

Assembly, Installation, Operation and Maintenance Instructions Full Replacement Front Bumper

Part Number: FX3031

240 minutes

Dealer / Installer: Provide a copy of these instructions to the end user of this product. These instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.

End User:

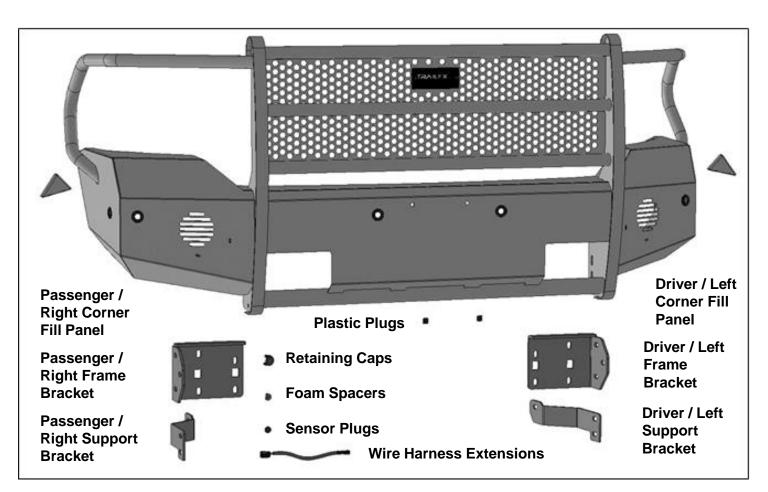
<u>MARNING</u>

Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any decals from the product. Failure to follow these instructions can result in injury or death.

APPLICATION: 2013 – 2018 RAM 1500 (Includes 2019 – 2020 "Classic" Model)

PARTS LIST:				
Qty	Part Description	Qty	Part Description	
1	Front Bumper Assembly	2	12-1.75mm x 130mm Hex Bolt	
1	Driver/left Top Corner Filler Panel	16	12-1.75mm x 40mm Hex Bolt	
1	Passenger/right Top Corner Filler Panel	36	12mm x 37mm x 3mm Flat Washers	
1	Driver/left Frame Mounting Bracket	18	12mm Nylon Lock Nuts	
1	Passenger/right Frame Mounting Bracket	2	10-1.5mm x 40mm Hex Bolts	
1	Driver/left Support Bracket	4	10mm x 30mm x 2.5mm Flat Washers	
1	Passenger/right Support Bracket	2	10mm Nylon Lock Nuts	
2	Plastic Plugs for license plate mount	6	6mm x 25mm Hex Bolts	
4	Wire Harness Extensions	4	6mm x 20mm Hex Bolts	
6	Sensor Retaining Caps	16	6mm x 18mm x 1.6mm Flat Washers	
6	20mm x 10mm Foam Spacers	4	6mm Lock Washers	
6	Sensor Hole Plugs	6	6mm Nylon Lock Nuts	

Torque Specs				
12mm	70 ft/lbs			
10mm	34.5 ft/lbs			
6mm	102 in/lbs			
Factory	See Mfg.			



INSTALLATION PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

- 1. Remove the license plate and bracket. For additional room to work, remove lower air dam-optional, (Figure 1). NOTE: Air dam is attached with several 2pc retaining clips. Pry up center of pin to release and remove clips.
- 2. On models with factory fog lights and/or sensors, unplug wiring harness leading to front bumper, (Figure 2). Release the harness from the clips and move harness out of way.
- 3. Next, remove the plastic fascia fill panel between the headlights and the top of the bumper. **NOTE**: Release inner fender liner to access hardware attaching the ends of fascia panel to the bottom of the front fenders, (Figures 3 & 4). With liner pulled back, also unplug fog lights if equipped. On some model years, it may be necessary to temporarily remove the grille to remove the fascia or 1pc plastic bumper cover.
- 4. Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the (3) hex nuts attaching each bumper bracket to the end of the frame, (Figure 5). WARNING! Assistance is required to hold bumper in place during hardware removal to prevent the bumper from falling. Slide the bumper assembly off of the end of the frame. NOTE: Models with tow hooks, do not remove top brackets and tow hooks from frame.
- 5. Next, remove the plastic inner support blocks from the bottom of the headlights, (Figure 6).

INSTALLATION PROCEDURE CONTINUED:

6. Select the driver/left side Frame Mounting Bracket, (Figure 7). NOTE: Holes in mounting flange on end of frame are two sizes (3-large, 1-small). Attach the Bracket to the end of the frame with (3) 12mm x 40mm Hex Bolts, (6) 12mm Flat Washers and (3) 12mm Nylon Lock Nuts. Use (1) 10mm x 40mm Hex Bolt, (2) 10mm Flat Washers and (1) 10mm Nylon Lock Nut to attach the Bracket to the smaller, top inner mounting hole in the bumper flange, (Figures 7 & 8). Repeat this Step to install the passenger/right Mounting Bracket.

Models with tow hooks:

- a. Insert bottom (2) Hex Bolts through Bracket, flange on frame and front bracket for tow hook, (Figure 9).
- 7. Determine if vehicle is equipped with parking sensors in bumper. **NOTE**: It is easier to install sensors and harness in Bumper, (if equipped), before installing Bumper Assembly.

Models without bumper sensors:

- a. Select the included (6) Plastic Plugs.
- b. From the front, push the plugs into the sensor mounting holes, (Figure 10).

Models with bumper mounted sensors:

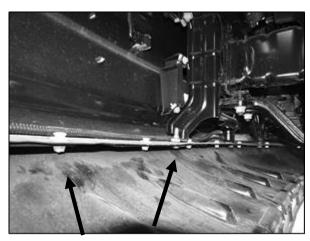
- a. Disassemble factory bumper to remove the sensors and wiring harness, (Figure 11).
- b. Select the driver/left outer sensor. **NOTE**: On models with (6) sensors, start with the sensor on the end of the bumper.
- c. Attach (1) Foam Spacer to the back of the sensor, (Figure 12).
- d. Push the sensor in from the back of the Bumper until it is flush with the front of the Bumper. Push (1) Retaining Cap onto the sensor mount to secure the sensor in place, **(Figure 12)**.
- e. Repeat the previous Steps for all remaining sensors in correct order.
- f. Starting on the driver/left side, run the OE sensor wire harness through the bumper cutouts. Connect the sensors to the OE sensor wire harness. **NOTE**: Use the provided (4) Wire Harness Extensions to extend the reach of the OE sensor harness as needed.
- 8. With assistance, position the Bumper assembly up to the outside of the Frame Brackets. Temporarily support the weight of the Bumper. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
- Attach the mounting tab on the back of the driver/left side of the Bumper to the Frame Bracket with
 (3) 12mm x 40mm Hex Bolts, (6) 12mm Flat Washers and (3) 12mm Nylon Lock Nuts, (Figures 13
 & 15). Do not fully tighten at this time. Repeat this Step to attach the passenger/right side of the
 Bumper to the Frame Bracket.
- 10. Select the driver/left Support Bracket, (Figure 14). Attach the Support Bracket to the lower frame extension with the included (1) 12mm X 130mm Long Hex Bolt, (2) 12mm Flat Washers and (1) 12mm Nylon Lock Nut, (Figure 15). Attach the forward end of the Support Bracket to the back of the plate on the Bumper with the included (2) 12mm x 40mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figures 14 & 16). Do not tighten Support Bracket hardware at this time. Repeat this Step to install the passenger/right Support Bracket.
- 11. Select the driver/left triangle shaped Top Corner Fill Panel, (Figure 17). NOTE: The driver and passenger side Top Corner Fill Panels look similar but are unique. Install the Fill Panel with the "short" side of the triangle facing forward toward the headlight. Attach the Panel to the top of the bumper with (2) 6mm x 20mm Hex Bolts, (2) 6mm Lock Washers and (2) 6mm Flat Washers, (Figure 18). Repeat to install the passenger/right Top Corner Fill Panel.
- 12. Level and adjust the bumper and fully tighten all hardware.

INSTALLATION PROCEDURE CONTINUED:

13. Models with fog lights:

- a. Select the driver/left fog light assembly.
- b. Flip the light assembly upside-down and attach to the mounting tabs on the back of the bumper with (3) 6mm x 25mm Hex Bolts, (6) 6mm Flat Washers and (3) 6mm Nylon Lock Nuts, (Figure 19). IMPORTANT: Do not overtighten hex bolts to avoid damaging plastic light mount.
- 14. Reattach the factory r wiring harness in the Bumper to the fog lights and main harness.
- 15. If front license plate is required, insert (2) Plastic Plugs into the square holes in the Bumper. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 20)**.
- 16. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

INSTALLATION PROCEDURE IMAGES:



(Fig 1) Release clips (arrow) to remove air dam (pictured from behind bumper-tow hook equipped)



(Fig 3) Pull back fender liner to locate fascia attachment at bottom of front fender



(Fig 2) Unplug lights and sensors if equipped. Unplug harness to bumper and move harness



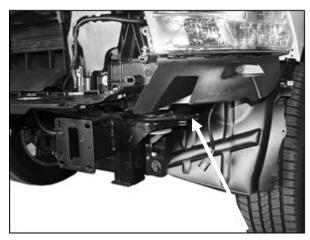
(Fig 4) Remove fascia body panel from top of bumper

INSTALLATION PROCEDURE IMAGES:



(Fig 5) Remove (3) factory hex nuts from each side (back of bumper pictured from below)

WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or it may fall.



(Fig 6) Remove plastic blocks from below both headlights (driver/left side pictured)

10mm x 35mm Hex Bolt (2) 10mm Flat Washers 10mm Nylon Lock Nut

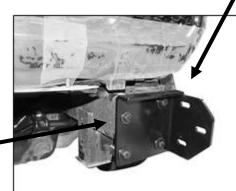
(3) 12mm x 40mm Hex Bolts (6) 12mm Flat Washers (3) 12mm Nylon Lock Nuts

(Fig 7) Attach Mounting Bracket to end of frame (driver/left side illustrated)

10mm x 40mm Hex Bolt (2) 10mm Flat Washers 10mm Nylon Lock Nut

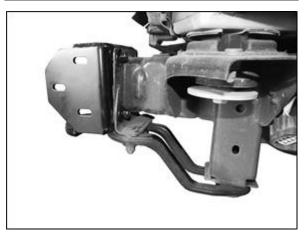
WARNING! Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.

- (3) 12mm x 40mm Hex Bolts
- (6) 12mm Flat Washers
- (3) 12mm Nylon Lock Nuts

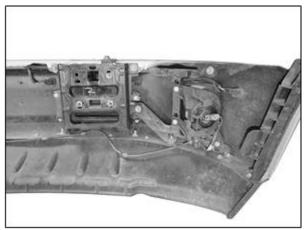


(Fig 8) Driver/left Mounting Bracket installed

INSTALLATION PROCEDURE IMAGES:

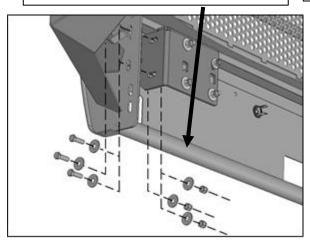


(Fig 9) Driver/left Mounting Bracket installed with tow hook

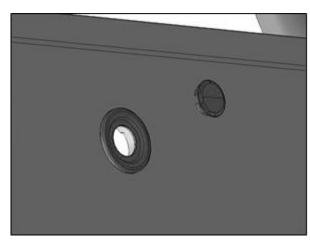


(Fig 11) Remove fog lights, sensors and wiring harness as equipped (back of passenger/right side pictured)

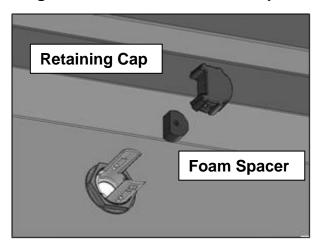
- (3) 12mm x 40mm Hex Bolts
- (6) 12mm Flat Washers
- (3) 12mm Nylon Lock Nuts



(Fig 13) Attach Bumper to Mounting Brackets (driver/left side illustrated)

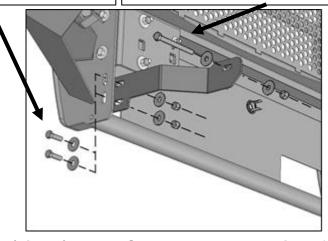


(Fig 10) Models without sensors, push Plugs into sensor mounts in Bumper



(Fig 12) Push sensor into sensor mount on back of Bumper

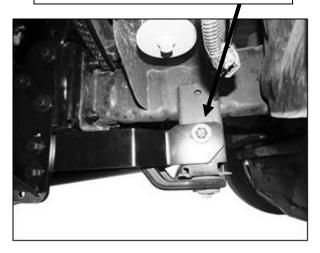
12mm x 130mm Hex Bolt (2) 12mm Flat Washers 12mm Nylon Lock Nut 12mm x 130mm Hex Bolt (2) 12mm Flat Washers 12mm Nylon Lock Nut



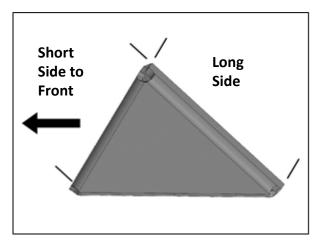
(Fig 14) Attach Support Bracket to side of rear tow hook mount and back of Bumper

INSTALLATION PROCEDURE IMAGES:

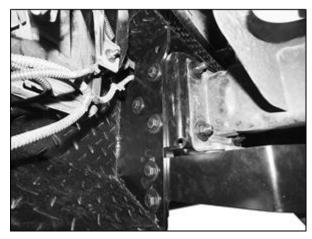
- (2) 12mm x 40mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts



(Fig 15) Support Bracket attached to outside of rear tow hook mount on frame

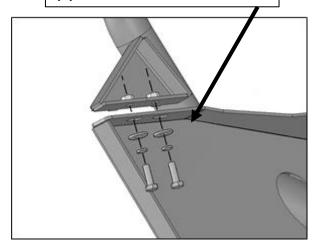


(Fig 17) Select driver/left corner fill panel



(Fig 16) Driver/left side of Bumper and Support Bracket installed

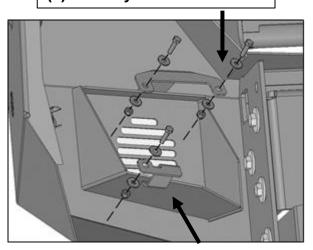
- (2) 6mm x 20mm Hex Bolts
- (2) 6mm Lock Washers
- (2) 6mm Flat Washers



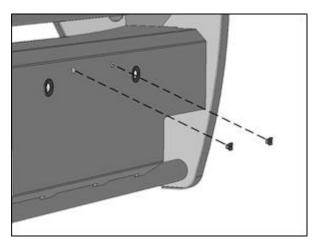
(Fig 18) Attach Driver/left side triangle Fill Panel to top corner of Bumper assembly

INSTALLATION PROCEDURE IMAGES CONTINUED:

- (3) 6mm x 25mm Hex Bolts
- (6) 6mm Flat Washers
- (3) 6mm Nylon Lock Nuts



(Fig 19) Attach driver/left fog light assembly to back of Bumper. NOTE: Flip fog light upside-down and attach to Bumper



(Fig 20) Models with license plate, push Plastic Plugs into square holes in Bumper

Installation is now complete, check all hardware is tightened and torqued to spec.

PRODUCT CARE:

- Periodically check the product to ensure all fasteners are tight and components are intact.
- Use ONLY Non-Abrasive automotive wax. Use of any soap, polish or wax that contains an abrasive is detrimental and can scratch the finish leading to corrosion.
- Mild soap may be used to clean the Black finish product.

FAQ'S

- Hardware and mounting brackets are not aligning properly
 - Ensure that hardware is being used on the correct side of the vehicle. In some cases, the hardware may appear same for driver or passenger side but may alter the alignment of mounting location. Check mounting brackets for both sides.
- Products are thumping / rattling after installation
 - Ensure that all required mounting brackets / hardware's are installed & tighten correctly. Suggest using white lithium / regular grease between metal-to-metal contact.
- Missing / Excess Hardware
 - Recheck hardware count as per the part list.
- Product not installing properly
 - Ensure the Year / Make / Model as well as cab and bed dimensions are correct for the application. Review all steps for installation to ensure they were followed correctly.
- Who should be contacted for questions regarding product / installation assistance?
 - www.trailfx.com / <u>support@trailfx.com</u> 1-(866) 638-4870

Warranty Terms:

3 Year Limited Warranty:

TrailFX and Keystone Automotive Operations Inc. make no guarantees or warranties for products not manufactured by Keystone Automotive Operations Inc. Such products are covered solely under any applicable warranty of the manufacturer. It is always recommended that the operating instructions and warranty instructions provided by the manufacturer are followed.

Keystone Automotive Operations Inc. warrants its products to be free from manufacturing and material defects to the original purchaser for the length of warranty stated above from the date of retail purchase. If any products are found to have a manufacturing or material defect, the product will be replaced or repaired at the option of TrailFX and Keystone Automotive Operations Inc. with proof of purchase by the original purchaser. The original purchaser shall pay all transportation and shipping costs associated with the return of the defective product and the defective product shall become the property of Keystone Automotive Operations Inc.

The Warranty applies to Keystone Automotive Operations Inc. products used for individual and recreational purposes. Commercial usage of the Keystone Automotive Operations Inc. products limits the warranty to 90-days from date of purchase.

The Warranty applies only to Keystone Automotive Operations Inc. products which are found to be defective in manufacturing or material. This warranty does not apply to normal wear and tear of the finish placed on Keystone Automotive Operations Inc. products.

TrailFX and Keystone Automotive Operations Inc. are not responsible for any labor costs incurred for removal or replacement of the defective product.

TrailFX and Keystone Automotive Operations Inc. are not responsible for repair or replacement of any product under the limited warranty where the product was improperly installed, misapplied, altered, abused, neglected, overloaded, misused or damaged as a result of an accident, including any use of the product not in accordance with all product operating and safety instructions.

Without limiting the generality of the foregoing, TrailFX and Keystone Automotive Operations Inc. shall under no circumstances be liable for any incidental or consequential loss or damage whatsoever arising out of, or in any way relating to any such breach of warranty or claimed defect in, or non-performance of the products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state.