



INSTALLATION INSTRUCTIONS

Fully-Hidden Kit

Part Number: 112894

Application: 2020-2022 Ford Super Duty

GENERAL SAFETY PRECAUTIONS

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. WARNING and CAUTION are signal words that identify the level of hazard. These signal words mean:

▲ **WARNING** signals a hazard that could cause serious injury or death, if you do not follow recommendations. ▲ **CAUTION** signals a hazard that may cause minor to moderate injury, if you do not follow recommendations.

This guide uses **NOTICE** to call attention to important mechanical information, and Note: to emphasize general information worthy of special attention.

▲ WARNING

IMPACT AND MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or death

- **Always** Know Your Winch. Take time to fully read the Instructions and/or Operations Guide, and/or Basic Guide to Winching Techniques, in order to understand your winch and its operations.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Never** use a jack to support the vehicle.
- **Always** use jack stands in pairs to support the vehicle.
- **Always** use jacks or jack stands only on a hard, stable, and level surface.
- **Never** exceed the rated capacity of a jack or jack stands.
- **Always** verify that the parking brake is set, the transmission is in park (automatic) or reverse (manual) and the rear wheels are blocked before working on vehicle.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Always** insure components will remain secure during installation and operation.
- **Always** tighten all nuts and bolts securely, per the installation and operation.
- **Always** perform regular inspections and maintenance on the winch, winch mount and related hardware.
- **Always** replace all worn or damaged parts before operating.
- **Never** operate this WARN product with damaged or missing parts.
- **Always** use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when / if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.
- **Always** use extreme caution when cutting and trimming during fitting.
- **Always** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- **Always** remove jewelry and wear eye protection.
- **Never** lean over battery while making connections.
- **Never** route electrical cables across any sharp edge, through or near moving parts, near parts that become hot.

Read installation and operating instructions thoroughly.

▲ CAUTION

MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury

- Part edges may be sharp!
- **Always** use proper posture / lifting technique or get lifting assistance while handling and installing product.

Read installation and operating instructions thoroughly.

NOTICE

EQUIPMENT DAMAGE

- **Never** tow vehicle by attaching a tow bar to the eyelets on the bumper.
- Do not attach tow bars directly to the bumper. Damage to bumper may occur. WARN bumpers are not designed to be used for flat towing. Consult with the manufacturer of your tow bar system for the proper vehicle tow bar brackets.

Read installation and operating instructions thoroughly.

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BEFORE YOU BEGIN



This product may interfere with driver assist systems such as adaptive cruise control and parking assist systems that have sensors or cameras installed in the bumpers or front grill area. If your vehicle is equipped with any of these systems or features, consult your vehicle owner's manual before installing this product. These systems may need to be disabled and/or recalibrated as a result of installing this product.

TOOLS REQUIRED

- | | |
|--------------------------------|----------------------------------|
| • Body Pry Tool | • Standard socket and wrench set |
| • Phillips head screwdriver | • Socket extension |
| • Flathead screwdriver | • Cutting tool |
| • Metric socket and wrench set | • E-Torx |

TORQUE SPECIFICATIONS

Please use the recommended torque specifications when assembling this product unless otherwise specified in the instructions.

FASTENER SIZE	FASTENER TORQUE		FASTENER SIZE	FASTENER TORQUE	
	lb-ft	(N.m)		lb-ft	(N.m)
1/4"	8	(11)	M4	(2)	3
5/16"	17	(23)	M5	(4.5)	6
3/8"	30	(40)	M6	(7.5)	10
7/16"	48	(66)	M8	(18)	25
1/2"	74	(100)	M10	(37)	50
9/16"	106	(144)			
5/8"	148	(200)			
3/4"	269	(364)			

PARTS LIST

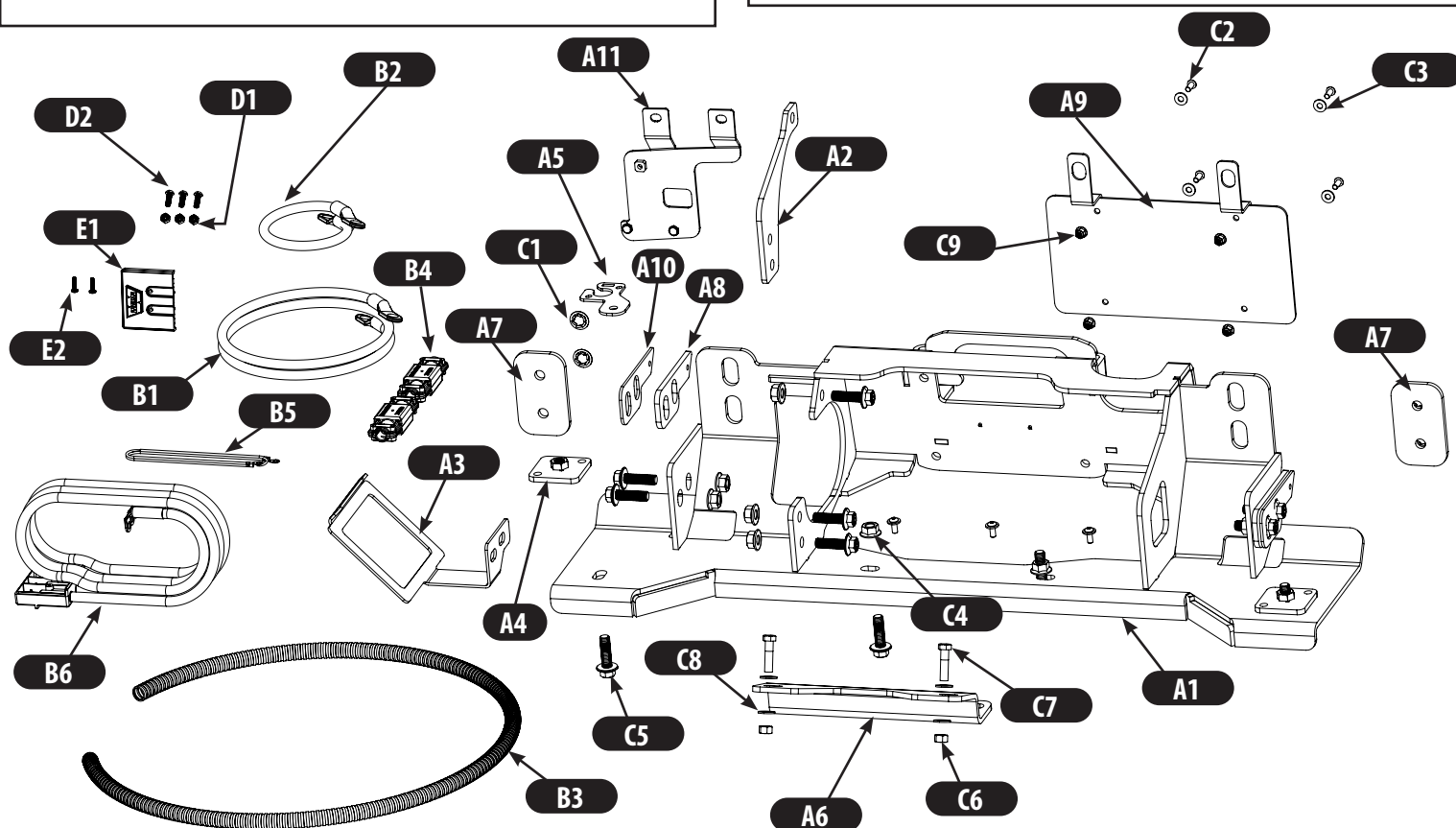
Main Components			
ITEM	QTY	DESCRIPTION	PART NO.
A1	1	FULLY HIDDEN MOUNT	112556
A2	1	STRAP PLATE	112566
A3	1	CONTROL PACK RELOCATION BRKT	112567
A4	2	NUT PLATE	112568
A5	1	WINCH REMOTE BRACKET	112570
A6	1	CROSSMEMBER BRACKET	112571
A7	2	BUMPER SPACER PLATE	112572
A8	2	.25" INNER FRAME SPACER PLATE	112573
A9	1	LICENSE PLATE HOLDER	112579
A10	2	.12" INNER FRAME SPACER PLATE	112731
A11	1	ACC BRACKET	112896

Relocation Kit Components			
ITEM	QTY	DESCRIPTION	PART NO.
B1	1	RED EXTENSION CABLE	112576
B2	1	BLACK EXTENSION CABLE	112577
B3	1	CORRUGATED TUBING	79211
B4	2	JUNCTION BOX	80790
B5	1	BLACK WIRE	111954
B6	1	CONTROL PACK CABLE ASSEMBLY	112080

112578 - Hardware Kit			
ITEM	QTY	DESCRIPTION	PART NO.
C1	4	INTERNAL START WASHER	101259
C2	7	M6-1.0 X 16MM SCREW	89911
C3	7	M6 FLAT WASHER	86558
C4	9	M12-1.75 LOCK NUT	79465
C5	11	M12-1.75 X 40MM BOLT	107752
C6	2	3/8"-16 LOCK NUT	6779
C7	2	3/8"-16 X 1-1/2" BOLT	8160
C8	4	3/8" FLAT WASHER	11524
C9	4	M6-1.0 FLANGE NUT	83125

112575 - Hardware Kit			
ITEM	QTY	DESCRIPTION	PART NO.
D1	3	M6-1.0 LOCK NUT	60595
D2	3	M6-1.0 X 16MM SCREW	111809

111955 - Hardware Kit			
ITEM	QTY	DESCRIPTION	PART NO.
E1	1	WIRE SEPARATOR TOP	89372
E2	2	M4 X 16MM SCREW	64503



MAINTENANCE / CARE

1. Inspect all parts on the winch, winch mount, and related hardware prior to each use. Replace all hardware that appears rusted or deformed.
2. Inspect all nuts and bolts on the winch, winch mount, and related hardware prior to each use. Tighten all nuts that appear to be loose. Stripped, fractured, or bent bolts or nuts need to be replaced.
3. Check all cables prior to use. Replace cables that look worn or frayed.
4. Check all moving or rotating parts. Remove debris that may inhibit the part from moving freely.

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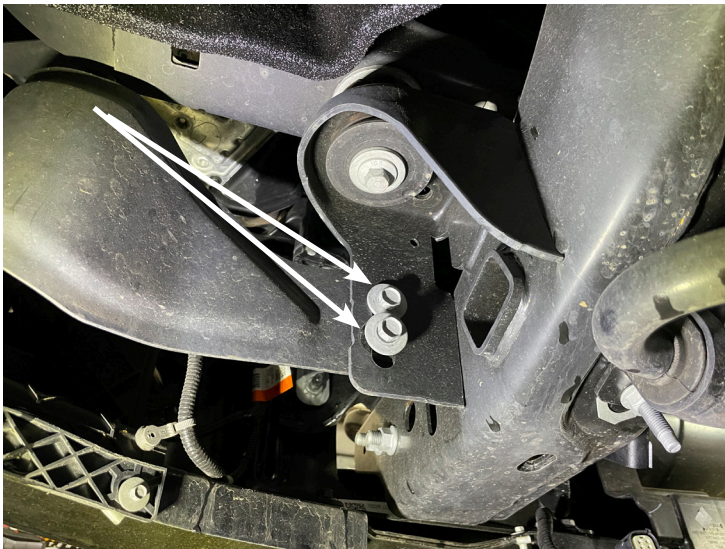
1. From under the hood, disconnect the power and ground cables from the vehicle battery.
If vehicle is equipped with a primary and secondary battery, disconnect both batteries.
2. Remove the plastic tow hook covers by gently pulling them forward to release the clips.



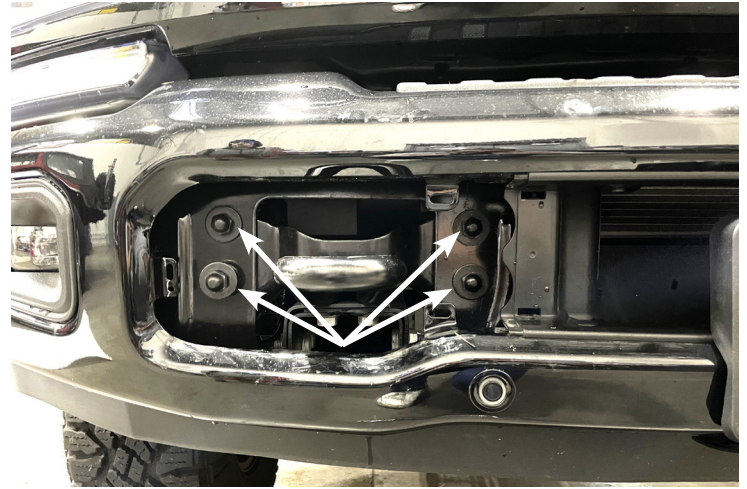
3. Unplug the wiring harness on the driver side inner frame rail.



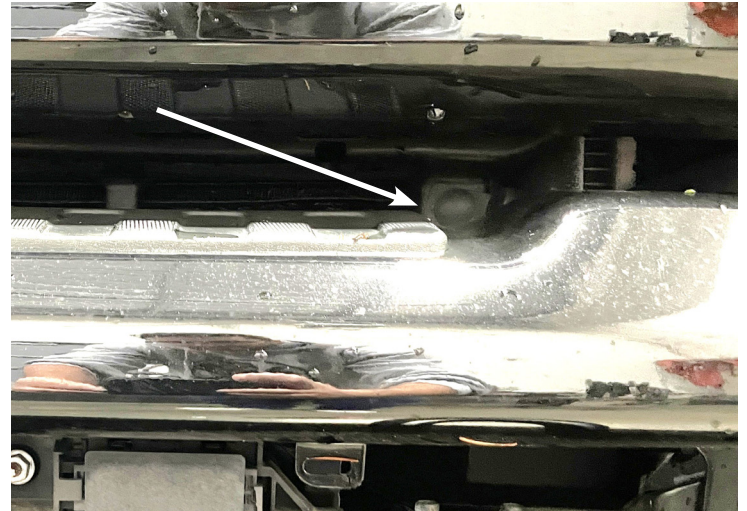
4. Using a 15mm tool, remove the two bolts that attach the bumper reinforcement brackets to the outer frame rail (each side).



5. Using a 18mm tool, loosen the 8 bolts holding the bumper to the frame just enough for the bumper to move downward and create a larger gap between the bumper and grill.



6. Carefully, use a body panel pry tool to remove the hidden clip holding the bumper's rubber trim piece to the grill (each side).

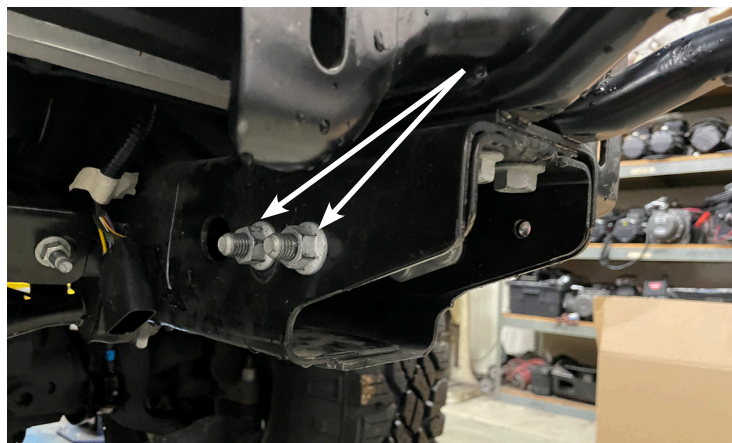


7. With assistance holding the bumper, completely remove the four loose bumper (each side). While continuing to hold the bumper, carefully pull the bumper outward from the vehicle and reach behind the bumper to unclip the engine block heater harness from the bumper.

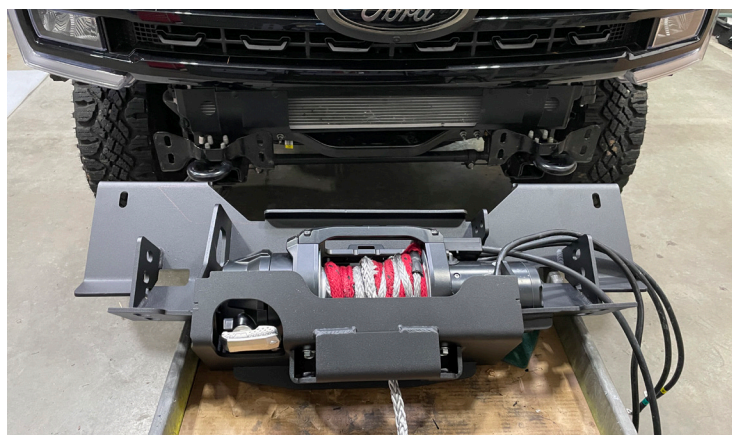
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8. Remove the two nuts and bolt plate assembly from the inboard frame rail.

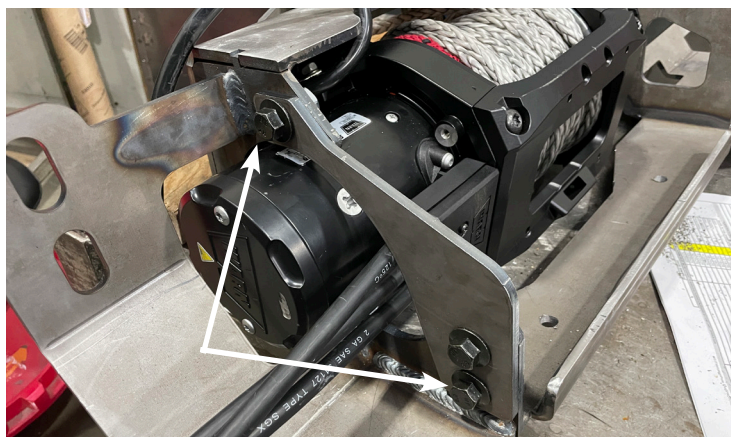
NOTE: The outboard frame rail nuts and bolt plate assembly remains in place until a later step.



9. If equipped, remove the underrun guards on the bottom of the frames. These will not be reused and can be discarded. Do this on both sides of the vehicle.
10. Locate your Warn Short Drum Zeon XC and follow your winch instructions on installing the synthetic rope.
11. Locate the control pack relocation bracket (A3) and the box including the relocation components (B1-B6) and follow the instructions on the control pack relocation instructions to relocate the control pack to the relocation bracket.
12. Locate the Warn Fully Hidden Winch Mount (A1) and install the winch to the mount following the winch installation instructions.



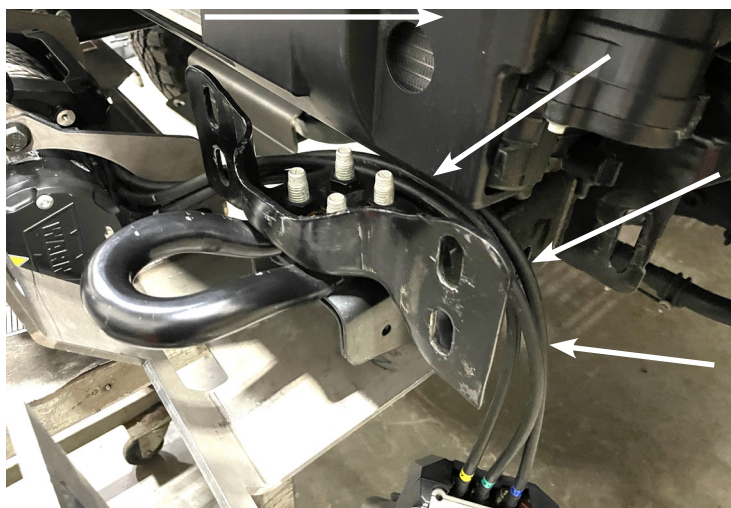
13. Install the strap plate (A2) to the winch mount using three M12 bolts (C5) and M12 lock nuts (C4).



14. Loosely install the crossmember bracket (A6), to the crossmember between the frame rails using the 3/8" hardware (C6, C7, C8). Refer to exploded view on page 3.



15. With help, position the winch mount assembly up to the vehicle and carefully pass the three control pack cables behind the driver side tow hook and under the radiator shroud.



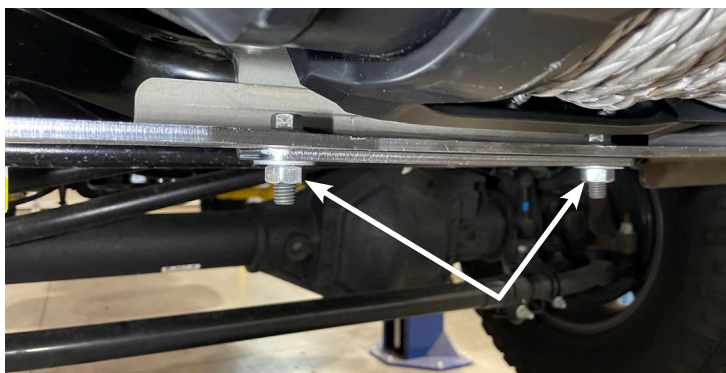
16. Continue to bring the winch mount closer to the vehicle, until the lower holes are aligned with the frame rail holes.

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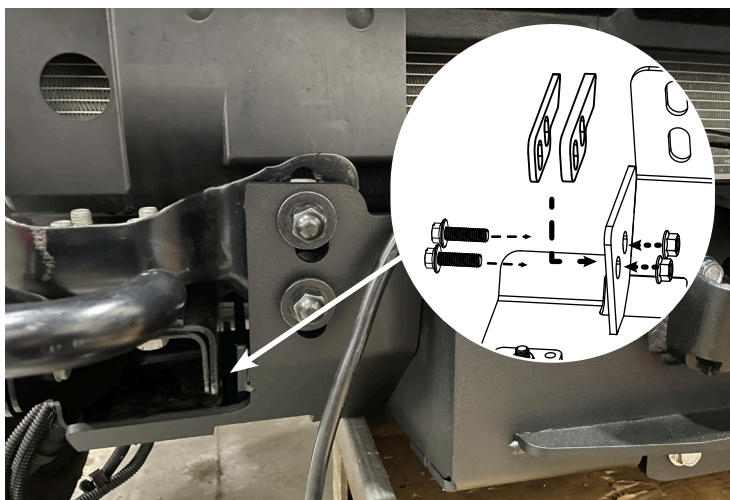
17. Slide one nut plate (A4) into the frame rail and loosely fasten the mount up to the nut plate with one M12 bolt (C5). Repeat for other side.



18. Loosely fasten the crossmember bracket to the winch mount with two M12 bolts (C5) and lock nuts (C4).

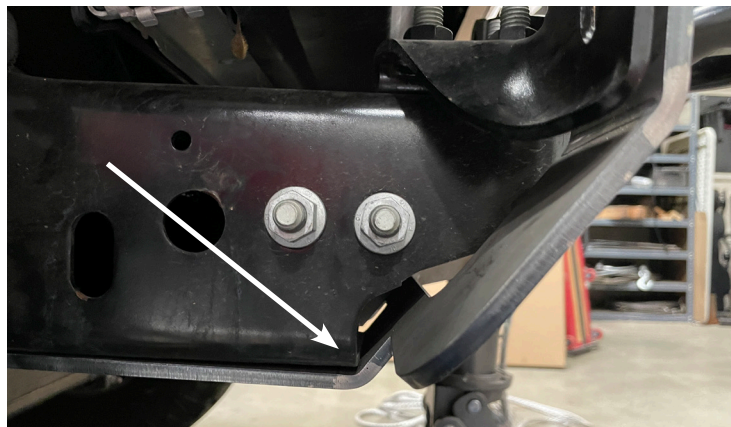


19. Align and center the mount between the frame rails. Slide the necessary inner spacer plates (A8) and/or (A10) between the frame and mount (use one or both - enough to fill the gap) and loosely fasten in place using two M12 bolts (C5) and nuts (C4). Repeat for other side.



20. With the assistance of a floor jack, lift the front of the winch mount upward so that it sits flush against the tow hooks/bumper mounts.

NOTE: Ensure that the bottom of the frame rail is nestled in the bend of the mount or just behind the bend. The mount will not sit properly if it is pushed too far back and the frame's edge is sitting on the angled portion of the mount.



21. With the mount centered between the frame rails, tighten the bottom bolt to the weld nut plate inside the frame rail on each side.
22. Tighten the hardware holding the mount and spacer to the inner frame rail on both sides.
23. Tighten the hardware holding the crossmember bracket to the winch mount.
24. Tighten the hardware holding the bracket to the crossmember between the frame rails.
25. With the front clear of obstructions, route the power cable and the ground cable over to the passenger side of the vehicle. Neatly tuck the wires behind the mount so that they are routed between the radiator shroud and frame rails.



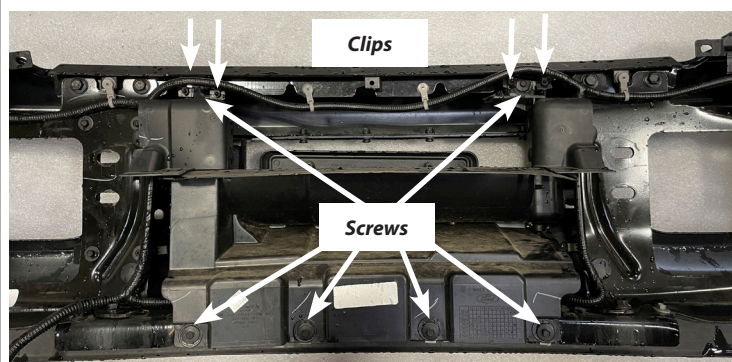
NOTE: Image below shows cables in front of the mount for clarity.

26. Locate the two junction boxes (B4), red power extension cable (B1), and black ground extension cable (B2) provided in your relocation kit. Attach

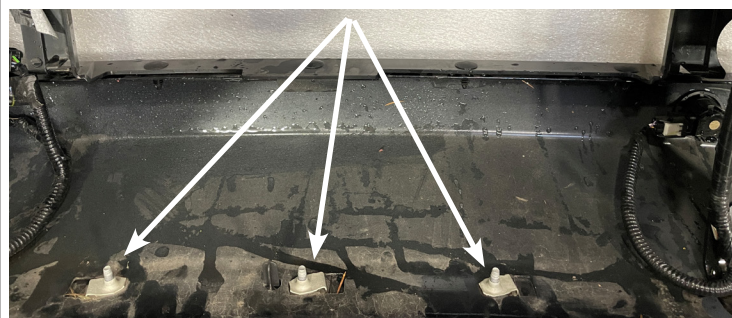
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the red cable to the power cable, and the black cable (B2) to the ground cable.

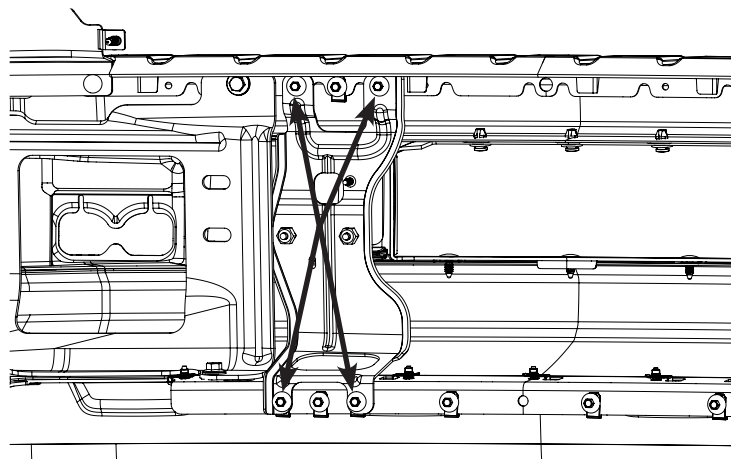
27. Locate the corrugated black tubing (B3) and slide it over the red power extension cable (B1). Use a cutting tool to trim the tubing down to size and use electrical tape to hold tubing in place.
28. Route the wires behind the grill and into the engine compartment towards the battery on the passenger side of the vehicle and connect the winch to the battery following the winch instructions.
29. Route the remote plug wire attached to the control pack behind the grill towards the driver side of the vehicle.
30. Route the engine block heater harness to an easily accessible area and zip tie in place.
31. From the backside of the OE bumper, remove the six screws and the four harness clips to fully remove the air dam. *Air dam and screws can be discarded.*



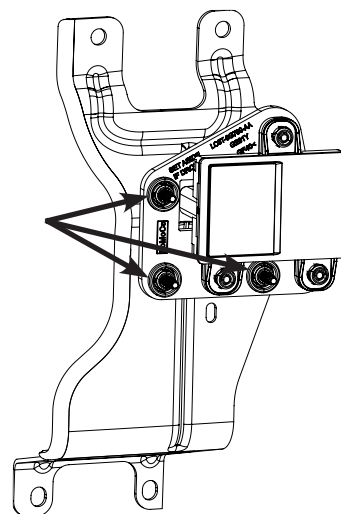
32. Once the air dam is removed, you are able to see the three screws at the bottom center of the bumper, remove those now and discard.
33. Flip the three panel clips around, and install three M6 screws (C2) making sure the button head is pointing upward and the threads are going downward. **NOTICE** *It is critical the button head is pointing upward so that the synthetic winch rope does not snag and tear on an upward protruding bolt.*



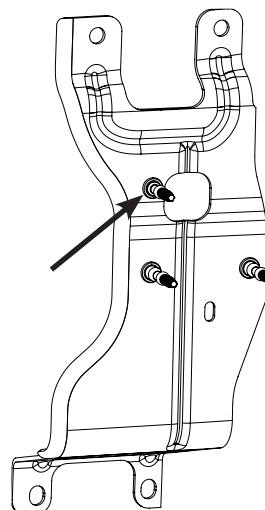
34. If equipped, remove the OEM adaptive cruise bracket. Keep the hardware, to be reused later.



35. Remove the three nuts from the studs securing the ACC sensor mount and free it from the metal OEM bracket.
36. Remove the ACC sensor from the plastic mount by popping the three ball and socket mounts free.

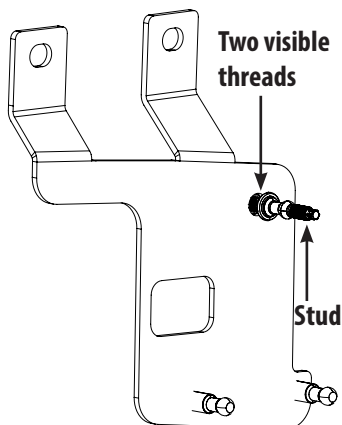


37. Using an E-Torx, remove the top ACC sensor stud from the metal OEM bracket.

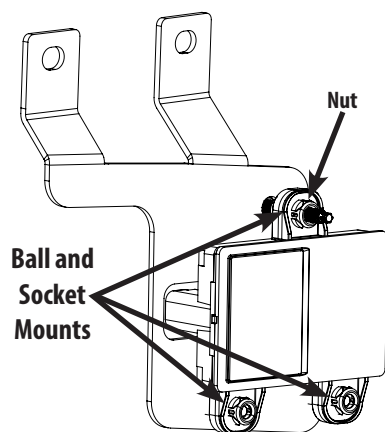


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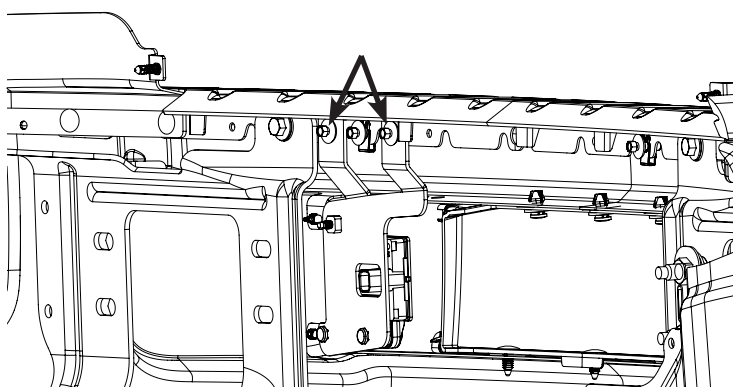
38. Locate the ACC relocation bracket (A11) included in your kit.
39. Install the stud using an E-Torx until about two threads are visible.



40. Install the ACC sensor on the ACC relocation bracket.
41. Use pressure to pop the bottom three ball and socket mounts in place and then reinstall the nut removed from the stud in the previous steps.

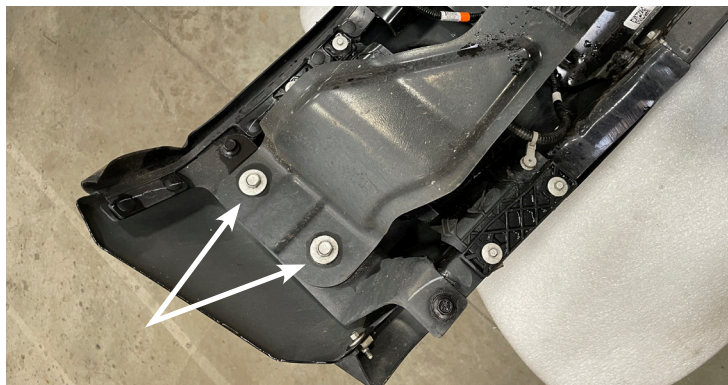


42. Using the OEM hardware, install the ACC relocation bracket back on the bumper.

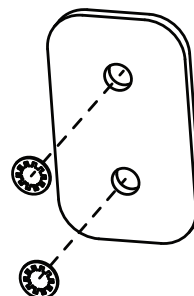


44. Reinstall the harness clips to the bumper bracket on each side of the vehicle.

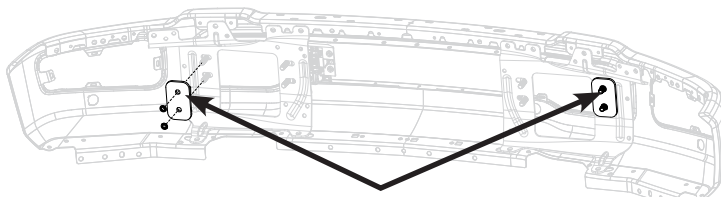
43. Remove the bumper reinforcement bracket on the driver side of the OE bumper. Place the hardware and bracket safely aside, it will be reused.



44. Install two internal tooth lock washers (C1) on each bumper spacer plates (A7).



45. Install spacer plates on the outer OE bumper bolts (each side).



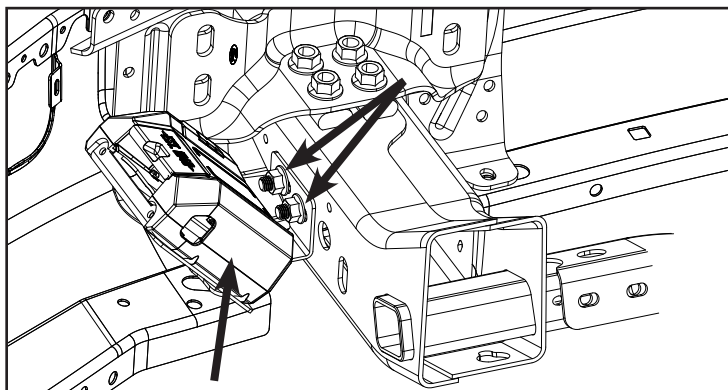
CAUTION Always use proper posture / lifting technique or get lifting assistance while handling and installing product.

46. With assistance, install the bumper back onto the vehicle and loosely install the bumper bolts to help hold and support the weight. **NOTE:** Ensure the harness is not being pinched or crushed between the mount and bumper.



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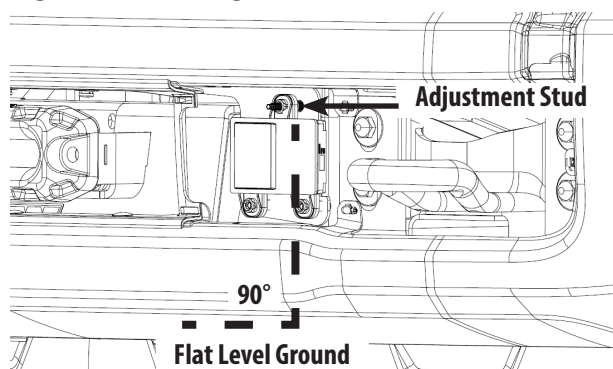
47. From behind the bumper on the driver side, remove the two OE nuts from the outboard frame rail bolt plate assembly.
48. Install the control pack relocation bracket (A3) using the OE nuts and bolt plate assembly.
49. Tidy all the cables around the frame and behind bumper.



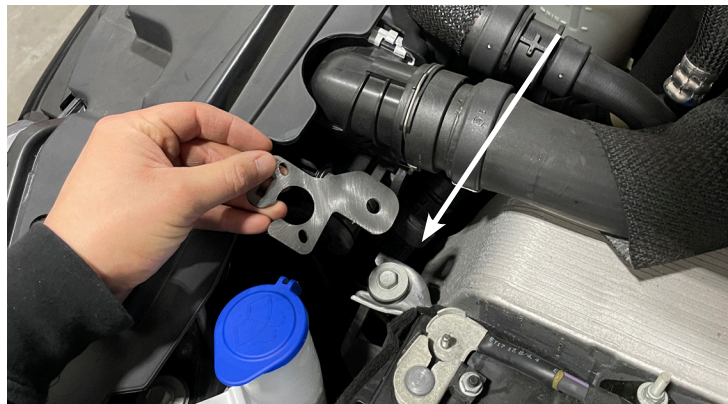
50. Reconnect the wire harness plug, located by the inner frame rail on the driver side.



51. Reinstall the two hidden clips holding the bumper's rubber trim piece to the grill on each side of the vehicle
52. With assistance, align and center the OE bumper and fully tighten all eight bumper bolts.
53. With the bumper aligned and centered on the truck, ensure the sensor face is 90 degrees to the flat ground surface.
54. Use an E-Torx to thread the adjustment stud in and out as needed until the sensor is 90 degrees with the ground.



55. Fully reinstall the bumper reinforcement bracket behind the bumper on the driver side and reattach the bumper reinforcement bracket on the passenger side to the frame using the OE hardware. Refer to step 5.
56. Remove the bolt from the intercooler in the engine compartment on the driver side of the vehicle and install the winch remote bracket (A5) using the OE bolt.



57. Reinstall the plastic tow hook covers.
58. Install license plate holder (A9) using hardware (C2, C3, and C9). Refer to exploded view.
59. Locate the fairlead. Thread your winch rope through the fairlead opening and install the fairlead to the front of the winch mount using the hardware and instructions supplied in the winch kit.



60. Install hook and strap to winch rope.
61. Verify all hardware is tighten.
62. Reinstall battery connections.

