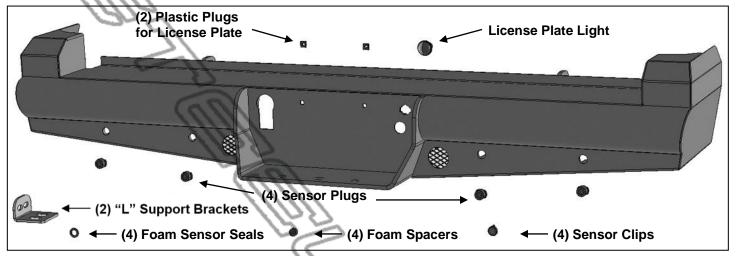
PARTS LIST:

1	HD Replacement Rear Bumper Assembly	2	"L" Support Brackets
1	License Plate Light	12	12-1.75mm x 45mm Hex Bolts
4	Sensor Retaining Clips	24	12mm x 32mm x 3mm Flat Washers
4	Sensor Foam Spacer 20mm x 10mm	12	12-1.75mm Hex Nylon Lock Nuts
4	Sensor Foam Washer Seals	2	Plastic Plugs for license plate mount
4 \$	Rubber Sensor Hole Plugs	8	4mm x 10mm Button Head Bolts
1	Rubber Sensor Cover Kit	1	2.5mm Allen Wrench



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.

- 1. Remove the license plate from the bumper. Unplug the wiring harness leading to the bumper and move harness away from bumper.
- 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 (2) factory bolts attaching the bottom of the bumper (step area) to the receiver hitch, (Figure 1). Next, remove the factory hardware attaching the bumper to the bumper brackets and remove the bumper assembly, (Figure 2). WARNING! Assistance is required to hold the bumper in place during hardware removal to prevent bumper from falling.
- 3. Next, remove both bumper brackets from the frame, (Figure 3 & 4).
- **4.** Remove sensors, (if equipped), from bumper. Squeeze the metal clips securing the trailer plug to release and remove the plug. Remove the wiring harness from the bumper. Next, remove the spare tire plug lock if equipped, (**Figure 5**).
- 5. Install the spare tire hole plug lock, License Plate Light and trailer plug into the Steelcraft Bumper, (Figure 12). NOTE: Use a flat blade screwdriver to carefully pry out the metal clips on the trailer plug to grab the edge of the opening if necessary.
- **6.** Determine if the vehicle is equipped with parking sensors. **NOTE**: It may be necessary or easier to install sensors, (if equipped), and harness before installing the Bumper on the vehicle.

Models without bumper sensors:

- a. Select the included (4) Rubber Plugs, (Figure 6).
- **b.** <u>From behind bumper</u>, push plugs into sensor mounting sleeves, **(Figure 6)**. Screws have been provided to lock the plugs into the sleeves. Use of screws is optional.

Models with bumper mounted sensors:

- **a.** Select (1) parking sensor. Test fit sensor in mounting sleeve. It may be necessary to trim or grind off the tabs on the sides of the sensor to fit into the sleeve.
- **b.** Remove the OE seal from the end of the sensor, **(Figure 7)**. Remove the adhesive backing from the included larger foam Sensor Seal and slide over the front of the sensor.
- c. Insert the sensor with Seal into sensor mount, (Figure 8).

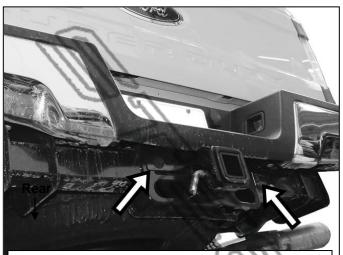
- **d.** Remove the adhesive backing from the thick Foam Spacer and place on the back of the sensor. Push Sensor Retaining Clip into sensor mount and lock detents into mounting holes, **(Figure 8)**.
- **e.** Repeat previous Steps to install remaining sensors.
- **f.** Install wiring harness for sensors.
- g. Optional: Secure each sensor to the socket with (2) 4mm x 10mm Button Head Screws, (Figure 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.
- 7. Attach the wiring harness to the sensors, license plate light and trailer plug as equipped.
- 8. Determine year of vehicle.

2017-22 models:

- **a.** With assistance, hold the Bumper assembly up to 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. Re-use the factory bumper hardware to attach the Bumper Mounting Bracket to the outside of the frame, **(Figure 9)**.
- **b.** Repeat this **Step** to install the driver/left Bracket. Snug but do not fully tighten hardware at this time. **2023-on models:**
- a. Select (1) L Support Bracket. Attach the Bracket to the top of the hitch with the included (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figures 10 & 11).
- b. With assistance, hold the Bumper assembly up to 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. Re-use the factory hardware to attach the Bumper Mounting Bracket to the side of the frame. Attach the Bumper Mounting Bracket to the side of the new "L" support Bracket with the included (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figures 10 & 11). Snug but do not fully tighten hardware at this time.
- **c.** Repeat the previous **Steps** to install the driver/left "L" Support Bracket and Mounting Bracket.
- **9.** Level and adjust the bumper and slowly lower the tailgate and check for clearance. Adjust the bumper as required and fully tighten all hardware to 65-70ft-lbs.
- 10. Use the included (2) push-in plugs to attach the license plate to the Bumper, (Figure 12).
- 11. Splice in the universal license plate light into the OE light harness. Seal the open connectors with tape.
- 12. Plug in the wiring harness on the bumper to the main harness on the vehicle.
 NOTE: It may be necessary to release some wiring clips along the frame to gain the extra length required for a proper connection.
- 13. 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 Side Installation Pictured



(Fig 1) Remove the (2) bolts attaching the bottom of the step to the receiver hitch if equipped



(Fig 2) Remove the factory hex nuts attaching the bumper to the brackets (arrow)

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

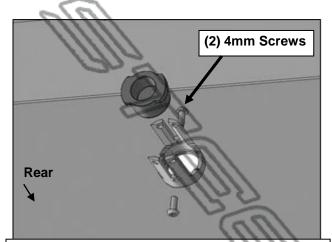


(Fig 3) Remove bumper bracket from frame. [2017-22 model year pictured]

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

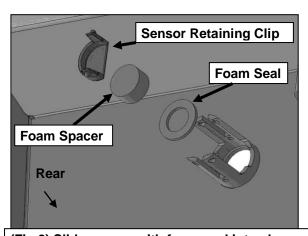


(Fig 4) Bumper bracket removed. [2017-22 model year pictured] OE "L" bracket remains attached.



(Fig 6) Push sensor hole plug into mounting sleeve. Use 4mm Screws to lock sensor in place.

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.

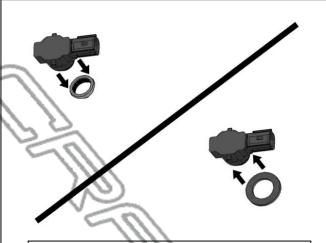


(Fig 8) Slide sensor with foam seal into sleeve. Insert Foam Spacer and Clip onto back of sensor to lock sensor in sleeve.

Detents must be inserts into holes on sleeve.



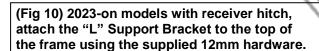
(Fig 5) Remove sensors, wire harness, trailer plug and spare tire access lock (pictured) if equipped

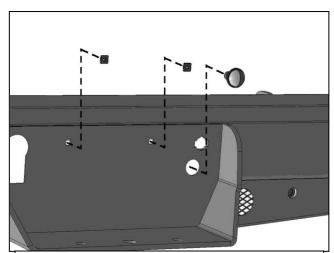


(Fig 7) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

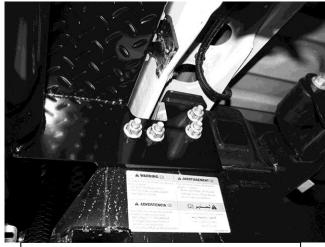
Passenger Side Installation Pictured

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

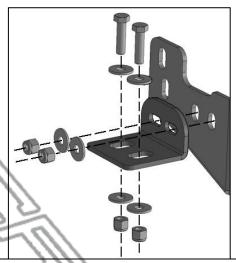




(Fig 12) Push plugs into holes for license plate



(Fig 9) Reuse factory hardware to attach passenger/right Bumper to side of frame



(Fig 11) 2023-on models with OE receiver hitch, attach the Support Bracket to the top of the frame. Reuse the factory hardware to attach the Mounting Bracket to the side of the frame. Use the included 12mm hardware to attach the Mounting Bracket to the Support Bracket



Complete Installation