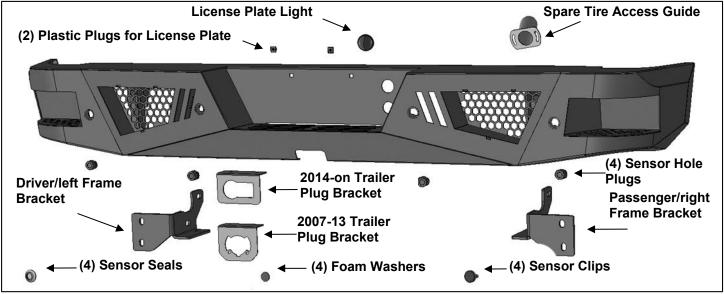


LDB-CSIL55-RB

PARTS LIST:

1	LD1 Rear Bumper Assembly	12	14mm x 28mm OD x 2.5mm Flat Washers
1	Driver/left Frame Bracket	6	14mm Nylon Lock Nuts
1	Passenger/right Frame Bracket	4	12-1.75mm x 35mm Hex Bolts
1	License Plate Light	8	12mm x 24mm OD x 3mm Flat Washers
2	License Plate Plugs	4	12mm Nylon Lock Nuts
4	Sensor Hole Plugs	2	10-1.5mm x 50mm Hex Bolts
1	Sensor Cover Kit	4	10mm x 34mm OD x 3mm Flat Washers
4	Retaining Clips	2	10mm Nylon Lock Nuts
4	20mm x 2mm Foam Washers	2	6mm x 16mm Hex Bolts
4	Sensor Sealing Washers	2	6-1.0mm x 20mm Button Head Bolts
1	Trailer Plug Bracket 07-13	4	6mm x 18mm OD x 1.6mm Flat Washers
1	Trailer Plug Bracket 2014+	4	6mm x 12mm OD x 1.6mm Flat Washers
2	Self-Tapping Screws (2014+ trailer plug)	4	6mm Nylon Lock Nuts
1	Spare Tire Access Guide	1	Wrench (6mm)
10	Nylon Wire Ties	8	4mm x 10mm Button Head Bolts
6	14-2.0mm x 45mm Hex Bolts	1	Wrench (4mm)



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.** Remove the license plate. On models with bumper sensors, unplug wiring harness leading to the bumper. Unplug and remove the trailer plug from the bumper.
- 2. Place blocks or jack stands under the bumper to support it during mounting bolt removal.
- **3.** Determine procedure for your model year:

07-13 Models.

- **a.** Starting on the passenger/right side, remove (2) hex bolts attaching bumper to top/center of receiver hitch if equipped.
- b. Remove hex bolts from side and bottom of frame, (Figures 1—3).
- **c.** Repeat previous Steps to remove driver/left side hardware.
- d. With assistance, pull bumper and brackets straight out from vehicle, (Figures 6 & 7).
- e. Proceed to Step 4

14-18 Models.

- **a.** Starting on the passenger/right side, remove rear bolts attaching bed to frame, **(Figure 2)**. Loosen center bolts (if equipped). Do not loosen front bed mounting bolts.
- b. Remove hex bolts from side and bottom of frame, (Figures 1—3).
- **c.** Repeat previous Steps to remove driver/left side hardware.
- **d.** Raise bed up slightly, only enough to clear bumper brackets. With assistance, pull bumper and brackets straight out from vehicle, **(Figures 6 & 7)**. Reattach bed and tighten hardware.

OPTION for 14-18 models only, bumper must be disassembled to remove to avoid raising the bed from the frame. Release the clips attaching the plastic cover to the steel bumper, **(Figure 4)**. Remove cover and hardware attaching the outer bumper to the bumper brackets, **(Figure 5)**. With assistance, remove the outer steel bumper, from the brackets, then remove the hex bolts attaching the brackets to the frame. Slide the brackets out of the ends of the frame, **(Figures 6 & 7)**.

- 4. Select the passenger/right Frame Bracket, (Figure 8). Slide the Bracket into the end of the frame. Attach the Bracket to the forward hole in the frame with (1) 10mm x 50mm Hex Bolt, (2) 10mm Flat Washers and (1) 10mm Nylon Lock Nut. Attach the Bracket to the side and bottom of the frame with (2)14mm x 45mm Hex Bolts, (4) 14mm Flat Washers and (2) 14mm Nylon Lock Nut, (Figures 8 & 9). Do not fully tighten hardware at this time. NOTE: On some models/years, the factory tow hitch may have support straps attached to the outside of the frame. Use the included (1) 14mm x 45mm Hex Bolt, (2) 14mm Flat Washers and (1) 14mm Nylon Lock Nut to attach the top hole in the strap to the top mounting hole, (Figures 7 & 10). Bottom hole in strap is attached to Bumper Bracket.
- **5.** Repeat **Step 4** to install the driver/left Frame Bracket.
- **6.** Slide the Spare Tire Access Guide onto the OE spare tire tube before installing the bumper onto the vehicle, **(Figure 11)**.
- **7.** Determine if the vehicle is equipped with sensors:

Models without bumper sensors:

- **a.** Select the included (4) Rubber Plugs.
- **b.** From behind bumper, push plugs into sensor mounting holes, **(Figure 12)**. Screws have been provided to lock the plugs in the sleeve. Use is optional.

Models with bumper mounted sensors:

- **a.** Unplug and remove sensors and wiring harness from factory bumper. Test fit sensor in sleeve. It may be necessary to cut or grind off the tabs on the sides of the sensor to fit into the sleeve.
- **b.** Remove the silicone seal from the end of the sensor. Slide the included larger Sensor Seal over front of sensor, **(Figure 13)**.
- c. Insert sensor with Seal into sensor mount, (Figure 14).
- **d.** Place Foam Washer over end of sensor. Push Sensor Retaining Clip into sensor mount and lock into mounting holes, **(Figure 14)**.
- e. Repeat previous Steps to install remaining sensors.
- **f.** Install wiring harness for sensors.
- g. Optional: Secure each sensor to the socket with (2) 4mm x 10mm Button Head Screws, (Figure 12). 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.
- **8.** 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.** With assistance, position the Bumper Assembly up to the Frame Brackets. Attach the Bumper to the Brackets with the included (4) 12mm x 35mm Hex Bolts, (8) 12mm Flat Washers and (4) 12mm Nylon Lock Nuts, (Figures 15 & 16). Do not fully tighten hardware at this time.
- **10.** Attach the Spare Tire Access Guide to the back of the Bumper using (2) 6mm Button Head Bolts, (4) 6mm x 12mm Small Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figures 17 & 18)**.
- **11.** <u>Level and adjust the bumper and fully tighten all hardware</u>. Slowly open tailgate and check for clearance. Adjust as necessary.

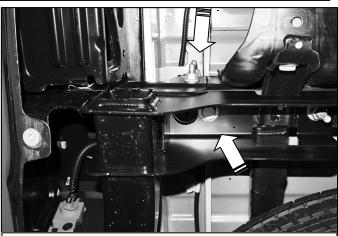
- **12.** Use the included (2) push-in Plastic Plugs to attach the rear license plate to the (2) holes in the Bumper, **(Figure 19)**. Insert the License Plate Light into the hole in the bumper, **(Figure 19)**. Attach the License Plate Light wire to the end of the factory wire harness.
- **13.** Select the correct mounting plate for your trailer harness plug. Attach the mounting plate to the bottom of the bumper with (2) 6mm Hex Bolts, (4) 6mm x 18mm Large Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figure 19)**. **NOTE**: On 2011-14 models, use the included (2) Self Tapping Screws to attach the trailer plug to the Bracket, **(Figure 19)**.
- **14. LED light installation at ends of bumper** as supplied with bumper or 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 20)**.
 - **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 passenger side light installation.
 - **d.** Follow light manufacturer's instructions to properly wire the light.
- **15.** Attach the wiring harness to the lights and trailer plug.
- **16.** Use the included Wire Ties to secure the wiring harness to the bumper and frame as necessary.
- **17.** 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.

Passenger/right side installation pictured

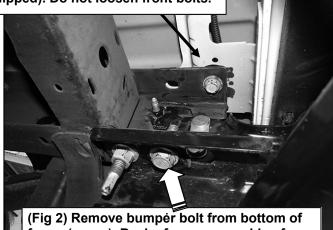


(Fig 1) Remove bumper bolts from outside of frame (arrows). Passenger side pictured from below



(Fig 3) Remove bumper bolts attaching brackets to frame (arrows). Model with receiver hitch pictured

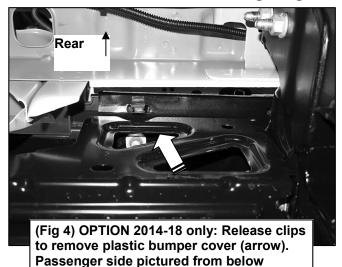
2014-16 models, remove rear bed to frame bolts, loosen center bolts, (if equipped). Do not loosen front bolts.



(Fig 2) Remove bumper bolt from bottom of frame (arrow). Back of passenger side of model w-o receiver hitch pictured from below

WARNING! Before removing hardware, fully support the weight of the bumper with blocks or stands to prevent injury or damage to the vehicle.

Passenger/right side installation pictured





(Fig 6) End of frame once factory bumper is removed. Passenger side w-o receiver hitch pictured

WARNING! Before removing hardware, fully support the weight of the bumper with blocks or stands to prevent injury or damage to the vehicle.



(Fig 5) OPTION 2014-18 only: Remove bumper bolts attaching bumper to inner bracket. Remove outer bumper first, then remove inner brackets



(Fig 7) End of frame once factory bumper is removed. Passenger side with receiver hitch pictured

14mm x 45mm Hex Bolt (2) 14mm Flat Washers 14mm Nylon Lock Nut

Rear

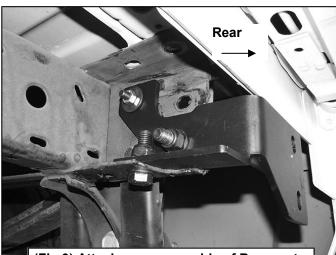
(Fig 8) Attach Bumper Bracket to side mounting holes in frame and hitch if equipped

14mm x 45mm Hex Bolt

10mm x 50mm Hex Bolt (2) 10mm Flat Washers 10mm Nylon Lock Nut

14mm x 45mm Hex Bolt (2) 14mm Flat Washers 14mm Nylon Lock Nut

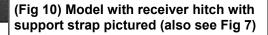
Passenger/right side installation pictured

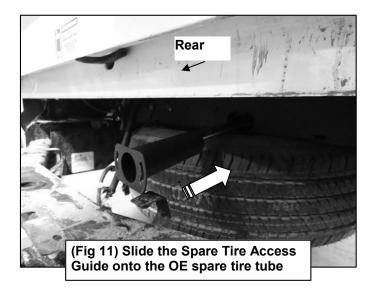


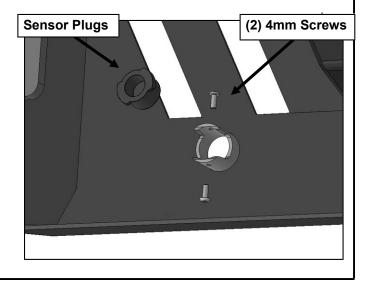
(Fig 9) Attach passenger side of Bumper to frame. Model w-o receiver hitch pictured

Rear

14mm x 45mm Hex Bolt (2) 14mm Flat Washers 14mm Nylon Lock Nut

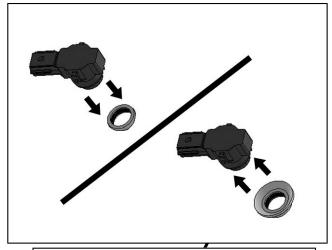






(Fig 12) Push sensor plug into mounting sleeve. Use of 4mm Screws is optional

Passenger/right side installation pictured



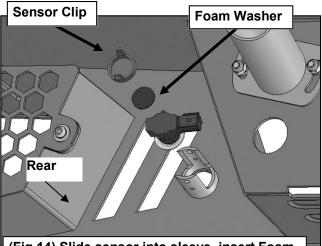
(Fig 13) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

Rear

WARNING! Before installation, fully support the weight of the bumper with blocks or stands to prevent injury or damage to the vehicle.

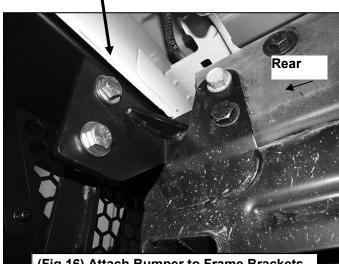
(Fig 15) Attach Bumper to Frame Brackets

NOTE: Sensor plugs fit snug in sockets. Use of the 4mm Screws is optional. 4mm Screws can also be used to apply slight pressure to lock the sensors in place or to aim the sensor. Tighten both screws evenly until they touch the sensor body only. Do not overtighten screws or damage to sensors will result.



(Fig 14) Slide sensor into sleeve, insert Foam Washer and Clip to lock sensor in sleeve

- (2) 12mm x 55mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts

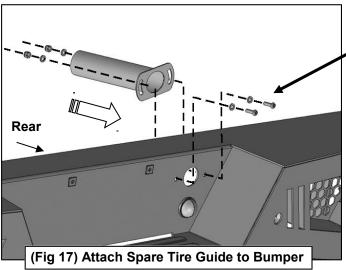


(Fig 16) Attach Bumper to Frame Brackets

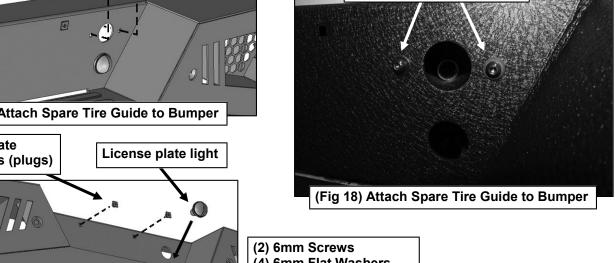
(2) 6mm Button Head Bolts (4) 6mm Flat Washers

(2) 6mm Nylon Lock Nuts

Passenger/right side installation pictured



(2) 6mm Button Head Bolts(4) 6mm Flat Washers(2) 6mm Nylon Lock Nuts

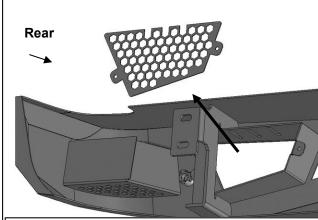


- (2) License plate mounting nuts (plugs)

 License plate light

 Rear
- Complete Installation

(4) 6mm Flat Washers (2) 6mm Nylon Lock Nuts



(Fig 20) Remove screens if necessary for additional clearance around or access to lights