



INSTALLATION MANUAL
MATRIX FRONT BUMPER
PRODUCT NUMBER: X595X
APPLICATION: 2023 FORD SUPER DUTY



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.

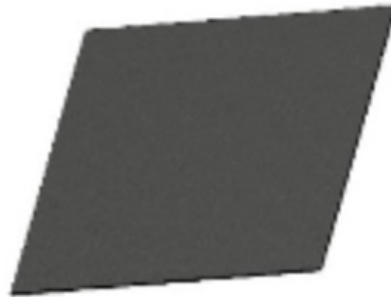
PROVIDED MATERIALS



23038 - BUMPER SHELL



21871 - LIGHT BAR L-BRACKETS
QTY:2



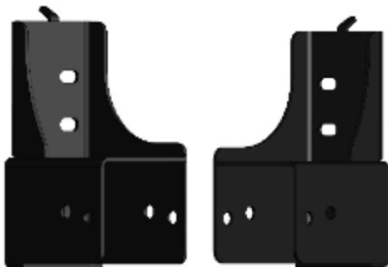
61784 - ACC FILLER PANEL
(PLASTIC SHEET)



20296 - BOLT STRIP QTY:4



23042 - ACC COVER SHROUD



23039 - DS MOUNTING BRACKET
23040 - PS MOUNTING BRACKET



23046 -WASHER PLATES
QTY 4

61632 - EPOXY PACKETS QTY:2

50409-HW - HARDWARE KIT

TOOLS REQUIRED

- PANEL PRY TOOL
- TAPE MEASURE
- SILVER MARKER
- ANGLE GRINDER OR HAND FILE
- DRILL
- 1/4" DRILL BIT
- 1/2" DRILL BIT
- E6 TORX SOCKET
- 1/8" ALLEN WRENCH
- 8MM SOCKET WRENCH
- 11MM SOCKET WRENCH
- 15MM SOCKET WRENCH
- 18MM SOCKET WRENCH
- 7/16" SOCKET WRENCH
- 7/16" COMBINATION WRENCH
- 3/4" COMBINATION WRENCH
- 3/4" DEEP SOCKET WRENCH

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 | 50409-HW

IDENTIFICATION NUMBER	COMPONENT DESCRIPTION	QTY
50409-HW	1/4"-20 X 1", HEX HEAD CAP SCREW, YELLOW-ZINC, GRADE 8	2
50409-HW	1/4"-20, HEX NUT, YELLOW-ZINC, GRADE 8	2
50409-HW	1/4"-SAE, FLAT WASHER, YELLOW-ZINC, GRADE 8	4
50409-HW	1/4"-SAE, LOCK WASHER, YELLOW-ZINC, GRADE 8	2
50409-HW	1/2"-13 X 2.0", HEX HEAD CAP SCREW, YELLOW-ZINC, GRADE 8	8
50409-HW	1/2"-SAE, LOCK WASHER, YELLOW-ZINC, GRADE 8	16
50409-HW	1/2"-SAE, FLAT WASHER, YELLOW-ZINC, GRADE 8	16
50409-HW	1/2"-13, HEX NUT, YELLOW-ZINC, GRADE 8	16
50409-HW	10-24 X 3/4", SOCKET HEAD CAP SCREW, BLACK SS	2
50409-HW	10-24, CLIP ON BARREL NUT	2
50409-HW	1-3/8", RUBBER SENSOR HOLE GROMMET	4
50409-HW	PLASTIC SENSOR HOLE PLUG	4
50409-HW	1/2" BOLT RETAINER CLIP	2

INSTALLATION

1. Remove the plastic tow hook covers by pulling on them to release the clips. Figure 1



Figure 1

2. Disconnect the bumper electrical harness connected to the inside of the driver side frame rail. Figure 2



Figure 2

3. If applicable, remove the adaptive cruise control (ACC) sensor from its mounting bracket. Figure 3



Figure 3

4. If applicable, disconnect the electrical connector from the ACC sensor. Figure 4



Figure 4

5. Using an E6 torx socket remove the three (3) studs that attach the ACC bracket to the vehicle. Figure 5

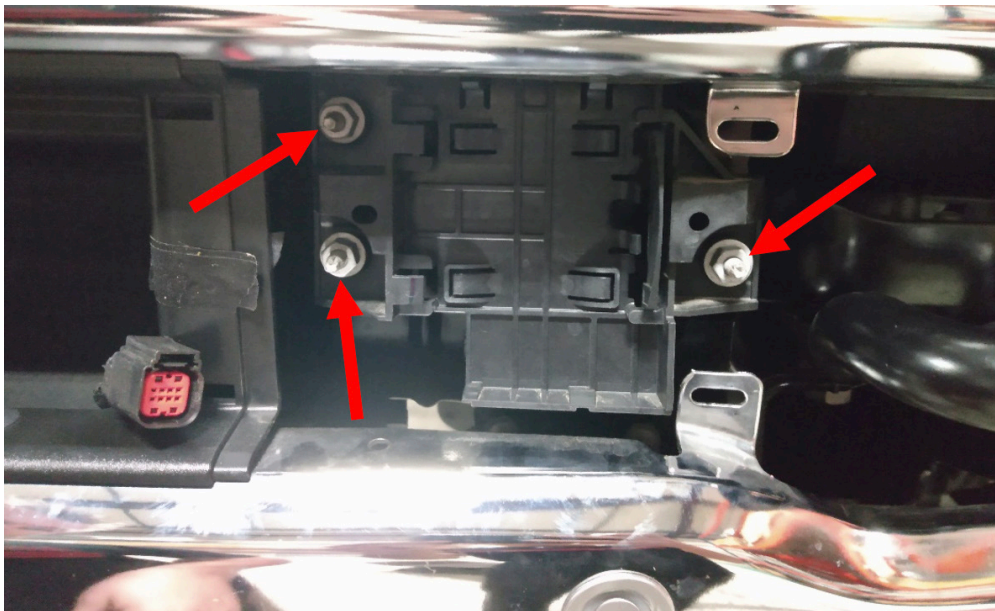


Figure 5

6. Using an 18mm socket wrench, remove the eight (8) bolts that attach the bumper to the tow hook brackets. Figure 6

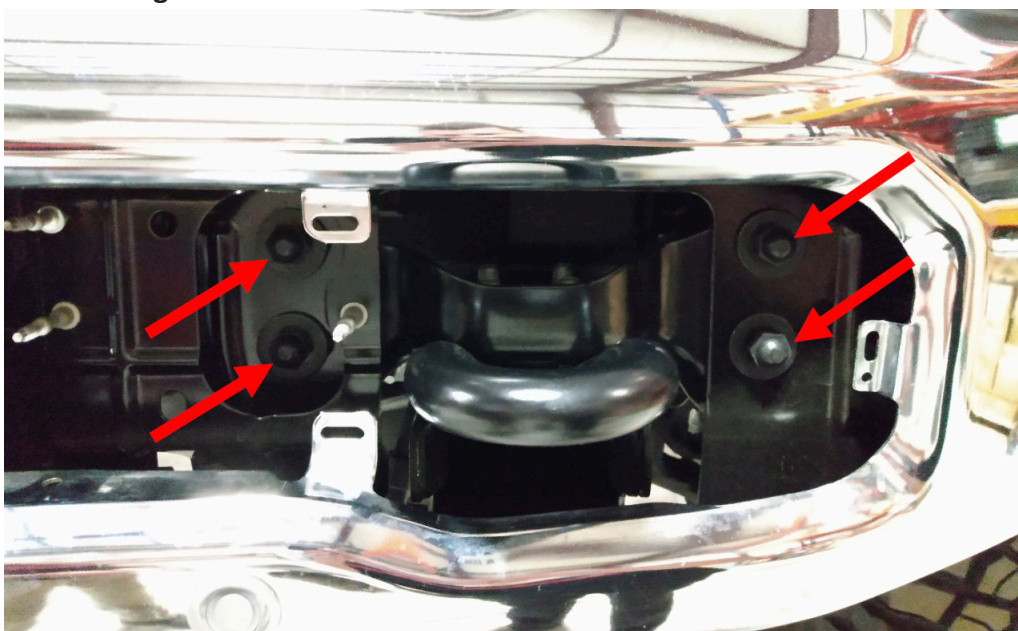


Figure 6

7. Using a 15mm socket wrench, remove the two (2) bolts per side that attach the bumper reinforcement brackets to the frame. Figure 7

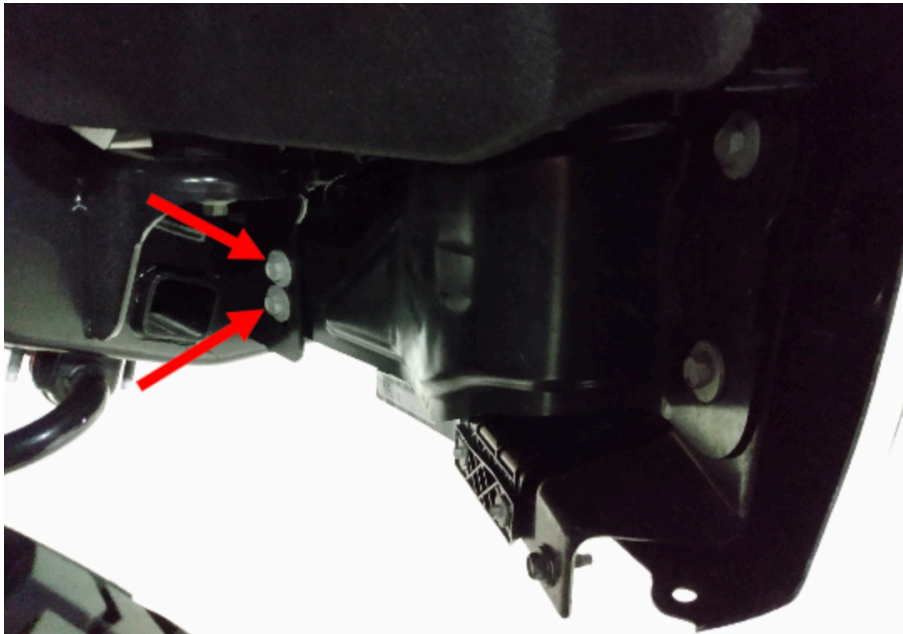


Figure 7

8. Using a body panel pry tool, remove the two (2) push pins attaching the shroud to the grille. The bumper can now be removed from the vehicle. Figure 8



Figure 8

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9. Using an 18mm socket wrench, remove the eight (8) bolts attaching the tow hooks to the frame and remove the tow hooks. Figure 9

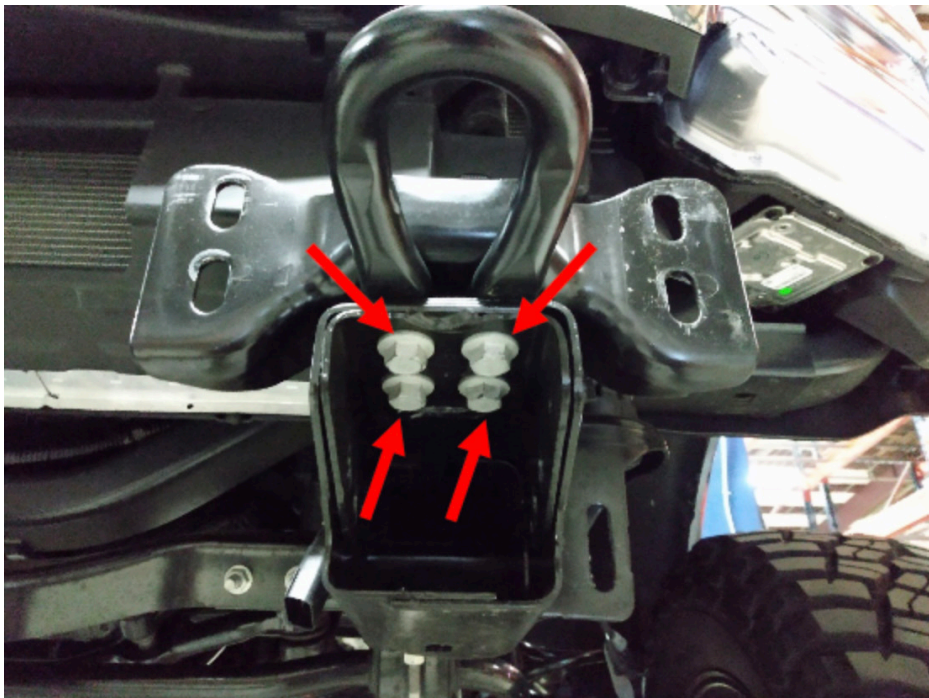


Figure 9

10. Using an 18mm socket wrench, remove the eight (8) nuts attaching the underrun guards to the bottom of each frame rail. Figure 10

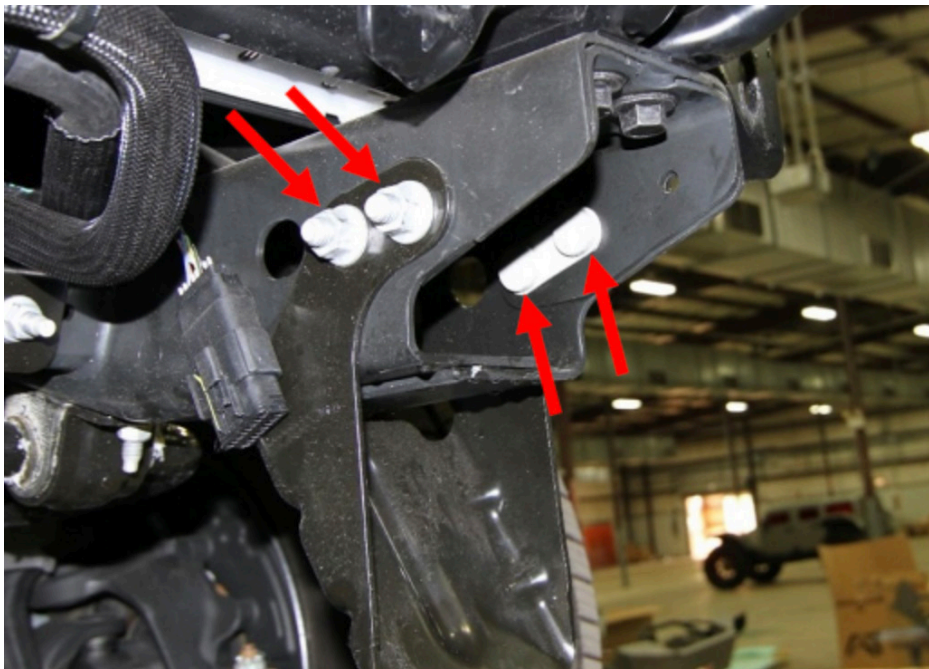


Figure 10

11. Using an 8mm socket wrench, remove the four (4) screws in each fog light bracket to remove them from the bumper. Figure 11

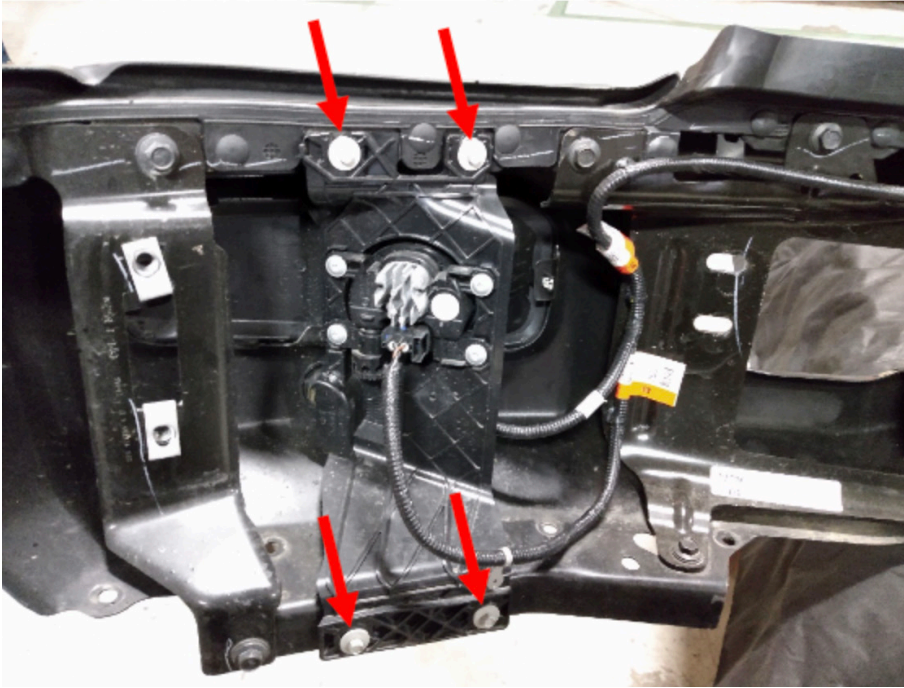


Figure 11

12. Using a panel pry tool, remove the push pin clip. Figure 12



Figure 12

13. Using a marker, trace the outline and the two (2) holes of the provided ACC cover plate (Part#: 23042) onto the smooth side of the provided plastic ACC filler panel (Part#: 61784). Then use a knife to cut the ACC filler panel along the marked line and use a 1/4" dill bit to drill the two (2) holes previously marked. Figure 13-14

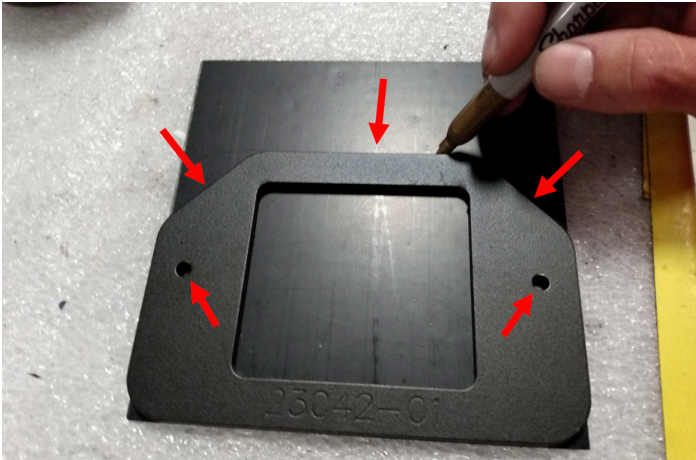


Figure 13

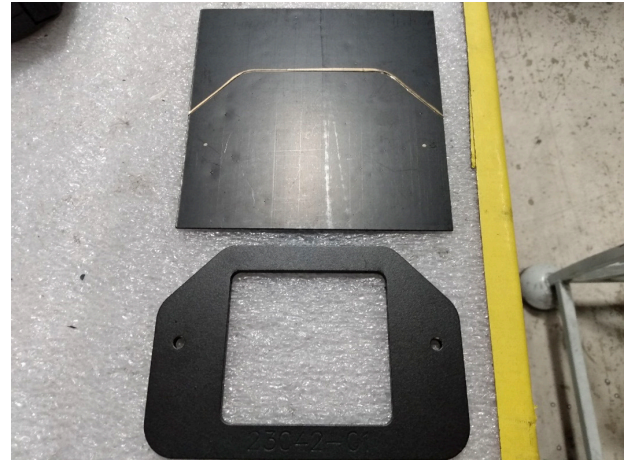


Figure 14

14. Hold the cut ACC filler panel inside the bumper and align the two (2) drilled holes with the corresponding holes in the bumper. Using a marker, trace the upper hole cutout in the bumper. Figure 15

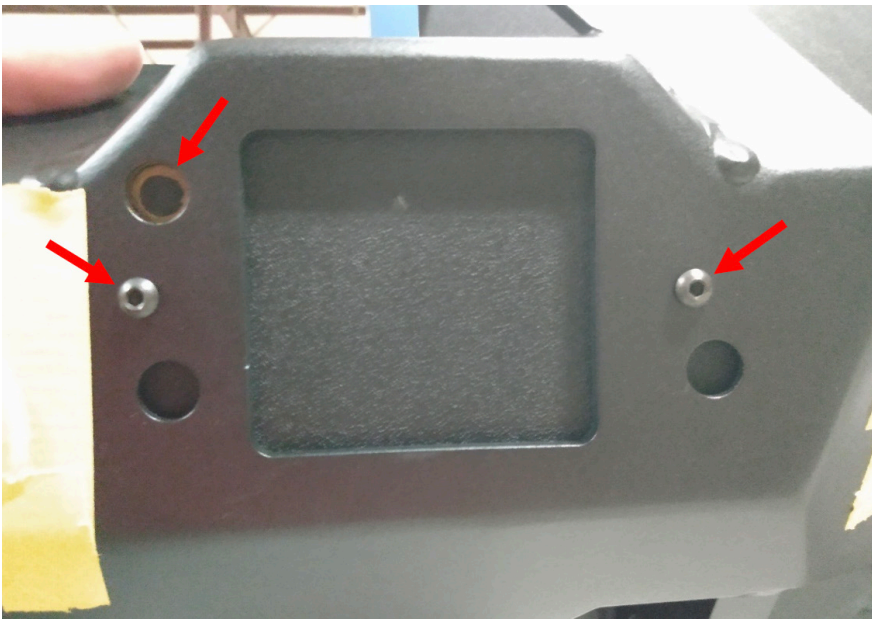


Figure 15

15. Remove the ACC filler panel, and use a 1/2" drill bit, drill out the previously marked spot on the ACC filler panel. Figure 16



Figure 16

16. Using a tape measure and marker, measure in from the corner of the ACC mounting bracket 1/4" and make a chamfer mark. Figure 17-19

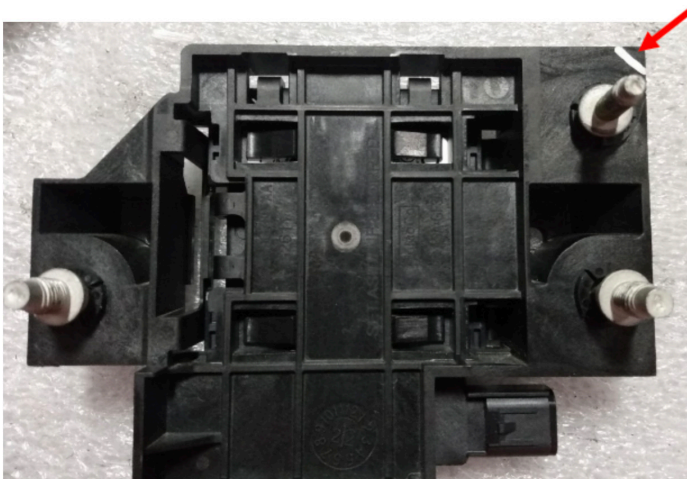


Figure 17



Figure 18



Figure 19

17. Using an angle grinder or hand file, remove the material previously marked on the ACC bracket.
Figure 20

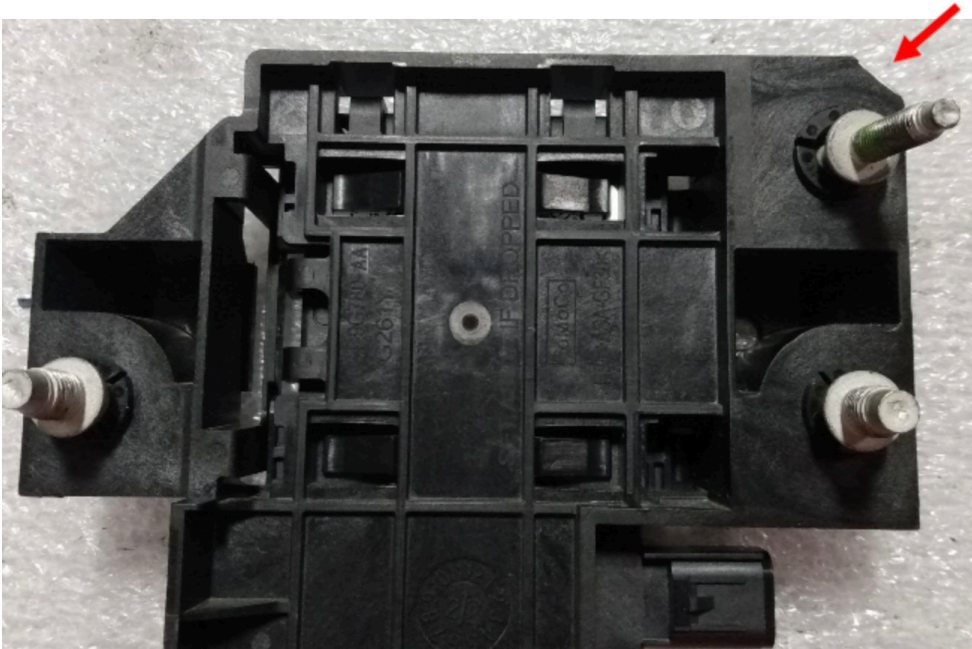


Figure 20

18. Dislodge the three (3) ACC bracket studs from the bracket towards the end with the lock nut so that the ball is visible. Figure 21



Figure 21

19. Install the ACC bracket into the bumper. Figure 22

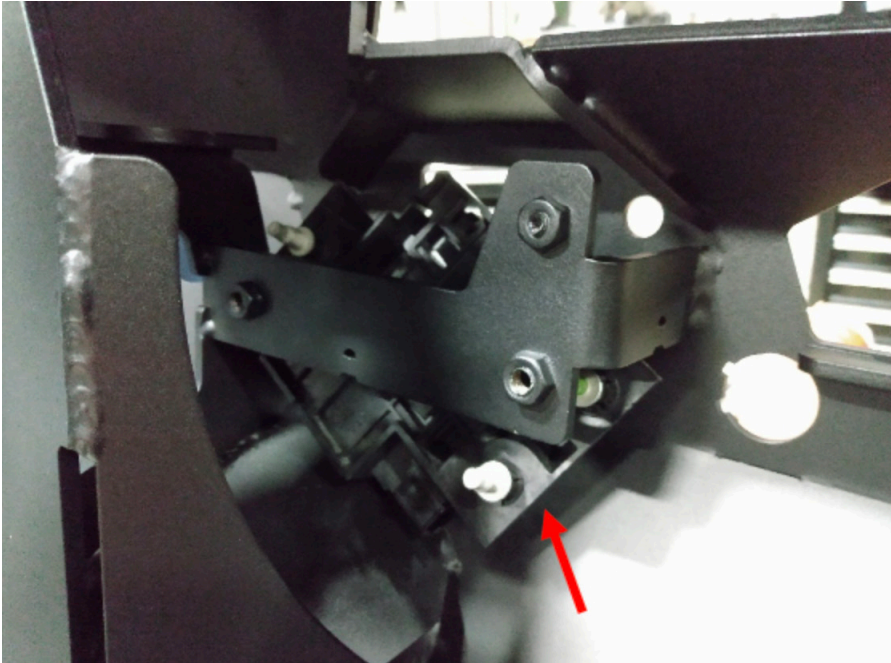


Figure 22

20. Thread the ACC bracket mounting studs into the mounting bracket in the bumper using an E6 torx socket wrench. Tighten the top stud until the sensor face is parallel to the bumper face. Figure 23A

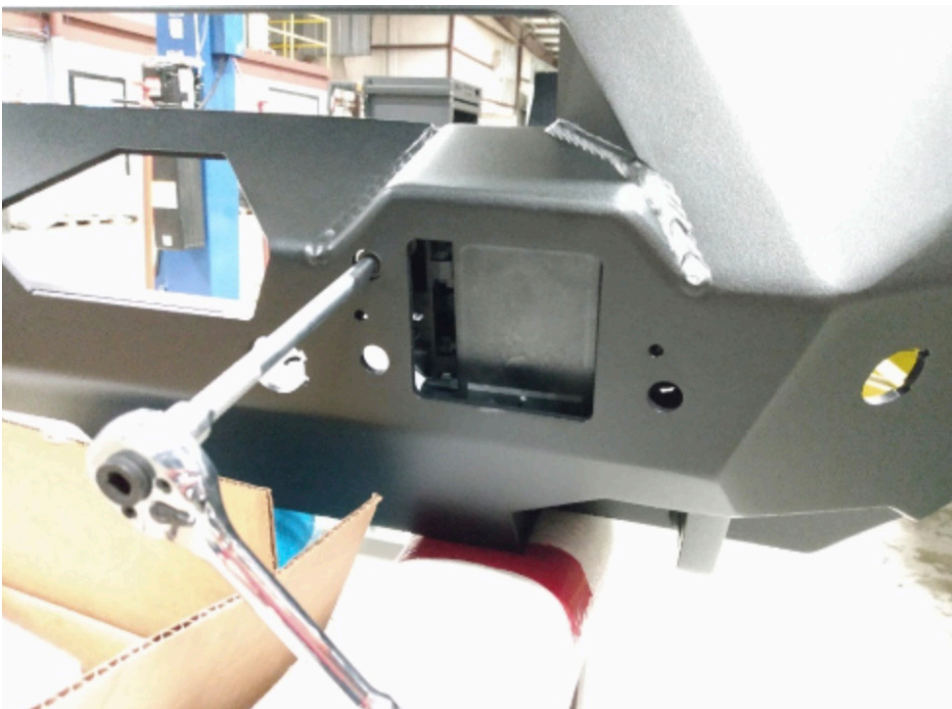


Figure 23A

****Note: The ACC sensor can be adjusted for calibration after the bumper is installed by simply removing the cover plate to access the top stud. ****

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21. Install the two (2) provided barrel nuts onto the ACC filler panel and insert it inside the bumper. Using the two (2) provided 10-24 socket head cap screws with an 1/8" Allen wrench, install the ACC cover plate. Figure 23B

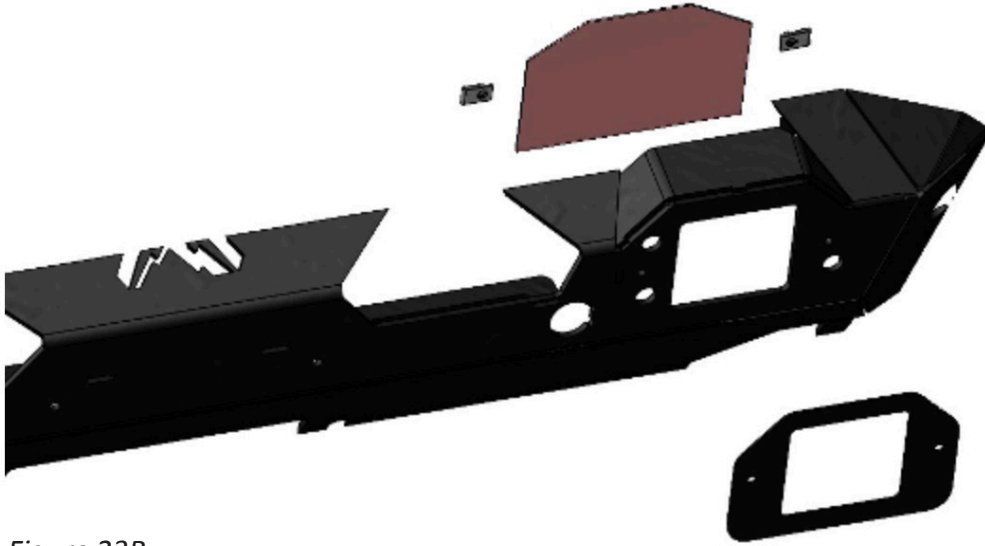


Figure 23B

22. Using a pry tool, reset the sockets in the ACC mounting bracket onto the mounting stud balls. Figure 24

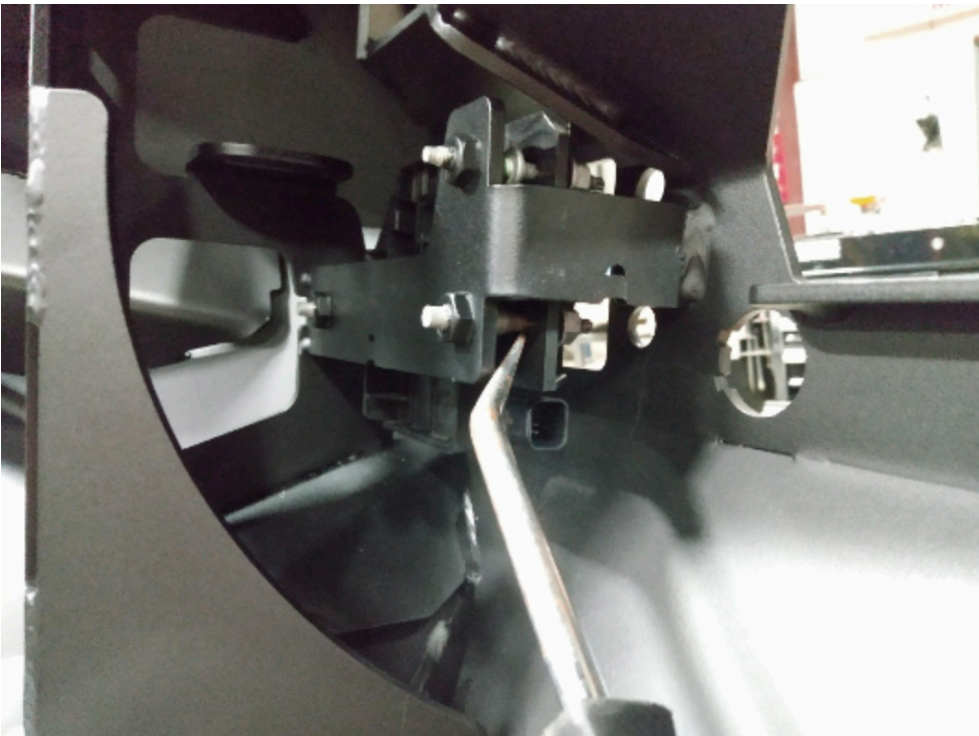


Figure 24

23. If installing lighting in the bumper do so now. Use the two (2) provided L-brackets (part#: 21871) and four (4) 1/4" hex cap screws, flat washers, lock washers, and nuts to mount the 30" lightbar. Figure 25-27

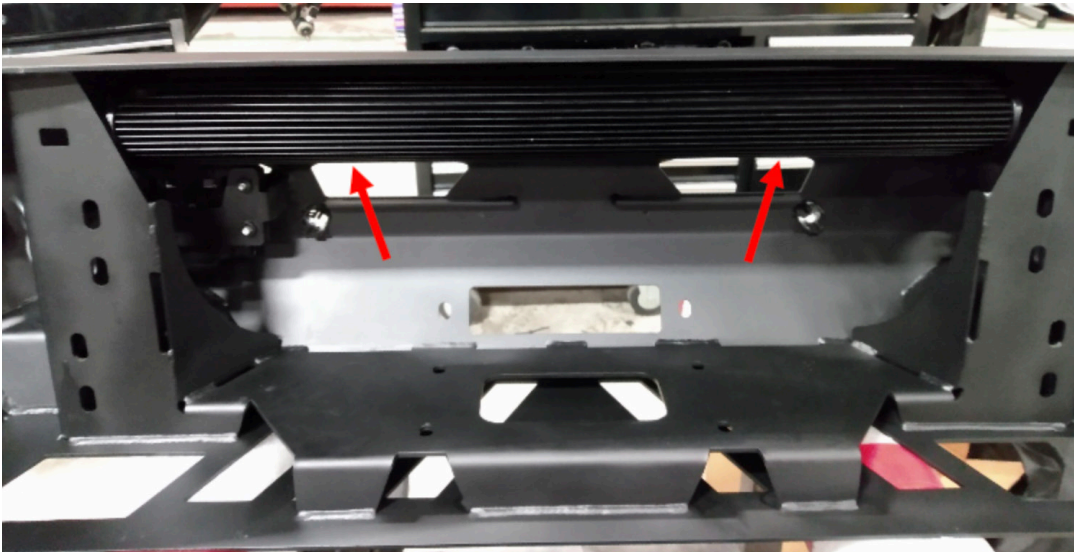


Figure 25

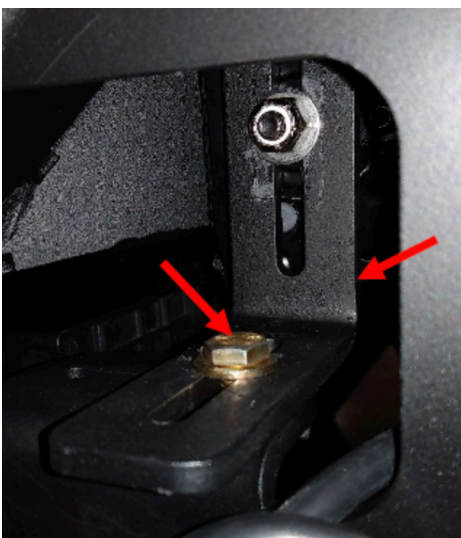


Figure 26

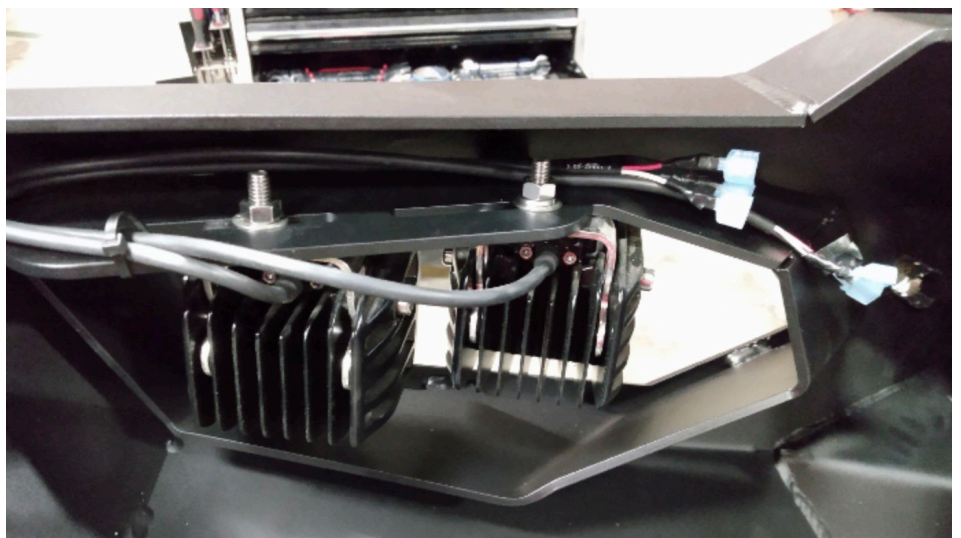


Figure 27

24. Reinstall the front parking sensor housing, sensors, and harness into the Fab Fours bumper in the same position and orientation as they were removed from the OEM bumper. Use the provided epoxy to secure the sensor housing to the bumper shell. Zip-tie the harness to the bottom of the tabs welded to the inside of the shell under the winch access holes. Figure 28-32

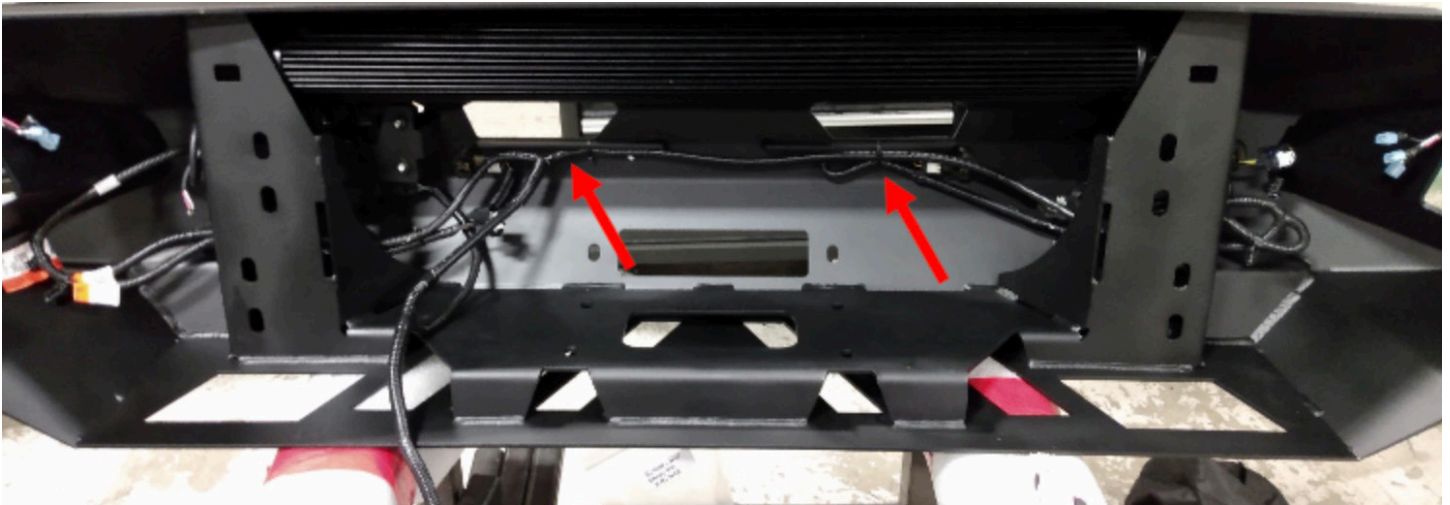


Figure 28

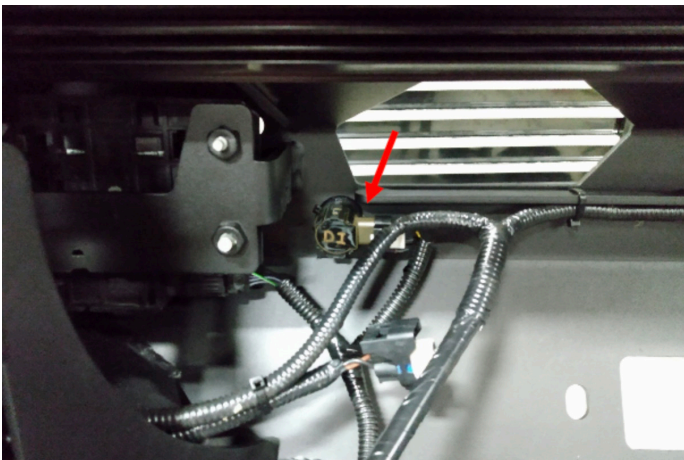


Figure 29



Figure 30



Figure 31



Figure 32

25. If installing a winch, do so now along with its fairlead per the winch manufactures instructions and with the hardware provided with the winch.

26. Using a 3/4" socket wrench and combination wrench, install the provided bumper mounting brackets (Part#: DS-23039 / PS-23040) onto their respective frame rail end with the provided 1/2" hex head cap screws, flat washers, lock washers, and hex nuts into the top four (4) holes. Figure 33

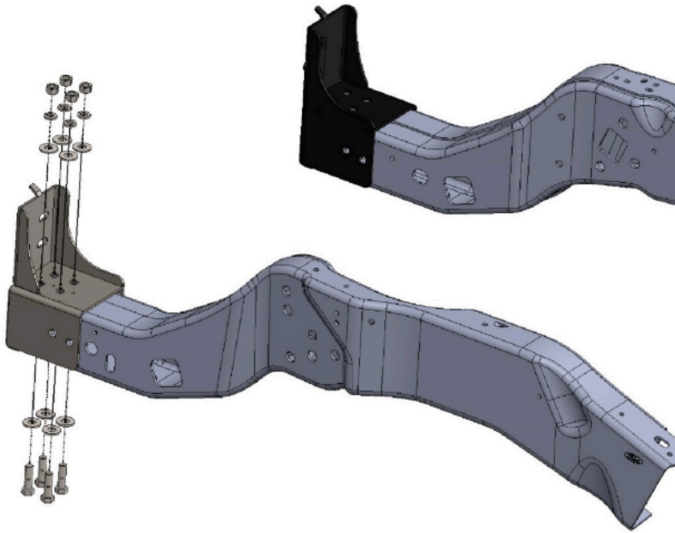


Figure 33

27. Using an 18mm socket wrench, reinstall the previously removed underrun guard bolt strips. Figure 34

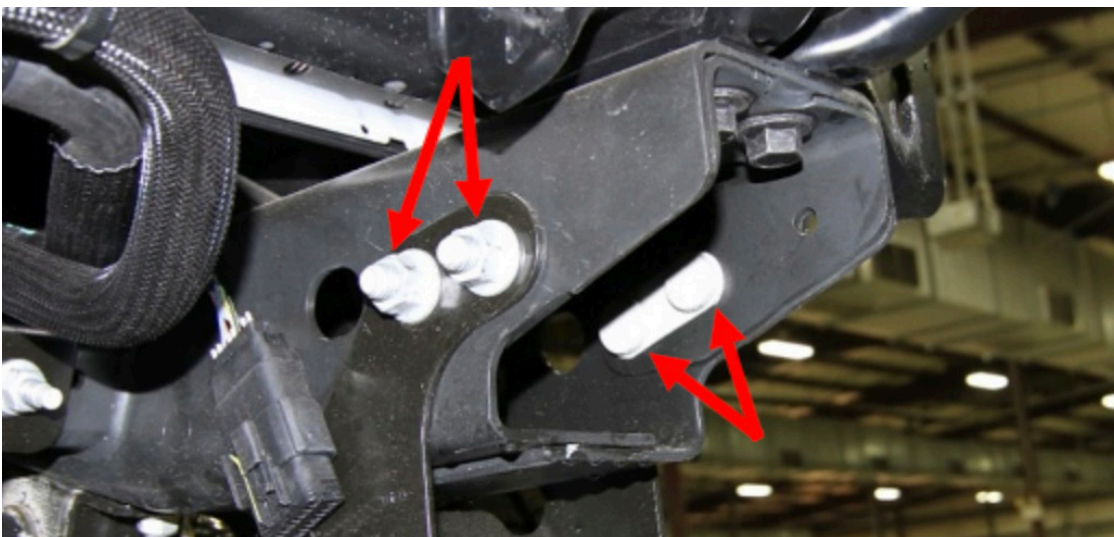


Figure 34

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28. Using the built in hang tabs on the bumper mounting brackets, hang the bumper shell (Part#: 23038) in place in preparation for bolting. Figure 35

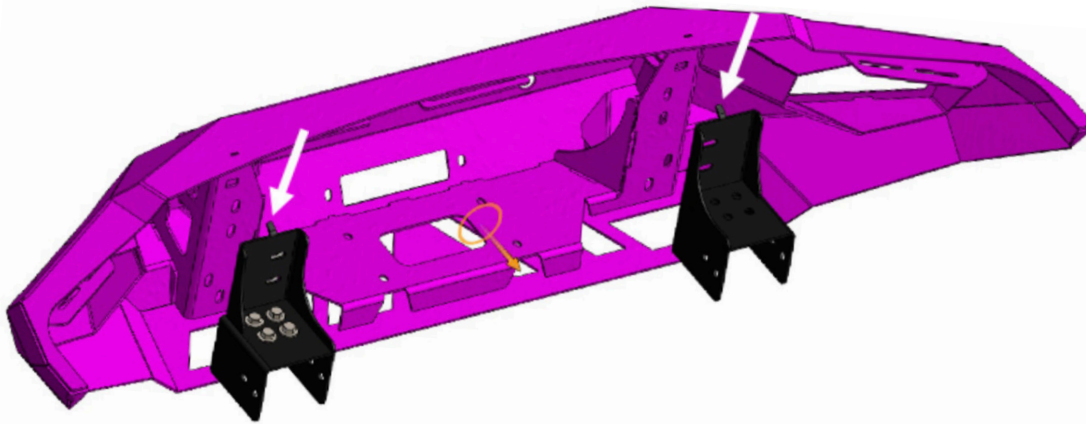


Figure 35

29. Install the four (4) provided bolt strips (Part#: 20296) inside the bumper mounts through the mounting brackets. Figure 36

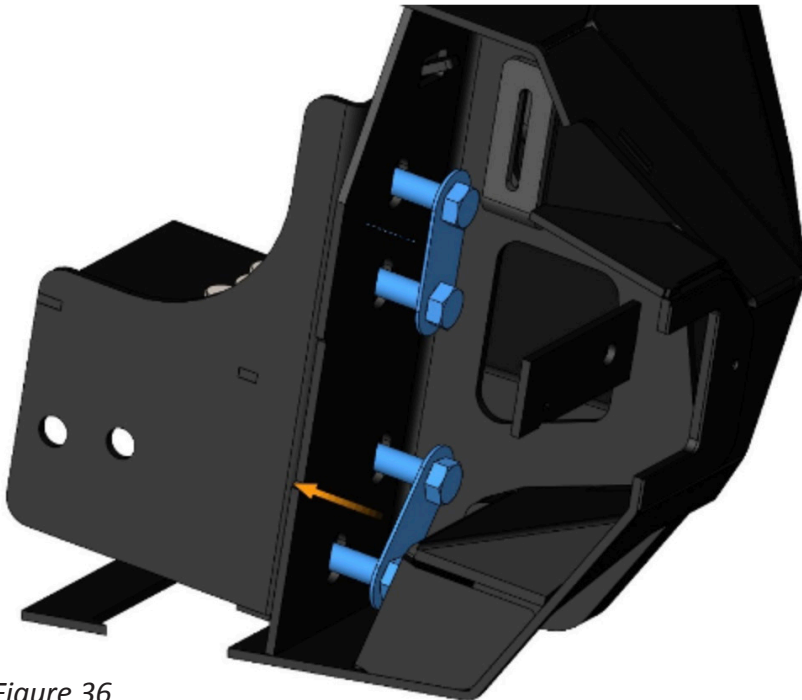


Figure 36

30. Using a 3/4" deep socket, press the four (4) provided 1/2" bolt retainer clips onto the previously installed bolt strips (one per bolt strip) to hold them in place for bumper installation. Figure 37

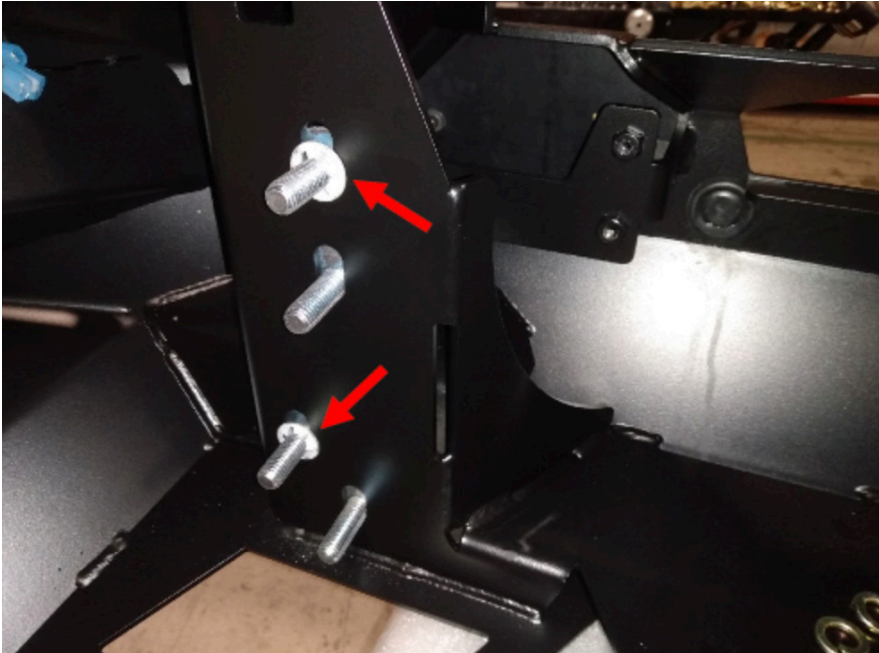


Figure 37

31. Using a 3/4" socket wrench, install the four (4) provided washer plates (Part#: 23046), 1/2" flat washers, lock washers, and hex nuts onto the previously installed bolt strips. Figure 38

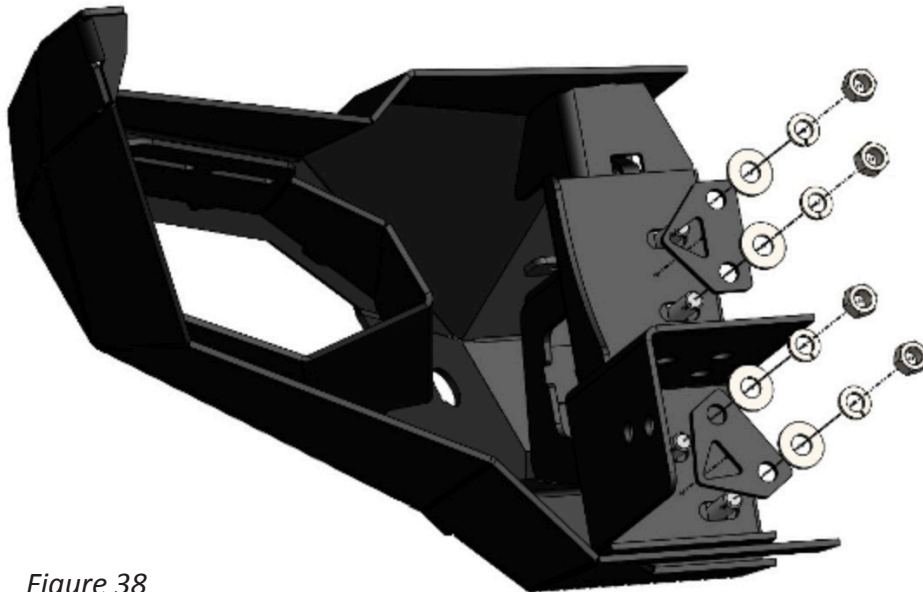


Figure 38

32. Reconnect the bumper wiring harness. Figure 39



Figure 39

INSTALLATION COMPLETE

CONTACT INFORMATION

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**“IF YOU’RE LOOKING FOR MORE OF THE SAME,
THEN YOU’VE COME TO THE WRONG PLACE.”**

- GREG HIGGS

