle is equipped with adaptive cruise control, reference the M3850-IM now to relocate the sensor.