

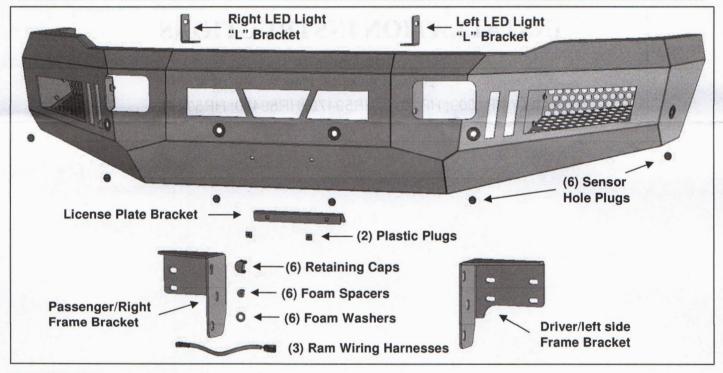
# **INSTALLATION INSTRUCTIONS**

LD1 FRONT BUMPER 2010-18 RAM 25-3500

PART# HR1009; HR1010; HR59479; HR59480; HR59481

#### **PARTS LIST:**

1	LD1 Front Bumper	12	12mm x 37mm x 3mm Flat Washers
1	Driver/left side Frame Mounting Bracket	16	12mm x 32mm x 3mm Flat Washers
1	Passenger/right side Frame Mounting Bracket	8	12mm Lock Washers
1	License Plate Bracket	8	12-1.75mm Hex Nuts
2	License Plastic Plugs	6	12mm Nylon Lock Nuts
1	Driver/left side LED Light "L" Bracket	2	8-1.25mm x 25mm Hex Bolts
1	Passenger/right side LED Light "L" Bracket	2	8-1.25mm x 16mm Hex Bolts
6	Sensor Retaining Caps	6	8mm x 24mm x 2mm Flat Washers
6	20mm x 10mm Foam Spacers	4	8mm Lock Washers
6	Foam Washers (not required)	2	8-1.25mm Hex Nuts
6	Sensor Hole Plugs	2	6-1.0mm x 20mm Button Head Bolts
3	Ram Wiring Harnesses	4	6mm x 18mm x 1.6mm Flat Washers
1	Sensor Cover Kit	2	6mm Nylon Lock Nuts
8	12-1.75mm x 50mm Hex Bolts	1	4mm Allen Wrench
6	12-1.75mm x 40mm Hex Bolts	12	4mm Self Tapping Screws
3-27		10	200mm Nylon Wire Ties



#### 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. CUTTING MAY BE REQUIRED.

- 1. Remove the license plate and bracket. On models with factory fog lights and/or sensors, unplug wiring harness leading to the front bumper, (Figure 1). Release the harness from the clips attached to the back of the bumper and move harness away from bumper.
- 2. Next, open hood and remove the plastic cover between the top of the grille and the top of the radiator. Carefully remove the grill assembly, (Figures 2 & 3).
- 3. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the hex nuts attaching each bumper bracket to the end of

the frame, **(Figure 4)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling. Slide the bumper assembly off of the tow hooks.

4. Next, remove the tow hooks from the end of the frame, (Figures 5 & 6).

- 5. Select the driver/left side Frame Mounting Bracket, (Figure 7). Attach the Bracket to the end of the frame with (4) 12mm x 50mm Hex Bolts, (8) 12mm x 32mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, (Figure 8). Leave hardware loose. Repeat this Step to install the passenger/right Frame Bracket.
- 6. Determine if the vehicle is equipped with front parking sensors. **NOTE**: Sensors and wiring harness must be installed in LD1 Bumper before installing Bumper Assembly.

#### Models without front sensors:

**a.** From the front of the bumper, push the included Plastic Plugs into sensor mounting holes, (**Figure 9**).

### Models with bumper mounted sensors:

a. Remove sensors and wiring harness from back of OE Bumper.

**b.** Test fit sensor into sensor mount on LD1 Bumper. Trim off the plastic tabs on the sensor if necessary to fit snug inside of the sensor mount.

c. 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 10).

d. Repeat previous Steps for all remaining sensors.

- e. Starting on the driver/left side, run the OE sensor wire harness through the bumper cutouts. Connect the sensors to the OE sensor wire harness.
- **f.** Use the provided wire harness extensions to connect the sensors to the OE sensor wire harness as needed.
- **q.** Use the provided Wire Ties to secure the Wiring Harnesses to the back of the Bumper.

## 7. Center LED light installation (not included).

- a. Select the L/R "L" Brackets, (Figure 11). Attach the Brackets to the top of the (2) mounting tabs welded onto the back of the bumper with the included (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts. Leave loose at this time.
- b. Attach the LED light assembly to the "L" Brackets with the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, (Figure 11). Do not fully tighten hardware at this time. IMPORTANT: "L" Brackets are designed for 8mm light mounting hardware only. Modify "L" Brackets if necessary or use brackets supplied by the light manufacturer, if possible, to install hardware larger than 8mm.
- c. Follow light manufacturer's instructions to properly wire light once bumper has been installed.

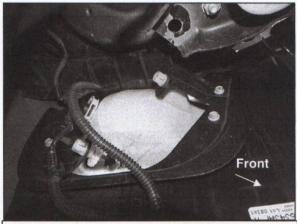
## 8. LED light installation at ends of bumper (not included).

- a. Insert light into opening and up to mounting slot. Check for clearance between front and back of light. If necessary, remove screen from back of opening, (Figure 12).
- **b.** Follow the light manufacturer's instructions to attach (1) light to the slot in the top of the light opening, (**Figure 12**).
- c. Repeat the above Steps to install the remaining light.
- d. Follow light manufacturer's instructions to properly wire light once bumper has been installed.
- 9. With assistance, position the LD1 Bumper Assembly up to the inside of the Frame Brackets. 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.
- 10. Attach the Bumper to the inside of the Frame Brackets with (6) 12mm x 40mm Hex Bolts, (12) 12mm x 37mm Large Flat Washers and (6) 12mm Nylon Lock Nuts, (Figures 13 & 14). Do not fully tighten hardware.
- 11. Level and adjust the Bumper and fully tighten all hardware.
- 12. Reattach the bumper wiring harness to the main wiring harness.
- 13. If front license plate is required, attach the License Plate Bracket to the holes in the Bumper with the included (2) 6mm x 20mm Button Head Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, (Figure 15). Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the Plastic Plugs.

- 14. Trim off the underlined section of the plastic wheel well liner for a clean finish, (optional-Figure 16).
- 15. 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 Bumper assembly.

#### **Driver/left Side Installation Pictured**



(Fig 1) Unplug lights and sensors if equipped. Unplug harness to bumper and move harness

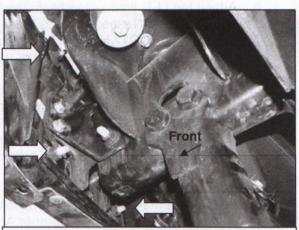


(Fig 2) Open hood and remove plastic cover



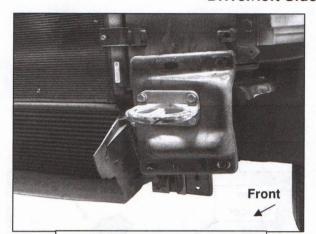
(Fig 3) Temporarily remove plastic grille to access top bumper bolts

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

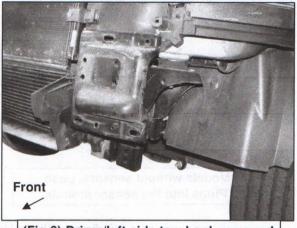


(Fig 4) Remove hex nuts from bumper bolts (arrows). Driver/left bumper bracket pictured from below/behind bumper

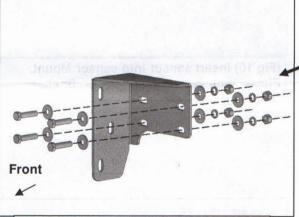
# **Driver/left Side Installation Pictured**



(Fig 5) Remove both tow hooks

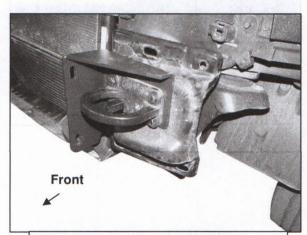


(Fig 6) Driver/left side tow hook removed



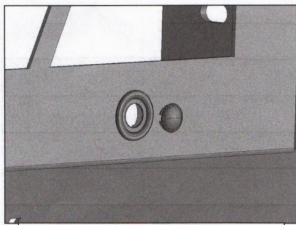
(Fig 7) Attach driver/left Frame Bracket to end of frame, between the tow hook and the bumper bracket

- (4) 12mm x 50mm Hex Bolts
- (8) 12mm x 32mm Flat Washers
- (4) 12mm Lock Washers
- (4) 12mm Hex Nuts



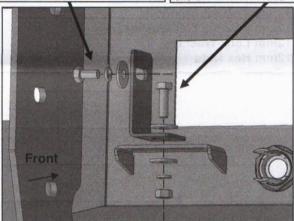
(Fig 8) Driver/left Frame Bracket attached to end of frame with tow hook

# **Driver/left Side Installation Pictured**

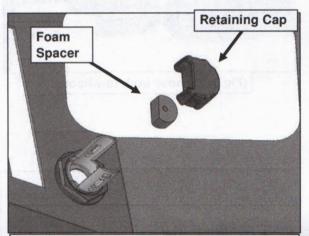


(Fig 9) Models without sensors, push Plastic Plugs into the sensor mounts

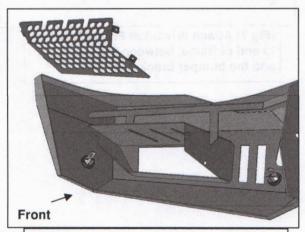
- (2) 8mm x 16mm Hex Bolts
- (2) 8mm Lock Washers
- (2) 8mm Flat Washers
- (2) 8mm x 25mm Hex Bolts
- (4) 8mm Flat Washers
- (2) 8mm Lock Washers
- (2) 8mm Hex Nuts



(Fig 11) Example of center light installation

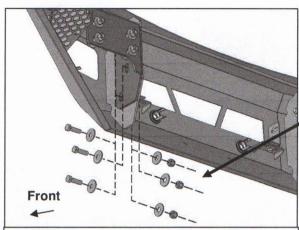


(Fig 10) Insert sensor into sensor Mount. Place Foam Spacer onto sensor. Snap Retaining Cap onto sensor and Mount

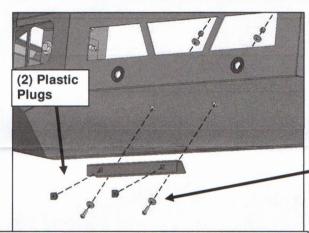


(Fig 12) Remove screens if necessary for clearance/access to outer light mounts

# **Driver/left Side Installation Pictured**



(Fig 13) Attach the driver/left side of the Bumper to the inside of the Mounting Bracket



(Fig 15) Attach License Plate Bracket to Bumper



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

- (3) 12mm x 40mm Hex Bolts
- (6) 12mm x 37mm Flat Washers
- (3) 12mm Nylon Lock Nuts



(Fig 14) Driver/left side complete installation (pictured from below Bumper)

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



(Fig 16) Trim off plastic wheel well liner (Optional)