

INSTALLATION MANUAL MATRIX FRONT BUMPER PRODUCT NUMBER: X675X APPLICATION: 2024 TOYOTA LAND CRUISER



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.

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.

- 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.
- 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



23407 - MATRIX FRONT BUMPER



23408 – DS UPPER BLIND SPOT BRACKET



23410 - DS LOWER BLIND SPOT BRACKET



21871 – LIGHT BAR L-BRACKETS QTY:2



23409 – PS UPPER BLIND SPOT BRACKET



23411 – PS LOWER BLIND SPOT BRACKET



20296 - BOLT STRIP QTY:2

REQUIRED TOOLS

- PANEL PRY TOOL
- PHILLIPS HEAD
 SCREWDRIVER
- 5MM ALLEN WRENCH
- 10MM SOCKET WRENCH
- 17MM SOCKET WRENCH
- 5/8" SOCKET AND COMBINATION WRENCHES
- 11/16" SOCKET AND COMBINATION WRENCHES
- SMALL RECIPROCATING SAW
- SILVER MARKER
- RULER
- MASKING TAPE
- SCISSORS

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 | 50509-HW

IDENTIFICATION NUMBER	COMPONENT DESCRIPTION	QTY
50509-HW	7/16"-14 X 1.25", HEX HEAD CAP SCREW, YELLOW-ZINC, GRADE 8	4
50509-HW	7/16"-14, HEX NUT, YELLOW-ZINC, GRADE 8	4
50509-HW	7/16"-SAE, LOCK WASHER, YELLOW-ZINC, GRADE 8	4
50509-HW	7/16" USS FLAT WASHER, YELLOW-ZINC, GRADE 8	8
50509-HW	1/2"-13, HEX NUT, YELLOW-ZINC, GRADE 8	4
50509-HW	1/2"-SAE, LOCK WASHER, YELLOW-ZINC, GRADE 8	4
50509-HW	1/2"-USS, FLAT WASHER, YELLOW-ZINC, GRADE 8	4
50509-HW	M6-1.0 X 25, BUTTON HEAD CAP SCREW, SS	4
50509-HW	M6 X1.00, NYLOCK NUT, SS	4
50509-HW	M6, FLAT WASHER, ZINC	4
50509-HW	1/4"-20 X 3/4", HEX HEAD CAP SCREW, YELLOW-ZINC, GRADE 8	4
50509-HW	1/4"-20, HEX NUT, YELLOW-ZINC, GRADE 8	4
50509-HW	1/4"-SAE, FLAT WASHER, YELLOW-ZINC, GRADE 8	8
50509-HW	1/4"-SAE, LOCK WASHER, YELLOW-ZINC, GRADE 8	4
50509-HW	1"X1", DOUBLE SIDED, ADHESIVE BACKED FOAM	4

DISASSEMBLY & INSTALLATION

1. Open the hood and using a panel pry tool, remove the eight (8) push pins holding the shroud to the radiator support and grill. Remove the shroud from the vehicle. Figure 1.



Figure 1.

2. Using a 10mm socket wrench, remove the three (3) screws that attach the top of the grill to the radiator support. Figure 2.



Figure 2.

3. Use a 10mm socket and panel pry tool, to remove the two (2) outboard screws and push pin in the center of the plastic trim piece between the bumper and skid plate. Once the trim is removed, you will have access to remove the two (2) screws holding the bumper on to the lower supports. Remove the two (2) screws using a 10mm socket. Figure 3.

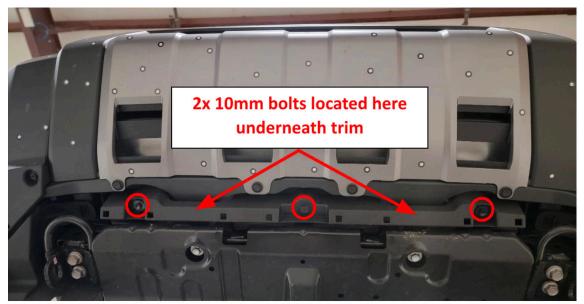


Figure 3.

4. Using a 10mm socket wrench and panel pry tool, remove the three (3) screws on the bottom, and two (2) push pins in the wheel wells to remove the large outer air-dams from the bottom of the bumper. Figure 4-5.



Figure 4-5

5. Remove the smaller inner air-dams by removing the two (2) twist pins. Using a 10mm socket wrench, remove the two (2) screws at the lower portion of the bumper wings. Figure 6.

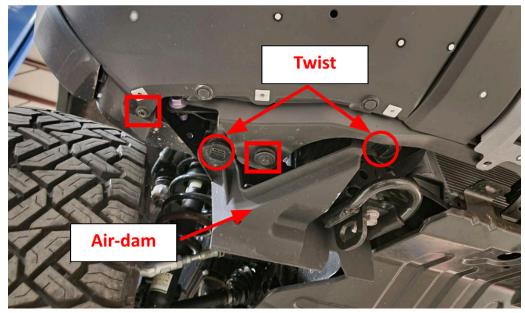


Figure 6.

6. Using a panel pry tool and 10mm socket wrench, loosen the driver and passenger side fender trim by removing the four (4) push pins and one (1) 10mm screw on the side of the wheel wells. Figure 7.



Figure 7.

7. Using a panel pry tool, pry outward on the driver and passenger side fender flares to release the clips. Figure 8.



Figure 8.

8. Using a 10mm socket wrench and panel pry tool, remove the one (1) screw and one (1) push pin from underneath the fender flare to loosen the bumper. Figure 9.



Figure 9.

9. Starting from the outside working your way towards the grill, carefully pull the bumper fascia away from the truck. Disconnect the sensor harness plug and remove the fascia. Figure 10.



Figure 10.

10. Once the bumper fascia is removed, use a panel pry tool to remove the push pin in the driver and passenger side air-dams from the crash bar. Figure 11.



Figure 11.

11. Remove the crash bar by using a 17mm socket wrench to remove the four (4) bolts on each frame horn. These bolts will be used later for reassembly. Figure 12.



Figure 12.

12. Remove the tow hooks using a 17mm socket wrench to remove the two (2) bolts attaching them to the frame. Figure 13.



Figure 13.

13. Start to disassemble the OE bumper fascia by removing the front camera. Do this using a Philips head screwdriver to remove the two (2) screws holding it in place. Unplug the camera from the harness and set aside for installation in new bumper. Figure 14.

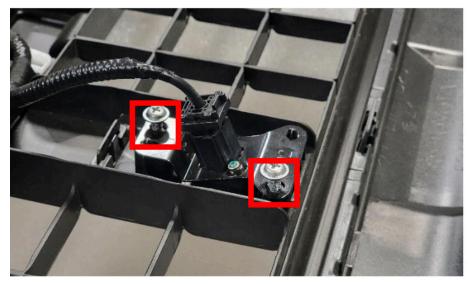


Figure 14.

14. Remove the four (4) parking sensors from the bumper by carefully pulling the black clips away from the sensor and pulling the sensor up out of the housing. Using a panel pry tool, separate the sensor housing from the bumper facia. Figure 15-16.

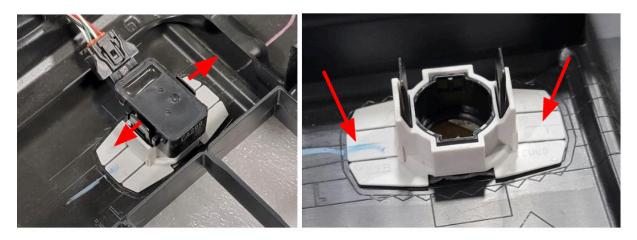


Figure 15-16.

15. Using a panel pry tool and Phillips head screwdriver, remove the lower fascia covering by removing the four (4) push pins from the front, then the two (2) Philips head screws, two (2) white retaining clips and six (6) body clips from the back. Figure 17-18.



Figure 17-18.

16. Using a Phillips head screwdriver and panel pry tool, remove the center mesh fascia from the bumper by removing the five (5) Philips head screws above the mesh, the six (6) white retaining clips and six (6) black tabs. Figure 19-20.

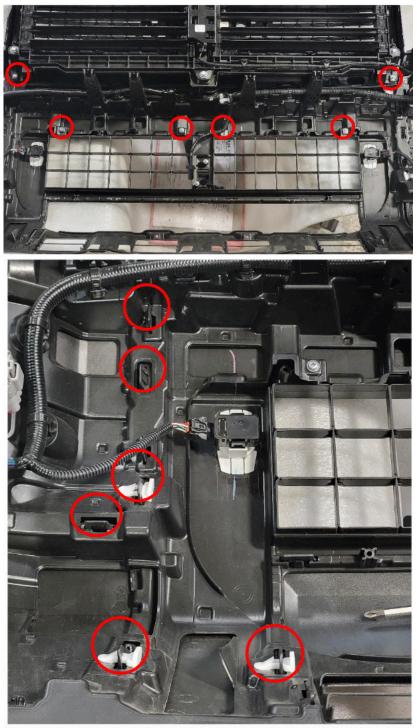


Figure 19-20

17. Using a Phillips head screwdriver, remove the three (3) screws, attaching the fog lights to the bumper. Figure 21.

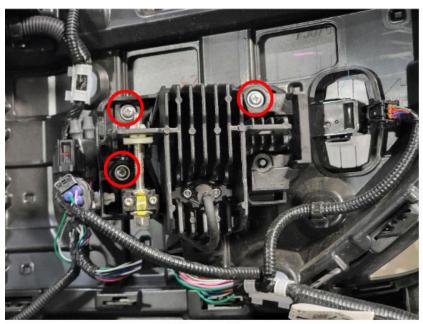


Figure 21.

18. Using a Phillips head screwdriver and panel pry tool, remove the one (1) screw and nine (9) black tabs attaching the bumper fog light valance to the bumper shell. Figure 22.

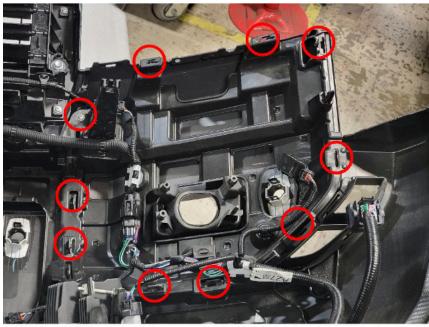


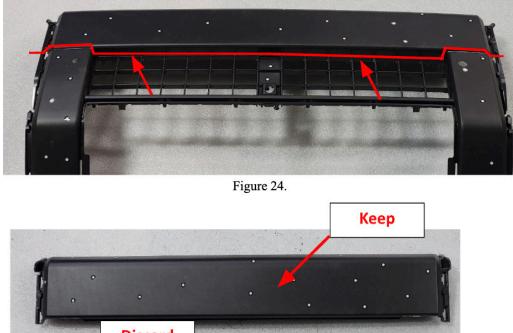
Figure 22.



19. Once complete, the bumper frame should look like Figure 23 and be ready for trimming. Figure 23.

Figure 23.

20. Using a silver marker, trace the separation line between the solid section of the grille and the mesh area then onto the seam on either side of the mesh area. Using a small reciprocating saw cut the grill along the previously marked line. Figure 24-25.



Discard

Figure 25.

Apply the cut template marked DS onto the driver's side fog light valance taking care to align the 21. top and side profiles with the edges on the valance as shown. Figure 26-29. Note the dimensions are for reference only and to help verify the template has been placed correctly. Figure 26-29.



Figure 27.



Figure 28.

Figure 29.

22. Using a small reciprocating saw, cut the fog light valance along the bottom edge of the previously applied template. Repeat steps 21-22 on the passenger's side. Figure 30.



Figure 30.

23. Using a marker and masking tape, cover the fender flare where it meets the front edge of the fender and mark a line parallel with the front edge of the fender. Using a small reciprocating saw, trim the flare along the previously marked line. Figure 31.

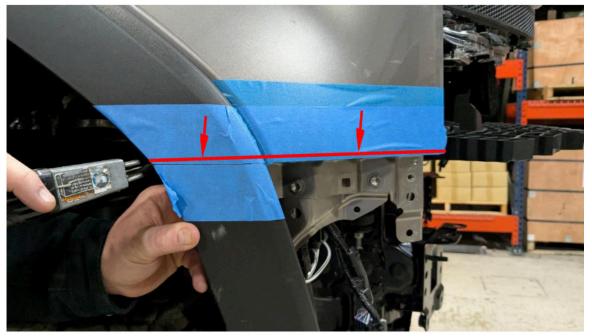


Figure 31.

24. Using a silver marker, trace a straight line parallel to the bottom edge of the previously cut center that traverses along the top edge of the large holes cut out of the bumper wing structure. Cut the bumper structure along the previously marked line. Figure 32.

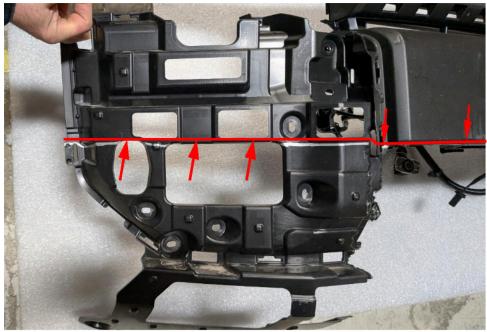


Figure 32.

25. Stack two (2) of the adhesive-backed foam squares provided in the hardware kit to each other, then apply them to the location shown on the bumper structure. Figure 33.



Figure 33.

26. Using the small reciprocating saw, trim off the tab slot that was left over from the initial cut on the fog light valance. Figure 34.



Figure 34.

27. Carefully remove the radar sensors from their brackets on the driver and passenger sides of the vehicle by releasing the clips with a panel pry tool. Figure 35.

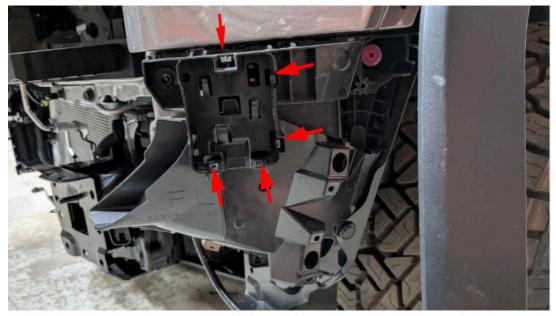


Figure 35.

28. Using a 10mm socket, Phillips head screwdriver and panel pry tool, Remove the screw and push pins attaching the air duct structures to the vehicle. Figure 36.

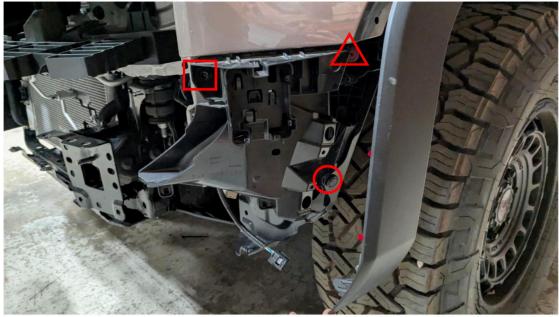


Figure 36.

29. Using a silver marker, hold the provided black plastic sheets on the inside of the bumper wings with the smooth side facing out and trace the hole that is cut out of the bumper wing and the two (2) adjacent holes next to the large cutout. Figure 37.



Figure 37.

30. Using a silver marker and ruler, offset the previously marked line 1/2" outboard from the closest part marked. Using scissors, cut along the offset line. Using a 1/4" drill bit, drill a t the two (2) mounting hole locations circled. Figure 38.

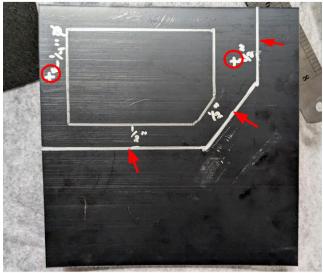


Figure 38.

31. Install the cut black plastic sheet, the upper and lower radar brackets and the radar sensor. Using a 5mm Allen wrench and 10mm socket wrench, install the supplied M6 screw, flat washer and nuts through the radar brackets and plastic sheet to the bumper shell. Figure 39-41.

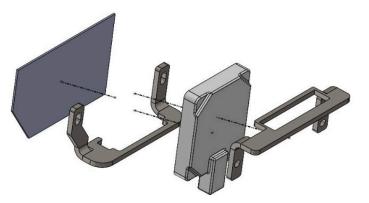


Figure 39.



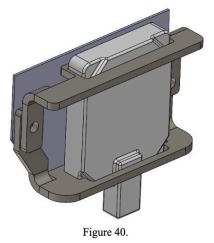


Figure 41.

32. Using a 7/16" combination and socket wrench, install the camera with the two (2) provided 1/4" hex head cap screws, flat washers, lock washers and nuts. Figure 42.



Figure 42.

33. Using the provided epoxy, adhere the parking sensor housings into the bumper shell in the same position and orientation from which they were removed from the factory bumper. Figure 43.



Figure 43.

34. If installing a lightbar, do so now using the provided L-brackets and four (4) 1/4" hex head cap screws, flat washers, lock washers and nuts. Use a 7/16" tighten the previously installed hardware. Figure 44.

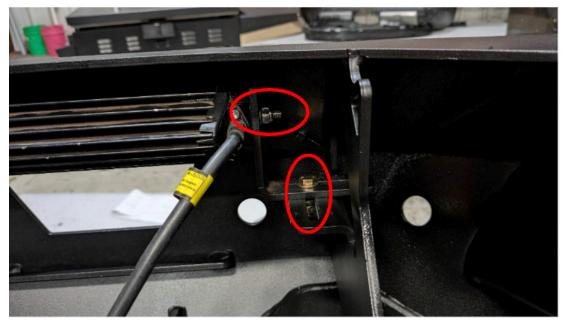


Figure 44.

- 35. If installing lights in the wings, do so now using the hardware provided but the lighting manufacture.
- 36. If installing a winch, do so now using the winch manufactures hardware per their instructions. Figure 45.

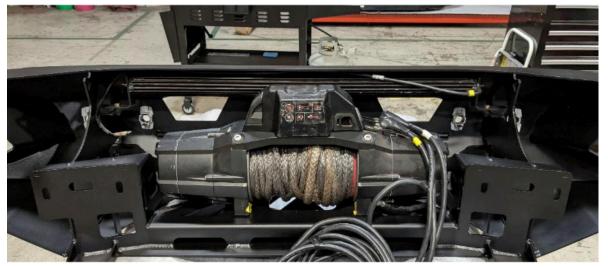


Figure 45.

37. Using the two (2) provided bolt strips (part#: 20296) and four (4) 1/2" flat washers, lock washers, and nuts, install the two (2) provided brackets to the bumper. Part#: 23418 is the driver's side and part#: 23419 is the passenger side. Figure 46

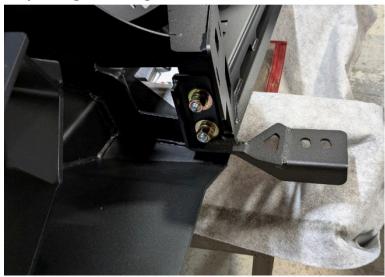


Figure 46.

38. Install the assembled bumper to the vehicle and loosely install the four (4) factory screws removed from the crash bar earlier into the holes from which the tow hooks were removed. Figure 47-48. Note: if installing a full guard (X6750), steps 38 and 39 should be done simultaneously.



Figure 47.

Figure 48.

39. Reinstall the bumper wiring harness and reconnect all the plugs from where they were removed.

Reinstall the fog light facias to the driver and passenger side of the grille structure. Reinstall the 40. assembled grille to the vehicle by reversing the steps used to remove it. Figure 49.



Figure 49.

41. Install the four (4) provided 7/16" hex head cap screws, flat washers, lock washers and nuts into the frame horn. Figure 50-51.



Figure 50.

- 42. Using a 5/8", 11/16" socket wrench, tighten the previously installed 7/16" hardware.
- 43. Using a 3/4" socket and combination wrench, tighten the previously installed 1/2" hardware.
- 44. Using a 17mm socket and combination wrench, tighten the previously installed factory hardware.

INSTALLATION COMPLETE

CONTACT INFORMATION

FAB FOURS INC. 2213 Industrial Park Road Lancaster, SC 29720

PHONE: (866) 385-1905 Fax: 970-385-1914 Email: Support@fabfours.com Fabfours.com

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"IF YOU'RE LOOKING FOR MORE OF THE SAME, Then you've come to the wrong place."

- GREG HIGGS

