



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

**Part Number:  
FX1020**

**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.

**⚠️ WARNING ⚠️**

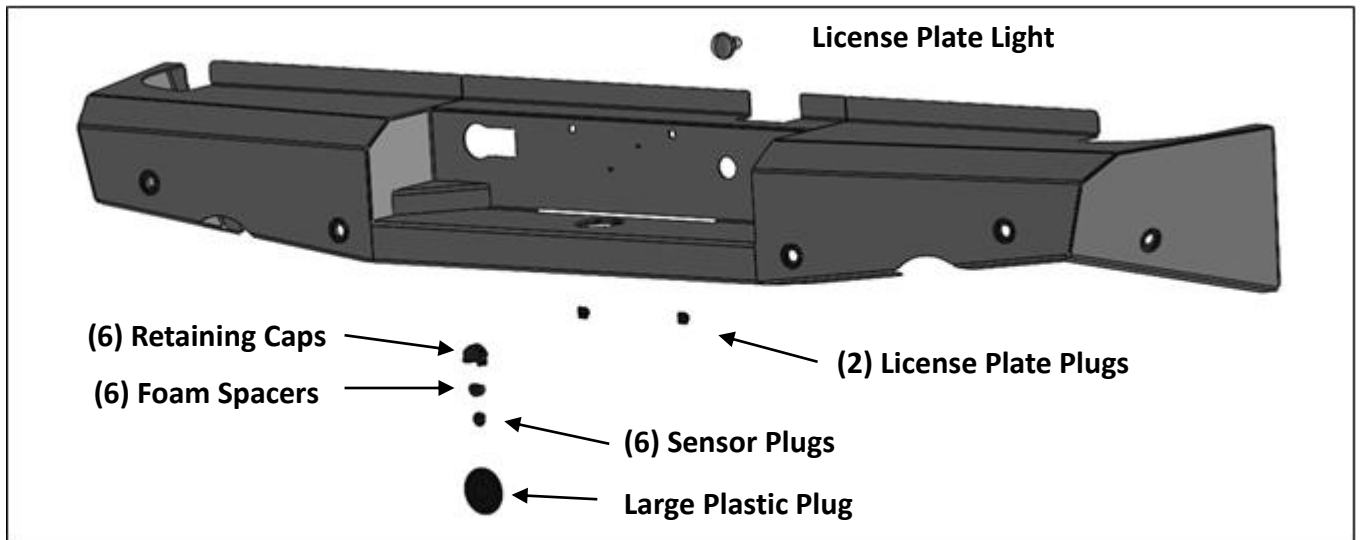
**APPLICATION: 2009 – 2018 RAM 1500; 2010 – 2020 RAM 2500 / 3500**

**PARTS LIST:**

Qty	Part Description	Qty	Part Description
1	Full Replacement Rear Bumper	2	12mm Double Nut Plates
6	Retaining Caps	12	4mm x 15mm Self Tapping Screws
6	Foam Spacers	2	4mm x 10mm Button Head Bolts
6	Sensor Plugs	4	4mm x 12mm OD x 1mm Flat Washers
1	Sensor Cover Kit	2	4mm Lock Washers
2	License Plate Plugs	2	4mm Hex Nuts
1	Large Plastic Plug	10	Wire Ties
1	License Plate Light	2	License Light Wire Harnesses
4	12mm x 50mm Hex Bolts	2	Wire Harnesses (for 1500 Models)
4	12mm Lock Washers	4	Wire Harnesses (For 25-3500 Models)
4	12mm x 37mm OD x 3mm Flat Washers	1	2.5mm Hex Wrench

**Torque Specs**

12mm Bolt	65 ft/lbs
4mm Bolt	27 in/lbs



## INSTALLATION PROCEDURE:

**REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS HIGHLY RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE. ON MODELS WITH DUAL EXHAUST, ALLOW EXHAUST TO COMPLETELY COOL BEFORE STARTING INSTALLATION.**

1. Remove the license plate and bracket, **(Figure 1)**. Remove the (2) hex bolts behind the license plate, **(Figure 2)**
2. Unplug the license plate lights and towing plug. Unplug all wire harnesses leading to the bumper, **(Figures 3 & 4)**.
3. Place blocks or jack stands under the bumper to support it during bumper bolt removal. Once the bumper has been safely supported, remove the hardware attaching the bumper to the end of the frame, **(Figures 5—8)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal and to prevent the bumper from falling. Move the bumper to a clean stable work surface.
4. Determine if the vehicle is equipped with parking sensors. **NOTE:** Sensors must be installed in Bumper before installing Bumper Assembly.

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

- a. Select the included Rubber Plugs.
- b. From the front of the Bumper, push the Plugs into the sensor mounts, **(Figure 9)**.

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

- a. Unplug and remove sensors and wiring harness from the factory bumper, **(Figure 10)**. Note location of all sensors for proper reinstallation. 2019-on models may be equipped with (6) sensors, 2009-18 models may be equipped with (4) sensors. Follow the previous Step to plug the unused outer sensor mounting holes in both ends of the Bumper on 2009-18 models as needed.
- b. Remove the sealing washer from the front of the sensor.
- c. Slide the sensor into the sensor mount, **(Figure 11)**.
- d. Push the Retaining Cap and Foam Spacer into the sensor mount and lock the cap, **(Figure 11)**.
- e. Repeat previous Steps to install remaining sensors.
- f. Install the factory wiring harness for the sensors. Plug harness into sensors. **NOTE:** Run wire harness through openings in Bumper.

### **Models with TPMS (tire pressure monitoring system).**

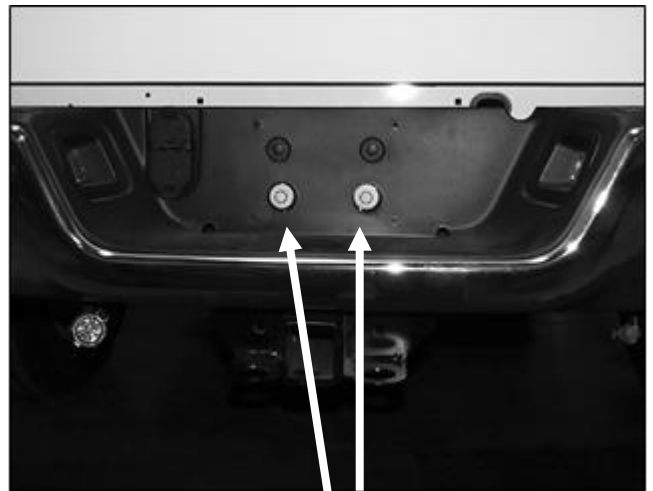
- a. Remove the sensor from the back of the factory bumper, **(Figure 12)**. **NOTE:** It may be necessary to partially disassemble the plastic bumper panel to remove the sensor.
- b. Attach the sensor to the tabs on the back of the Bumper with the included (2) 4mm Button Head Screws, (4) 4mm Flat Washers, (2) 4mm Lock Washers and (2) 4mm Hex Nuts, **(Figure 13)**. Do not overtighten the 4mm hardware or damage to sensor could result.
- c. Once installed, plug wiring harness into TPMS sensor.

5. With assistance, position the Bumper up to the end of the frame. Temporarily support the weight of the Bumper Assembly. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
6. Attach the Bumper to the frame with the included (4) 12mm Hex Bolts, (4) 12mm Lock Washers, (4) 12mm Flat Washers and (2) 12mm Double Nut Plates, **(Figure 14)**. Do not tighten hardware.
7. Slowly open the tailgate and check for clearance. Level and adjust Bumper and tighten all hardware.
8. Push the Large Plastic Plug into the stepping area in the Bumper, **(Figure 15)**.
9. Insert the included (2) Plastic Plugs to attach the license plate to the Bumper, **(Figure 16)**. Insert the included License Plate Light into the mounting hole in the bumper.
10. Connect the license plate light harness to the License Plate Light. Reattach the wiring harness to the back of the trailer plug. Plug all harnesses into vehicle as equipped.
11. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

**INSTALLATION PROCEDURE IMAGES:**



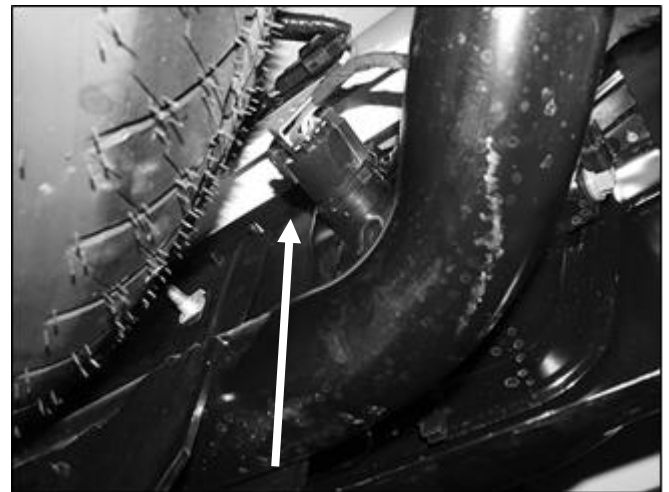
**(Fig 1) Remove license plate bracket**



**(Fig 2) Remove (2) hex bolts from behind license plate**



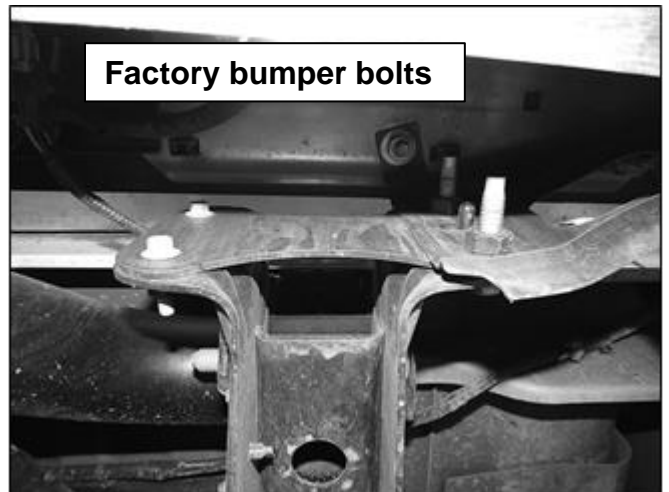
**(Fig 3) Unplug license plate lights and all wiring harnesses leading to the bumper**



**(Fig 4) Unplug trailer connector**



**(Fig 5) Example of factory bumper bracket with (2) hex bolts pictured from behind bumper**



**(Fig 6) Example of factory bumper bracket with 8mm hex nuts (left) welded onto back of bracket**

**INSTALLATION PROCEDURE IMAGES CONTINUED:**

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

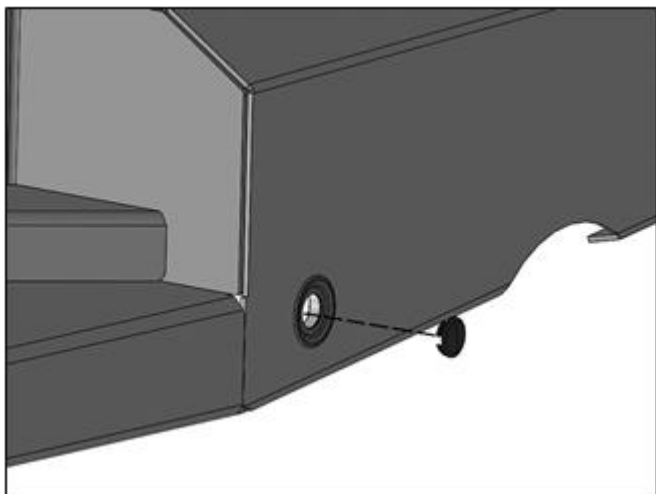
Models with dual exhaust, allow exhaust to completely cool before starting installation



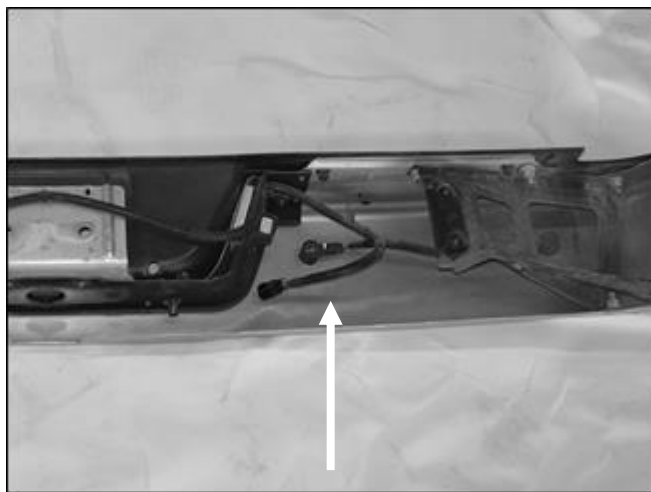
**(Fig 7) Bumper removed**



**(Fig 8) Example of factory bumper brackets with (4) mounting holes per side, only outer mounting holes will be used**



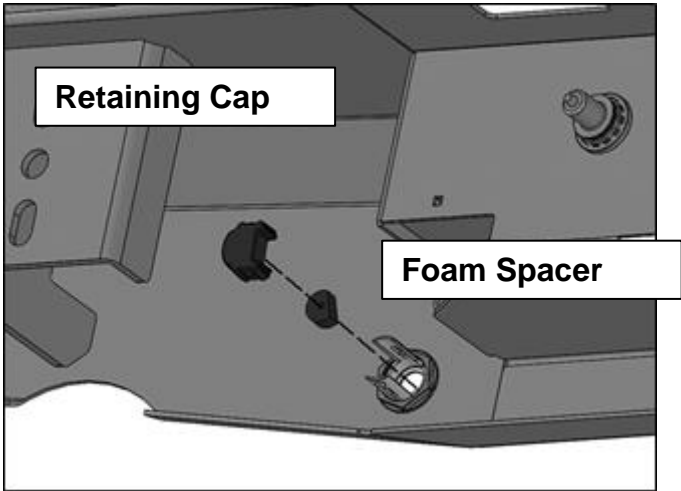
**(Fig 9) Push Rubber Plug into sensor mount**



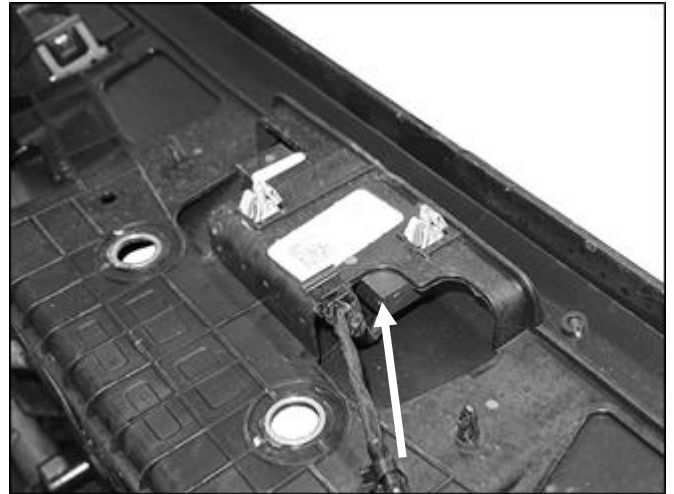
**(Fig 10) Unplug and remove the factory sensors and wiring harness. Note location of each sensor for proper reinstallation**



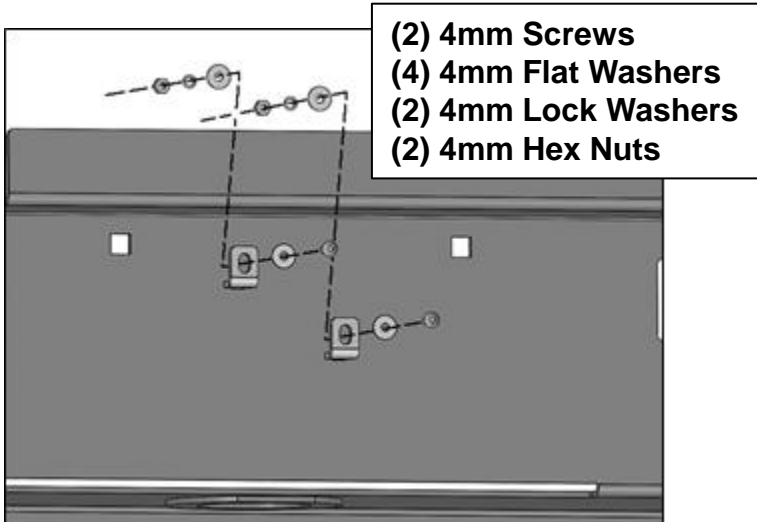
**INSTALLATION PROCEDURE IMAGES CONTINUED:**



**(Fig 11) Replace front seal on sensor with Foam Seal. Push sensor and Seal into sensor Mount on the back of the Bumper**

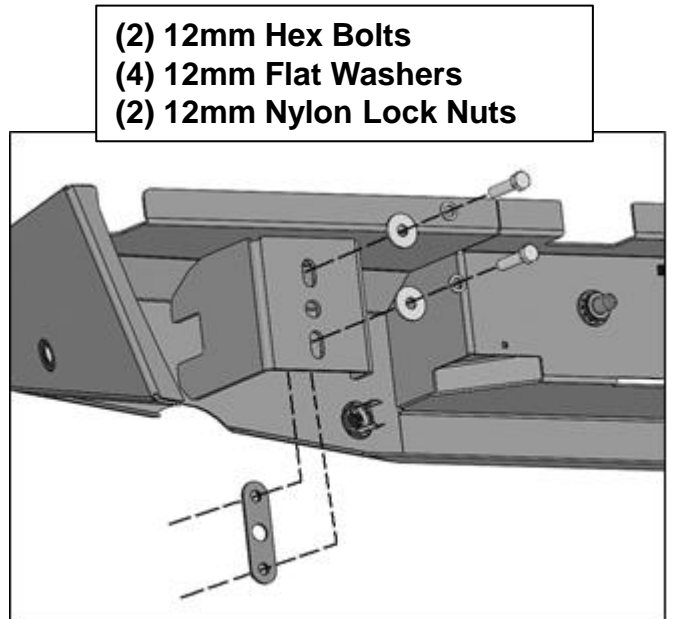


**(Fig 12) Remove tire pressure monitoring sensor (TPMS) from back of bumper, if equipped**



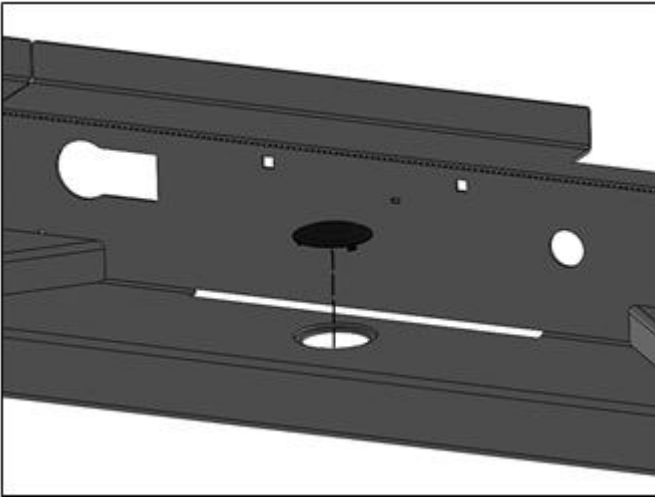
**(Fig 13) Attach TPMS sensor to mounting tabs on back of Bumper**

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

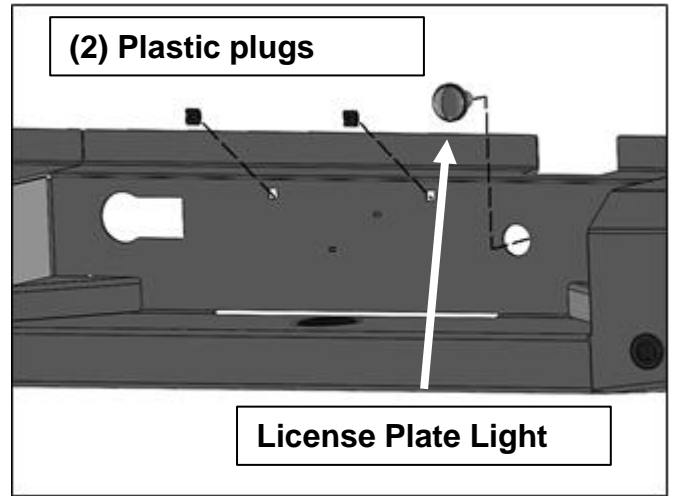


**(Fig 14) Attach Passenger/Right side of Bumper to frame**

**INSTALLATION PROCEDURE IMAGES CONTINUED:**



**(Fig 15) Insert the Large Plastic Plug into the step area of the Bumper**



**(Fig 16) Insert the factory trailer plug, License Plate Light and Plastic Plugs into the mounting holes in the 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](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.