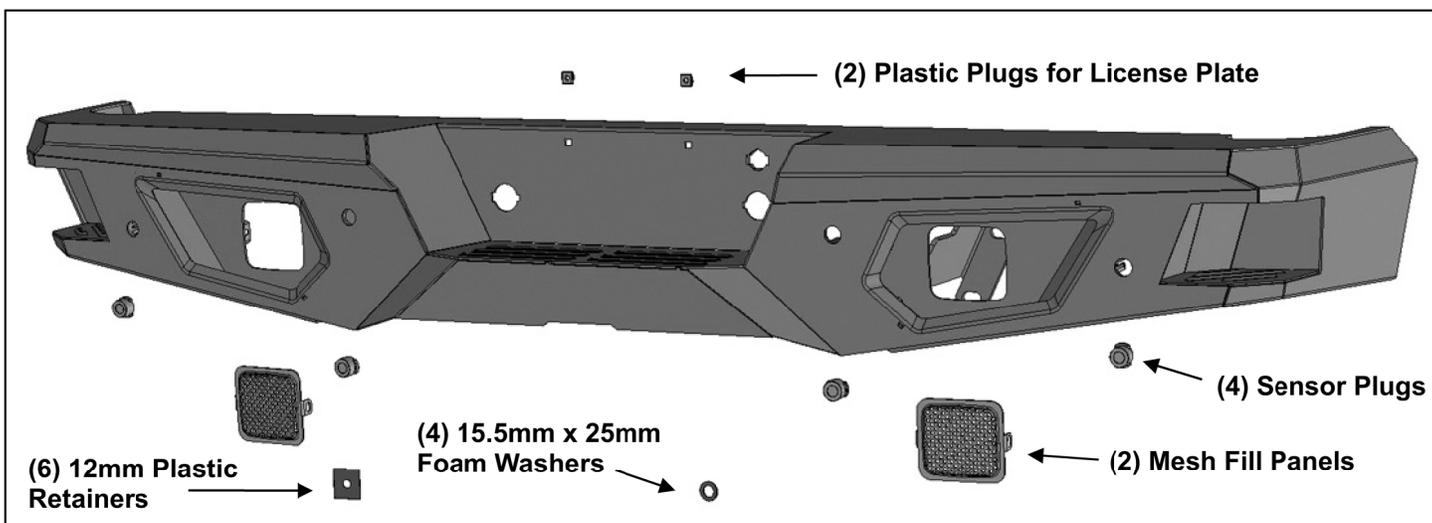




**PARTS LIST:**

**X3B-FORD29-RB**

1	LD2 Rear Bumper Assembly	4	6-1.0mm x 20mm Combo Bolts
2	Mesh Fill Panels	4	6mm Flange Hex Nuts
2	Plastic Plugs for license plate mount	8	4mm x 10mm Button Head Bolts
4	Sensor Hole Plugs	1	2.5mm Wrench
4	15.5mm x 25mm x 2mm Foam Washers	1	4mm Wrench
1	Sensor Covers Kit	10	Nylon Wire Ties
6	12mm Plastic Retainers		



**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. TO INSTALL CUBE LIGHTS, CUTTING MAY BE REQUIRED.**

1. Remove the license plate from the bumper. Next, unplug the wiring harnesses leading to the bumper. Move wiring harness away from bumper, **(Figure 1)**.
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 assembly, (with integrated receiver hitch if equipped), to the frame, **(Figure 1 & 2)**. **WARNING! Bumper with hitch is heavy**, assistance is required to hold the bumper in place during hardware removal to prevent bumper from falling.
3. Remove the receiver hitch, wiring harness, license plate lights, trailer plug and spare access lock from the factory bumper, **(Figure 3)**. Remove sensors, (if equipped), from bumper.
4. Determine correct procedure for your model.

**Models without bumper sensors:**

- a. Select the included (4) Rubber Plugs, **(Figure 4)**.
- b. From behind bumper, push plugs into sensor mounting holes, **(Figure 4)**. Screws have been provided to lock the plugs in the sleeve. Use is optional.
- c. Repeat previous **Steps** to install remaining sensors.

**Models with bumper mounted sensors:**

- a. Select (1) sensor. Remove the silicone seal from the end of the sensor, **(Figure 5)**.
- b. Slide the included larger Sensor Seal over front of sensor, **(Figure 6)**.

- c. Insert sensor with Seal into sensor mount in LD2 Bumper, **(Figure 6)**.
- d. Secure each sensor to the socket with (2) 4mm x 10mm Button Head Screws, **(Figure 6)**. **IMPORTANT:** Sensors fit snug in sockets. The 4mm Screws are used to apply slight pressure to lock the sensors in place. Tighten both screws evenly until they touch the sensor body only. Do not overtighten screws or damage to sensors will result.

**5. Determine if accessory lights, (not included), or Mesh Fill Panels will be installed.**

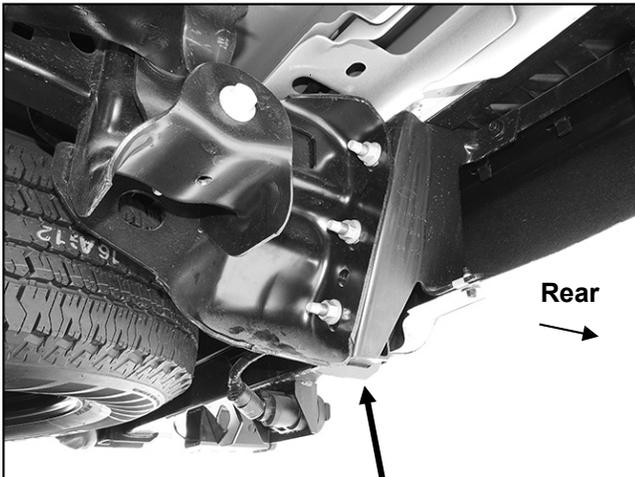
**Mesh Fill Panel Installation (do not install fill panels if installing lights).**

- a. Select the Fill Panels, **(Figure 7)**.
- b. Attach Panels to mounting tabs on back of Bumper with the included 6mm Combo Bolts and 6mm Flange Nuts, **(Figure 7)**. Fully tighten Fill Panel hardware at this time.

**LED cube style light installation (light not included). IMPORTANT: Cutting may be required on models without receiver hitch and with integrated receiver hitch. Check fit of Bumper and lights before continuing with installation, (Figure 8).**

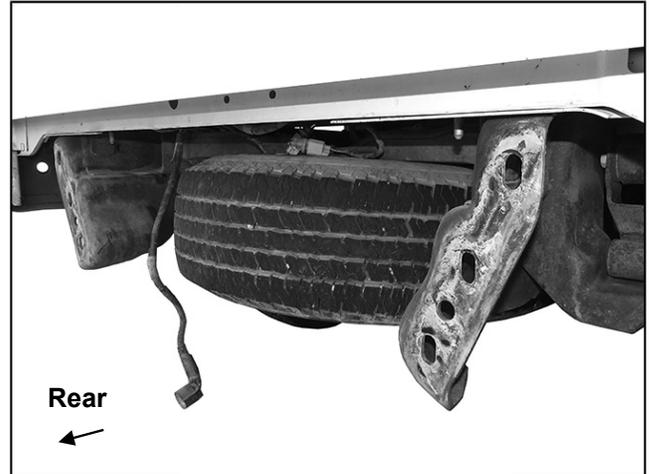
- a. Attach lights to mounting tabs on back of each end of the Bumper.
- 6. Install the license plate lights, spare access lock and wiring harness from factory bumper into the LD2 Bumper.
  - 7. Use a small flat blade screwdriver to pry the star washers off of the bolt plates used to attach the bumper to the frame brackets, **(Figure 9)**. Insert the bolt plates through the mounting tab on the back of the Bumper. Reuse the star washers if possible or thread the 12mm Plastic Retainers onto the bolt plates to hold the bolt plates in the Bumper, **(Figure 10)**.
  - 8. With assistance, hold the LD2 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.
  - 9. Reuse the factory hex nuts to attach the LD2 Bumper with bolt plates to the frame, **(Figure 11)**. Snug but do not fully tighten hardware at this time.
  - 10. Level and adjust the bumper and fully tighten all hardware.
  - 11. Plug the bumper wiring harness into the main harness. Use the included Wire Ties to secure the wiring harness to the bumper and frame as necessary.
  - 12. Do periodic inspections to the installation to make sure that all hardware is secure and tight.
  - 13. Use the included (2) push-in plugs to attach the license plate to the Bumper, **(Figure 12)**.
  - 14. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

**To protect your investment**, wax this product after installing. Regular waxing is recommended to add a protective layer over the finish. 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 Bumper assembly.



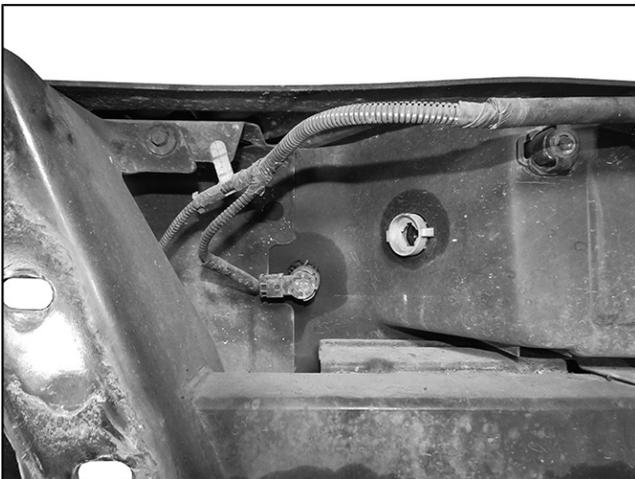
(Fig 1) Unplug wire harness leading to bumper. Remove hex nuts attaching bumper and receiver hitch if equipped, to frame and remove together

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

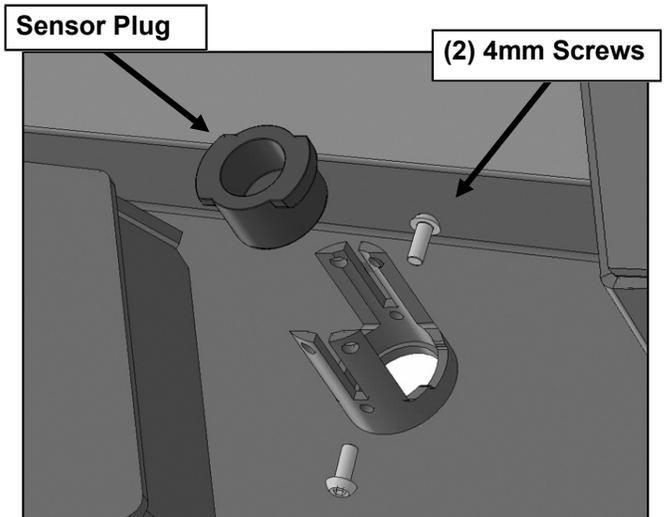


(Fig 2) Bumper removed

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

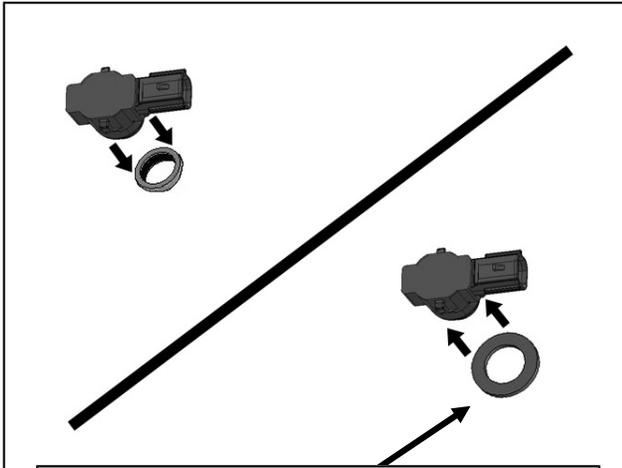


(Fig 3) Remove license lights, spare tire access lock, sensors and harness if equipped



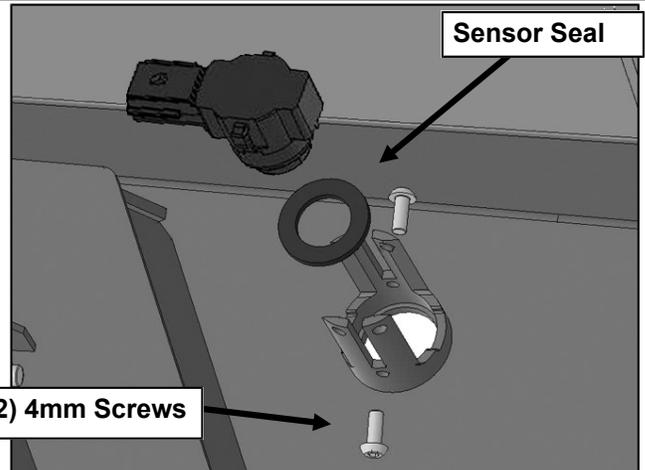
(Fig 4) Push sensor plug into mounting sleeve. Use of 4mm Screws is optional

Passenger Side Installation Pictured

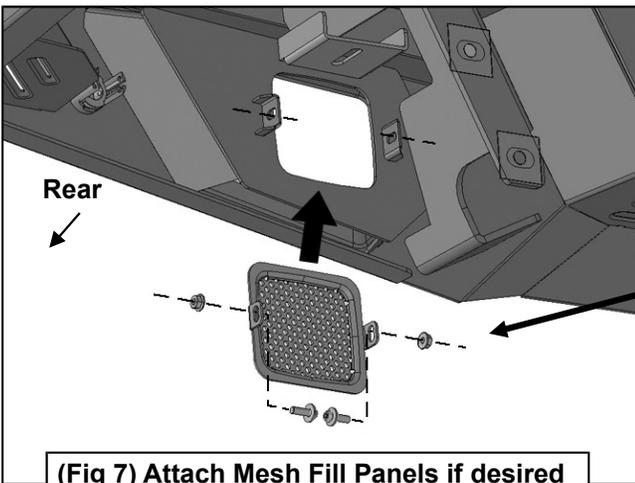


(Fig 5) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

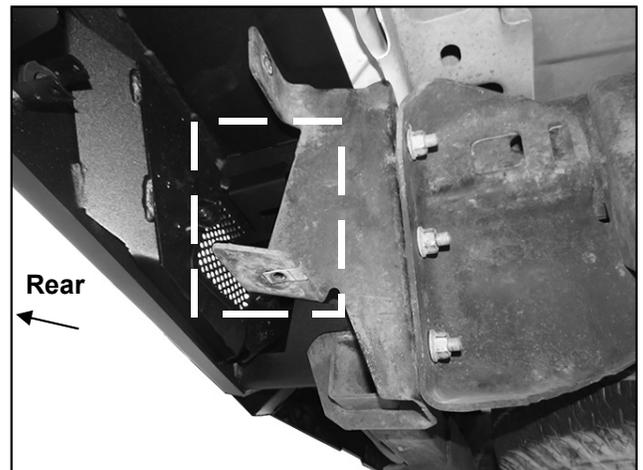
**IMPORTANT:** Sensors fit snug in sockets. The 4mm Screws are only used to apply slight pressure to lock the sensors in place. Tighten both screws evenly until they touch the sensor body only. Do not overtighten screws or damage to sensors will result.



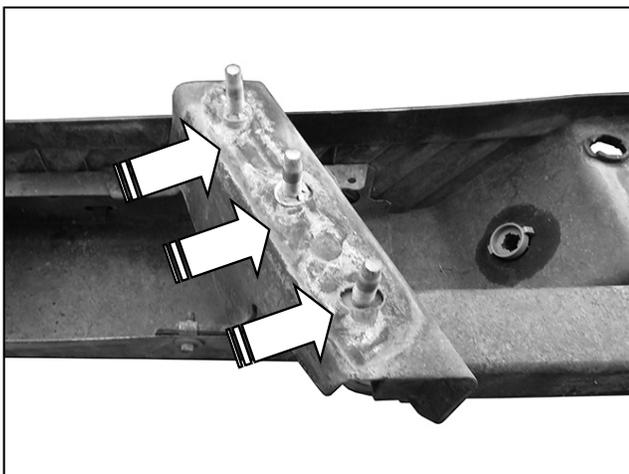
(Fig 6) Push sensor and seal into mounting sleeve. Use 4mm Screws to hold sensor in place



(Fig 7) Attach Mesh Fill Panels if desired



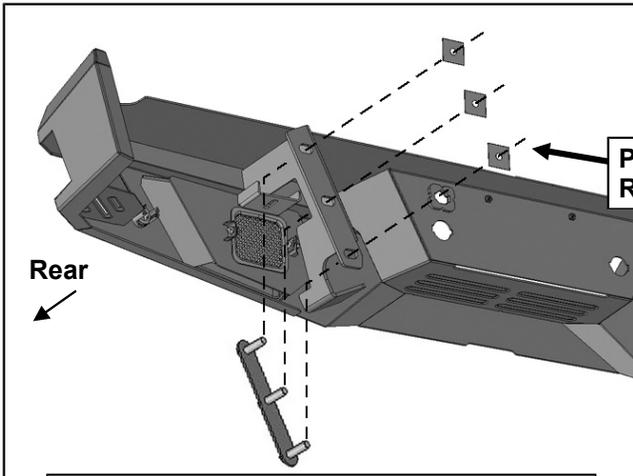
(Fig 8) Bumper bracket must be cut to clear lights. Check fit of lights before proceeding



(Fig 9) Use flat blade screwdriver to carefully pry off star washers to remove bolt plates

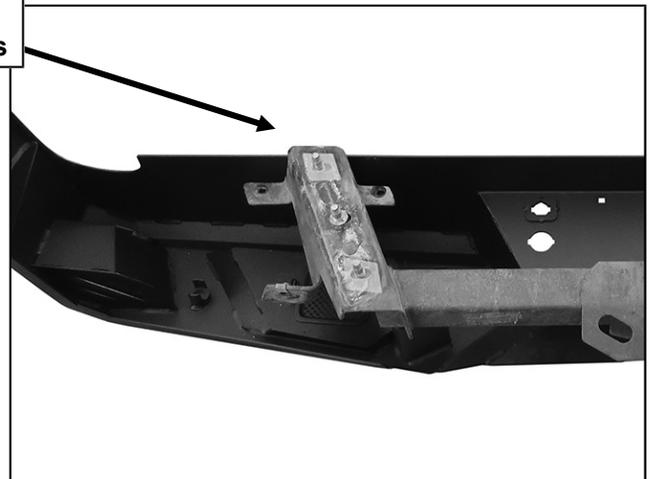
(Fig 6) Use flat blade screwdriver to carefully pry tab to hold light in place

Passenger Side Installation Pictured

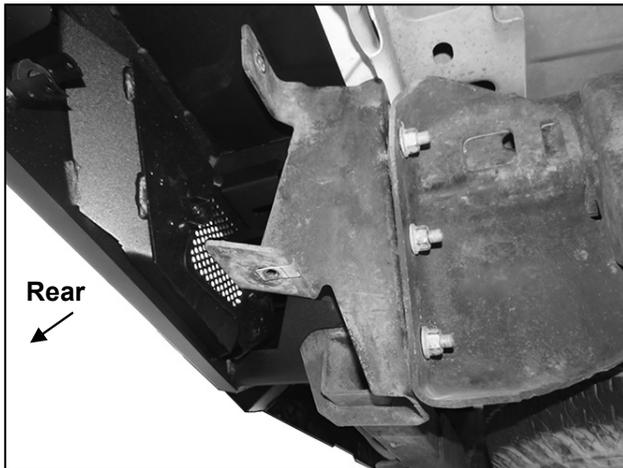


(Fig 9) Insert bolt plate into and through back of mounting tab on back of Bumper

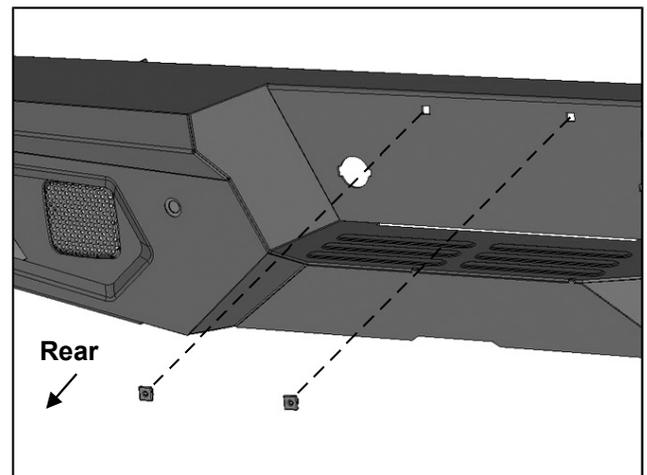
**WARNING!** Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.



(Fig 10) Reuse star washers or included Plastic Retainers to hold bolt plate in Bumper



(Fig 11) Reuse factory hex nuts to attach Bumper assembly



(Fig 12) Push (2) plastic plugs into holes for license plate

