

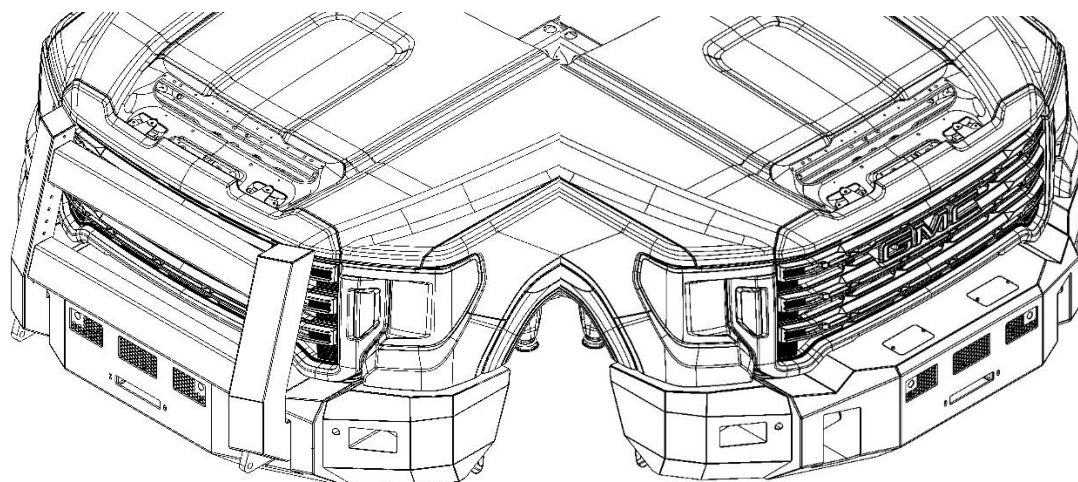


kelderman

Alpha Series Front Bumper Installation Manual

- 2020 GMC Sierra 2500-3500 HD

Kelderman Alpha Series Front Bumper



Commander
Optional

Winch

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Kit Numbers

- This installation manual covers the following front bumpers.

Kit Number	Description
KLM- 404011020-001020000	Sierra 2500 HD – Alpha Winch – Sensors – Stock Width
KLM- 404012020-001020000	Sierra 3500 HD – Alpha Winch – Sensors – Stock Width

Introduction

- **Important**

It is important that the entire installation instructions be read thoroughly before proceeding with bumper installation.

- **Product Installer Responsibilities**

Installer is responsible for installing this product in accordance with Kelderman Mfg. Inc. specifications and installation instructions.

Installer is responsible for providing proper installation of vehicle components and attachments as well as required or necessary clearance for suspension components, axles, wheels, tires, and other vehicle components to ensure a safe and sound installation and operation of this product.

NOTE: It is recommended that the bumper, and its components, be test fit to the vehicle prior to finish painting

- **Product Owner Responsibilities**

Owner is solely responsible for pre-operation inspection, periodic inspections, maintenance, and use of the product as specified by Kelderman Mfg. Inc. Of particular importance is the re-torque of fasteners. This re-torque must be performed within 90 days or 1000 miles of this product being put into service.

- **Definition of Terms**

- **Warning:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- **Caution:** A potential hazardous situation may result in property damage.
- **Note:** Provide information or suggestions that help correctly perform a task.
- **Torque:** When italicized "*torque*" alerts the installer to tighten fasteners to a specified value.

Safety

- **Your Safety and the Safety of Others is Very Important.**
Read and understand all safety precautions and instructions before installing this product.

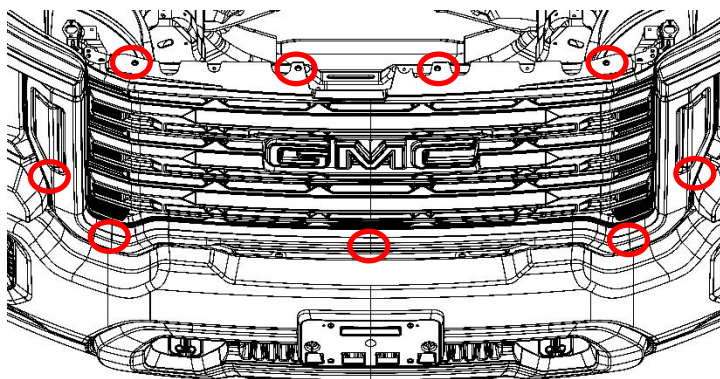
- **CAUTION: Trucks Equipped with Parking Sensors or Other Like Devices.**
Relocation of these devices will alter the field of view. It is the responsibility of the owner to understand how these changes affect the operation of these systems.

- **This Product is Intended for Off-Road Use**
All liability for installation and use rests with the owner.

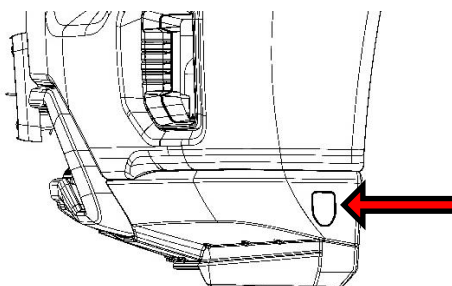
- **WARNING: Careless Installation Can Result in Serious Injury or Property Damage**
 - Wear eye protection.
 - Disconnect the battery before doing any work on the vehicle.
 - Work on flat level ground.
 - Ensure truck is properly supported by jack stands. Never work under a vehicle supported only by hydraulic jacks.
 - Take precautions when lifting product. Due to the size and weight of this product three people are recommended for installation.
 - Never work directly under the product until it has been securely fastened to the vehicle.
 - Avoid sharp, hot, and moving components when routing electrical cables.
 - If drilling inspect both sides of the surface and remove/relocate any objects located in the way.
 - Ensure all bolts are properly tightened before driving.

Bumper Removal

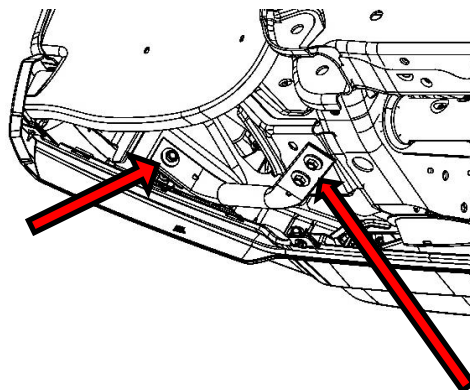
- 1:** Disconnect the battery prior to performing any work on the vehicle
- 2:** Remove the fender flares and fender extensions from both the passenger and driver side.
- 3:** Remove the black plastic cover panel over the radiator.
- 4:** Remove the four screws that fasten the top of the grille. The bottom of the grille is held in with clips. Pull outward at each clip location until it releases. The grille can now be removed.



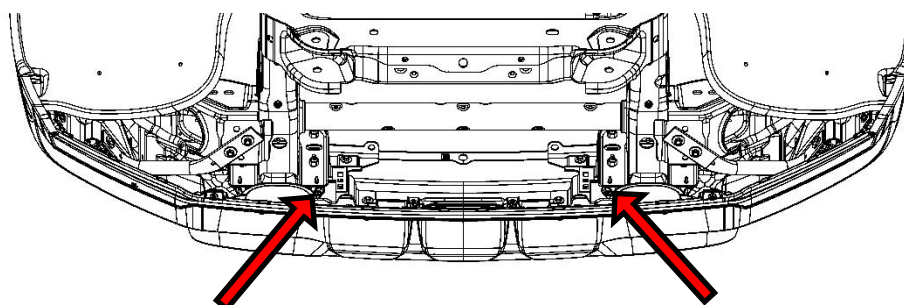
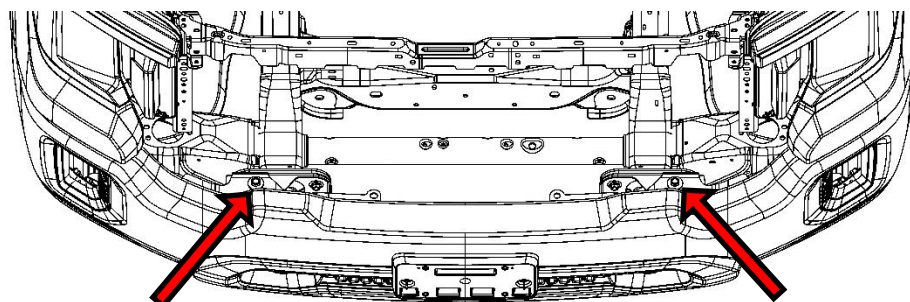
- 5:** Locate the front parking sensor wiring harness connection near the passenger-side headlight and disconnect, if equipped.
- 6:** Locate the block heater wiring harness connection near the passenger-side headlight and disconnect, if equipped.



- 7:** Unbolt the corner braces from the bumper and remove.

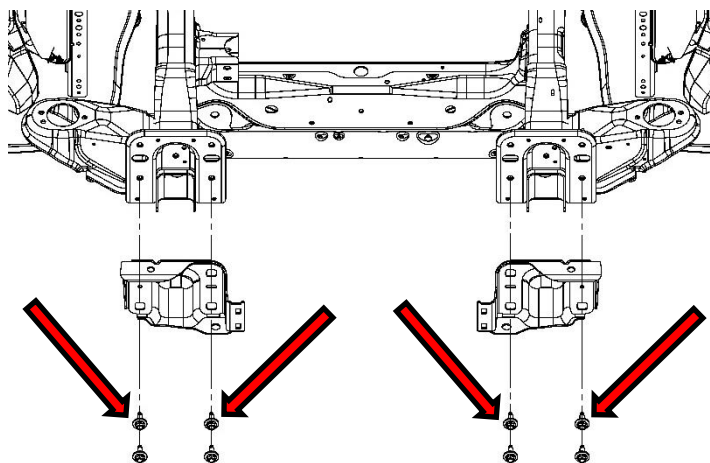


- 8:** With the bumper supported, remove the two bolts located just under the grille. Remove the remaining two bolts on the underside of the bumper. The bumper can now be removed.



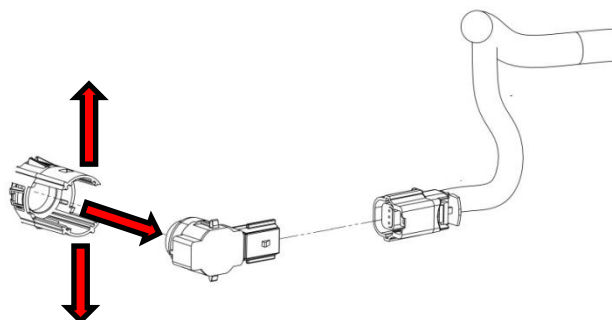
- 9:** Remove the 4 screws that fasten the lower active louvers to the bumper brackets and set aside. **NOTE:** The active louvers will be reinstalled later.

- 10:** Remove the eight bolts that fasten the bumper brackets to the frame horns. **NOTE:** These bolts will be reused later.

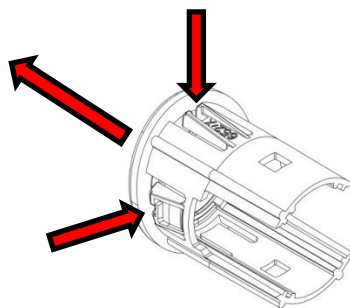


11: Remove the four bolts that hold the tow hooks (2 per tow hook). **NOTE:** These will be reused later.

12: If equipped remove the parking sensors from the stock bumper. Slightly spread the ears on the sensor bezel and push the sensor through the back of the bumper. Remove the wiring harness from the stock bumper. **NOTE:** Make a note of each sensor's location within the stock bumper.



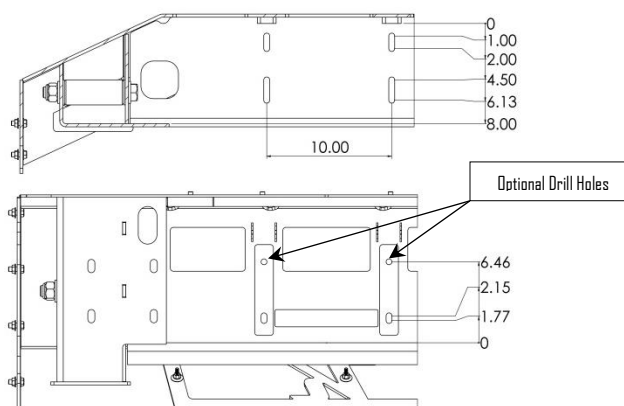
13: Depress the tabs on the sensor bezel and push it through the front of bumper.



14: If equipped, remove the block heater plug and wiring harness from the stock bumper. **NOTE:** It will be reinstalled on the new bumper.

Bumper Preparation

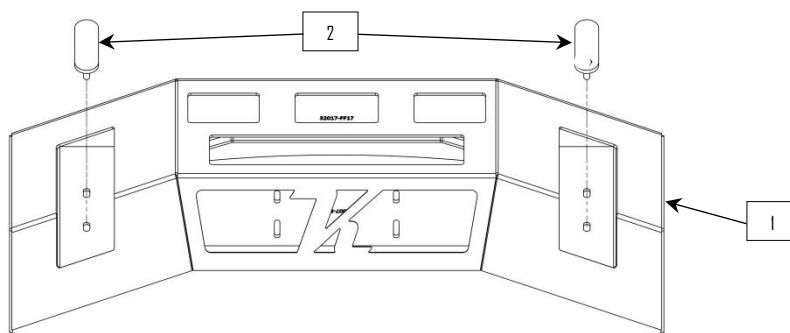
- Before painting open every box and locate all parts. There are several smaller bushing pieces, screens, and bolt tabs that are packaged separately inside the main box.
- **CAUTION:** Kelderman Mfg. Inc. cannot guarantee correct out of the box fitment across all winch brands and sizes. The installer is responsible for test fitting the winch into the bumper and making any required modifications before the bumper is sent to paint. See Image below for the bolt pattern in the Kelderman bumper.
 - **NOTE:** When installing larger winches (16,500lb) the installer maybe required to drill two extra holes into the face of the bumper in order to properly mount the winch.



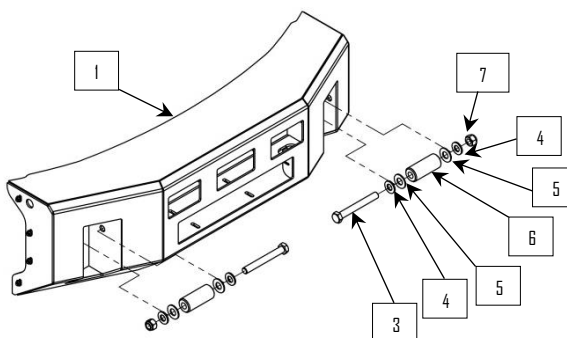
- **CAUTION:** Kelderman Mfg. Inc. cannot guarantee correct out of the box fitment across all light brands and sizes. The installer is responsible for test fitting all lights into the bumper and making any required modifications before the bumper is sent to paint. This bumper has been designed to utilize the following Rigid Industries lights.
 - Rigid Industries E-Series 4 Inch Light (End Cap)
- **Tow Hook Pocket Painting**
 - If a heavily textured thick coating is being applied, take note that buildup does not hinder the installation of the tow hooks. Each bumper is supplied with four rubber washers to let tow hooks rotate without damaging the paint. If thick coatings are applied, installation of hooks may only allow for the use of one or no rubber washers.

Bumper Assembly

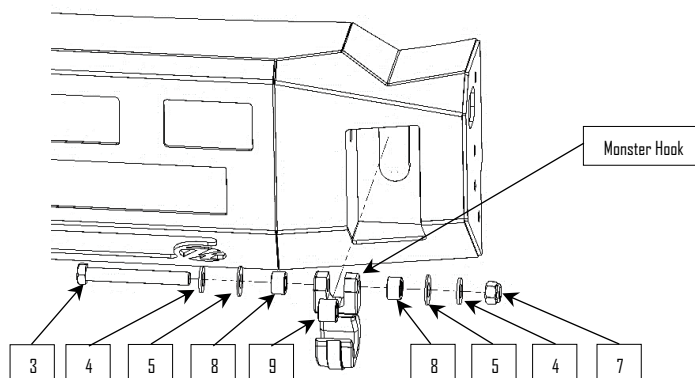
- On a clean, flat non-scratching surface, place the bumper center section (1) face down.
- Insert bumper mount bolting tabs (2) thru each pocket in the center section. Use tape or zip ties to temporarily hold in place.



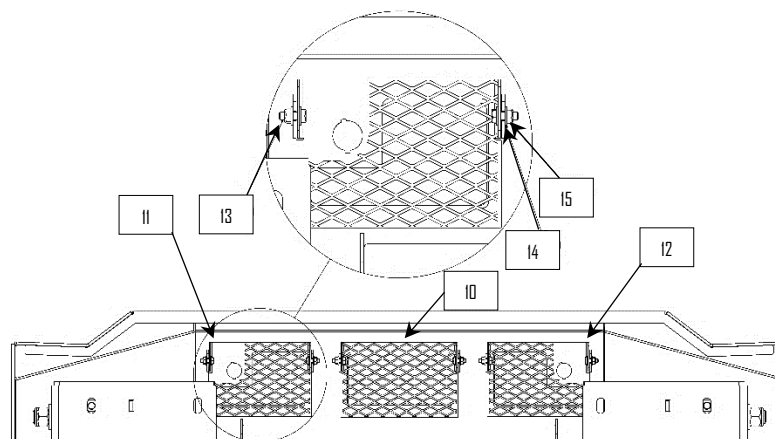
- Install the tow hooks (6) into the pockets using the provided 7/8" hardware. Tow hooks (6) and rubber washers (5) go inside the pocket. Tighten the 7/8" nut (7) to the point where the tow hook will still spin, but not freely.



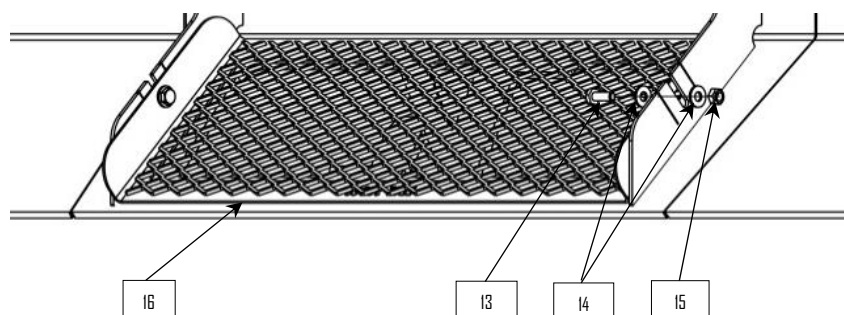
- If optional, install the Monster Hooks into the pockets using the provided Monster Hook spacers (8 & 9) and rubber washers (5). Tighten the 7/8" nut (7) to the point where the tow hook will still spin, but not freely.



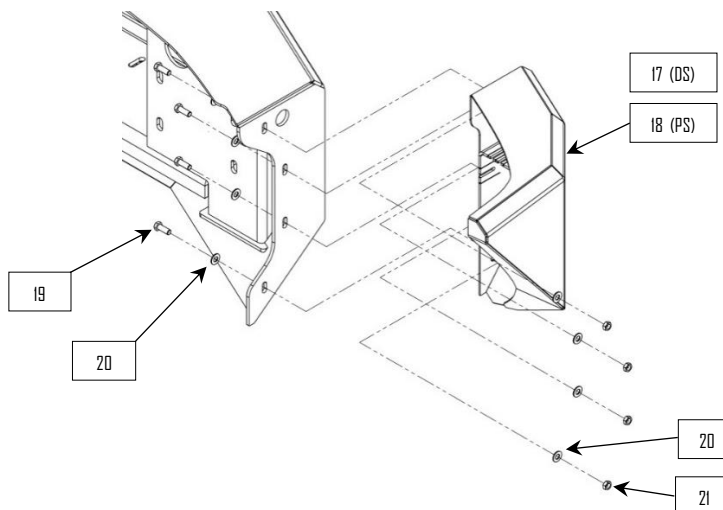
- Bolt the three upper screens (10, 11, & 12) into the center section, using the supplied 1/4" hardware (13, 14, & 15).



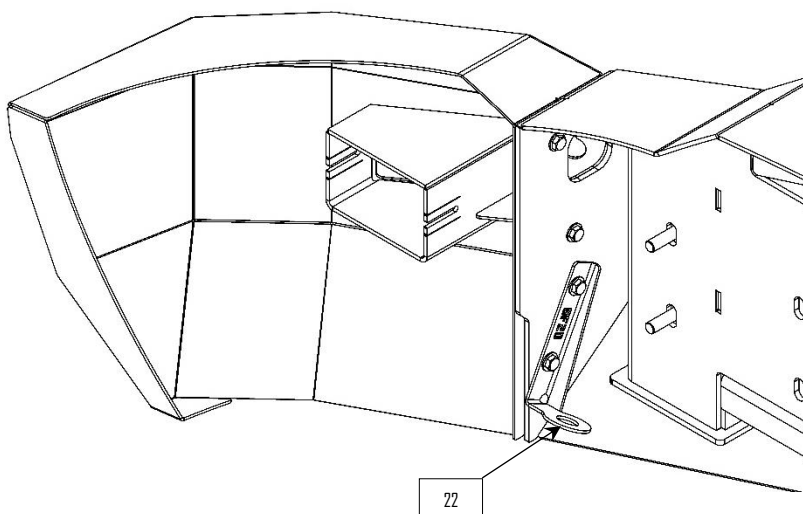
- Bolt the lower screen (16) into the center section, using the supplied 1/4" hardware (13, 14, & 15).



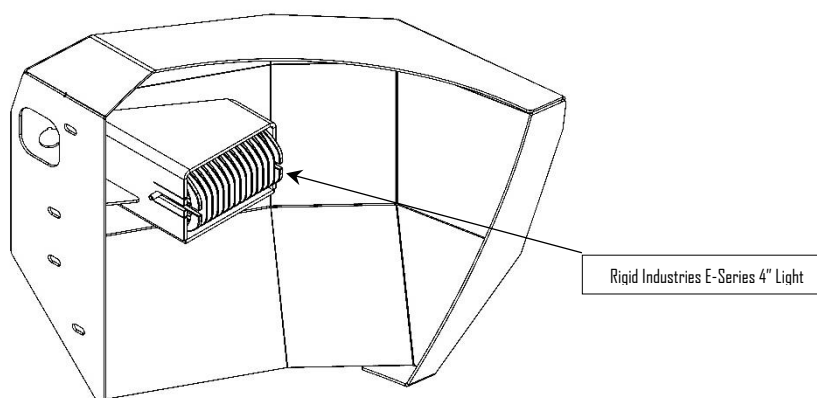
- Bolt the end caps (17 & 18) onto the center section using the supplied 3/8" hardware (19, 20, & 21). Re-positioning may be required after bumper is installed onto the truck. **NOTE:** While positioning use masking tape to protect painted surfaces that come into contact.



- If equipped install the block heater bracket (22) on the driver side of the center section.

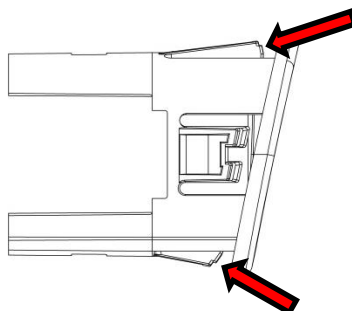


- Winch Bumpers
 - Install winch according to winch manufacture's specifications. When installing large winches two extra holes may need to be drilled into the face of the bumper. **NOTE:** Use the internal spacer plates as a drill guide. (See *Bumper Preparation Section*)
- Install the lights into each end cap.

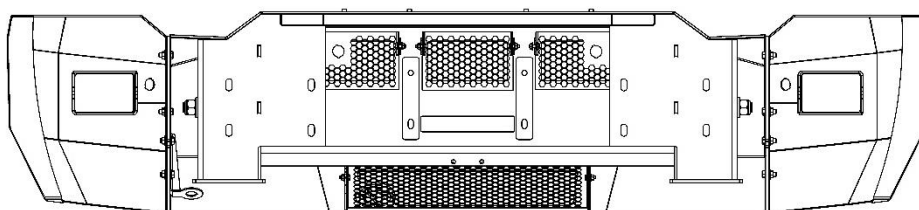
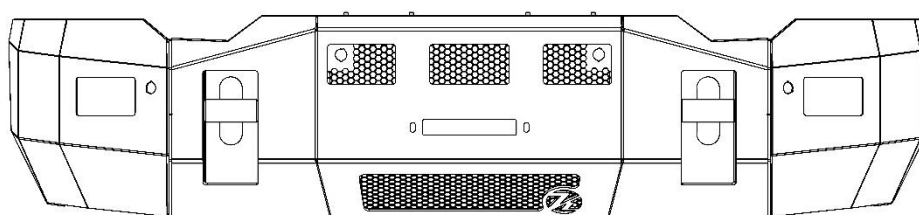


- Install a Rigid Industries 4 inch E-Series light (*or similar light*) into each end cap using the hardware supplied with the light.
 - **NOTE:** The light mounting ears will deform and draw up to the light as they are tightened.

- If equipped install the sensors into the end caps and center screens by reversing the process *from steps twelve and thirteen*. Be sure to install them back in the correct location. **NOTE:** If bezels will not snap into place file the tabs down a little at a time until they will catch.

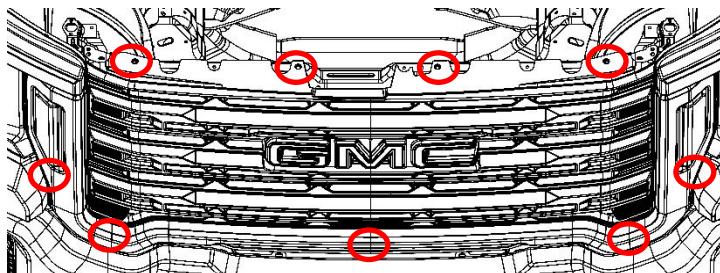


- Zip tie wiring to the anchor points inside the bumper.
- The bumper is now ready for installation.



Bumper Installation

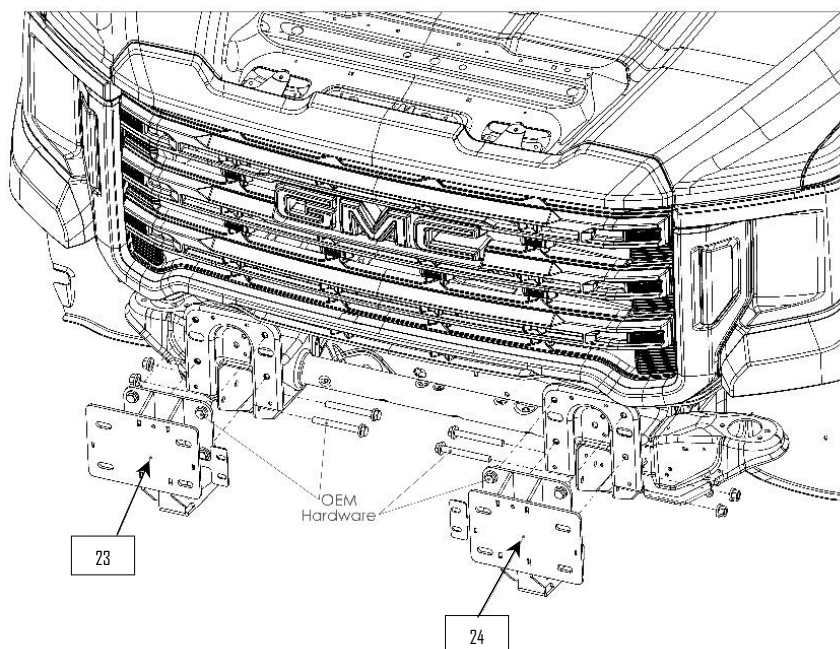
15: Reinstall the grille by reversing the process from *step four*.



16: Reinstall the black plastic cover panel over the radiator removed in *step three*.

17: Reinstall the fender flares and fender extensions from both the passenger and driver side removed in *step two*.

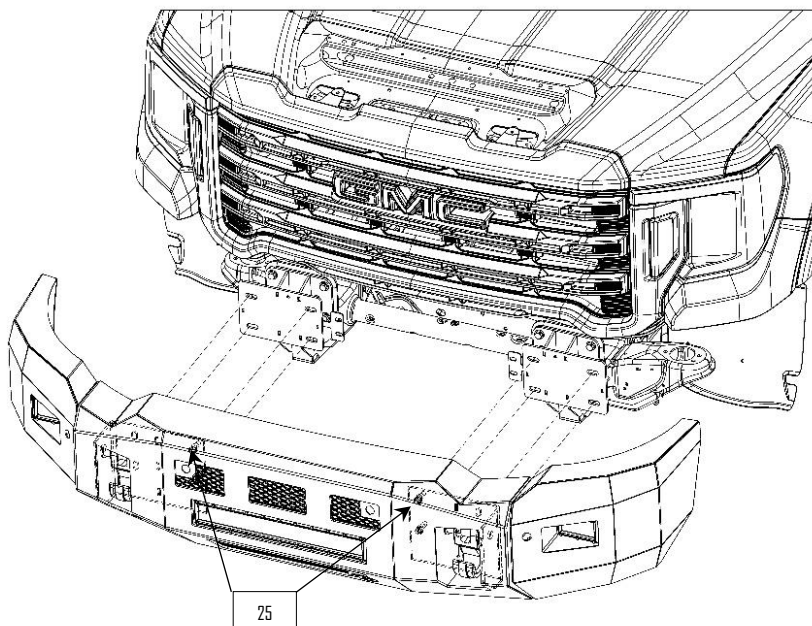
18: Install the bumper frame brackets (23 & 24) using the OEM hardware from *steps seven & eight* to bolt the brackets to the frame horns.



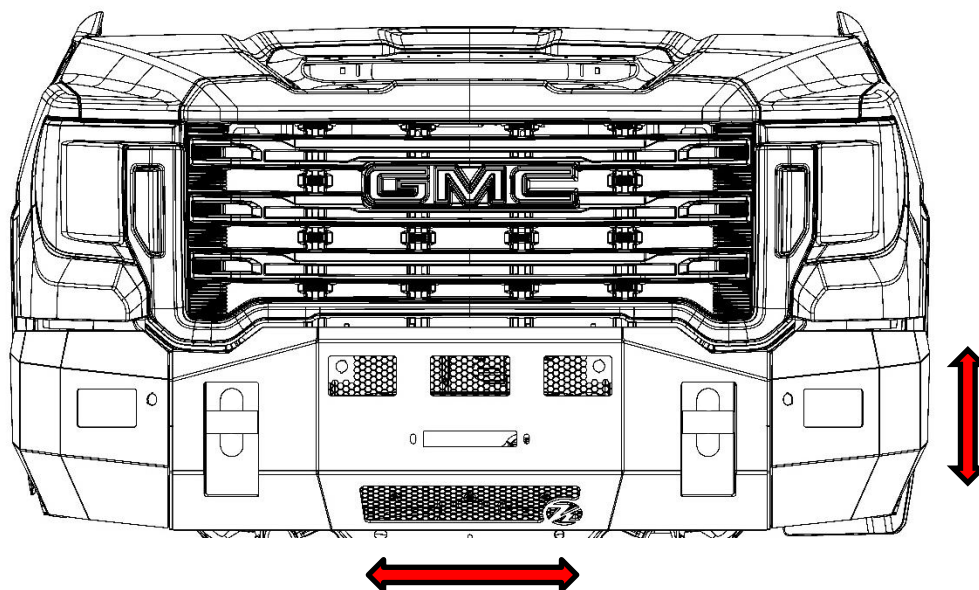
19: Reinstall the active grille louvers onto the new bumper brackets using the OEM hardware removed in *step nine*.

20: Use the studs of the bumper mount bolting tabs (2) to position the bumper on the frame brackets (23 & 24) use nut (27) and washer (26) to fasten the bumper to the mount. **CAUTION:** Bumper may need two people to lift.

21: Fasten the remaining 1/2" hardware (25, 26, & 27) through the bumper and bracket.



22: Align the bumper on the truck and evenly torque all bolts. **NOTE:** The end caps can be re-adjusted at this point if required.

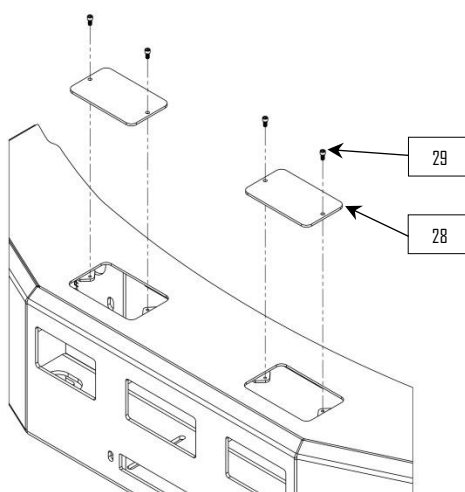


23: Torque all fasteners according to the chart below.

Bolt Size	Torque
1/4"-20	70 <i>in-lb</i>
3/8"-16	20 <i>ft-lb</i>
1/2"-20	50 <i>ft-lb</i>
9/16"-18	70 <i>ft-lb</i>
7/8"-9	250 <i>ft-lb</i>

24: Finish wiring accessories and sensors.

25: Install winch access covers (28) using bolts (29).



Parts Key

Item Number	Part Number	Description
1	10008678	Weldment – Alpha Winch Center Section
2	31760	Weldment – 4” Bolting Tab
3	12644	Bolt: 7/8”-9 X 7.00”
4	13010	Flat Washer: 7/8”
5	80043	Rubber Washer: 1” ID X 2” OD
6	31552	Bushing: Tow Hook
7	13110	Lock Nut: 7/8”-9
8	31561	Bushing: Monster Hook Spacer – Outside 0.9” L
9	31562	Bushing: Monster Hook Spacer – Inside 1.197” L
10	10008105	Plate – 16ga - Inner Screen – 8”
11	10009215	Plate – 16ga - DS Screen, Sensor – 7”
12	10009222	Plate – 16ga - PS Screen, Sensor – 7”
13	12108	Bolt: 1/4”-20 X 3/4”
14	13000	Flat Washer: 1/4”
15	13100	Lock Nut: 1/4”-20
16	10008106	Plate – 16ga - Lower Screen
17	10006509	Weldment - End Cap (DS) Stock Sensor
18	10006520	Weldment - End Cap (PS) Stock Sensor
19	12210	Bolt: 3/8”-24 X 1-1/4”
20	13002	Flat Washer: 3/8”
21	13102	Lock Nut: 3/8”-24
22	10006558	Plate 11ga - Block Heater Bracket - 2020 GMC
23	10006567	Weldment – Bumper Frame Mount (PS)
24	10006561	Weldment – Bumper Frame Mount (DS)
25	12007	Bolt: 1/2”-20 X 1-1/2”
26	13004	Flat Washer: 1/2”
27	13124	Lock Nut: 1/2”-20
28	31560	Winch Access Cover
29	13503	Socket Head Screw: ¼”-20 X ½”

Notes

Notes

Contact Information

- Kelderman Manufacturing appreciates your business. We strive to meet the needs of our customers by providing the highest quality products. If you have any questions concerning our products please call or email us at the following:

2686 Highway 92
Oskaloosa, Iowa 52577

Phone: (641) 673-5396

Fax: (641) 673-4168

Email: info@kelderman.com



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