



INSTALLATION INSTRUCTIONS

SUPER DUTY HIDDEN BRACKET KIT

Part Number: 107168

Application: 2017 F250/350/450/550 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** 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.
- **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** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- **Always** use extreme caution when cutting and trimming during fitting.
- **Always** remove jewelry and wear eye protection.
- **Never** lean over battery while making connections.
- **Never** route electrical cables:
 - Across any sharp edges.
 - Through or near moving parts.
 - Near parts that become hot.
- **Always** insulate and protect all exposed wiring and electrical terminals.
- **Always** install terminal boots as directed in installation instructions.
- **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 instructions.
- **Always** perform regular inspections and maintenance on the plow mechanism, fasteners, cable and related hardware.
- **Always** replace all worn or damaged parts before operating.
- **Never** operate this WARN product with damaged or missing parts.

Read installation and operating instructions thoroughly.

WARN INDUSTRIES, INC. 12900 S.E. Capps Road,
Clackamas, OR USA 97015-8903, 1-503-722-1200, FAX: 1-503-722-3000
Customer Service: 1-800-543-9276
Dealer Locator Service: 1-800-910-1122
International Fax: 1-503-722-3005

⚠ CAUTION

MOVING PARTS ENTANGLEMENT HAZARD

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

- **Always** take time to fully read and understand the installation and Operations Guide included with this product.
- **Never** operate this product if you are under 16 years of age.
- **Never** operate this product when under the influence of drugs, alcohol or medications.

Read installation and operating instructions thoroughly.

NOTICE

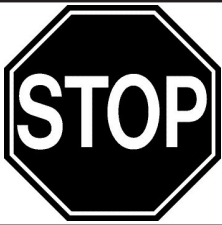
EQUIPMENT DAMAGE

- **Always** refer to the Installation and Specification Guide, supplied in the winch kit, for all wiring schematics and specific details on how to wire this WARN product to your vehicle.

Read installation and operating instructions thoroughly.

BEFORE YOU BEGIN

NOTICE



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 as a result of installing this product.

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TOOLS REQUIRED

- Standard wrenches
- Standard sockets

TORQUE SPECIFICATIONS

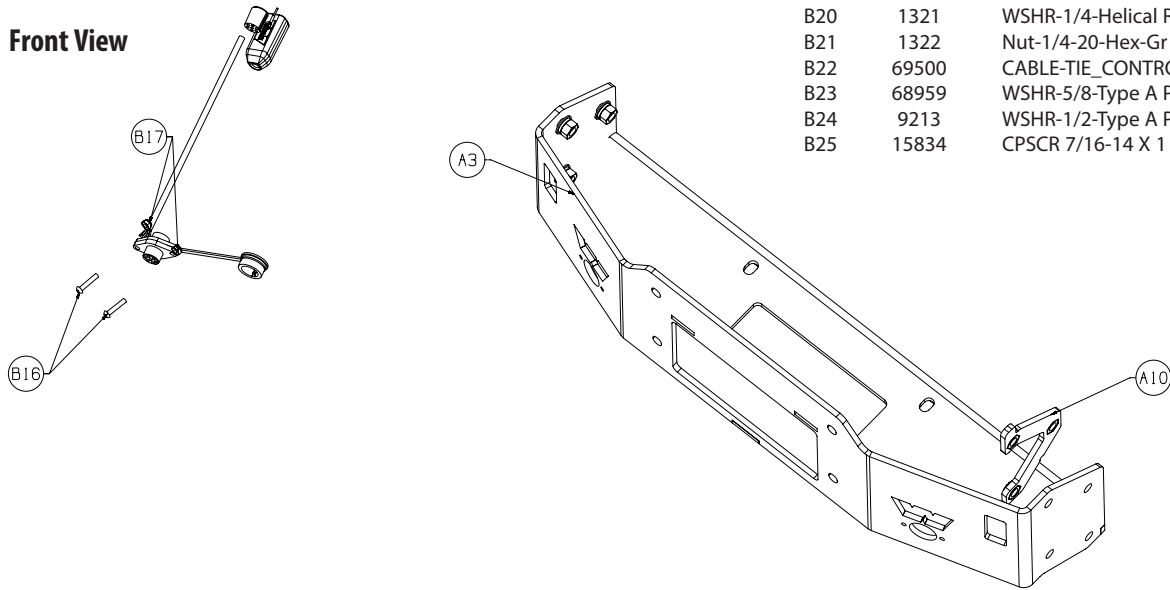
Please use the recommended torque specifications when assembling this product unless otherwise specified in the instructions.

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)			

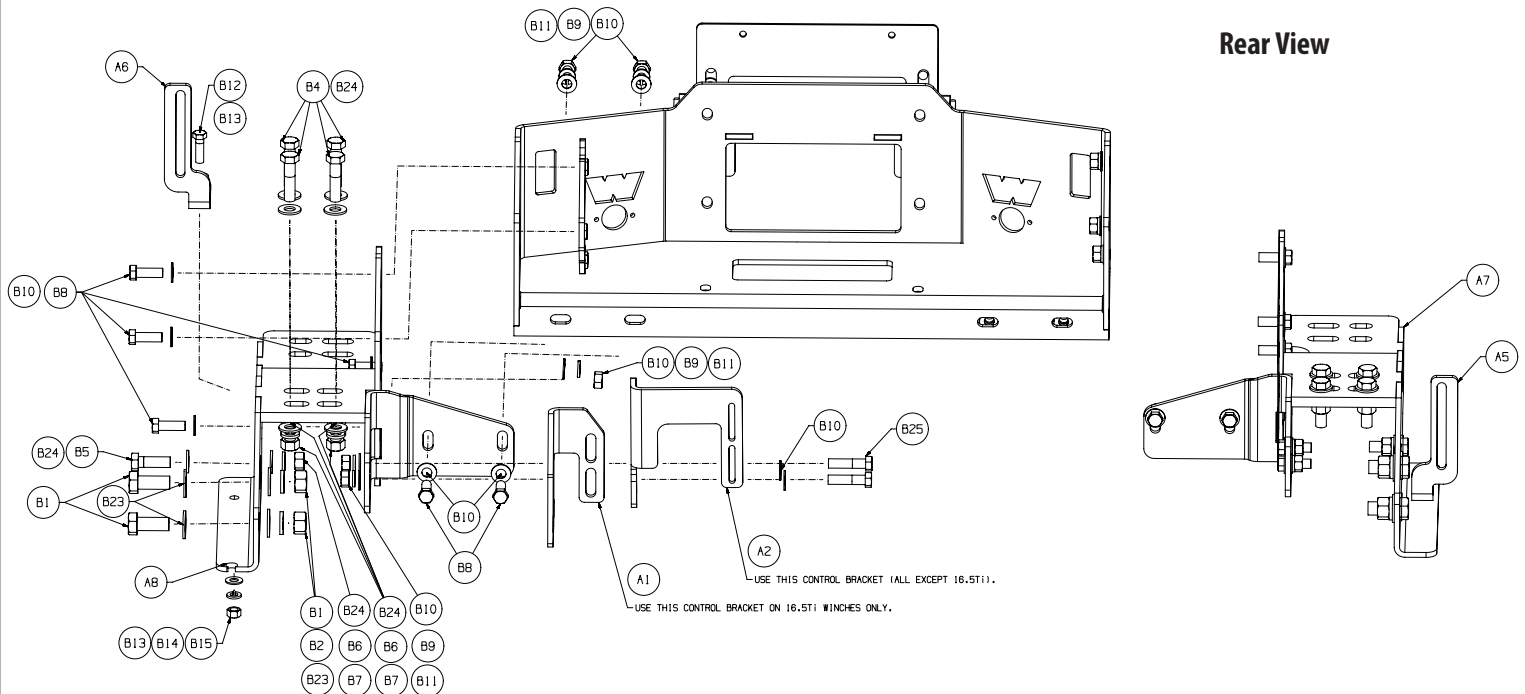
PARTS LIST

ITEM	PN.	DESCRIPTION	QTY	ITEM	PN.	DESCRIPTION	QTY
A1	98553	16.5 Ti HIDDEN KIT BRACKET	1	B1	6819	CPSCR-5/8-11 x 1-1/2-Hex Head-Gr 5-Pl	4
A2	98552	HIDDEN KIT BRACKET	1	B2	6820	WSHR-5/8-Helical Reg Spring Lock-Zn	4
A3	107169	WINCH CARRIER	1	B3	6821	Nut-5/8-11-Hex-Gr 2-Zn	4
A5	98096	RH BUMPER BRACKET	1	B4	11294	CPSCR-1/2-13 x 2-Hex Head-Gr 5-Pl	8
A6	98066	LH BUMPER BRACKET	1	B5	6818	CPSCR-1/2-13 x 1-1/2-Hex Head-Gr 5-Pl	2
A7	107170	RH FRAME EXTENSION	1	B6	2596	WSHR-1/2-Helical Reg Spring Lock-Zn	10
A8	107171	LH FRAME EXTENSION	1	B7	1323	Nut-1/2-13-Hex-Gr 2-Zn	10
A9	14867	REMOTE_CONTROL_SOCKET_HIDDEN	1	B8	1824	CPSCR-7/16-14 x 1-1/4-Hex Head-Gr 5-Pl	16
A10	84782	NUT PLATE	1	B9	2146	WSHR-7/16-Helical Reg Spring Lock-Zn	15
				B10	220026	WSHR-7/16	29
				B11	2583	Nut-7/16-14-Hex-Gr 2-Zn	13
				B12	6960	CPSCR-3/8-16 x 1-1/4-Hex Head-Gr 5-Pl	6
				B13	11524	WSHR-3/8-Type A Plain Narrow	12
				B14	1829	WSHR-3/8-Helical Reg Spring Lock-Zn	2
				B15	1828	Nut-3/8-16-Hex-Gr 2-Zn	6
				B16	29382	MSCR-#10-24x1-Cross Round Head-Pl	2
				B17	63241	Nut-#10-24-Locking Hex-Gr 2-Zn-Elastic Insert	2
				B18	1319	CPSCR-1/4-20 x 1-Hex Head-Gr 2-Pl-Full Thread	2
				B19	1141	CPSCR-1/4-20 x 3/4-Hex Head-Gr 2-Pl	2
				B20	1321	WSHR-1/4-Helical Reg Spring Lock-Zn	4
				B21	1322	Nut-1/4-20-Hex-Gr 2-Zn	4
				B22	69500	CABLE-TIE_CONTROL-PACK_DCX	4
				B23	68959	WSHR-5/8-Type A Plain Narrow	8
				B24	9213	WSHR-1/2-Type A Plain Narrow	2
				B25	15834	CPSCR 7/16-14 X 1 3/4 HEX HEAD GD5	2

Front View



Rear View



INSTALLATION INSTRUCTIONS

1. Remove license plate.



Figure 1

2. Disconnect fog lamps, located on the inside of the driver's side frame rail just behind the bumper.

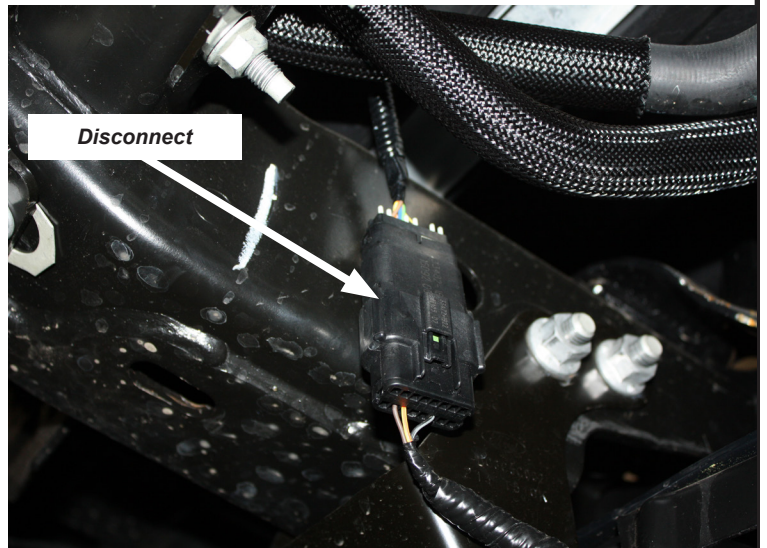


Figure 2

3. Disconnect engine block heater harness, located just outside of the passenger side frame rail.

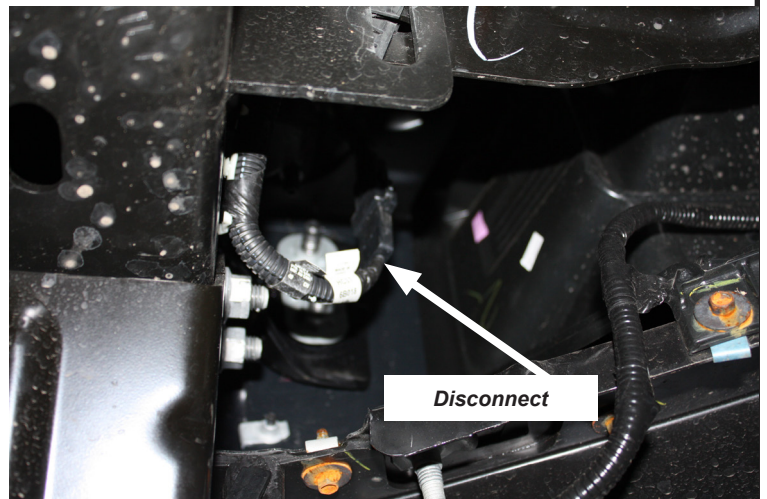


Figure 3

4. Remove the outside bumper support bolts, located behind the bumper and on each side of the vehicle outboard frame rails.

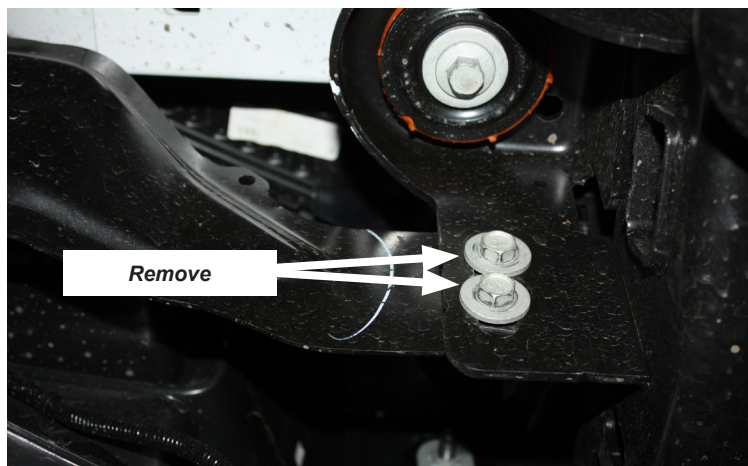


Figure 4

5. Remove the plastic cover that is held on by snaps onto the bumper. By removing, you will expose the bumper attachment hardware (four bolts).

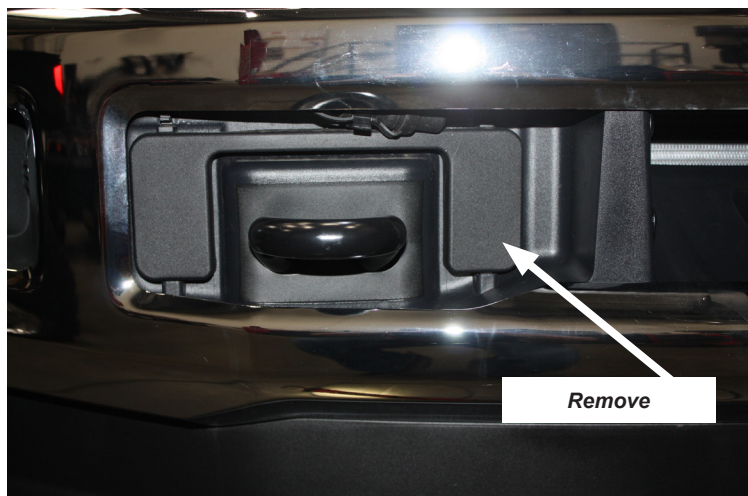


Figure 5

6. Remove the four bolts from around the tow hooks (each side) that are holding bumper in place.

⚠ CAUTION

- **Always** use assistance when moving or lifting heavy parts.

7. With assistance, remove the front bumper.

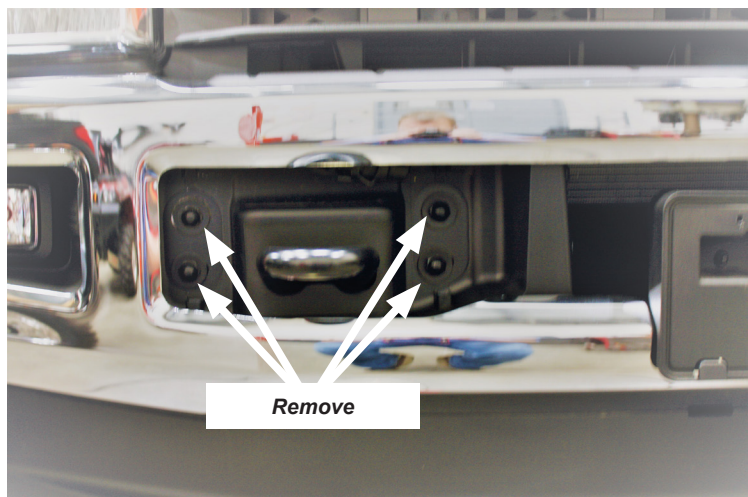


Figure 6

8. Remove the four nuts that hold the impact bracket to frame (each side).

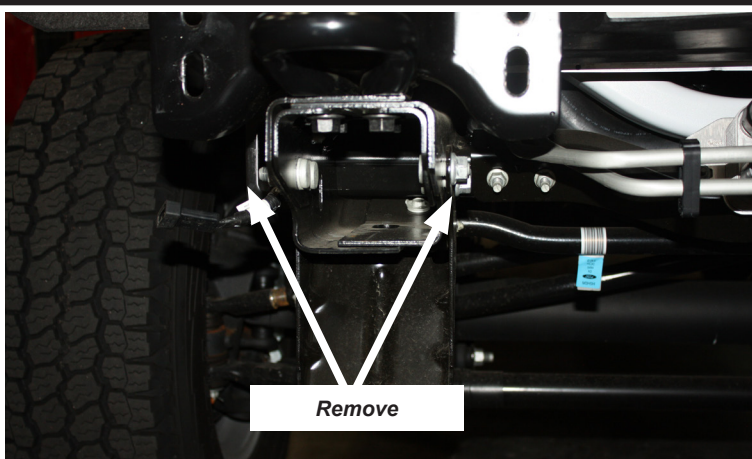


Figure 7

9. Remove the four bolts that attach the front tow hooks to the frame rail (each side).

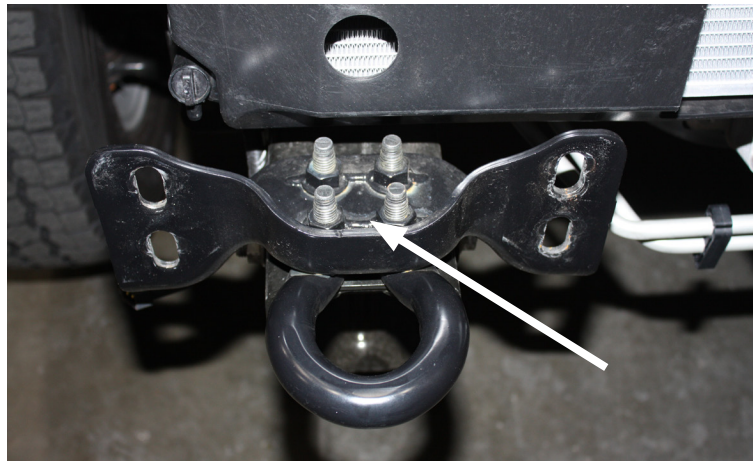


Figure 8

10. Slide the frame extension bracket over the frame rail, aligning the four holes in top of frame (each side).

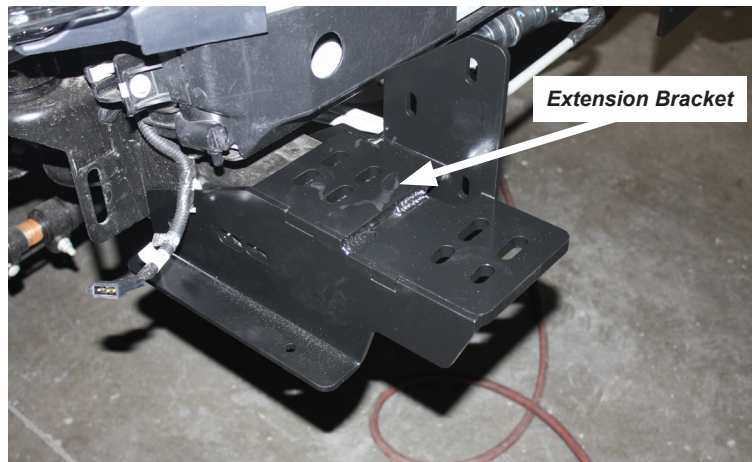


Figure 9

11. Install hardware, to secure frame extension bracket, refer to exploded view on page 2.

Two 7/16 bolts, on the other side frame bracket, are not shown.

Do not fully tighten hardware at this time.

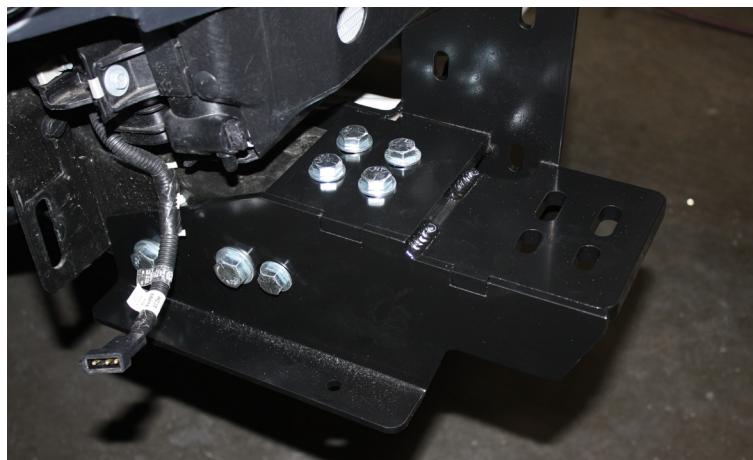


Figure 10

INSTALLATION INSTRUCTIONS

12. On the drivers side only, mount the control pack bracket on the inside of the frame rail of the vehicle.

NOTE: There are two brackets supplied in kit. You will need to choose the correct bracket size for your specific kit.

- a. For 16.5 Ti models: Use smaller bracket (A1)
b. For all other winches: Use larger bracket (A2), as seen in photo.

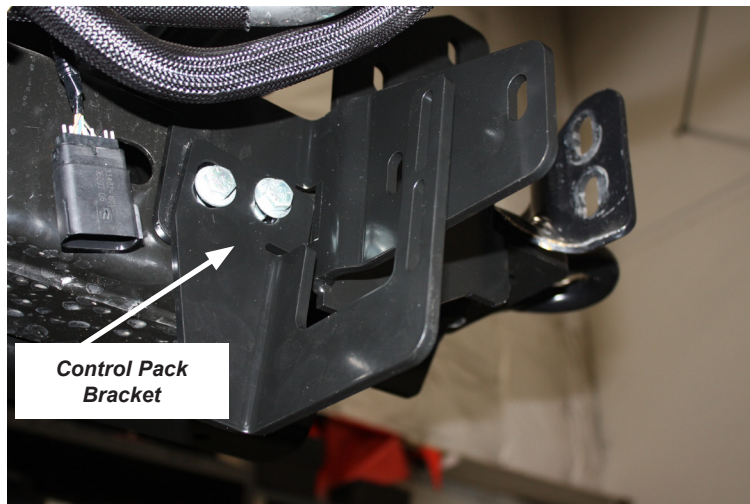


Figure 11

13. Remove the control pack from the winch.

NOTE: Make sure to mark all the wires in order of removal, to be sure to reattach in same order.

14. Mount the control pack to control pack bracket using hardware in this kit (Two 7/16 x 1 1/4 bolts, lock washers and nuts). Be sure to slide the control pack as far up as it can go with out causing interference with vehicles plumbing.

The bottom of the control pack should be facing you if you are standing in front of the vehicle. Make sure when mounting the control pack, that the wires coming out of the pack are as close to the top of the bumper as possible.

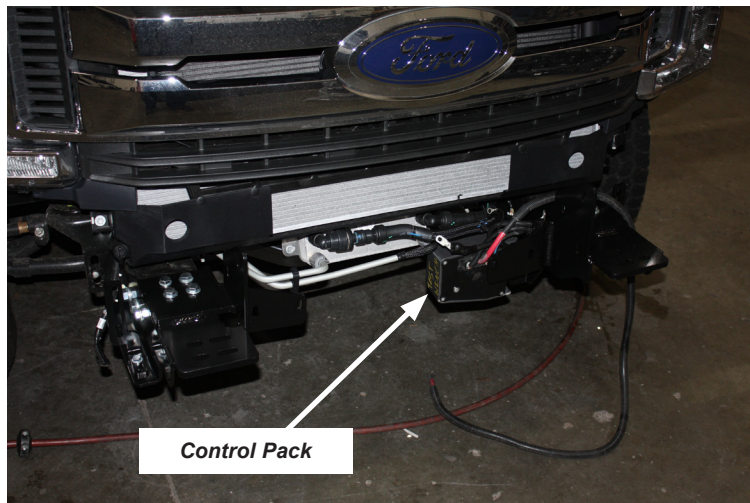


Figure 12

⚠ CAUTION

- Always use assistance when moving or lifting heavy parts.

15. Mount winch and fairlead to the winch carrier using winch mounting hardware.

16. With assistance, install winch carrier to vehicle.

NOTE: On the driver's side, locate the nut plate (A10) for easier installment of the winch carrier to the frame bracket. Refer to exploded view on page 2.

17. Once carrier and winch are in place, reinstall the factory tow hooks using the factory hardware.

18. Adjust winch carrier proper height. The carrier should be sitting about 3/16 of an inch below the top of the frame extension bracket as shown in photo.

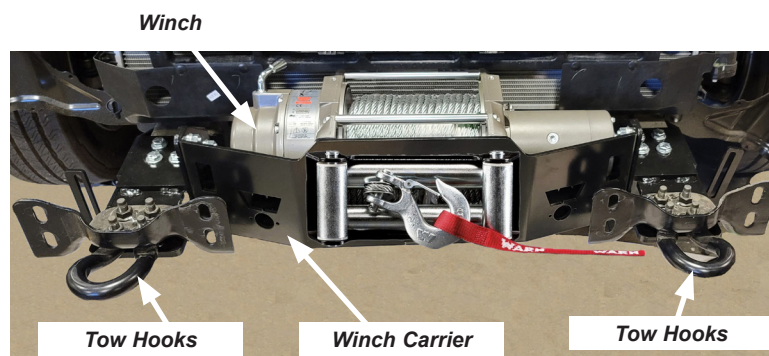


Figure 13

INSTALLATION INSTRUCTIONS

19. Tighten all hardware on the frame extension brackets and winch carrier at this time.

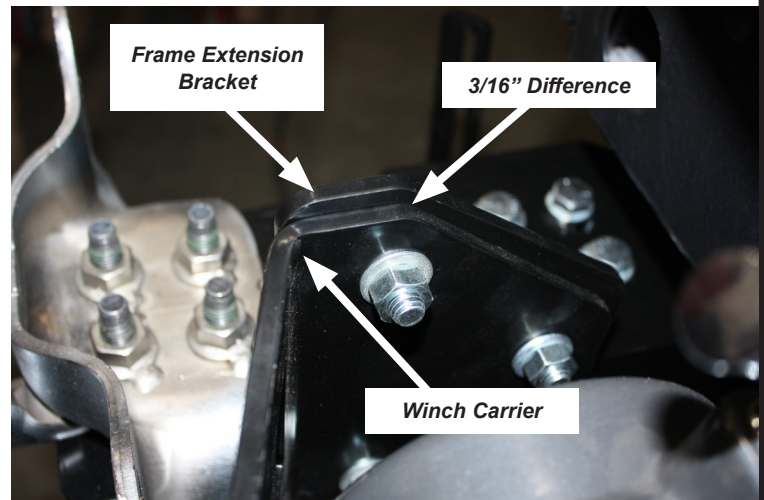


Figure 14

20. Install the winch carrier's lower bolts (four), located on the underside of the carrier.
21. Tighten hardware.

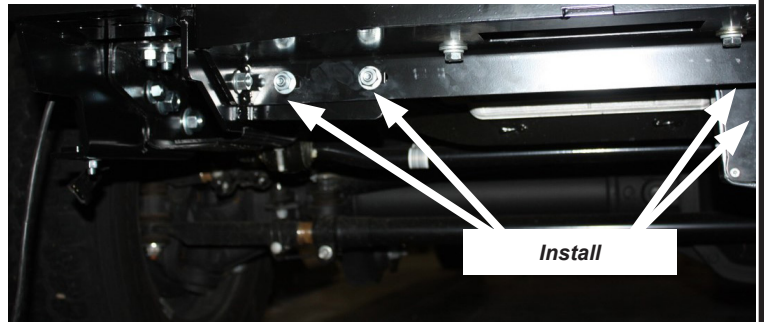


Figure 15

22. Prep bumper for reinstall.
23. From the inside of the bumper, remove the six screws holding the center airduct and license plate holder.

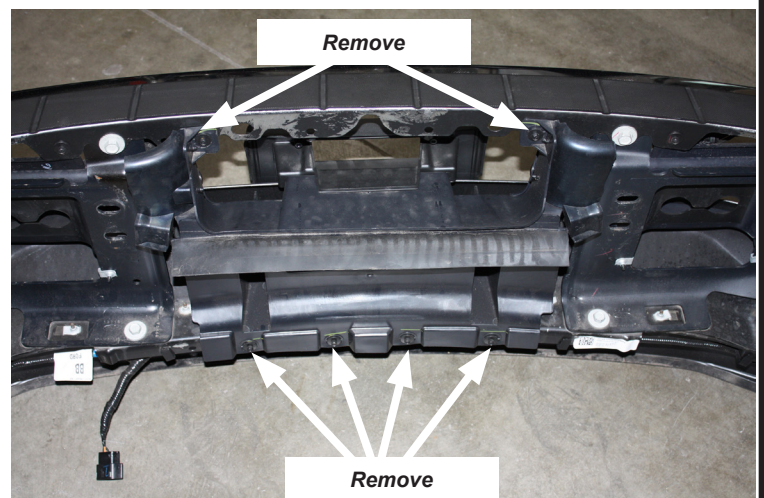


Figure 16

24. Remove the two plastic retainers (each side) to finish detaching the center duct.
25. Remove the center duct from bumper, by rolling out through the rear of the bumper.
26. Reinsert plastic retainers after center duct is removed.



Figure 17

27. Remove the rubber strips on each end of the bumper by removing all the plastic retainers. Repeat for other side.

28. You are now ready to install your Hidden Skirt Kit.

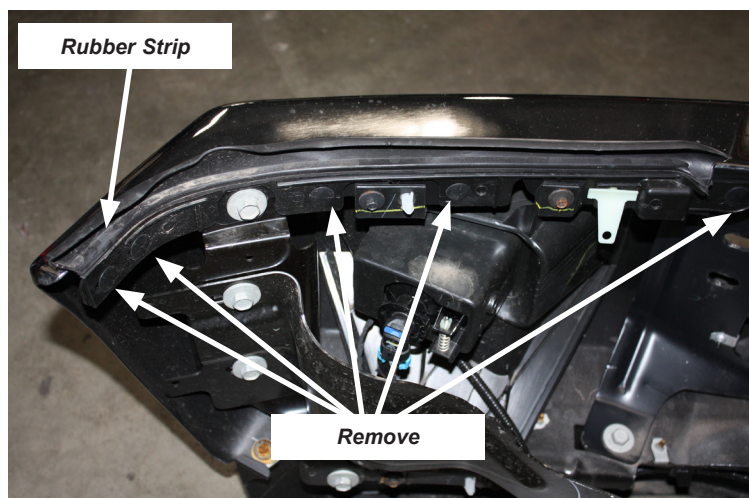


Figure 18

NOTICE



It is essential to fit your plastic skirt kit to the bumper BEFORE you reinstall your bumper. See your WARN Super Duty Skirt Kit for complete Winch installation instructions.

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.