



**INSTALLATION MANUAL**  
**JEEP JL TIRE CARRIER**  
**PRODUCT NUMBER: Y1851-T**  
**APPLICATION: 2018+ JEEP JL**



## **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.

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### **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.

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### **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

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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!

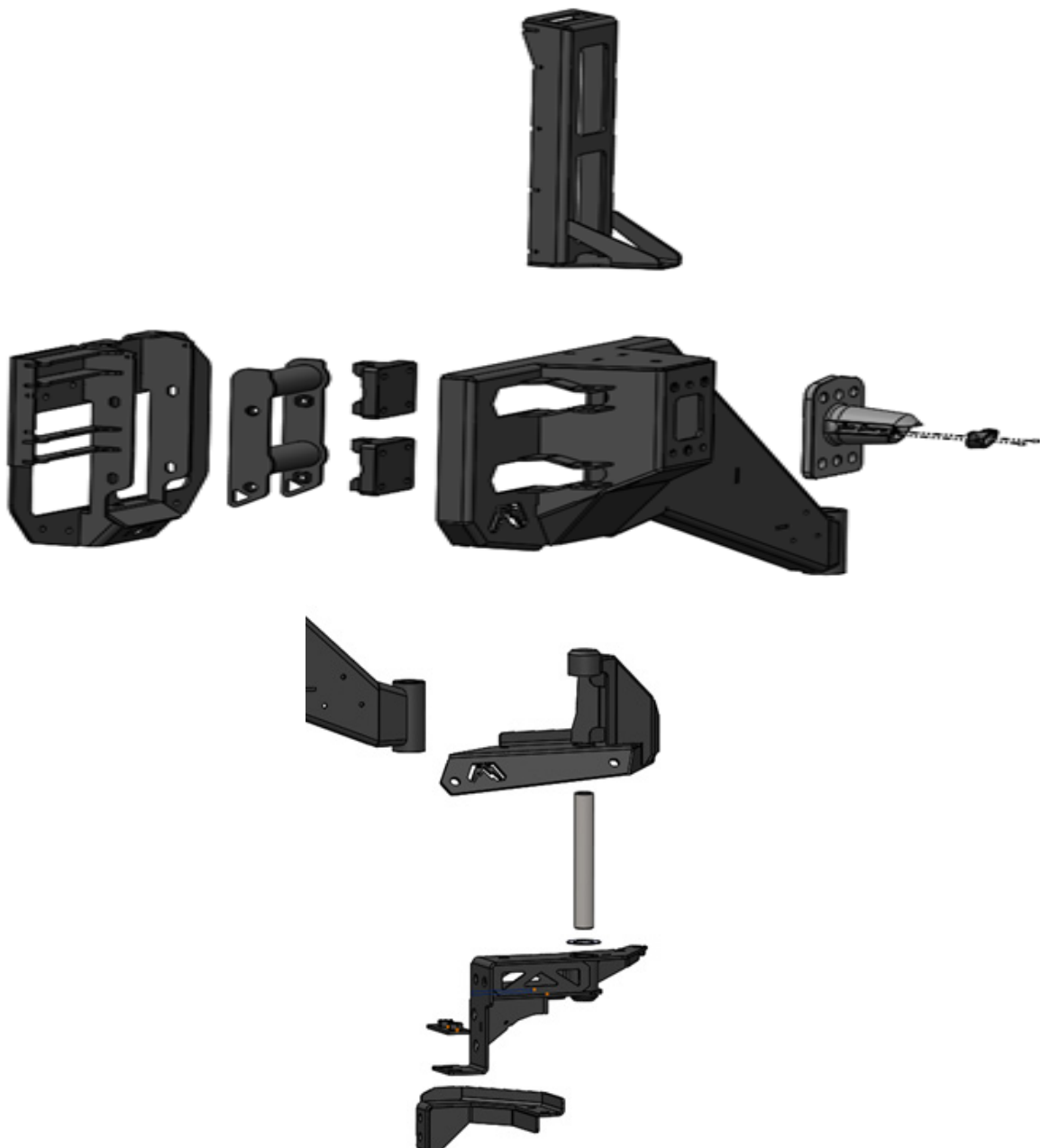
*Ereg Higgs*

**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.

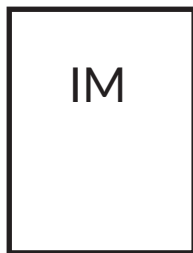
Failure to fully account for all components before beginning installation may leave vehicle immobile until part is acquired. Refer to the next pages as an inventory check.



# PROVIDED MATERIALS



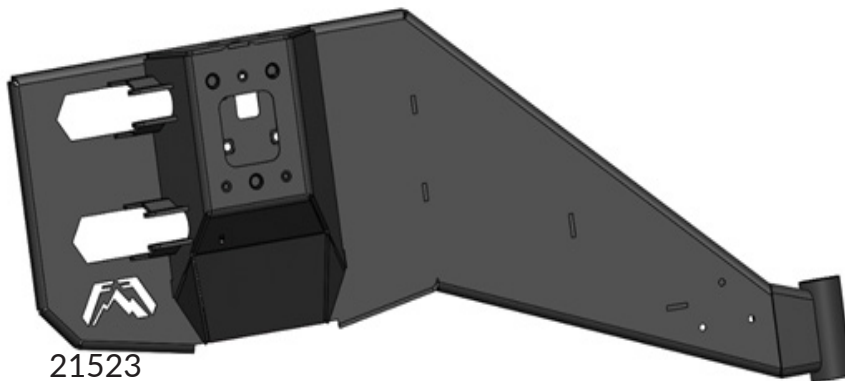
50158-HW



Y1851-T



50173-HW



21523



21525



21627



61620 x2



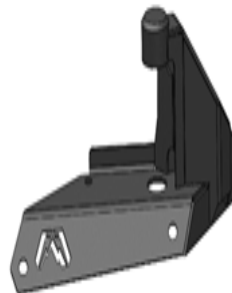
61751



61752



21590



21522



21537



21649



21545



61740



61358

## TOOLS REQUIRED

- Pair of 3/4" Open End Wrenches
- 3/4" Socket Wrench
- 9/16" Socket Wrench
- 7/16" Wrench
- Lug Nut Wrench
- Rubber Mallet
- 21mm Socket Wrench
- 13mm Socket Wrench
- Body Pry Tool
- Wire Crimping Tool
- 3/32" Allen Wrench
- 3/16" Allen Wrench
- 7/32" Allen Wrench
- Grease Gun and Grease
- Wire Loom
- Breaker Bar
- Zip Ties
- T40 Torx Wrench
- T30 Torx Wrench
- T25 Torx Wrench
- T20 Torx Wrench; T8 Torx 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 | 50173 & 50158

FAB FOURS IDENTIFICATION	COMPONENT DESCRIPTION	QTY
50173-HW	½"-13 x 2.5" Yellow zinc Hex Cap Bolt Grade 8	4
50173-HW	½"-13 x 1.25" Yellow zinc Hex Cap Bolt Grade 8	4
50173-HW	½" Yellow Zinc Flat Washer Grade 8	12
50173-HW	½" Yellow Zinc Lock Washer Grade 8	4
50173-HW	7/16"-14 x 1.25" Yellow zinc Hex Cap Bolt Grade 8	12
50173-HW	7/16"-14 x 1" Yellow zinc Hex Cap Bolt Grade 8	2
50173-HW	7/16" Yellow Zinc Flat Washer Grade 8	15
50173-HW	7/16" Yellow Zinc Lock Washer Grade 8	12
50173-HW	7/16"-14 Yellow Zinc Hex Nut Grade 8	3
50173-HW	¾"-16 x 1.25" Yellow zinc Hex Cap Bolt Grade 8	14
50173-HW	¾" Yellow Zinc Flat Washer Grade 8	16

FAB FOURS IDENTIFICATION	COMPONENT DESCRIPTION	QTY
50173-HW	¾" Yellow Zinc Lock Washer Grade 8	14
50173-HW	¾"-16 Yellow Zinc Nyloc Nut Grade 8	3
50173-HW	5/16"-18 x .75" Yellow Zinc Hex Cap Bolt Grade 8	1
50173-HW	5/16"-18 x 1.0" Clear Zinc Flat Head Bolt	3
50173-HW	Ball Joint Rod End Left Hand Stainless Steel	2
50173-HW	Ball Joint Rod End Right Hand Stainless Steel	2
50173-HW	½"-20 Clear Zinc Hex Jam Nut Left Hand Grade 5	2
50173-HW	½"-20 Clear Zinc Hex Jam Nut Right Hand Grade 5	2
50173-HW	½"-20 Yellow Zinc Hex Bar Turnbuckle	2
50173-HW	½" Aluminum Spacer	8
50173-HW		

FAB FOURS IDENTIFICATION	COMPONENT DESCRIPTION	QTY
50173-HW	⅛" NPT Grease Fitting	1
50173-HW	M14-1.5 to M14-1.5 x 63mm Wheel Stud	3
50173-HW	#4-40 x 1.25" Clear Zinc Socket Head Bolt	2
50173-HW	#8 x .75" Clear Zinc Torx screw for plastic	2
50173-HW	#10 Clear Zinc Fender washer .75" OD	2
50158-HW	18" wire with 4 butt connectors	1

# DISASSEMBLY

*NOTE: Save all OEM parts until installation is complete!*

1. Using a 10mm wrench, disconnect the negative battery terminal.
2. Using a lug nut wrench, remove the spare tire from the OEM spare tire carrier.
3. Using a T30 Torx wrench, turn the plastic retainer counterclockwise until loose and remove the protective camera cover. (Figure 1)



Figure 1

4. Using a body panel pry tool, remove the inner door plate. (Figure 2)

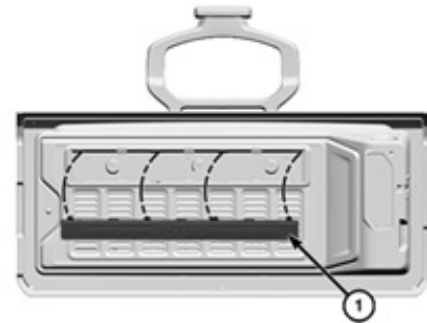


Figure 2

5. Using a body panel pry tool, remove the rear door inner panel trim by releasing the fifteen (15) clip retainers. (Figure 3)

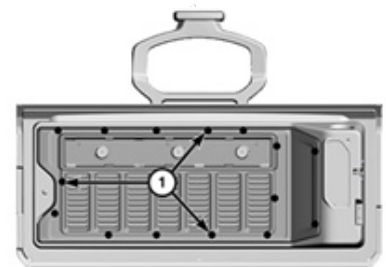


Figure 3



6. Disconnect both the camera and third brake light wiring harness connectors from inside the rear door. (Figure 4)



Figure 4

7. Remove the factory wiring harness grommet that passes through the outside of the rear door.

8. Using a 13mm wrench, remove the eight (8) bolts and remove the OEM spare tire carrier. (Figure 5)



Figure 5

9. Using a body panel pry tool, release the push retainer that holds the camera and third brake light wiring harness to the inside of the OEM spare tire carrier. (Figure 6)



Figure 6

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10. Using a T25 Torx wrench, remove the two (2) screws separating the rear-view camera bracket and wheel studs from the OEM spare tire carrier. (Figure 7)



Figure 7

11. Using a rubber mallet, tap the three (3) wheel studs to release the OEM rear camera and wheel stud assembly from the OEM spare tire carrier. (Figure 8)



Figure 8

12. Reconnect the factory camera and third brake light wiring harness to the connectors inside the rear door and reinstall the wiring harness grommet to the outer door skin.

13. Set the rear camera and camera mount inside the cargo area for later disassembly. (Figure 9)



Figure 9

# REMOVAL OF Y1851 (IF APPLICABLE)

14. Disconnect the factory wiring harness from the vehicle.

15. Using a 24mm and  $\frac{3}{4}$ " socket wrench, remove the Y1851 rear bumper from the vehicle. (Figure 10)

16. Remove the bumper and set aside in a secure upright position.



Figure 10 

17. Using a  $\frac{9}{16}$ " socket wrench, remove the passenger side cosmetic trim panel. (Figure 11)

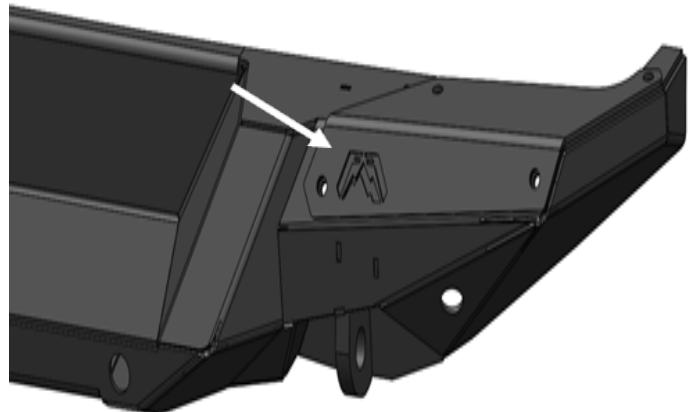


Figure 11

# INSTALLATION

18. Using a 13mm socket wrench and the eight (8) factory bolts, install the door plate (21525) to the jeep rear door where the OEM tire carrier was installed. (Figure 12)



Figure 12

19. Preassemble the two (2) turnbuckles using the two (2) stainless steel ball joint rod ends, two (2) 1/2"-20 clear zinc jam nuts and 1/2"-20 yellow zinc hex bar. (Figure 13) (50173-HW)

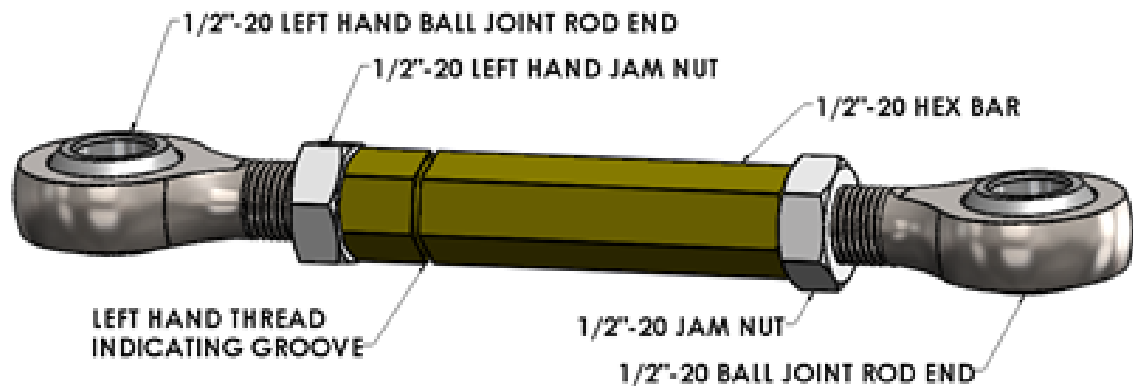


Figure 13

20. Using two (2)  $\frac{3}{4}$ " open end wrenches, fully install the two (2) provided turnbuckles to the door plate (21525) in the same thread indicating groove orientation. Use the provided two (2)  $\frac{1}{2}$ "-13 x 2.5" yellow zinc hex bolt,  $\frac{1}{2}$ " yellow zinc flat washer,  $\frac{1}{2}$ " aluminum spacer, assembled turnbuckle,  $\frac{1}{2}$ " aluminum spacer,  $\frac{1}{2}$ " yellow zinc flat washer,  $\frac{1}{2}$ "-13 yellow zinc hex nut. (Figure 14) (50173-HW)



Figure 14

21. Using a  $\frac{5}{8}$ " socket wrench, loosely install the adjustable tube bracket (21627) to the door plate (21525) using the provided four (4) 7/16-14 X 1.25" yellow zinc bolts, yellow zinc flat washers, yellow zinc lock washer and yellow zinc hex nut. (Figure 15 ) (50173-HW)

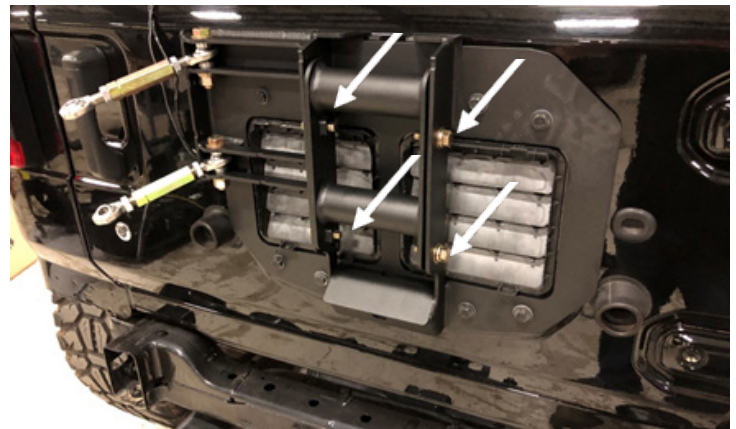


Figure 15

22. Preassemble the Y1851 rear bumper and the swing arm mount (21537) and hand tighten the two (2) 7/16"-14 yellow zinc hex bolts, yellow zinc lock washer, yellow zinc flat washer. (Figure 16, #1)

23. Insert the swing arm pivot pin (61740) into the top of the bumper (Y1851) and into the swing arm mount pivot cup (21537) (Figure 17, #2). Be sure the swing arm pivot pin (61740) is rotated so that the provided 5/16-18 x .75" yellow zinc locking bolt will tighten on the pins wrench flat. Fully tighten the 5/16"-18 x .75" locking bolt (Figure 16, #3)

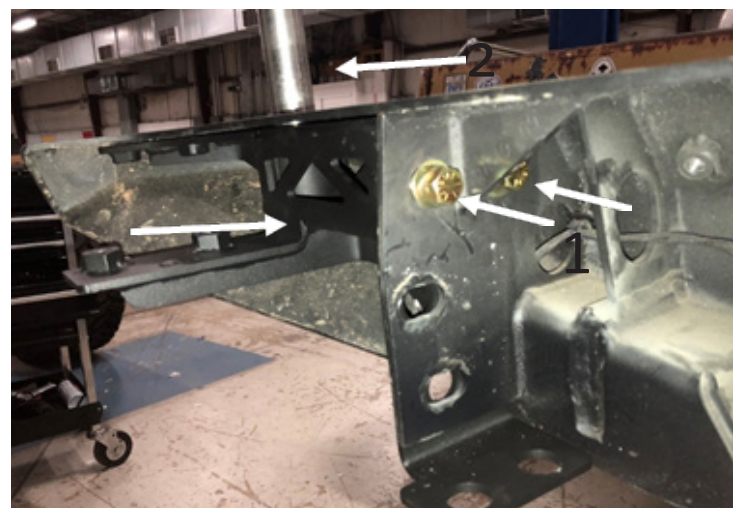


Figure 16

24. With the bumper (Y1851) in an upright and secure position, assemble the swing arm cobra (21522), thrust washer (61358) and swing arm (21523) onto the top of the bumper and pin. (Figure 17)

Note: apply a small amount of grease to the swing arm pivot pin (61740) and thrust washer (61358)



Figure 17

25. Using a  $\frac{5}{8}$ " and  $\frac{9}{16}$ " socket wrench, fully tighten the three (3)  $\frac{7}{16}$ "-14 x 1.25" yellow zinc hex bolts, yellow zinc lock washers, yellow zinc flat washers (Figure 18) and the two (2)  $\frac{3}{8}$ "-16 x 1.25" yellow zinc hex bolts, yellow zinc lock washers and yellow zinc flat washers (Figure 19)



Figure 18



Figure 19

26. Using a  $\frac{5}{8}$ " socket wrench, fully tighten down the two (2) 7/16-14 hex bolts. (Figure 20)



Figure 20

27. Insert the swing arm mount nut plate (21545) into the passenger side frame rail. Align the nut plate nuts with the holes in the frame rail. (Figure 21)



Figure 21

28. With assistance, carefully hold the bumper and swing arm assembly up to the frame rails and hand tighten the six (6) Oem frame bolts. Two (2) on the passenger side and four (4) on the driver side. (Figure 22)



Figure 22

29. With assistance stabilizing the bumper and swing arm assembly, carefully thread the provided two (2)  $\frac{1}{2}$ "-13 x 1.25" up into the swing arm mount nut plate. Using a  $\frac{3}{4}$ " wrench, snug down the two (2) hex bolts. (50173-HW) (Figure 23)



Figure 23

30. Using the provided two (2)  $\frac{1}{2}$ "-13 x 1.25" yellow zinc hex bolt, yellow zinc lock washer and yellow zinc flat washer, hand tighten the swing arm mount alignment bracket (21649) to the swing arm mount (21537). (50173-HW) (Figure 24, #1)



Figure 24, #1

31. Using the two (2) factory Oem bumper stiffener bolts, hand tighten and secure the swing arm alignment bracket to the frame. (Figure 24, #2)

Note: Close the Swing arm (21523) to the door plate prior to performing any "fully tighten" processes to the vehicle frame rail bolts securing the rear bumper to the frame.



Figure 24, #2



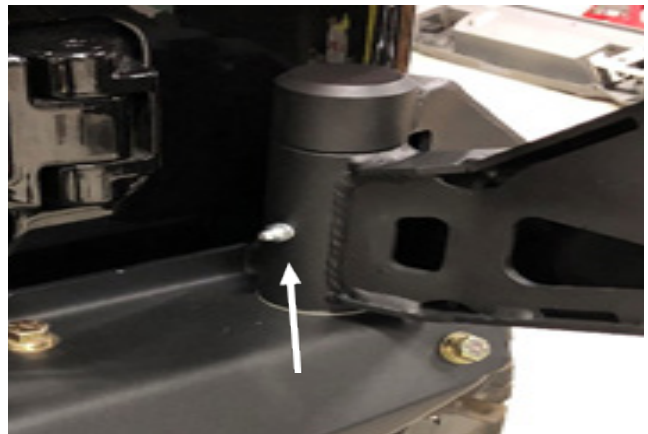
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**32. Using a  $\frac{3}{4}$ " and 13mm socket wrench, fully tighten the  $\frac{1}{2}$ "-13 bolts first then followed by the four (4) bolts securing the swing arm alignment bracket (21649). (Figure 24)**

**Note: The bumper and swing arm will rotate into a more vertical position when tightening the swing arm alignment bracket (21649)**

**33. Using a  $\frac{3}{4}$ " and 21mm socket wrench and breaker bar, fully tighten down the two (2)  $\frac{1}{2}$ "-13 hex bolts followed by all six (6) factory Oem bumper bolts.**

**34. Open the swing arm away from the rear door and using a  $\frac{7}{16}$ " open end wrench, install the grease fitting and grease the fitting. (50173) (Figure 25)**



35. Using a 9/16" socket wrench and the provided eight (8) 3/8"-16 x 1.25" yellow zinc hex bolt, yellow zinc lock washer, yellow zinc flat washer, fully tighten the two (2) rubber tube stops (61620) to the swing arm (21523). (50173-HW) (Figure 26)

Note: The mounting plate for the rubber stops is designed to place the stop tightly against the sheet metal brace that sits above it when tightened down. Slight pressure or rotation may be required to align the mounting holes in the rubber stop



Figure 26

36. Using a 5/8" wrench and the two (2) provided 7/16-14 X 1.00" yellow zinc bolts, yellow zinc flat washers, yellow zinc lock washer and yellow zinc hex nut, fully tighten the third brake light mount (21590) to the swing arm (21523). (Figure 27) (50173-HW)



Figure 27

37. Using a T20 Torx bit and the provided two (2) #8 X .75" Torx screw, #10 fender washer, lightly tighten the Oem third brake light to the third brake light mount (21590). (Figure 28) (50173-HW)

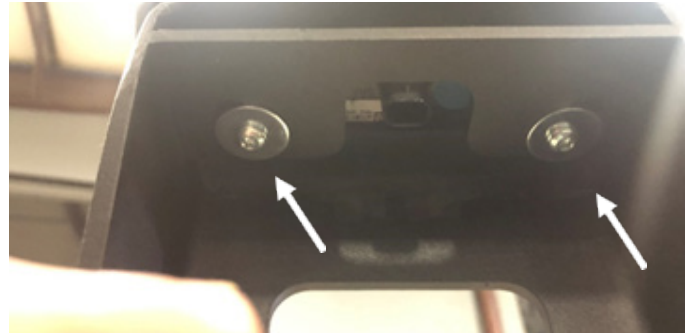


Figure 28

38. Begin routing and zip tying the Oem third brake light and camera leads. (Figures 29 and 30)

Note: Separation of the factory wiring harness loom and splicing additional length will be necessary to achieve the required routing and distance. Use 50158-HW and a wire crimping tool to extend the wire.

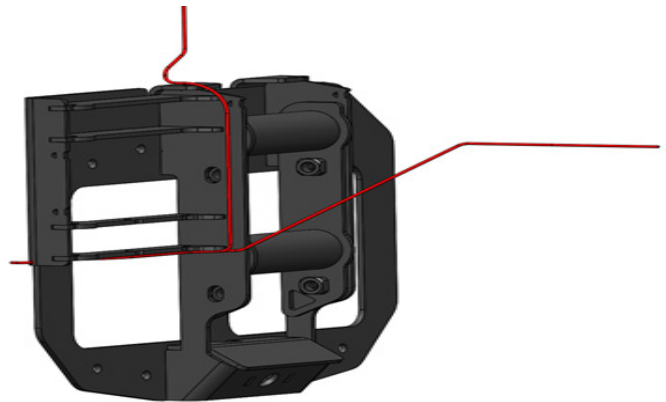
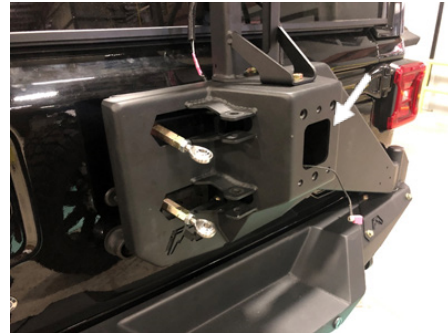


Figure 29



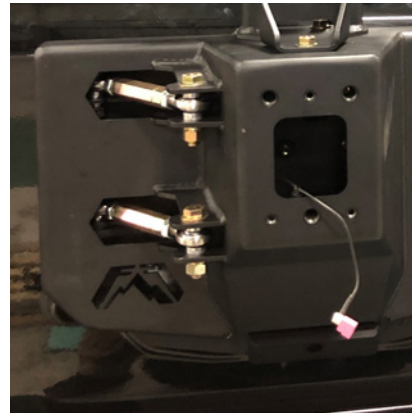
Figure 30

**39. Begin closing the swing arm (21523) onto the door plate assembly (21525) while fishing the camera lead through the swing arm camera opening. (Figure 31)**



*Figure 31*

**40. Using two (2)  $\frac{3}{4}$ " open end wrenches, fully install the two (2) provided turnbuckles to the swing arm (21523). Use the provided two (2)  $\frac{1}{2}$ "-13 x 2.5" yellow zinc hex bolt,  $\frac{1}{2}$ " yellow zinc flat washer,  $\frac{1}{2}$ " aluminum spacer, assembled turnbuckle,  $\frac{1}{2}$ " aluminum spacer,  $\frac{1}{2}$ " yellow zinc flat washer,  $\frac{1}{2}$ "-13 yellow zinc hex nut. (Figure 32) (50173-HW)**



*Figure 32*

**41. Using two (2)  $\frac{3}{4}$ " open end wrenches, adjust both turnbuckles so they draw the swing arm (21523) and rubber mounts (61620) tight to the tube mount (21627) that's attached to the door plate (21525).**

**Note: The turnbuckles should be set to hold the swing arm tight to the door plate but not too tight to cause the swing arm to be over extended crushing the rubber mounts and possibly causing metal to metal interference between the swing arm and door plate.**

42. Using a 7/32 Allen key and the three (3) provided m14 wheel studs into the three projection nuts in the swing arm (21523). (50173-HW) (Figure 33)



Figure 33

43. Using a 3/16" Allen wrench and the three (3) provided 5/16" -18 x 1.00" clear zinc flat head bolt, fully tighten the camera shroud base (61751) to the swing arm (21523). Be sure to fish the Oem camera lead through the shroud. (50173-HW) (Figure 34.)



Figure 34

44. Using a T8 Torx wrench, remove the three (3) OEM torx screws from the Oem camera base and use them to secure the camera to the camera shroud cap (61752). (Figures 35 and Figure 36)

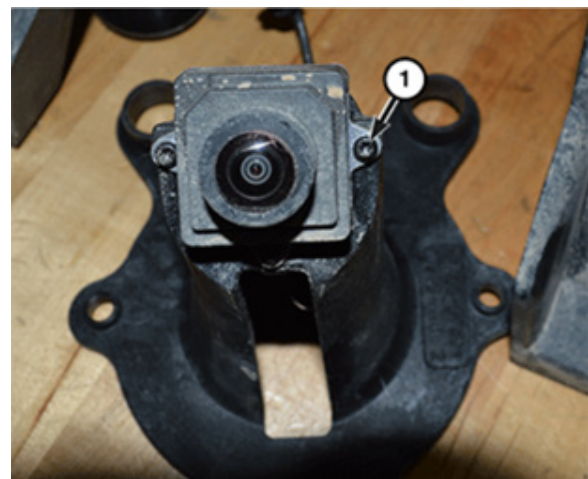


Figure 35



Figure 36

45. Using a 3-32" Allen wrench and the two (2) provided #4-40 x 1.25" clear zinc socket head bolts, reconnect the camera to the camera lead and fully tighten the camera shroud cap (61752) to the camera shroud base (61751). (50173-HW (Figure 37)



Figure 37

46. Open the rear door and reconnect the third brake light wire to the light. Begin zip tying the third brake light loomed lead to the points on the side of the third brake light mount (21590). (Figure 38)

Note: A 1.25" spacer wheel spacer is required for an Oem wheel and tire assembly. And may be required for your specific application depending on wheel diameter and/or offset.

Complete



Figure 38