PARTS LIST:		
1 Front Bumper Assembly	8	12mm x 50mm Bolt Plates
1 Winch Tray	20	12mm x 50mm Hex Bolts
1 Winch Access Cover Panel	28	12mm Lock Washers
1 Driver/left Frame Mounting Bracket	28	12mm Hex Nuts
1 Passenger/right Frame Mounting Bracket	48	12mm x 32mm OD x 3mm Flat Washers
2 Plastic Plugs for license plate mount	4	6mm x 20mm Button Head Bolts
1 Adaptive Cruise Control (ACC) Plastic Cover	6	6mm x 35mm Hex Bolts
1 Driver/left ACC Mounting Bracket	5	6mm x 20mm Button Head Combo Bolts
1 Passenger/right ACC Mounting Bracket	16	6mm x 18mm OD x 1.6mm Flat Washers
1 ACC Cover Bracket	10	6mm Lock Washers
1 ACC Sensor Bracket	10	6mm Hex Nuts
4 Parking Sensor 20mm x 10mm Foam Spacers	1	2.5mm Allen Wrench
4 Plastic Parking Sensor Hole Plugs	8	4mm x 20mm Button Head Screws
4 Parking Sensor Retaining Caps	8	4mm Hex Nuts
4 Parking Sensor 25mm x 15mm Foam Seals	16	4mm x 8.65mm x 0.8mm Flat Washers
1 Sensor Cover Kit	8	4mm Lock Washers
1 4mm Allen Wrench	8	4mm Self-tapping Screws
	• @	
],	Driver/left
CC Plastic Cover Passenger/right Frame Bracket (2) License (2) License (4) Sensor Cap (4) Foam Spacer (4) Foam Spacer (4) Foam Seals		Frame Bracket ACC Cover Bracket
(4) 12mm		Tray _ Driver/left ACC Brack

PROCEDURE:

SOME PARTS ARE SMALL AND WILL BE HIDDEN IN WRAPPINGS. REMOVE CONTENTS FROM PACKAGING. 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. Unplug all wiring harnesses connecting bumper to vehicle (Figure 1).
- Remove the outer bumper supports attaching the outer ends of the bumper to the side of the frame, (Figure 2). Remove the plastic covers surrounding the tow hooks to uncover the bumper bolts, (Figures 3 & 4).
- 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 (8) factory bumper bolts, (Figure 4).
 WARNING! Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper off, over the tow hooks. There will be 2 plastic pins that attach the bumper to the grille that need to be pried off (Figure 5).
- 4. Remove the driver/left side tow hook from the end of the frame, (Figure 6). Next, remove the (4) factory hex nuts, lower frame extension and double bolt plates from the end of the frame, (Figure 6). Repeat this Step to remove the passenger/right side tow hook and lower frame extension. Note: tow hooks will not be re-installed.
- Next, select the Driver/left Mounting Bracket. Slide the Bracket over the end of the frame. Line up the slots in the side of the Bracket with the holes in the sides of the frame. Select (4) 12mm Bolt Plates. Insert the Bolt Plates into the open end of the frame and out through the Bracket. Attach the Bracket to the Bolt Plates with (4) 12mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, (Figure 7). Leave loose at this time.
- Attach the top of the Bracket to the top of the frame at the original tow hook location with the included (4) 12mm x 50mm Hex Bolts, (8) 12mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, (Figure 8). Do not fully tighten hardware yet.
- 7. Repeat Steps 5 & 6 to attach the passenger/right Frame Bracket to the end of the frame.
- Next, select the Winch Tray Assembly, (Figure 9). Slide the Winch Tray between the two Brackets. Attach the Winch Tray to the Brackets with (6) 12mm x 50mm Hex Bolts, (12) 12mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, (Figure 9). Leave hardware loose.
- **9.** If installing winch, attach winch to Winch Tray at this time. Winch must be installed before Bumper is placed in position against Brackets. Also attach winch cable guide, (not included), to Bumper. Follow manufacturer's instructions to properly wire the winch to the electrical system.
- 10. Determine if truck is equipped with fog lights, otherwise skip to step 13.

Models with factory fog lights:

- **a.** Remove fog lights from the back of the OE bumper. Brackets may need to be removed to gain proper access (**Figure 10**).
- **b.** Move to the driver/left fog light opening. Place fog light into the fog light bracket on the new HD bumper. Make note of the plastic tabs that need to be removed for the light to sit flush. Use diagonal cutters to trim off tabs (Figure 11 & 12).
- c. Attach fog light to the Bracket with the included (4) 4mm x 20mm Button Head Screws, (8) 4mm x 9mm STD Flat Washers, (4) 4mm Lock Washers and (4) 4mm Hex Nuts, (Figure 12).
- **d.** Repeat Steps to install the passenger/right fog light.
- **11.** Determine if truck is equipped with adaptive cruise control, (ACC).

Vehicles without Adaptive Cruise Control, skip to Step 12.

- **a.** Remove the 3 nuts securing the ACC sensor to the front of the OE bumper. (Figure 13). Unplug the wiring harness and remove the sensor and bracket from the bumper.
- b. Remove the screen covering the square opening on the driver/left side of the Bumper, (Figure 14).
- c. Select the long, Driver/left ACC Bracket and attach it to the inner/lower tab re-using the screen hardware from the previous step. In a similar fashion, attach the shorter Passenger/right ACC Bracket to the outer/upper tab. Do not fully tighten hardware. (Figure 15).
- d. Select the OE ACC sensor and the provided ACC Sensor Bracket. Place the Sensor Bracket between the two ACC Brackets previously installed. Place the ACC sensor in front and insert (4) 6mm x 35mm Hex Bolts through (4) 6mm Flat Washers and the (4) holes on the ACC sensor to attach the assembly to each side of the ACC Brackets. Secure with (4) 6mm Flat Washers, (4) 6mm Lock Washers and (4) 6mm Hex Nuts, (Figure 16). Note: Pay attention that the sensor matches the OE configuration and is straight. This may require fine tuning at the end of the install.

- e. Select the ACC Plastic Cover and the ACC Cover Bracket. Insert (4) 6mm x 25mm Button Head Bolts through the (4) holes on the ACC Plastic Cover to each side of the ACC cover bracket. Secure with (4) 6mm Flat Washers, (4) 6mm Lock Washers and (4) 6mm Hex Nuts, (Figure 17).
- Attach the ACC Cover assembly to the top of the ACC Sensor Bracket with the included (2) 6mm x 35mm Hex Bolts, (4) 6mm Flat Washers, (4) 6mm Lock Washers and (4) 6mm Hex Nuts, (Figure 18).
- **12.** Determine if truck is equipped with front parking sensors.
 - For vehicles not equipped with front parking sensors.
 - a. Select the included (4) Plastic Parking Sensor Plugs. From the front of the bumper, push plugs into sensor sleeves, (Figure 19).

For vehicles equipped with front parking sensors.

- **a.** Select a sensor and remove the OE silicone seal from the end of the sensor. Remove the adhesive backing from the supplied 15.5mm x 25mm x 2mm Foam Washer Sensor Seal. Slide the Foam Seal over front of sensor (Figure 20).
- b. Insert sensor with Seal into sensor mount on back of bumper until it clicks (Figure 21).
- c. Select the included (1) Foam Spacer and peel off the adhesive backing. Place Foam Spacer into (1) Sensor Retainer Cap. Push Sensor Retaining Cap and Foam Spacer onto sensor mount and lock into mounting holes, (Figure 21).
- d. Repeat previous Steps to install remaining sensors.
- 13. With assistance, carefully position the Bumper Assembly to the outside 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.
- 14. Attach the Bumper to the outside of the Frame Brackets with the included (6) 12mm x 50mm Hex Bolts, (12) 12mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, (Figure 22).
- 15. Level and adjust the bumper, then fully tighten all 12mm hardware to 65-70ft-lbs.
- 16. Level and adjust the ACC sensor. Position plastic ACC cover so the sensor is centered behind it.
- 17. Remove the factory wiring harness from the old bumper and reattach to the new HD bumper.
- Insert (2) Plastic Plugs into the Bumper. Reuse factory hardware to attach license plate to Plugs. On models with grille emblem mounted factory camera, remove the center window screen, (Figure 23).
- **19.** Do periodic inspections to the installation to make sure that all hardware is secure and tight.



(Fig 1) Unplug all wiring harnesses. (Inside of driver side frame shown)



(Fig 2) Remove outer bumper support brackets between frame and bumper (arrow) [Passenger side shown]

Driver Side Installation Pictured



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



(Fig 4) Remove bumper bolts



(Fig 5) Remove the clips attaching rubber bumper trim to grille.



(Fig 6) Remove tow hook assembly and lower frame extension



Driver Side Installation Pictured





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