

INSTALLATION MANUAL VENGEANCE FRONT BUMPER PRODUCT NUMBER: D685X

**APPLICATION: 2025 TOYOTA 4RUNNER** 



#### **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!

Greg Higgs

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



23470 - 4RUNNER VENGEANCE FRONT SHELL



23472 - 6" LIGHTBAR C-BRACKETS QTY: 2



23473 - GRILL BRACKET

61632 EPOXY QTY:2

25 4RUNNERF-T – FRONT DS/PS FACIA CUT TEMPLATE

### **REQUIRED TOOLS**

- BODY PRY TOOL
- PHILLIPS HEAD SCREWDRIVER
- 10MM SOCKET WRENCH
- 12MM SOCKET WRENCH
- 13MM SOCKET WRENCH
- 17MM SOCKET WRENCH
- 7/16" COMBINATION AND SOCKET WRENCH
- 5/8" COMBINATION AND SOCKET WRENCH
- 11/16" COMBINATION AND SOCKET WRENCH
- PERMANENT MARKER
- SMALL RECIPROCATING SAW
- MASKING TAPE (OPTIONAL)

### **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.

### HARDWARE KIT | 50525-HW

IDENTIFICATION	COMPONENT	QTY
NUMBER	DESCRIPTION	
50525-HW	7/16"-14 X 1.25" YELLOW ZINC FINISH HEX CAP SCREW, GRADE 8	4
50525-HW	1/2" X 1.25" O.D. THRU-HARDENED YELLOW ZINC FINISH STEEL	4
	USS GENERAL PURPOSE FLAT WASHER, GRADE 8	
50525-HW	1/4"-20 X 3/4" GRADE 8 YELLOW ZINC FINISH HEX CAP SCREW	2
50525-HW	1/4"-20 YELLOW ZINC FINISH GRADE 8 FINISHED HEX NUT	2
50525-HW	1/4" X 0.734" O.D. THRU-HARDENED YELLOW ZINC FINISH STEEL	4
	USS GENERAL PURPOSE FLAT WASHER	
50525-HW	LOCTITE 0.50 ML BOTTLE 242 BLUE LIQUID MEDIUM STRENGTH	2
	THREAD LOCKER	

### DISASSEMBLY & INSTALLATION

1. Disconnect the vehicles battery located in the trunk of the vehicle. (Figure 1)



Figure 1

2. Using the panel pry tool remove the eight (8) push pins in the under-hood cowl. To release the pins, depress the center. (Figure 2-5)



Figure 2



Figure 3 Figure 4

Figure 5

3. Using the panel pry tool remove the four (4) push pins in the intake scoop. (Figure 6)



Figure 6

4. Using the panel pry tool and phillps head screwdriver, remove the six (6) push pins and four (4) screws in the front part of the DS inner fender liner. Repeat on the passenger's side. (Figures 7-9)









Figure 9

5. Using a 10mm socket wrench, remove the five (5) remaining screws from the air dam. (Figure 10)

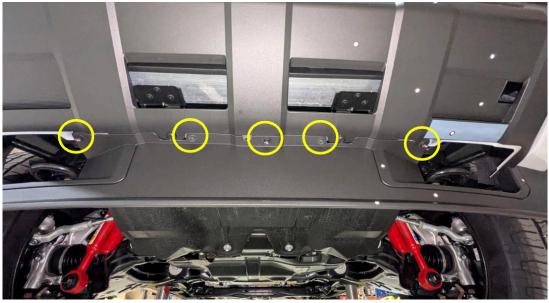
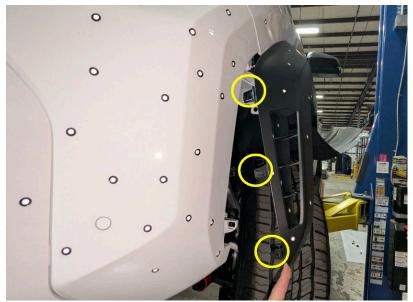


Figure 10

6. Using the panel pry tool, release the three (3) tabs on the lower portion of the flare inside the fender and pull the flare away from the vehicle to release the rest of the clips along the top of the flare. Repeat on the passenger's side. (Figure 11-13)



Figure 11







7. Using a 10mm socket wrench, remove the screw that was exposed by removing the flare. (Figure 14)



Figure 14

8. Using a 10mm socket wrench, remove the four (4) screws from the bottom of the facia. Set these aside for reassembly later. (Figure 15)



Figure 15

9. Using a 10mm socket wrench, remove the three (3) screws from the top of the grille. (Figure 16)

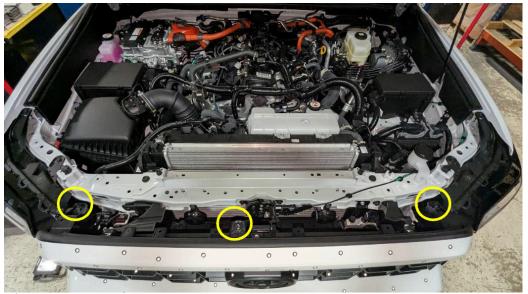


Figure 16

10. Disconnect the wiring harnesses on the passenger's side of the vehicle. (Figure 17)



Figure 17

11. Pull the corners of the facia outward away from the vehicle in order to release the clips along the fender. The facia can now be removed from the vehicle by pulling outward along the rest of the facia. (Figure 18)



Figure 18

12. Using a 17mm socket wrench, remove the eight (8) screws from the crash bar. Set these aside for reassembly later. (Figure 19-20)



Figure 19



Figure 20

#### 13. Using a 17mm socket wrench, remove the two (2) screws from each tow hook. (Figure 21)



Figure 21

#### 14. Using a 12mm socket wrench, remove the four (4) screws from the skid plate. (Figure 22)



Figure 22

15. Using a panel pry tool, remove the two (2) push pins from the plastic frame covers inside of each frame rail to remove them from the vehicle. (Figure 23)



Figure 23

16. Using a panel pry tool, remove the four (4) push pins from the bottom of the facia. (Figure 24)



Figure 24

17. Pinch the locking tabs on the center two (2) parking sensor covers to remove them. Set them aside for reassembly later. (Figure 25)

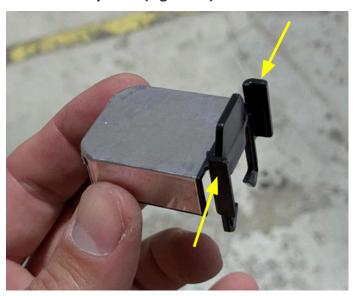


Figure 25

18. Carefully spread the green locking tabs on the parking sensor housings to remove the sensors from their housings. (Figure 26)

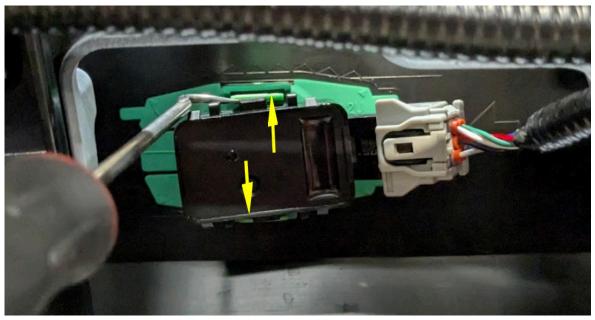


Figure 26

19. Using a panel pry tool, release the wiring harness retainers and move the harness up and out of the way as far as possible. (Figure 27)



Figure 27

20. Using a Phillips-head screwdriver, remove the eight (8) screws across the inside of the facia. (Figure 28)

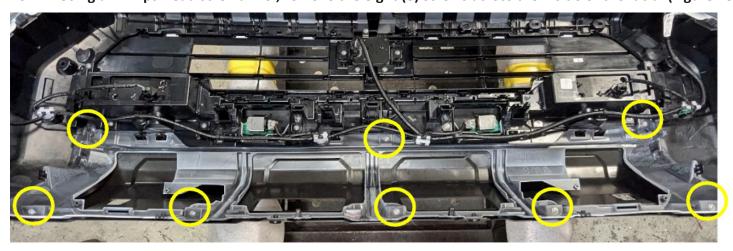


Figure 28

21. Using a panel pry tool, release the remaining clips attaching the lower black facia cover and sensor facia from the painted portion of the facia. (Figure 29-31)

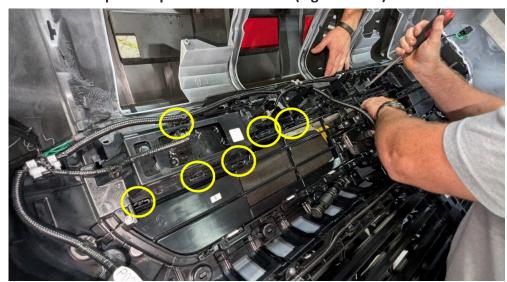


Figure 29



Figure 30



Figure 31

22. Use a Philips head screw driver to remove the 4x screws around the DS and PS fog lights and 3x screws in the center. (Figure 32-33)

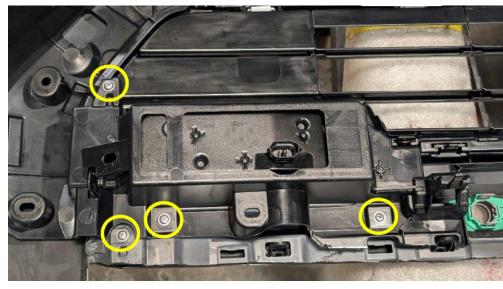


Figure 32



Figure 33

23. Remove the center fog light cover from the front of the bumper facia by unclipping it from the back. Unbolt the fog lights using a Philips head screwdriver to remove the 2x screws. (Figure 34-35)



Figure 34 – Fog Light Cover Removal



Figure 35 – Fog Light Removal

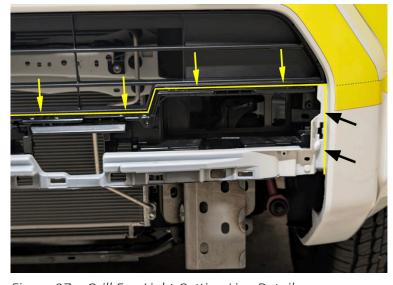
24. Reinstall the facia back on the front of the truck to place the templates and start the facia cutting process.

25. Carefully place the provided cut templates onto the DS and PS facia and fenders. Starting with the center contour profile, adhere the template to the facia and work outwards by lining up the edge of the template with the chamfer body lines (1). Next, line the center of the template with the connecting edge and body line (2). Lastly, follow the fender lines cut out to place the template on the fender flares (3). (Figure 36) Note: Take your time when locating the cut template on the facia to ensure the bumper fits properly.



Figure 36 – Template Placement and Sequence

26. Cut the center section of the front bumper along the fog light profile. Cutline shown below in Figure 37. It is recommended that the edge of the cutting blade remain below the template line to ensure a clean fit. (Figure 37-38)





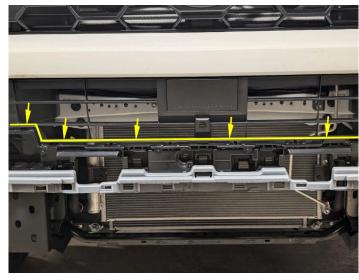


Figure 38 – Grill Cutting Line Detail

27. Start the cut at the fender and cut on the "CUT LINE A" cutline. Cut the top of the fender flare away and then use a piece of tape to connect the cutline to the end of the front facia. It is recommended that the edge of the cutting blade remain below the template line to ensure a clean fit. (Figure 39-40



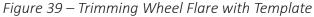




Figure 40 – Template Cut Line Extension

28. Following the template, cut the front facia along the "CUT LINE A". It is recommended that the edge of the cutting blade remain below the template line to ensure a clean fit. (Figure 41-42)



Figure 41 – Cutting Facia with Template



Figure 42 – Vehicle Front (Post-Cut)

29. Clean up any plastic burrs left behind after the cut to ensure a smooth bodyline post-install. It is recommended to use a piece of fine grit sandpaper (~180 grit or higher) to carefully clean up the cutline. (Figure 43)



Figure 43 – Burr Removal/Post-Cut Detailing

30. Using a Phillips Head Screwdriver, remove the two (2) Philips Head Screws holding the front camera shroud in place. Use a 10mm socket, or wrench, to remove the final four (4) bolts securing the lower grill support bracket and remove it from the truck. After removal, replace the OEM Grill Support Bracket with the one provided by Fab Fours [23473] and reinstall using previously removed OE hardware (2X Phillips Head Screws and 4X 10mm Bolts). (Figure 44-45)

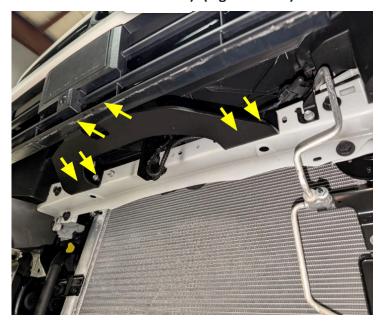


Figure 44 – Grill Support Bracket Screw Locations



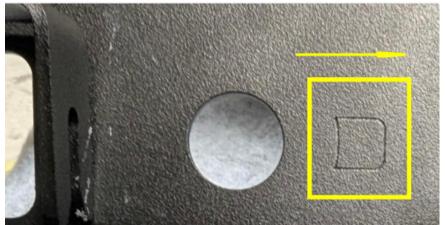
Figure 45 – Grill Support Bracket

31. In preparation for Final Installation, lay the bumper shell face down on a covered/padded surface and keep it in this position for the following steps. (Figure 46)



Figure 46 – Pre-Assembly Setup

32. Locate the four (4) sensor hole locations spaced along the shell body. Mix the provided epoxy, per the manufacturer's instructions, and apply it to the face of each Sensor Housing. Each of the sensor holes on the shell has an etch located next to it which denotes the proper direction of the sensor's wiring harness as shown in Figure 47.



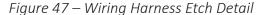




Figure 47 – Outer Sensor Housing Orientation

Note: There are two (2) different types of sensors to be reinstalled. Orientation and position of the sensor's housing is critical for proper function. See Figure 47 (Outer Sensors) and Figure 48 (Inner Sensors) to confirm proper installation.

Note: There are six (6) main tabs on this housing unit, one (1) of the tabs was manufactured with the number "11" embossed on it. When installing these housings, ensure the embossed "11" is located in the upper-right corner.

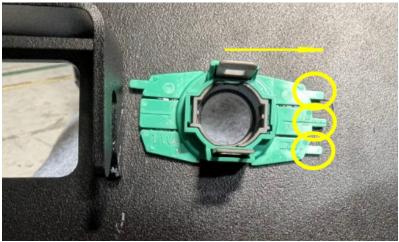


Figure 48 – Inner Sensor Housing Orientation

Note: The Inner Sensor Housings are identified by the four (4) additional "Micro-Tabs" located on the tips of the main tabs. Install the housing such that the side with three (3) Micro-tabs is located towards the reference etch (toward the center of the bumper).

- 32. Allow the epoxy to completely set, per the manufacturer's instructions, before moving on the following steps.
- 33. Reinstall each of the four (4) parking sensors by pushing the sensor block into the proper housing. Ensure the wiring connector is pointed toward the reference etch located next to each sensor hole. (Figure 49)

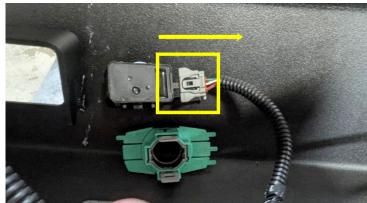


Figure 49 – Wiring Harness Direction Detail

Note: The Sensor Housing and Wiring Harness in this image are show for reference purposes. The Wiring Harness should not be connected to the sensors at the step.

34. Install the 6" Lightbar Mounting Bracket [23472] to the inside of the Bumper Shell using a 10mm socket/wrench and the provided Ø1/4" X 1" bolt, washer and locknut, as shown in Figure 50. Repeat this process on the opposite side to install the second Lightbar Mounting bracket.

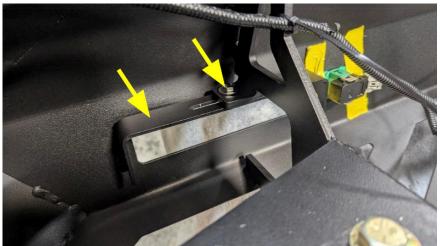


Figure 50 – 6" Lightbar Bracket Installation

35. During this step, it is advised to install any desired Lightbars, Pod Lights or other Aftermarket Accessories while access to the inside of the shell is adequately accessible. (Figure 51)

Note: Mounting hardware for aftermarket light kits has not been provided for this product line.



Figure 51 – Accessory Installation

36. Starting from the PS (Passenger Side) of the bumper, weave the DS sensor connectors of the Sensor Wiring Harness through the bumper as desired, making sure that the cable (circled in blue) is centrally located and the large cable connectors rest outside of the PS bumper mount (Outlined by yellow star). (Figure 51)



Figure 51 – Wiring Harness Routing

37. With assistance, raise the bumper up to the vehicle's mounting brackets. Insert the vehicle's weld studs (Figure 52) into the rectangular openings on the bumper's mounts – this will allow the majority of the bumper's weight to be supported by the vehicle's frame during installation. Despite the majority of the bumper's weight resting on the weld studs, DO NOT LEAVE THE HANGING BUMPER UNSUPPORTED, as doing so may increase risk of bodily injury or damage to the product.

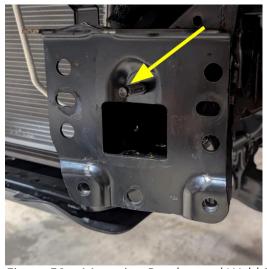


Figure 52 – Mounting Bracket and Weld Stud

38. Lift the bumper off the weld studs and into position. Use a 17mm socket/wrench, to loosely secure the four (4)  $\emptyset$ 7/16" X 1-1/4" bolts through the horizontal mounting faces of both brackets. (Figure 53)

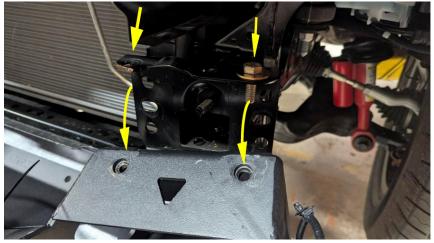


Figure 53 – Bolts for Top of Mounting Bracket

- 39. Use a 5/8" socket or wrench, to loosely secure the OEM Lower Bumper Mount Bolts through the slots at the bottom of the mounting faces, such that the bumper can still be adjusted, but the hardware and mounts bear the weight of the shell.
- 40. Reattach the Front Camera Cable to the sensor, located behind the grill.

Note: Connector Clip should be facing towards the driver side when plugging back in. (Figures 52-53)

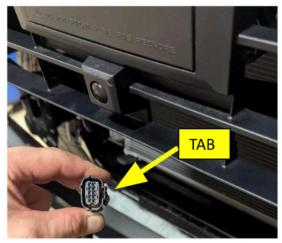


Figure 52 – Connector Identification



Figure 53 – Connector Orientation

#### 41. Reconnect the four (4) remaining connectors on the Wiring Harness. (Figures 54-58)







Figure 55

Figure 56





Figure 54 – Wiring Harness Connectors

Figure 57

Figure 58

42. Ensure the bumper is level to the vehicle body and centered on the frame, then fully tighten the Mounting Hardware to complete the installation.

Note: If installing the bumper on a lift, complete the final adjustments with the vehicle on the ground to ensure a proper fit since the suspension will compress any gaps between the bumper's top deck and facia.

- Run any additional wiring for After-Market Accessories installed in the bumper shell. 43.
- Finally, enjoy the fit and finish of your Fab Fours' Vengeance Series Front Bumper for the 2025 Toyota 44. 4Runner!

## **CONTACT INFORMATION**



# "IF YOU'RE LOOKING FOR MORE OF THE SAME, THEN YOU'VE COME TO THE WRONG PLACE."

- GREG HIGGS

