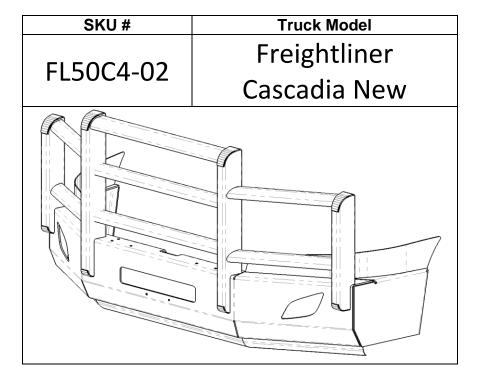


# **Installation Guide**

Thank you for choosing HERD!

For assistance call 1-888-543-4373 www.HERD.com



#### **Important**

- Herd Bumpers are vehicle "Make & Model" specific. Use of a bumper on a vehicle other than the model it was designed for will constitute improper use of the product and may void warranty.
- Unless otherwise specified, Grade 8 or Class 10.9 hardware is to be used. For the purposes of these instructions, OE hardware means the truck's original factory hardware.
- For further detail of warranty coverage and warranty repair information visit www.HERD.com.

### **General Safety**

- Take time to fully read the instructions before installing the Herd bumper.
- At all times exercise safe work shop practices, wear steel toe boots and safety glasses during installation.
- Parts and components of the Herd bumper can be heavy, handle with care to avoid injuries.
- Respect power tools and use them as advertised.

HERD North America Inc. 2168 Springfield Road Box 28, Group 525, RR5 Winnipeg, MB. Canada R2C 2Z2

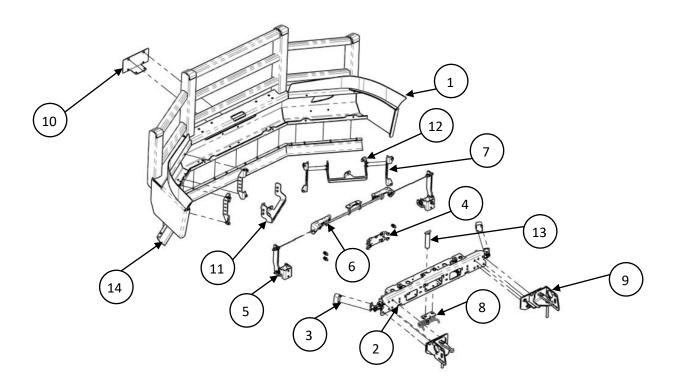


Figure A - FL50C4-02 Bill of Materials

Table 1 - Parts and Hardware Included

Item No	Part No	Description	Qty
1	2F0027	WLDMT-BUMPER FL50C4-02	1
2	100062	ASSY-UNIVERSAL BRACKET	1
3	400014	KIT-RUMBER 20 MM	2
4	100046	KIT-CAS BRACKET	1
5	100054	ASSY-HINGE	1
6	100027	C4 SLAM LATCH ASSEMBLY	1
7	100058	KIT-CHANNEL STRUT	4
8	100021	ASSY-LIFT ASSIST	1
9	1F0022	KIT-MOUNTING FL50C4-02	1
10	2F0025	BRKT-LICENSE PLATE	1
11	2F0018	DL SHROUD, PS, FL50C4-02	1
12	2F0017	DL SHROUD, DS, FL50C4-02	1
13	100049	PIN-TOW	1
14	400009	AIR DEFLECTOR FL50C4-02	1
*15	500250	SCR SM HWH SLOT S.S.14 X 1/2	6
*16	500238	NUT-NYLON NO 14 LICENSE PLATE	6
*17	500146	BOLT-HEX M18X2-1/2X180 CL10.9 YZP	2
*18	500222	WASHER-FLAT M18 CL10.9 YZP	2
*19	500183	NUT-NYLOCK M18X2.5 CL10.9 YZP	2
*20	500344	WASHER-FLAT 3/4 USS YZP	4
*21	500173	NUT-NYLOCK 3/4-16 NF GR8 YZP	2
*22	500085	BOLT-HEX 1/2-13X1-3/4 NC GR8 YZP	8
*23	500263	WASHER-FLAT 1/2X1-1/2OD 1/4THICK	8
*24	500206	WASHER-FLAT 1/2 SAE GR8 YZP	8
*25	500167	NUT-NYLOCK 1/2-13 NC GR8 YZP	8
*26	500095	BOLT-HEX 1/4-20X1 NC GR5 WZP	23
*27	500169	NUT-NYLOCK 1/4-20 NC GR8 YZP	23
*28	500208	WASHER-FLAT 1/4 SAE GR8 YZP	46

- Items marked with an asterisk are not shown in Figure A above, and are included in hardware kits listed in Table 2

Table 2 - Hardware Kits Included

Table 2 - Hardware Kits Ilicidded			
Hardware Kit	Qty		
1F0022	1		
100046	1		
2F0025	1		
2F0019	1		
2F0020	1		
400009	1		

Part No: FL50C4-02-IG Rev: D

1-888-543-4373 www.HERD.com 2 Date: 2019-05-23

1. Remove OEM bumper. Unplug driving lights (if equipped). Keep OEM hardware for later use. **Remove Bolts** Figure 1 - OEM Bumper Removal 2. Disconnect and remove radar sensor (if equipped). Retain Radar Sensor OEM hardware for later use if applicable. Note: For a more comprehensive guide, refer to Herd Radar Sensor Installation Guide (S009). Radar Sensor Figure 2 - Radar Sensor Removal 3. Insert tow receiver mounts (Item 9) into tow receivers of truck frame and rotate 90° to lock it in place. Tow Receiver

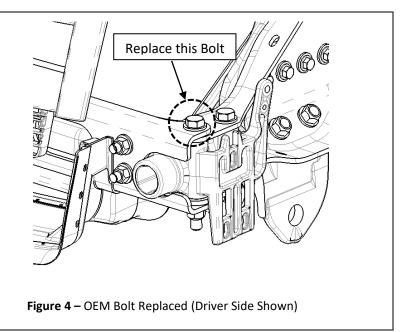
Part No: FL50C4-02-IG Rev: D

Date: 2019-05-23

Figure 3 – Tow Receiver Mount Installation

#### **Installation Procedure**

4. Replace OEM M18 bolt with the Herd supplied bolt (Item 17), washer (Item 18) at the top, and washer (Item 20), (all from Hardware Kit 1F0022) at the bottom. If necessary, move the cooling line on the driver side out of the way.



5. Install driver side mounting plate and passenger side mounting plate (Item 9) with items 17, 18, 19, 20, and 21 (from Hardware Kit 1F0022) and the OEM hardware until snug as shown in Figure 5a, 5b and 5c.

Once the mounting plate (Item 9) is level, Fully tighten items 17, 18, 19, 20, and 21 and the OEM hardware accordingly.

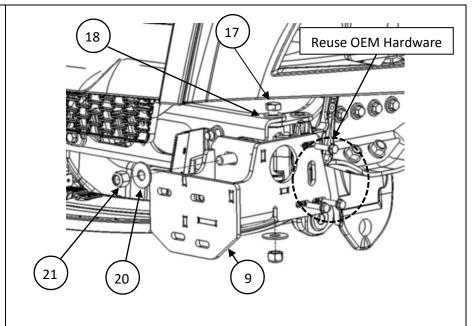


Figure 5a – Mounting Plate Installation (Driver Side Shown)

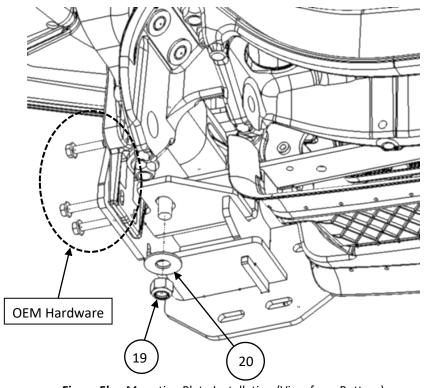
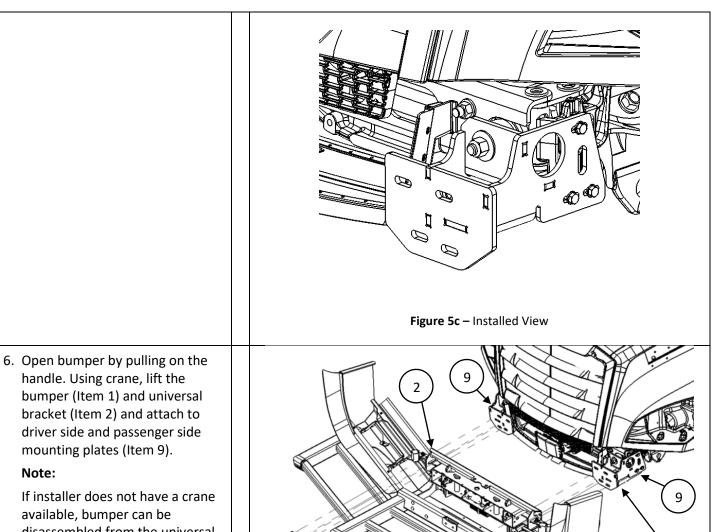


Figure 5b – Mounting Plate Installation (View from Bottom)

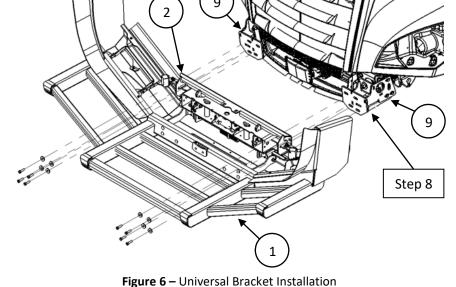
Part No: FL50C4-02-IG Rev: D

Date: 2019-05-23



#### Note:

If installer does not have a crane available, bumper can be disassembled from the universal bracket to simplify installation as shown in step 7, otherwise proceed to step 8.

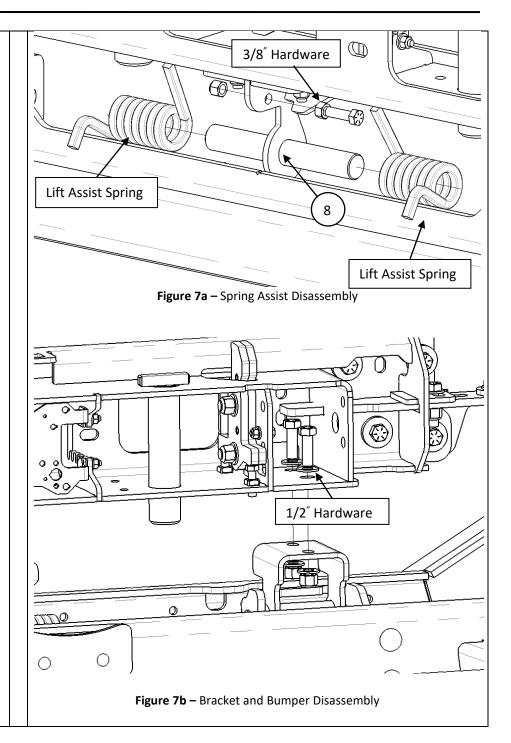


Part No: FL50C4-02-IG Rev: D

www.HERD.com 6 Date: 2019-05-23

7. a) Ensure bumper is closed. From underneath the bumper, remove the 3/8" hardware securing the lift assist springs and slide off springs from the lift assist (Item 8).

b) Once the springs are removed, carefully open the bumper using the slam latch. Remove the 1/2" hardware securing the bumper to the universal bracket. Remove bumper and set aside on cardboard. Now the bracket is isolated for mounting without a lift.



8. Attach universal bracket (Item 2) to driver side mounting plate (Item 9) and passenger side mounting plate (Item 9) as shown. Using the hardware provided (items 22, 23, 24, and 25 from Hardware Kit 1F0022).

**Note:** Place oversized ½" washers (Item 23) on the forward facing side.

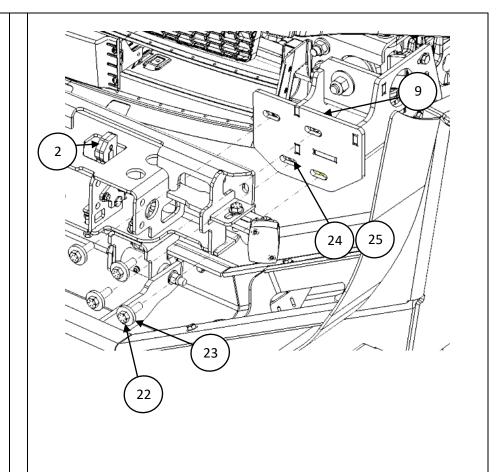


Figure 8 – Bracket Installation on Freightliner Cascadia New (Driver Side)

- 9. If bumper was disconnected from the universal bracket in step 6, reverse the procedure to mount bumper back onto the bracket.
  - a) First ensure the bumper hinges are open.
  - b) Attach using previously removed 1/2" bolts until the hinge just slightly touches the bracket.
  - c) Close the bumper and ensure the latch engages.
  - d) Open the bumper and tighten the bolts until they are snug.
  - e) Close the bumper again to ensure the latches engage properly.
  - f) Fully tighten the ½" hardware to 110 ft-lb. Latches may need to be adjusted, refer to Slam Latch Adjustment guide (S001).
  - g) Close the bumper and slide springs onto the lift assist shaft, ensuring that spring arms are inserted into slots of bumper. Reinsert 3/8" hardware securing the lift assist springs.

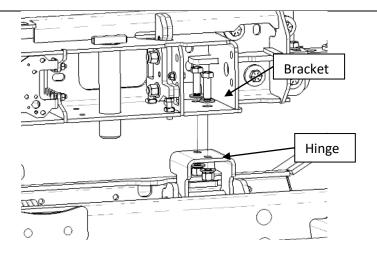


Figure 9.1 - Bracket and Hinge Reassembly

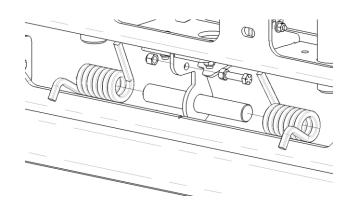


Figure 9.2 - Lift Assist Reassembly

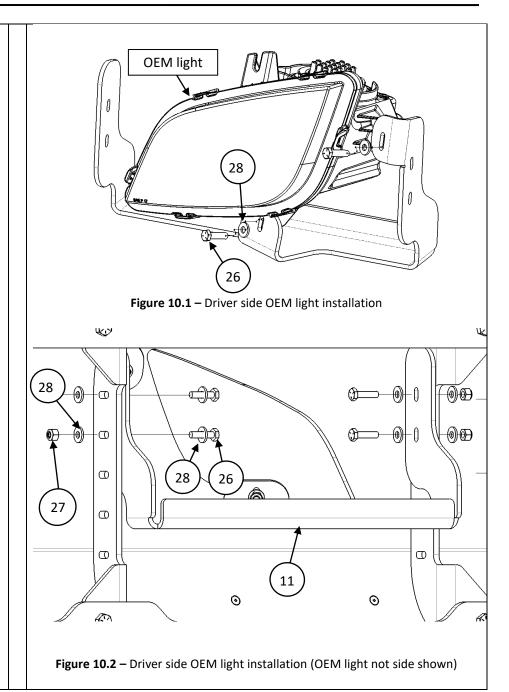
Part No: FL50C4-02-IG Rev: D

Date: 2019-05-23

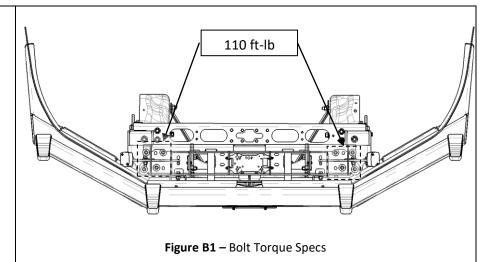
 If equipped with OEM driving lights, remove driving lights from factory bumper.

Next install the OEM Driving lights into the light bracket for their respective sides (items 11, and 12) using the provided hardware (items 26, 27, and 28 from Hardware Kits 2F0019 and 2F0020).

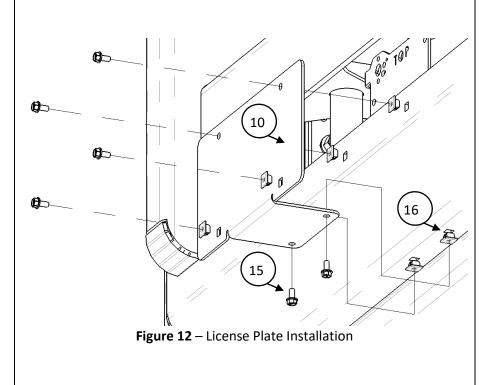
Install the OEM driving light and light bracket subassemblies into channel struts kit (Item 7), found pre-installed in the Herd Bumper (Item 1), using the provided hardware (items 26, 27, and 28 from Hardware Kits 2F0019 and 2F0020).



11. Close the bumper and check fitment. Bumper position can be adjusted side to side and up or down as required. Once fitment is confirmed, tighten 8 mounting bolts from step 8 to 110 ft-lb. Reattach wiring to driving lights.



12. Insert the nylon licence nuts (Item 16 from Hardware Kit 2F0025) into the square cutouts in the bumper and licence plate bracket (Item 10). Bolt the bracket into place using the No. 14 licence bolts (Item 15 from Hardware Kit 2F0025). The front four bolts can be used to mount a licence plate as needed.



13. Install the air deflector (Item 14) to the Bumper (Item 1) as shown, using the supplied hardware (items 26, 27, and 28 from Hardware Kit 400009).

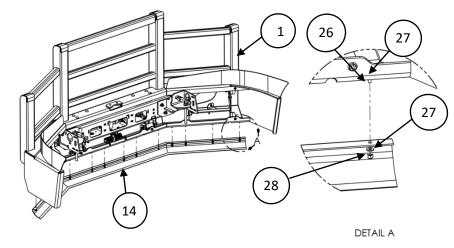
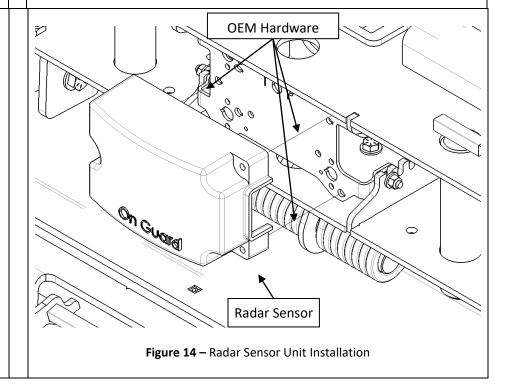


Figure 13 – Air Deflector Installation

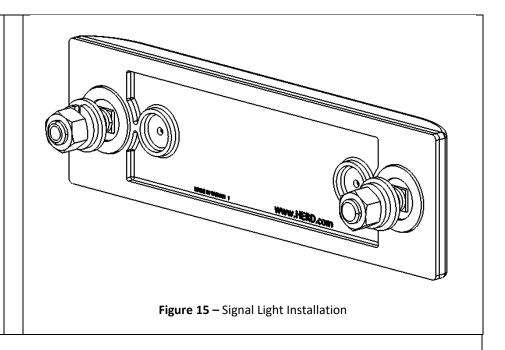
14. If the truck was equipped with radar sensor, install radar sensor onto Herd sensor bracket using the OEM hardware. Reattach wiring to the radar sensor unit.

#### Note:

To install sensor unit, use Hardware Kit 100046, and refer to Herd Radar Sensor Installation Guide (S009).



15. If installing surface-mount signal lamps, 4LMPA001, apply max 85 in-lbs (7ft-lbs, 9.6Nm)



## **Important**

- Check mounting points after the first 5000 km and every 3-6 month.
- This bumper is equipped with Herd Slam Latch which requires periodic adjustment. Refer to Slam Latch Installation adjustment instructions (S011) to properly adjust your Slam Latch.