



Assembly, Installation, Operation,
and Maintenance Instructions

PART NUMBER:
RHDB002TI

HD REAR BUMPER

INSTALL TIME:
120 minutes

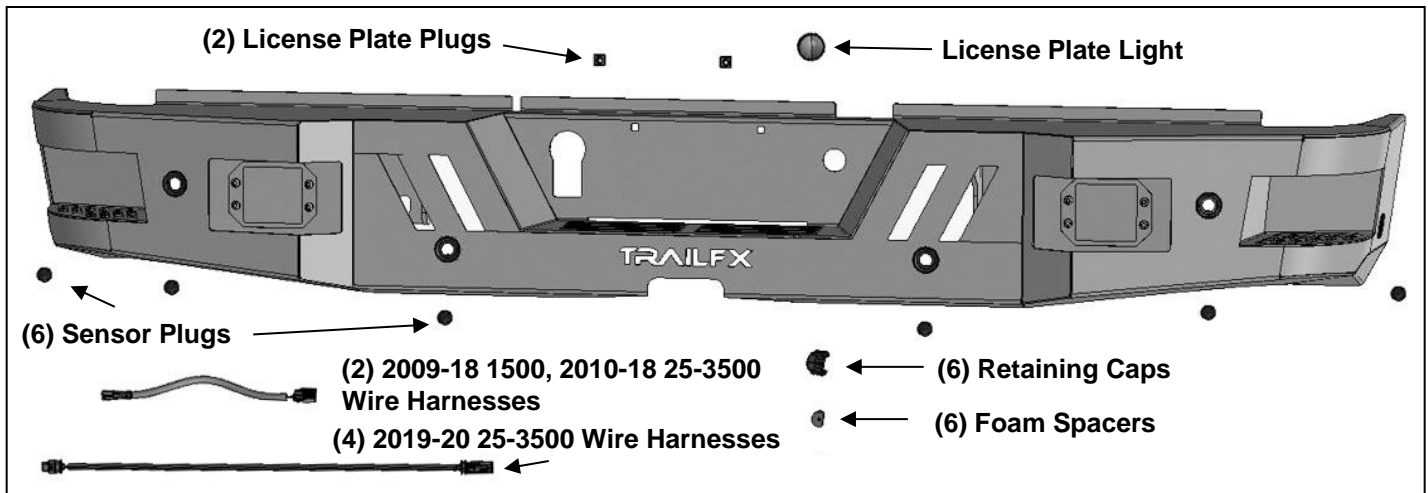
2010-24 RAM 25-3500

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.

PACKAGE CONTENTS

1	Heavy Duty Rear Bumper Assembly	16	12mm x 37mm x 3mm Flat Washers
1	Push in License Plate Light	8	12mm Nylon Lock Nuts
2	Plastic Plugs for license plate mount	4	8mm x 40mm Hex Bolts
2	Harness Extensions (2009-18 1500, 2010-18 25-3500)	4	8mm x 28mm x 3mm Flat Washers
4	Harness Extensions (2019-on 25-3500)	4	8mm Lock Washers
6	Sensor Retaining Caps	2	4mm x 10mm Button Head Bolts
6	20mm x 10mm Foam Spacers	4	4mm x 12mm x 1mm Flat Washers
6	Sensor Hole Plugs	2	4mm Lock Washers
6	15.5mm x 25mm x 2mm Foam Washers (discard)	2	4mm Hex Nuts
1	Sensor Cover Kit	1	2.5mm Wrench
8	12-1.75mm x 50mm Hex Bolts	12	4mm Self Tapping Screws



PROCEDURE:

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

1. Start installation by unplugging all wiring harnesses leading to the bumper, **(Figure 1)**. Move the wiring harnesses away from the bumper. Remove the license plate. Remove the (2) hex bolts located behind the plate attaching the center of the bumper to the receiver hitch, if equipped.
2. Place blocks or jack stands under the bumper to support it during bumper bolt removal. Once the bumper has been safely supported, remove the factory bumper bolts and slide the rear bumper off of the end of the frame, **(Figures 2—4)**. **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.
3. Remove all sensors as equipped, **(Figure 6)**, wiring harness and outer tow harness plug from the factory bumper. Label sensors with location for reinstallation.
4. Determine if the vehicle is equipped with sensors.

Models without bumper sensors:

- a. From the front of the bumper, push the included Plastic Plugs into sensor mounts, **(Figure 5)**.

Models with bumper mounted parking sensors. NOTE, models with (4) sensors, use included Plastic Plugs to fill unused outer sensor holes:

- a. Select the outer sensor, **(Figure 6)**.
- b. Insert sensor into the sensor mount, **(Figure 7)**. Push the sensor in from the back of the Bumper until it is flush with the sensor mount and Bumper face. Push (1) Foam Spacer and snap (1) Retaining Cap onto sensor and mount to secure the sensor in place, **(Figure 7)**.
- c. Attach factory wiring harness to Bumper and plug into sensors. Use the included Wire Ties to secure the wiring harnesses to the Bumper. **NOTE:** Use the included Wiring Harness Extensions as necessary to extend the reach of the harness to the sensors. **IMPORTANT:** kit includes **(2) 2009-18 1500 harnesses and (4) 2019-on 25-3500 harnesses**, use correct harness as needed.

Models with antenna for remote key fob.

- a. Remove the antenna from the back of the bumper, **(Figure 8)**. **NOTE:** It may be necessary to partially disassemble the plastic bumper panel to remove the sensor.
 - b. Attach the sensor to tabs on back of bumper with included (2) 4mm x 16mm Button Head Screws, (4) 4mm Flat Washers, (2) 4mm Lock Washers and (2) 4mm Hex Nuts, **(Figures 9 & 10)**. Do Not Overtighten 4mm hardware or damage to sensor could result.
5. **LED light installation at ends of bumper**, (sold separately).
 - a. Insert light into opening and up to mounting slots. Check for clearance between front and back of light. If necessary, remove the screen from the back of the opening for additional clearance or access to light, **(Figure 11)**.
 - b. Follow the light manufacturer's instructions to attach (1) light to the center slot or (2) lights to the inner and outer slots in the top of the light opening.
 - c. Repeat the above **Steps** for remaining light installation.
 - d. Follow light manufacturer's instructions to properly wire the light.
 6. Insert the License Plate Light into the hole in the Bumper. Attach Light to factory wiring harness. Insert the included (2) push-in plugs to attach the license plate to the Bumper, **(Figure 12)**.
 7. With assistance, position the Bumper Assembly up to the bumper brackets on the end of the frame, **(Figure 13)**. 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.
 8. Line up the (2) outer holes in the passenger/right frame mounting bracket with the (2) holes in the plate on the back of the Bumper. Attach the Bumper to the frame bracket with (2) 12mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, **(Figures 13)**. Leave hardware loose at this time. Repeat to attach the driver side of the Bumper to the frame bracket.
 9. Next, line up the (2) inner holes on the passenger/right frame bracket with the mounting plate on the Bumper. Select the correct installation. **NOTE:** Depending on model year, the frame bracket may be equipped with outer mounting holes only. Adjust installation accordingly, **(Figures 2, 3 & 13)**.

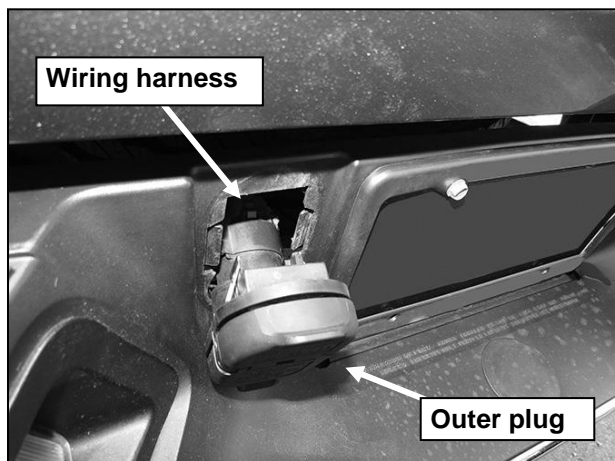
Models with 8mm hex nuts welded onto the back of the frame bracket:

 - a. Use (2) 8mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers to attach the passenger/right side of the Bumper to the frame bracket, **(Figures 2 & 13)**. Repeat this Step to attach the driver/left side of the Bumper to the frame bracket. Do not fully tighten hardware.

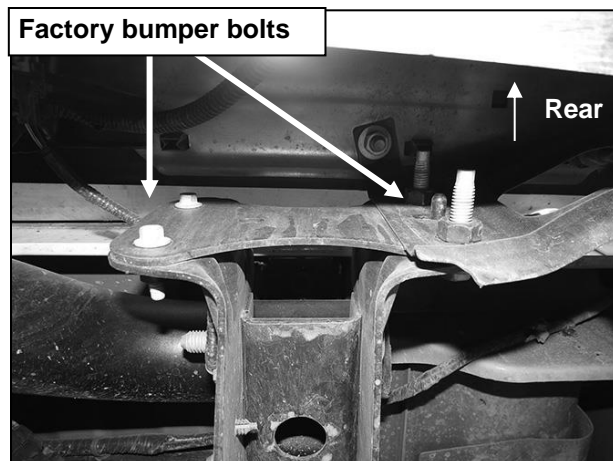
- b. Use (2) 12mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts to attach the passenger/right side of the Bumper to the frame bracket, **(Figures 3 & 13)**. Repeat this Step to attach the driver/left side of the Bumper to the frame bracket. Leave hardware loose.
10. Slowly open the tailgate and check for clearance. Level and adjust the Bumper and fully tighten all hardware.
11. Snap the plug for the trailer harness into the opening in the HD Bumper, **(Figure 12)**. If necessary, use a flat blade screwdriver to carefully pry the metal clips out to grab the edge of the openings in the Bumper. Reattach the wiring harness to the back of the plug.
12. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

To protect your investment, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Heavy Duty Bumper assembly.

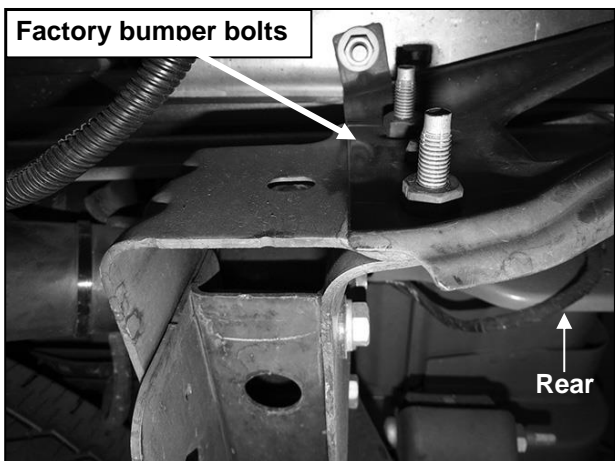
Installation Pictured



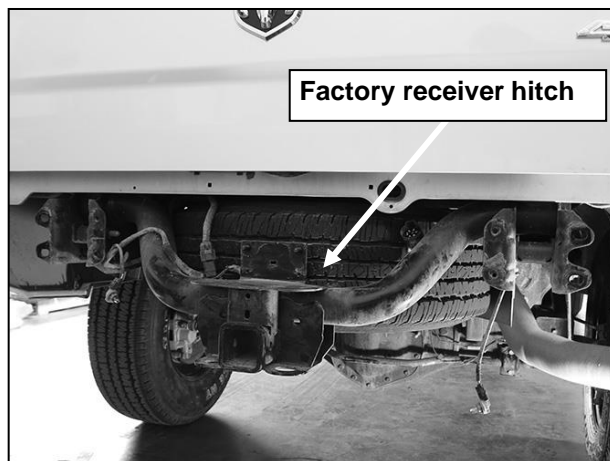
(Fig 1) Unplug harness from back of trailer connector then remove outer plug



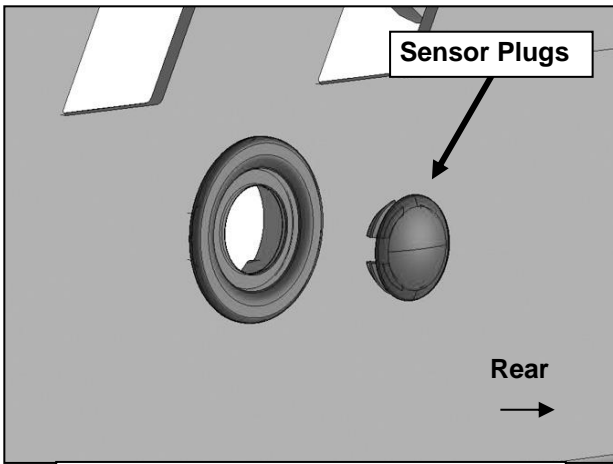
(Fig 2) Example of factory bumper bracket with 8mm hex nuts (left) welded onto back of bracket



(Fig 3) Example of factory bumper bracket with (2) hex bolts only (right) pictured from below bumper



(Fig 4) Bumper completely removed

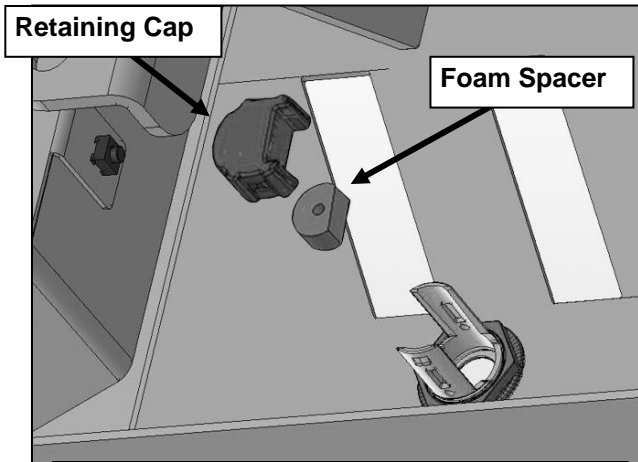


(Fig 5) Push sensor plugs into mounts

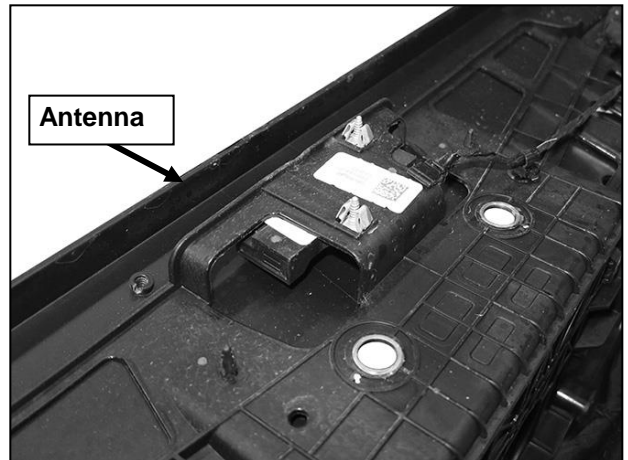
WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or it may fall.



(Fig 6) Unplug the sensor first then remove the sensor from the mounting sleeve



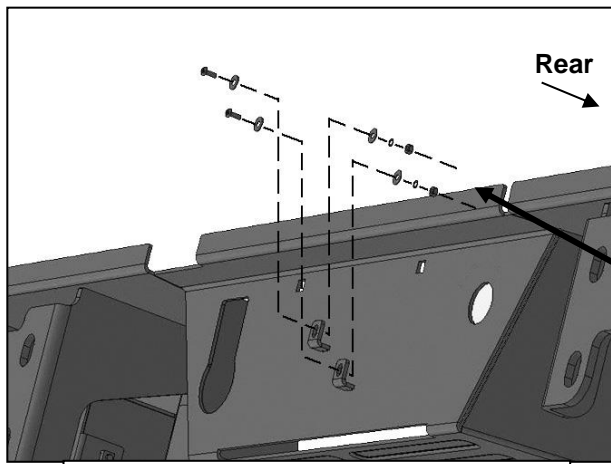
(Fig 7) Sensor Assembly attached to sensor sleeve on the back of the Bumper



(Fig 8) Remove remote antenna from back of bumper, if equipped



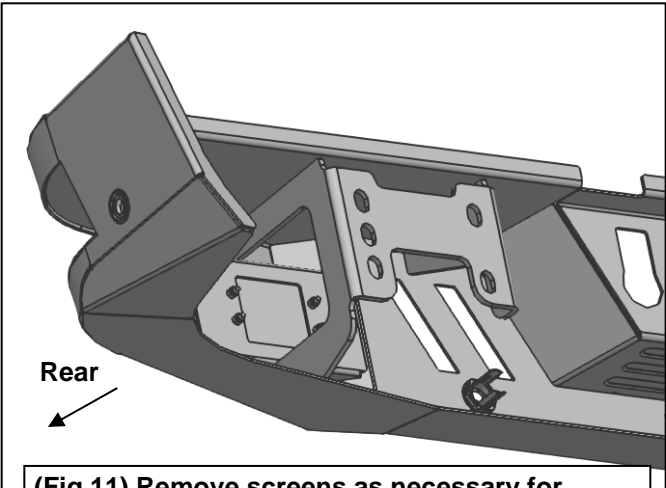
(Fig 9) Remote key antenna



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

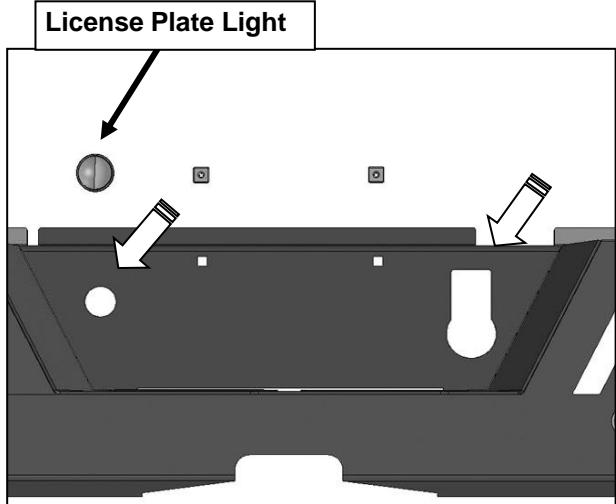
- (2) 4mm Screws
- (4) 4mm Flat Washers
- (2) 4mm Lock Washers
- (2) 4mm Hex Nuts

(Fig 10) Attach antenna, if equipped, to the tabs on the back of the Bumper



(Fig 11) Remove screens as necessary for additional clearance around or access to lights

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



(Fig 12) Push plastic plugs into holes for license plate. Install License Plate Light and trailer plug

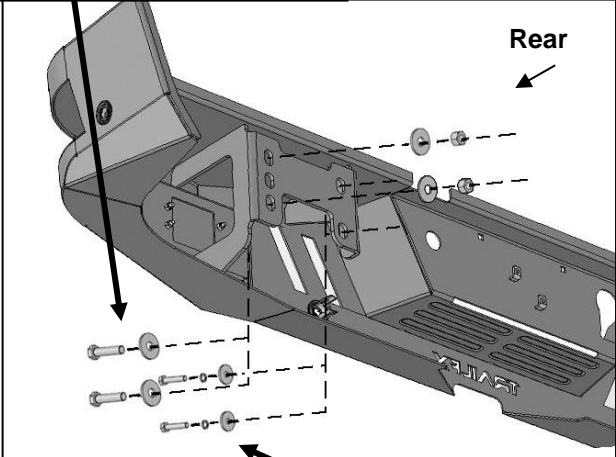


Fig 13

- On inner side of bracket, use:
- (2) 12mm Hex Bolts
 - (4) 12mm Flat Washers
 - (2) 12mm Nylon Lock Nuts
 - or
 - (2) 8mm Hex Bolts
 - (2) 8mm Lock Washers
 - (2) 8mm Flat Washers

PRODUCT CARE

- Periodically check the product to ensure all fasteners are tight and components are intact.
- Regular waxing is recommended to protect the finish of the product.
- **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.
- Aluminum polish may be used to polish small scratches and scuffs for **Stainless Steel finish.**
- Mild soap may be used to clean the product for both **Stainless Steel and Black finish.**

FAQ's

1. Hardware's are not of correct size.

In GMC / Chevrolet truck model 2006 & up, customer needs to reuse the factory body bolts to install the bracket. If your vehicle is not GMC / Chevrolet 2006 & up, ensure that holes are not partially covered with any plastic grommet or rust? If it is, remove the plastic grommet & rust from the thread holes & re-try the installation.

2. Mounting Bracket are not getting Installed properly.

In some cases Illustration images shown in Installation manual may not be the exactly same as per actual vehicle images ,also if Driver / Passenger side mounting brackets are very identical in the design, suggest referring Parts Identification guide to avoid fitment issue.

3. 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 the metal to metal contact surfaces.

4. Side Bar is not aligning with vehicle / Step Pads are not aligning with vehicle doors.

Side bar may be interchanged or mounting brackets are not installed at the correct position in the vehicle. Refer Parts identification guide.

5. Missing / Excess Hardware.

Recheck hardware count as per the part list.

6. Product not installing properly.

Ensure make model year, cab length and bed size of your vehicle is listed in the application. All installation steps are followed correctly.

Warranty Terms:

Black Powder Coated

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.