

INSTALLATION MANUAL WINCH MOUNT FRONT BUMPER PRODUCT NUMBER: N455X APPLICATION: 2014+ TOYOTA ARIINNER



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.

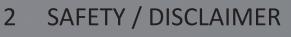
WARNINGS

- 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.



- 3 TABLE OF CONTENTS
- 4 A MESSAGE FROM THE OWNER
- 5 GETTING STARTED
- 6 PROVIDED MATERIAL
- 7 DISASSEMBLY
- 12 INSTALLATION
- 17 CONTACT

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!

Neg 9

FOUNDER, FAB FOURS

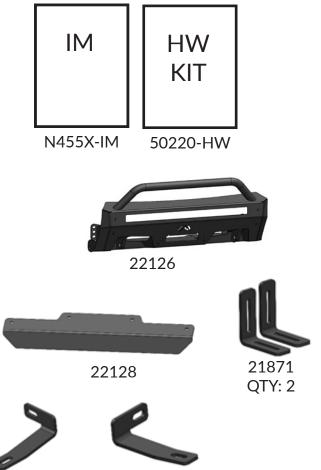
GETTING STARTED

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



22129

22130

HARDWARE KIT | 50220

FAB FOURS Identification	COMPONENT Description	QTY
50220-HW	7/16" Yellow Zinc Flat Washer, Grade 8	8
50220-HW	M12-1.25 x 35mm Clear Zinc, Cl 10.9	2
50220-HW	M12 Clear Zinc Flat Washer	2
50220-HW	M12 Clear Zinc Lock Washer	2
50220-HW	%"-16 x .75" Yellow Zinc Hex Bolt, Grade 8	2
50220HW	%" Yellow Zinc Flat Washer, Grade 8	2
50220-HW	%" Yellow Zinc Lock Washer, Grade 8	2
50220-HW	%"-16 x .75" Stainless Steel Button Head Bolt	4
20220-HW	%" Stainless Steel Rubber Bonded Flat Washer	4
20220-HW 20220-HW 20220-HW 20220-HW	 ¼"-20 X 1" Yellow Zinc Hex Bolt, Grade 8 ¼"-20 Yellow Zinc Hex Nut, Grade 8 ¼" Yellow Zinc Flat Washer, Grade 8 ¼" Yellow Zinc Lock Washer, Grade 8 	4 4 4 4

TOOLS REQUIRED

- 14mm socket wrench
- 18mm socket wrench
- 10mm socket wrench
- Pair 7/16" open end wrenches
- 7/32" allen wrench
- ratcheting wrench
- Marker
- Cutting Tool
- Deburring tool
- Phillips screwdriver
- Plastic panel pry tool
- Flat Head screwdriverPliers
- 1/2" or larger drill bit
- Drill

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

NOTE: Save all OEM parts until installation is complete!

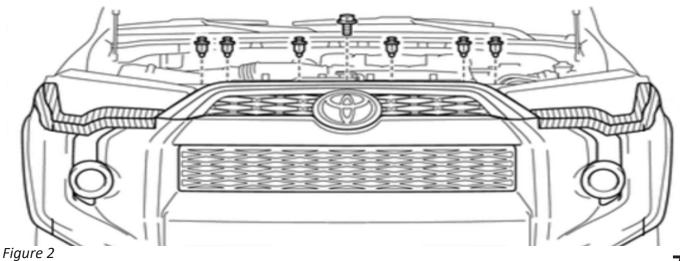
1. Pop the hood and remover the underhood radiator cover by removing the thirteen (13) push button clips and plastic screw clips. (Figure 1)



Figure 1

2. Using a 10mm socket wrench, remove the one (1) center bolt. (Figure 2)

3. Using a plastic panel tool, remove the six (6) push button clips. (Figure 2)



4. Using a 10mm socket wrench, remove the six (6) screws from both wheel wells. Note that the top screw in both wheel wells are a smaller thread size and meant for the top holes only. (Figure 3)

5. Unhook the bumper cover from the wheel well cover at all six (6) mounting points from both wheel wells. (Figure 3)



Figure 3

6. Using a 10mm socket wrench, remove the seven (7) under-bumper bolts. (Figure 4 & 5)



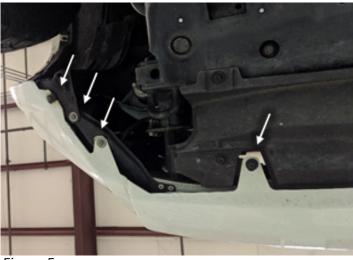


Figure 5

Figure 4

7. Beginning at the fender on one side of the plastic bumper cover, begin detaching the seven (7) bumper clips retaining the cover to the vehicle, stopping at the center of the vehicle. Repeat this process on the other side of the bumper

8. While holding the bumper, release the two (2) fog light wiring harnesses and set the bumper aside for further disassembly.

9. Using a Philips screwdriver, remove the six (6) screws holding the metal lower grill stiffener. Save for reinstallation later. (Figure 6)

9. Using a plastic panel tool, unclip the thirteen (13) retainers and one (1) push button clip, remove the lower grill from the bumper cover.

(Figure 7)







Figure 7

10. Using a 10mm socket wrench, remove the five (5) bolts securing the lower splash shield to the crash bar and frame. (Figure 8)



Figure 8

11. Using a 14mm socket wrench, remove the eight (8) bolts holding the factory crash bar to the end of the frame rail. These bolts can be fully removed without the crash bar falling. (Figure 9 & 10)



Figure 9



Figure 10

13. Using a 10mm socket wrench, remove the bolts securing the horizonal coolant pipe to the body. (Figure 11)

14. Using a pair of pliers, bend the coolant line brackets in a way so that the coolant line may be zip tied back to the vertical bumper brace. (Figure 11)

15. Using a 10mm socket wrench, reinstall the coolant line brackets to the frame. (Figure 11)



Figure 11

** Note: Depending on the winch installed, it may be recommended that the horizontal coolant line be secured back along the vertical frame brace. (Figure 12)

16. Using a marker and cutting tool, mark both driver and passenger side air dams and trim.

(Figure 13 &14)

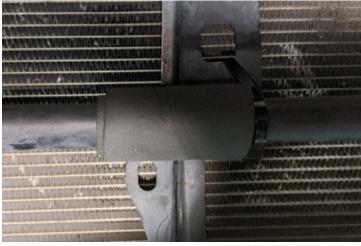


Figure 12



Figure 13

Note: Step 17 may not be needed depending on the winch you select to install into the bumper. The vertical coolant line is fairly malleable yet delicate. Bend very slowly not to cause any sharp angles or the tube to kink. Do not deform the coolant line too close to the fittings. This step should be done with caution and is to be performed at your own risk if damage occurs to the coolant line due to mishandling.



Figure 14

INSTALLATION

17. Carefully reposition the vertical coolant line if your winch requires it. (Figure 15 & 16)

18. Install the fairlead mount as directed and use the hardware provided by the manufacture.



Figure 15



Figure 16

19. Install the 30" light bar at this time using both the manufactures hardware and hardware provided in your Fab Fours hardware kit. (50220-HW) (Figure 17)

20. Using a pair of 7/16'' wrenches and the two (2) $\frac{1}{4''}$ -20 x 1'' yellow zinc hex bolt, yellow zinc flat washers, yellow zinc lock washer, and yellow zinc hex nut, position and fully tighten down the light bar to the two (2) light bar brackets (21871) and the brackets to the

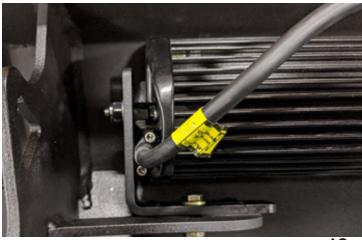


Figure 17

*** Note: You new Fab Fours bumper features winch access holes up through both d-ring pockets. You may utilize these access holes or create a third access hole in the under-hood radiator cover that was removed in the first step of this manual. The d-ring winch access holes may require you to clock the winch transmission forward depending on the winch you choose to install. The third winch access hole in the radiator cover may be required if you install a non-wireless winch or plugging in the control wire to the winch is unaccessible through the d-ring access holes.

21. Follow the manufactures recommended process to clock the winch transmission if applicable.

22. Using the manufactures provided hardware, loosely install the front two winch mounting bolts into the winch mounting holes. Leave at least ¼" of bolt hanging out the bottom. (Figure 18)

23. Place the winch on the bumpers winch tray dropping the front two (2) winch bolts into the keyhole slots. Push the winch forward enough to loosely install the rear two (2) winch bolts. (Figure 19)

24. Using an appropriate ratcheting wrench, fully tighten down the winch to the bumper.

25. Test winch transmission lever and winch control wire plug is accessible through the d-ring winch access hole if applicable.



Figure 18



Figure 19

26. Using a marker and blue painters tape, mark out the cut profile on the factory bumper. (Figure 20)

Note Figure 20 shows the upper corner of the factory bumper cut line. The distance between the two arrows is 1.00".

Note Figure 21 shows the upper middle of the factory bumper cut line. The distance between the two arrows is 1/2".

**Note Figure 22 shows the side of the factory bumper cut line. This cut should be right along the valley of the crevasse where the bumper start protruding back out. Only the flat surface should remain after cutting in the bumper crevasse.



Figure 20



Figure 21



Figure 22

27. Using at least a ½" drill bit or larger, drill out the upper two corners of the cut line to aid in cutting and to reduce stress points in the bumper. (Figure 23)

28. Using a cutting tool, cut away the center section of the factory bumper. (Figure 24)

29. Using deburring tool, clean the edges of the

cut.



Figure 23



Figure 24

30. Using a Philips head screwdriver and the six (6) factory screws, replace the metal lower grill stiffener that was removed in step eleven. (Figure 25)



Figure 25

30. Reinstall the factory bumper

31. With assistance, hold the bumper up to the vehicle and reconnect both factory fog lamp wiring harnesses.

32. Beginning at the fender on one side of the plastic bumper cover, begin clipping the seven(7) bumper clips retaining the cover to the vehicle, stopping at the center of the vehicle.

**Repeat step 31 beginning on other side of bumper

33. Using a 10mm wrench, reinstall the one (1) factory bolt in the center of the grill an reinstall the six (6) push pins. (Figure 26)

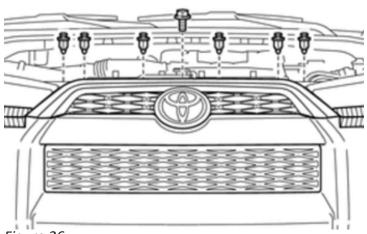


Figure 26

34. Using a 10mm wrench, reinstall the six (6) wheel well clips and screws. Be sure to use the finer thread screw in the upper screw hole, the lower two holes use the course thread screws. (Figure 27)



Figure 27

35. Using blue tape, protect the paint along the edges of the factory bumper. Be sure to layer the tape in a way making it easy to remove after the Fab Fours bumper is installed. The tape may be challenging to remove. (Figure 28)



Figure 28

**Note: the outer three (3) frame rail end bolts on each frame rail will be accessed from under the bumper. The inner one (1) frame rail end bolt on each frame rail will be accessed under the hood reaching down between the grill and the radiator.

36. With assistance of two, hold the bumper up to the frame rail ends and secure using the eight factory bolts with the provided 7/16" yellow zinc flat washers hand tightened. (50220-HW) (Figure 29)

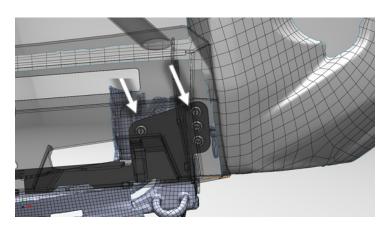


Figure 29

37. Using the provided M14 x 35mm clear zinc bolt, clear zinc flat washer and clear zinc lock washer, fully hand tighten the side mount bolt through the bumper (22126) and into the frame. (50220-HW) (Figure 30)



Figure 30

38. Ensure the eight (8) frame rail end bolts are holding the bumper close to the final mounted position and take this time to remove the blue protective tape.

39. Using a 14mm wrench, fully tighten all eight (8) frame rail end bolts

40. Using a 18mm wrench, fully tighten the two (2) side mount bolts.

41. Make any wiring connections for the winch and light bar using the manufactures provided hardware and instructions.

42. Using the provided ⅔"-16 x .75" yellow zinc hex bolt, yellow zinc flat washer, and yellow zinc lock washer position the driver side Oem bumper bracket (22129) and hand tighten. The end of the bracket (22129) should be positioned above the bumper flange inside the bumper. (50220) (Figure 31)

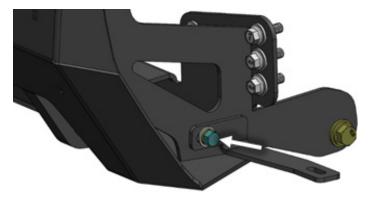


Figure 31

43. Using the provided ¼"-20 x 1" yellow zinc hex bolt, yellow zinc fender washers, yellow zinc lock washer, and yellow zinc hex nut, hand tighten the Oem bumper to the Oem bumper bracket (22129). (50220-HW) (Figure 32)



Figure 32

44. Position the driver side of the Oem bumper tight to the Fab Fours bumper closing any gaps between the to. Using both a 9/16" and pair of 7/16" wrenches, fully tighten down the hardware loosely installed in steps 42 and 43.

45. Perform 47 thru 49 in the same manner on the passenger side of the bumper using the passenger side Oem bumper bracket (22130). (50220-HW)

46. Using the provided four (4) ³⁄₄"-16 x .75" stainless steel button head bolts, rubber bonded stainless steel flat washers, hand tighten the lower guard (22128) to the bottom of the Fab Fours bumper (22126). (50220-HW) (Figure 33)



Figure 33

47. Using 7/32" Allen wrench, fully tighten down the hardware installed in step 46.

48. Optional: using a blue tape, marker, cutting tool, and deburring tool, determine the hole placement for the under-hood winch access hole through the under-hood radiator cover. Double check you marks and trim out the hole. (Figure 34)

49. Reinstall the under-hood radiator cover using the thirteen (13) plastic pish pins.



Figure 34



CONTACT INFORMATION

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

PHONE: (866) 385-1905 FAX: 866-574-1423 Email: Support@fabfours.com WWW.fabfours.com

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

- GREG HIGGS

