



**Assembly, Installation, Operation and  
Maintenance Instructions  
Full Replacement Rear Bumper**

**Part Number:  
FX1021**

**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:** 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.

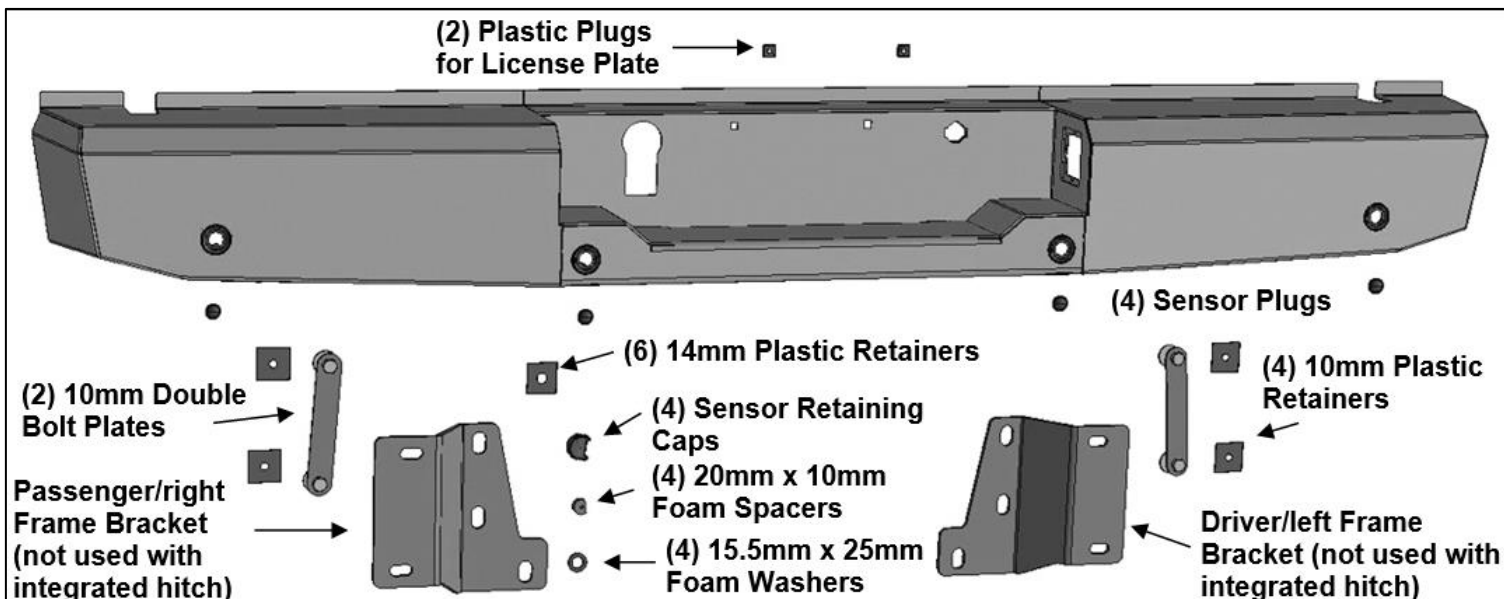
**APPLICATION: 2015 – 2021 Ford F150**

**PARTS LIST:**

Qty	Part Description	Qty	Part Description
1	Rear Bumper Assembly	1	Sensor Cover Kit
1	Driver/left Mounting Bracket	6	14mm Plastic Retainers
1	Passenger/right Mounting Bracket	4	10mm Plastic Retainers
2	Plastic Plugs for license plate mount	2	10mm x 35mm Double Bolt Plates
4	Sensor Hole Plugs	4	10mm x 30mm x 2.5mm Flat Washers
4	Sensor Retaining Caps	4	10mm Nylon Lock Nuts
4	20mm x 10mm Foam Spacers	8	4mm Self Tapping Screws
4	15.5mm x 25mm x 2mm Foam Washers	10	Nylon Wire Ties

**Torque Specs**

10mm	40 ft/lbs
4mm	27 in/lbs



## INSTALLATION PROCEDURE:

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

**IMPORTANT: OEM BUMPER REINFORCEMENT USED WITH “STANDARD” TOW PACKAGE WITHOUT RECEIVER HITCH CANNOT BE REINSTALLED. OE INTEGRATED “HD” HITCH, “MAX DUTY” HITCH AND MOST AFTERMARKET RECEIVER HITCHES REQUIRED FOR TOWING.**

1. Remove the license plate from the bumper, **(Figure 1)**. Next, unplug the license plate lights, trailer plug and sensors as equipped, **(Figure 2)**. Release the wiring harness from the clips attached to the back of the bumper. Move all wiring harnesses away from bumper. **NOTE:** Bumper is designed to be compatible with larger 7-wire universal trailer harness plug only.
2. Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the factory hardware attaching the bumper to the end of the frame and remove the bumper assembly, **(Figures 3A, 3B & 4)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent bumper from falling.
3. Disassemble the factory bumper to remove lights, trailer plug and sensors as equipped, from bumper, **(Figure 5)**. **NOTE**, release the clips holding the license plate lights and the trailer plug to remove, **(Figure 2)**.
4. Determine if vehicle is equipped with parking sensors. **NOTE:** Sensors, (if equipped), must be installed onto the back of the Bumper before installing the Bumper.

### **Models without bumper sensors:**

- a. Select the included (4) Plastic Plugs.
- b. From the front, push the plugs into sensor mounting holes, **(Figure 6)**.

### **Models with bumper mounted sensors:**

- a. Remove the small factory sealing washer from the sensor. Attach the provided larger (1) Foam Washer onto the front of the sensor, **(Figure 7)**.
- b. Push the sensor in from the back of the Bumper until it is flush with the Bumper. Attach the adhesive side of (1) Foam Spacer to the end of the sensor. Push the Retaining Cap onto the sensor mount until it locks into the mounting holes, **(Figure 8)**.
- c. Repeat the previous steps to install each sensor.

5. Install the spare tire access lock, license plate lights and trailer plug as equipped, **(Figure 9)**. **NOTE:** Use a flat blade screwdriver to carefully pry the metal clips on the plug out to grab the edge of the opening.
6. Attach the wiring harness to the sensors, lights and trailer plug as equipped, **(Figure 9)**. Use the included Wire Ties to secure the wiring harness to the bumper and frame as necessary.
7. Use a small flat blade screwdriver to pry the star washers off of the bolt plates used to attach the factory bumper to the frame, **(Figure 10)**. **NOTE:** “HD” tow package models use a triple bolt plate, “Standard” and “Max Duty” equipped models use a double bolt plate.

## INSTALLATION PROCEDURE CONTINUED:

### 8. Determine towing package supplied with vehicle:

**Models with “standard tow package” without HD receiver below bumper and models with “Max Duty” frame mounted receiver hitch below bumper.**

- a. Insert the factory bolt plate into the passenger/right Mounting Bracket. Thread (1) 14mm Plastic Retainer onto the bolt plate to hold it in position, **(Figure 12)**.
- b. Select (1) 10mm Double Bolt Plate and (1) 10mm Plastic Retainer. Insert the Double Bolt Plate into and through the back of the mounting tab on the LD1 Bumper, **(Figure 12)**. Thread the Retainer down onto the Bolt Plate to help hold it in position.
- c. Attach the passenger/right Mounting Bracket assembly to the 10mm Double Bolt Plate with (2) 10mm Flat Washers and (2) 10mm Nylon Lock Nuts, **(Figures 13 & 14)**. Snug but do not fully tighten hardware at this time.
- d. Repeat the previous Steps to install the driver side bolt plate and Bracket assembly.
- e. With assistance, hold the Bumper assembly up to the ends of the frame. 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. Reuse the factory hex nuts to attach the Bumper Brackets with bolt plates to the frame, **(Figures 15 & 16)**. Snug but do not fully tighten hardware at this time.

**Models with “HD” tow package with integrated receiver hitch into bumper and brackets.**

- a. Remove integrated receiver hitch and bracket assembly from the back of the factory bumper, **(Step 3, Figure 5)**.
- b. Use factory hardware to reinstall receiver/bumper bracket assembly to mounts on ends of frame, **(Figure 17)**. Snug but do not fully tighten hardware at this time.
- c. Select (1) 10mm Double Bolt Plate and (1) 10mm Plastic Retainer. Insert the Double Bolt Plate into and through the back of the mounting tab on the bumper, **(Figure 18)**. Thread the Retainer down onto the Bolt Plate to help hold it in position. Repeat to attach the driver side 10mm Double Bolt Plate.
- d. With assistance, attach the Bumper assembly to the receiver/bumper bracket assembly with (4) 10mm Flat Washers and (4) 10mm Nylon Lock Nuts, **(Figure 18)**. 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. Snug but do not fully tighten hardware at this time.

9. Level and adjust the bumper and fully tighten all hardware.
10. Plug bumper wiring harness into main harness.
11. Push outer trailer plug into inner harness, **(Figure 19)**.
12. Use the included (2) push-in plugs to attach the license plate to the Bumper, **(Figure 20)**.
13. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

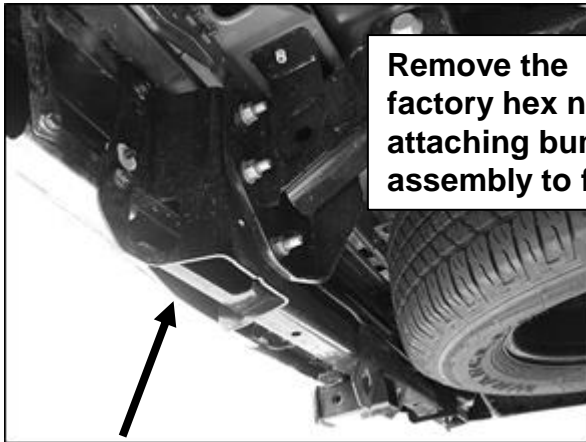
**INSTALLATION PROCEDURE IMAGES:**



**(Fig 1) Unplug and remove 7-wire trailer plug**

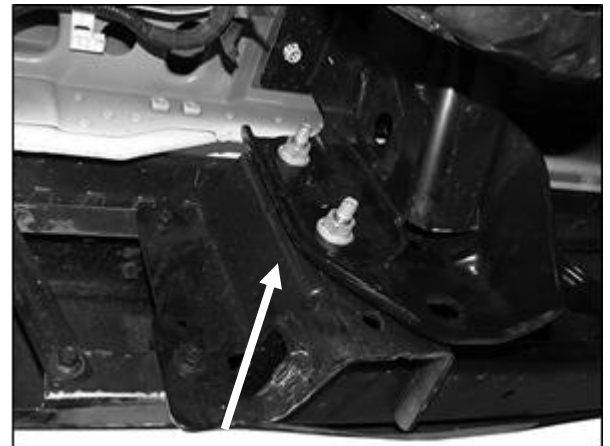


**(Fig 2) Unplug license plate lights**



**Remove the factory hex nuts attaching bumper assembly to frame**

**(Fig 3A) Note bumper with integrated receiver hitch**



**(Fig 3B) Remove the factory hex nuts attaching bumper assembly to frame. STD tow package model pictured (no receiver hitch)**

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

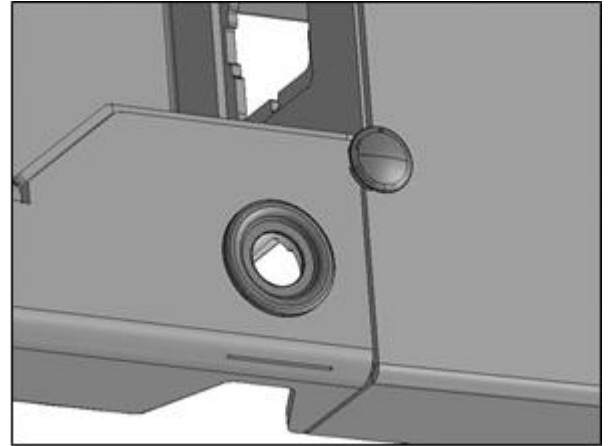


**(Fig 4) Passenger side of frame**

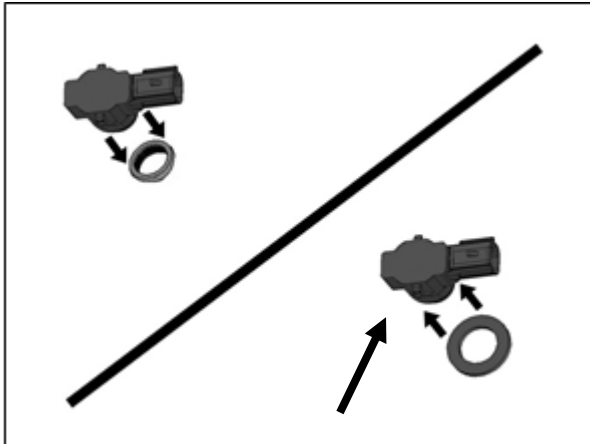
**INSTALLATION PROCEDURE IMAGES CONTINUED:**



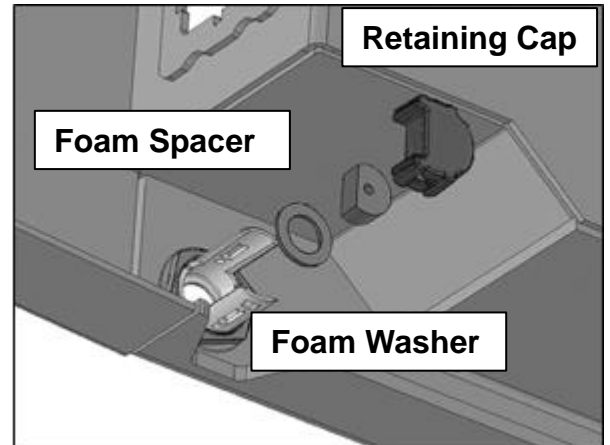
**(Fig 5) Disassemble factory bumper to remove lights, plugs, sensors and harness**



**(Fig 6) Models without sensors, insert Plugs into sensor mounts**



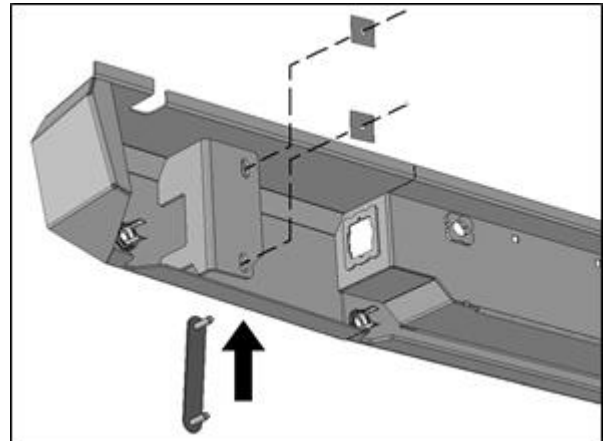
**(Fig 7) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)**



**(Fig 8) Sensor assembly pictured from back of bumper**

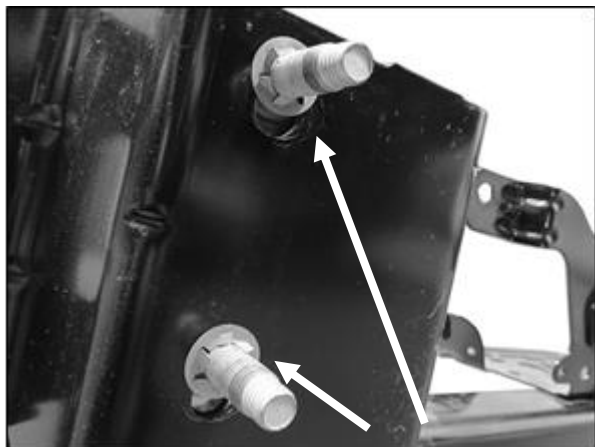


**(Fig 9) Install lights, sensors, trailer plug and harness before installing Bumper**



**(Fig 10) Insert 10mm Double Bolt Plate into and through back of mounting tab on back of Bumper**

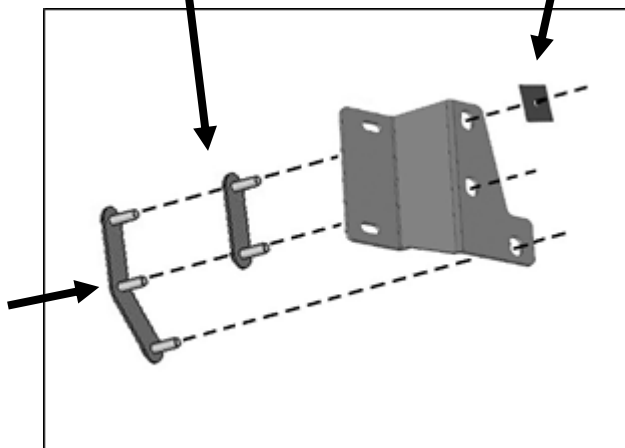
**INSTALLATION PROCEDURE IMAGES CONTINUED:**



**(Fig 11) Use flat blade screwdriver to pry off lock washers from bolt plates**

**Factory double bolt late used on model's w/o receiver hitch and "max tow" frame mounted receiver hitch**

**14mm Plastic Retainer**



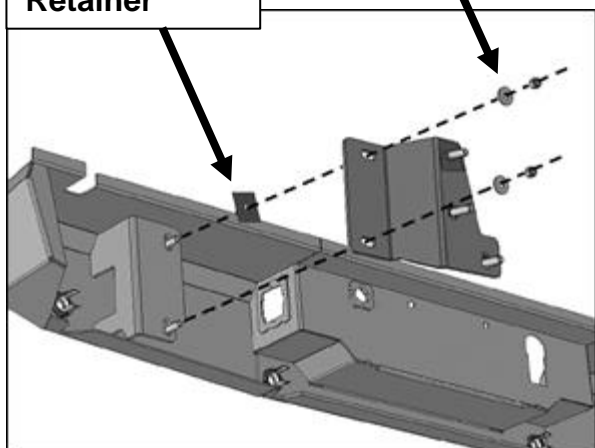
**(Fig 12) Attach factory bolt plate to passenger/right Mounting Bracket**

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

**Factory triple bolt plate used with "HD tow" package with integrated receiver hitch**

**10mm Plastic Retainer**

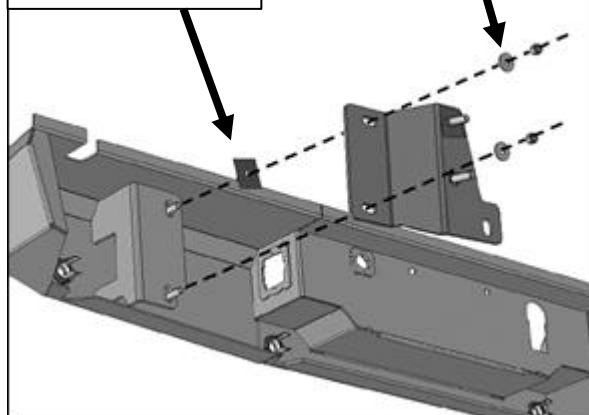
**(2) 10mm Flat Washers  
(2) 10mm Nylon Lock Nuts**



**(Fig 13) Use 10mm Plastic Retainer to hold Bolt Plate in position. Note OE triple bolt plate in place**

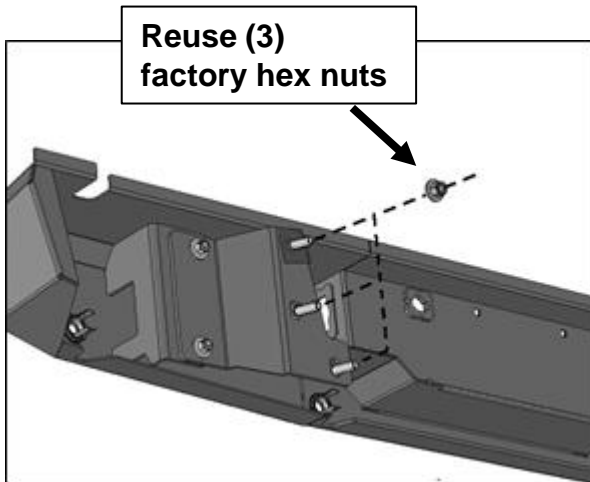
**(2) 10mm Flat Washers  
(2) 10mm Nylon Lock Nuts**

**10mm Plastic Retainer**

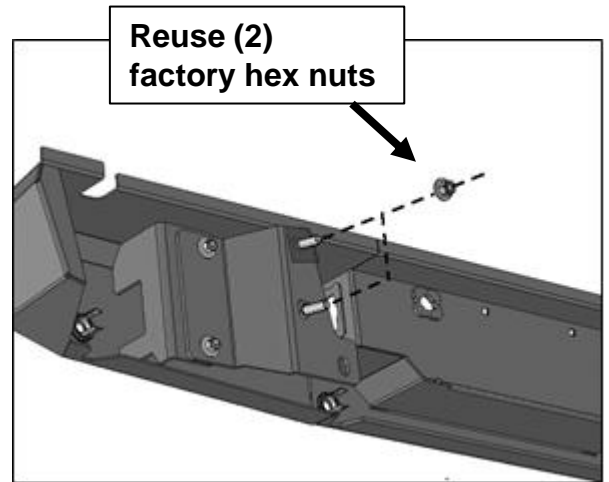


**(Fig 14) Use 10mm Plastic Retainer to hold Bolt Plate in position. Note OE double bolt plate in place**

**INSTALLATION PROCEDURE IMAGES CONTINUED:**



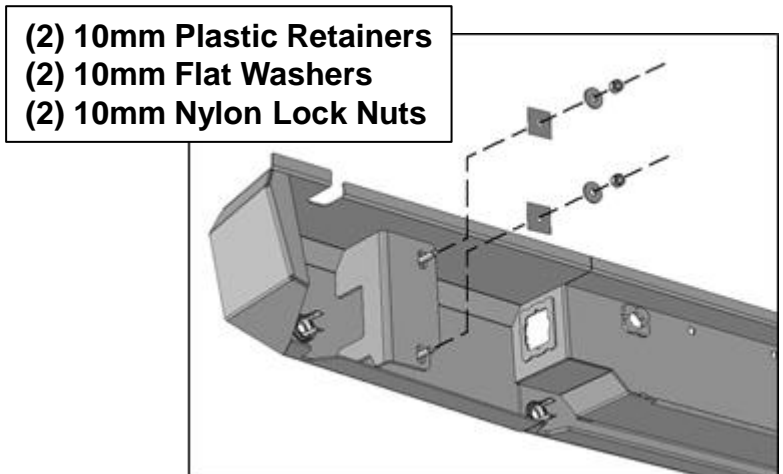
**(Fig 15) Attach Brackets to ends of frame with factory hex nuts (triple bolt plate illustrated)**



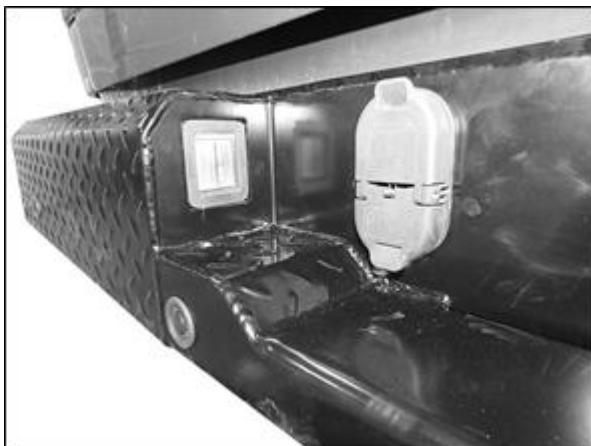
**(Fig 16) Attach Brackets to ends of frame with factory hex nuts (double bolt plate illustrated)**



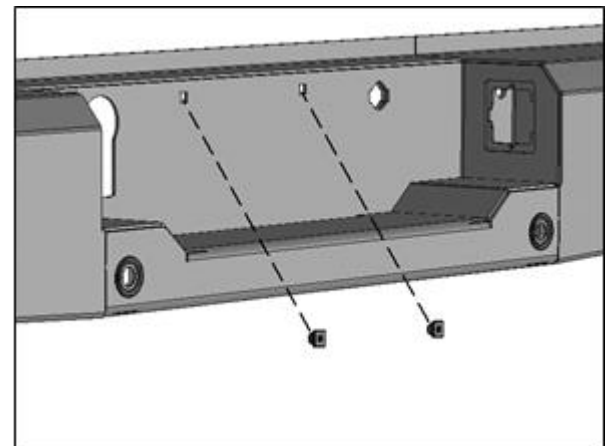
**(Fig 17) Reinstall integrated receiver hitch/bracket assembly on models with "HD Towing" package**



**(Fig 18) Attach Bumper directly to integrated hitch bracket (see Fig 13)**



**(Fig 19) Trailer plug, license plate light and sensors pictured**



**(Fig 20) Push plastic plugs into holes for license plate**

# 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](http://www.trailfx.com) / [support@trailfx.com](mailto:support@trailfx.com) 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.