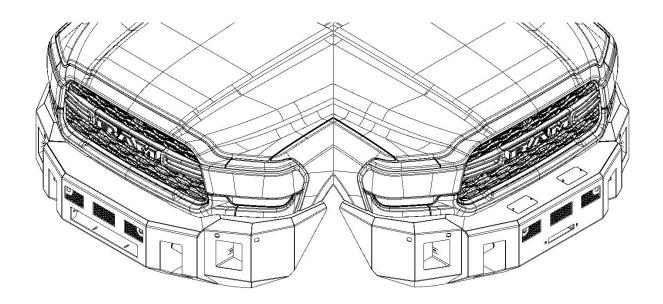


Alpha Series Front Bumper Installation Manual

- 2019 Ram 2500-5500

Kelderman Alpha Series Front Bumper



Light Winch

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Kit Numbers

This installation manual covers the following front bumpers.

| Kit Number | Description |
|-------------------------|---|
| KLM-401041019-001010000 | Ram 2500 – Alpha Light – Sensors – Stock Width |
| KLM-401042019-001010000 | Ram 3500 – Alpha Light – Sensors – Stock Width |
| KLM-401041019-001020000 | Ram 2500 – Alpha Winch – Sensors – Stock Width |
| KLM-401042019-001020000 | Ram 3500 – Alpha Winch – Sensors – Stock Width |
| KLM-401041019-001011000 | Ram 2500 – Alpha Light – Sensors – 1.0" End Caps – Wide Width |
| KLM-401042019-001011000 | Ram 3500 – Alpha Light – Sensors – 1.0" End Caps – Wide Width |
| KLM-401041019-001021000 | Ram 2500 – Alpha Winch – Sensors – 1.0" End Caps – Wide Width |
| KLM-401042019-001021000 | Ram 3500 – Alpha Winch – Sensors – 1.0" End Caps – Wide Width |
| KLM-401043019-001012300 | Ram 4500 – Alpha Light – Sensors – 2.375" End Caps – Super Wide Width |
| KLM-401044019-001012300 | Ram 5500 – Alpha Light – Sensors – 2.375" End Caps – Super Wide Width |
| KLM-401043019-001022300 | Ram 4500 – Alpha Winch – Sensors – 2.375" End Caps – Super Wide Width |
| KLM-401044019-001022300 | Ram 5500 – Alpha Winch – Sensors – 2.375" End Caps – Super Wide 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.

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

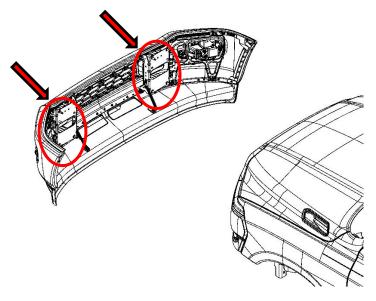
All liability for installation and use rests with the owner.

WARNING: Careless Installation Can Result in Serious Injury or Property Damage

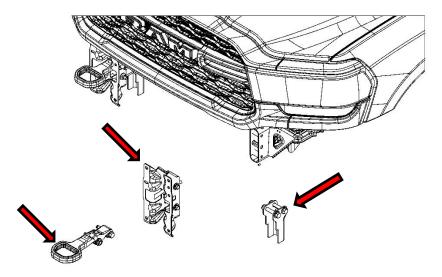
- Wear eye protection.
- Disconnect the battery before doing any work on the vehicle.
- Work on flat level ground.
- Ensure truck is properly supported by jack stands. Never work under a vehicle supported only by hydraulic jacks.
- Take precautions when lifting product. Due to the size and weight of 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

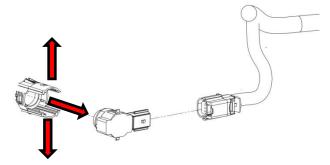
- **1:** Disconnect the wiring to any lights, sensors, or other accessories mounted to the stock bumper.
- **2:** Locate the four bolts on each side that attach the bumper to the frame horn bracket. With the bumper supported remove these bolts. The bumper is now free and can be removed.



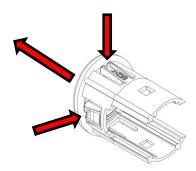
- **3:** If equipped unbolt and remove the plastic air duct from the intercooler. These bolts will be reused during the installation steps.
- **4:** Remove the tow hook, bumper bracket, and crash protector from each frame horn. The bumper bracket bolts will be reused during the installation steps.



5: If equipped remove the parking sensors from the stock bumper. Spread the ears on the sensor bezel and push the sensor thru the back of the bumper. NOTE: Keep track of each sensors location.

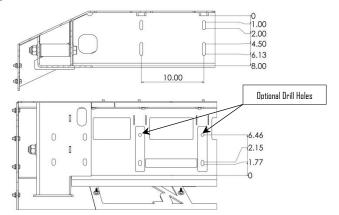


6: Depress the tabs on the sensor bezel and push it thru the front of bumper.



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 bellow 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.



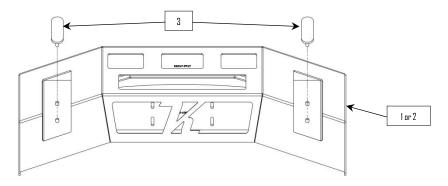
- CAUTION: Kelderman Mfg. Inc. cannot guarantee correct out of the box fitment across all light brands and sizes. The installer is responsible for test fitting all lights into the bumper and making any required modifications before the bumper is sent to paint. This bumper has been designed to utilize the following Rigid Industries lights.
 - Rigid Industries E-Series 20 Inch Light (Center)
 - Rigid Industries E-Series 4 Inch Light (End Cap)

Tow Hook Pocket Painting

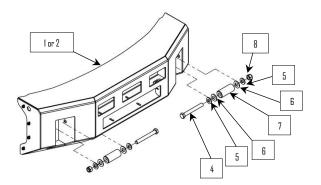
If a heavily textured thick coating is being applied, take note that buildup does not hinder the installation of the tow hooks. Each bumper is supplied with four rubber washers to let tow hooks rotate without damaging the paint. If thick coatings are applied, installation of hooks may only allow for the use of one or no rubber washers.

Bumper Assembly

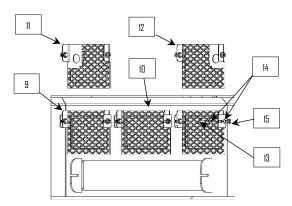
- On a clean flat non-scratching surface place the bumper center section (1 or 2) face down.
- Insert bumper mount bolting tabs (3) thru each pocket in the center section. Use tape or zip ties to temporarily hold in place.



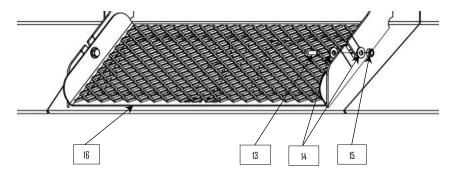
- Install the tow hooks (7) into the pockets using the provided 7/8" hardware. Tow hooks (7) and rubber washers (6) go inside the pocket. Tighten the 7/8" nut (8) to the point where the tow hook will still spin, but not freely.



- 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).

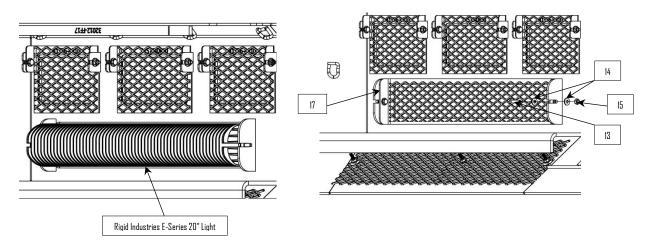


Winch Bumpers

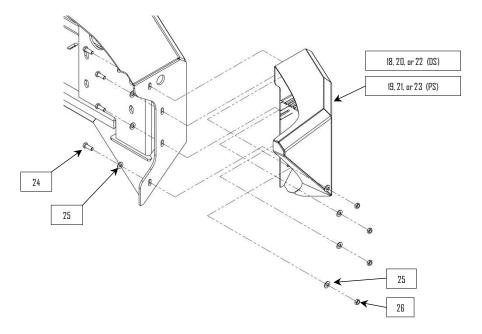
- Install winch according to winch manufacture's specifications. When installing large winches two extra holes may need to be drilled into the face of the bumper. **NOTE:** Use the internal spacer plates as a drill guide. (See Bumper Preparation Section)

- Light Bumpers

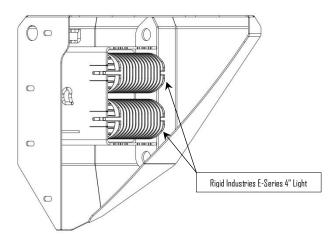
- Install the Rigid Industries E-Series 20 inch light bar (or similar light) into the center cut out using the hardware supplied with the light.
- Or if optioned install the Kelderman center light delete screen (17) using the hardware supplied with the light delete kit.



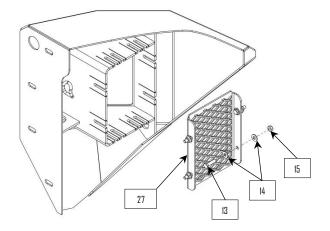
Bolt the end caps onto the center section using the supplied hardware. Repositioning may be required after bumper is installed onto truck. NOTE: While positioning use masking tape to protect painted surfaces that come into contact.



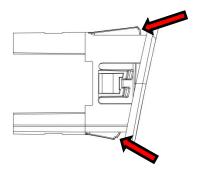
Install the lights into each end cap.



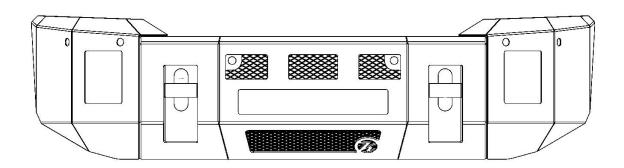
- Install two Rigid Industries 4 inch E-Series light (or similar light) into each end cap using the hardware supplied with the light.
 - NOTE: The light mounting ears will deform and draw up to the light as they are tightened.



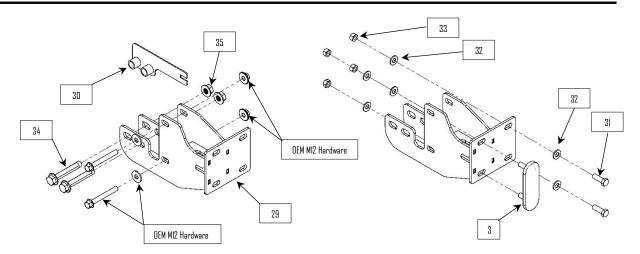
- Or if optioned, install the Kelderman end cap light delete screen (27) using the 1/4" hardware supplied with the light delete kit.
- If equipped install the sensors into the end caps and center screens by reversing the process from steps five and six. Be sure to install them back in the correct location. NOTE: If bezels will not snap into place file the tabs down a little at a time until they will catch.



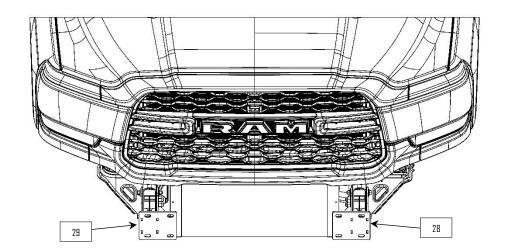
- Zip tie wiring to the tie downs welded inside the bumper.
- The bumper is now ready for installation.



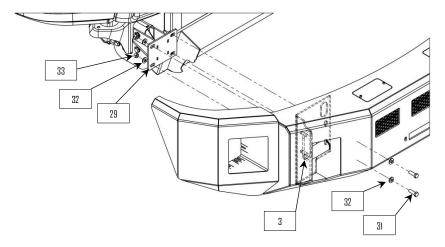
Bumper Installation



7: Insert the anti-crush bracket (30) into the frame horn. Re-use the OEM hardware removed in *step four* to bolt thru bumper bracket (28 & 29) and the frame horn. **NOTE:** Some trucks may already have factory anti-crush bushings located where the crash protector was installed. These trucks do not require the installation of anti-crush bracket (30).

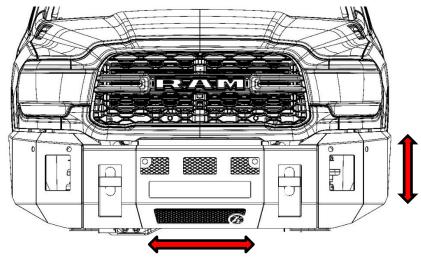


- **8:** Install bumper bracket (29) on the passenger side and bumper bracket (28) on the driver side.
- **9:** Use the studs of the bumper mount bolting tabs (3) to position the bumper on the frame brackets (28 & 29). Use washer (32) and nut (33) to fasten the bumper to the mount.

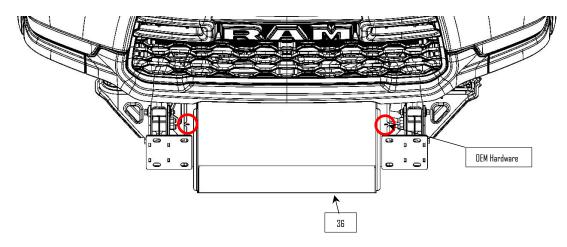


10: Insert the remaining 1/2" hardware thru the bumper and bracket.

11: Align the bumper on the truck and tighten the mounting hardware. NOTE: The end caps can be re-adjusted at this point if required.



12: On trucks equipped with an intercooler install the air duct (36) using the hardware removed in step three. The air duct (36) will slide up behind the installed bumper.



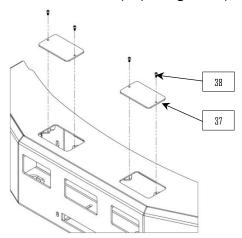
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13: Torque all fasteners according to the chart below.

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

14: Finish wiring accessories.

15: Winch bumpers, install winch access covers (37) using bolts (38).



Parts Key

| Item Number | Part Number | Description |
|-------------|-------------|--|
| 1 | 10004982 | Center Section - Winch |
| 2 | 10004796 | Center Section - Light |
| 3 | 31760 | Bumper Mount Bolting Tab |
| 4 | 12644 | Bolt: 7/8"-9 X 7.00" |
| 5 | 13010 | Flat Washer: 7/8" |
| 6 | 80043 | Rubber Washer: 1" ID X 2" OD |
| 7 | 31552 | Tow Hook |
| 8 | 13110 | Lock Nut: 7/8"-9 |
| 9 | 31765 | Outer Screen |
| 10 | 31764 | Inner Screen |
| 11 | 10004817 | DS Screen, Sensor |
| 12 | 10004826 | PS Screen, Sensor |
| 13 | 12108 | Bolt: ¼"-20 X ¾" |
| 14 | 13000 | Flat Washer: ¼" |
| 15 | 13100 | Lock Nut: ¼"-20 |
| 16 | 32059 | Lower Screen |
| 17 | 31569 | Light Delete Screen Center (Optional) |
| 18 | 10004976 | End Cap (DS) Stock Sensor |
| 19 | 10004965 | End Cap (PS) Stock Sensor |
| 20 | 10007167 | End Cap (DS) 1.0" Wide Sensor |
| 21 | 10007174 | End Cap (PS) 1.0" Wide Sensor |
| 22 | 10006889 | End Cap (DS) 2.375" Super Wide |
| 23 | 10006890 | End Cap (PS) 2.375" Super Wide |
| 24 | 12210 | Bolt: 3/8"-24 X 1-1/4" |
| 25 | 13002 | Flat Washer: 3/8" |
| 26 | 13102 | Lock Nut: 3/8"-24 |
| 27 | 31566 | Light Delete Screen End Cap (Optional) |
| 28 | 10004947 | Bumper Frame Mount (DS) |
| 29 | 10004939 | Bumper Frame Mount (PS) |
| 30 | 10004848 | Frame Anti Crush Insert |
| 31 | 12007 | Bolt: ½"-20 X 1-1/2" |
| 32 | 13004 | Flat Washer: ½" |
| 33 | 13124 | Lock Nut: ½"-20 |
| 34 | 13999 | Flange Bolt: M16-2.0mm X 100mm |
| 35 | 13913 | Flange Nut: M16-2.0mm |
| 36 | 10004859 | Alpha Bumper Air Duct |
| 37 | 31560 | Winch Access Cover |
| 38 | 13503 | Socket Head Screw: ¼"-20 X ½" |

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

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