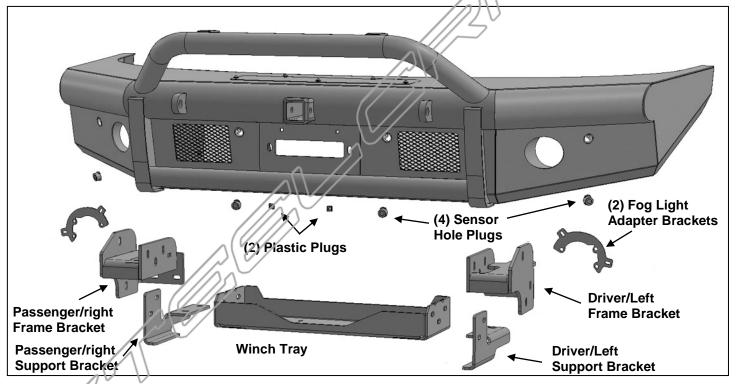


PARTS LIST:

1	HD Bull Nose Front Bumper Assembly	4	12-1.25mm x 55mm Special Fine Thread Hex Bolts
1	Driver/left Frame Mounting Bracket	12	12-1.75mm x 60mm Hex Bolts
1	Passenger/right Frame Mounting Bracket	28	12mm x 37mm x 3mm Flat Washers
1	Driver/left Support Bracket	4	12mm Lock Washers
1	Passenger/right Support Bracket	12	12mm Nylon Lock Nuts
2	Fog Light Adapter Brackets (L or R)	5	6mm x 20mm Button Head Combo Bolts (cover)
1	Winch Tray	10	6mm x 25mm Hex Bolts
1	Winch Access Cover	20	6mm x 18mm x 1.6mm Flat Wasners
2	Plastic Plugs for license plate mount	10	6mm Nylon Lock Nuts
4	Sensor Hole Plugs	8	4mm x 10mm Button Head Bolts
1	Sensor Cover Kit	1	2.5mm Wrench
		1	4mm Wrench



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 factory fog lights and/or sensors, unplug the wiring harness leading to the bumper. Release the harness from clips attached to the back of the bumper and move harness out of the way.
- 2. Starting on the driver/left side, remove the plastic panel next to the opening in the bumper, (Figure 1). On models with sensors, remove the panel and unplug the sensor, (Figure 2). On models with tow hooks, remove the plastic fill panel directly above the tow hook, (Figure 3). Repeat this Step on passenger/right side of vehicle.
- 3. Remove the factory skid plate if equipped, (Figure 4). IMPORTANT: Skid plate cannot be reinstalled.
- **4.** Next, remove the hardware attaching the inner bumper reinforcements to the outside of the frame and body mount bracket, **(Figure 5)**. Do not remove large body mount bolt. Repeat on the passenger/right side of the vehicle.

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- 5. 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 (3) hex bolts attaching each side of the bumper to the bracket on the end of the frame, (Figure 2). 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 end of the frame and past the tow hooks if equipped.
- **6.** Once the bumper assembly has been removed, remove both bumper brackets and tow hooks, (if equipped), from the end of the frame, **(Figures 6 & 7). NOTE**: Tow hooks cannot be reinstalled.
- 7. Select the driver/left Support Bracket, (Figure 8). Reuse the (2) factory tow hook hex bolts or the included (2) 12-1.25mm x 55mm Special Fine Thread Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers to attach the Support Bracket to the bottom of the frame, (Figures 8 & 10). Leave hardware loose at this time.
- 8. Next, select the driver/left Frame Mounting Bracket. Reuse the (3) factory hex bolts from the bumper bracket to attach the Frame Bracket to the end of the frame, (Figures 9 & 10). Reuse the (1) factory hex bolt to attach the Frame Bracket to the top of the frame. Snug but do not fully tighten all Bracket hardware at this time
- 9. Repeat Steps 7 & 8 to install the passenger/right side Frame and Support Brackets.
- 10. Optional Winch Tray and Winch installation (winch sold separately):
 - a. Select the Winch Tray. With assistance, slide the Winch Tray between the Frame Brackets. Attach the Winch Tray to the Frame Brackets with (6) 12mm x 60mm Hex Bolts, (12) 12mm Flat Washers and (6) 12mm Nylon Lock Nuts, (Figures 11 & 12). Snug but do not fully tighten all hardware.
 - **b.** If installing winch, follow manufacturer's instructions to attach the winch to the Winch Tray. Winch must be installed before Bumper is placed in position against Brackets. Attach winch cable guide, (not included), to Bumper assembly.
 - **c.** Follow manufacturer's instructions to properly wire the winch to the electrical system.
- 11. Determine if the bumper is equipped with sensors and/or fog lights.

Models without bumper sensors:

- a. Select the included (4) Rubber Plugs.
- b. From behind bumper, push plugs into sensor mounting holes. (Figure 13).

Models with bumper mounted sensors and/or fog lights:

- a. Remove the sensors, foo lights and wiring harness from the factory bumper, (Figure 14).
- **b.** Select (1) sensor. Push the sensor into the mounting socket in the back of the bumper until it is flush (or as close as possible) to the outer edge of the Bumper.
- c. Secure the sensor to the socket with (2) 4mm x 10mm Button Head Screws, (Figure 13). 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.
- d. Repeat to install all sensors. **NOTE**: See **Step 15** for fog light installation.
- **12.** With assistance, position the Bumper Assembly up to the Mounting 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.
- 13. Attach the driver/left side of the Bumper to the Mounting Bracket and Support Bracket with the included (3) 12-1.75mm x 60mm Coarse Thread STD Hex Bolts, (6) 12mm Flat Washers and (3) 12mm Nylon Lock Nuts, (Figures 15—17). Snug but do not fully tighten hardware at this time. Repeat this Step to attach the passenger/right side of the Bumper to the Brackets.
- **14.** Level and adjust the bumper and fully tighten all hardware.
- 15. On models equipped with factory fog lights, select (1) Fog Light Adapter Bracket. Attach the Bracket to the driver/left fog light with the included (3) 6mm x 25mm Hex Bolts, (6) 6mm Flat Washers and (3) 6mm Nylon Lock Nuts, (Figure 18). Do not overtighten the hardware. Next, attach the light with Bracket to the mounting tabs on the back of the bumper with the included (2) 6mm x 25mm Hex Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, (Figures 18 & 19). Repeat this Step to attach the passenger/right fog light.
- **16.** Reinstall the wiring harness to the sensors and/or fog lights.
- **17.** If front license plate is required, insert (2) Plastic Plugs into the square holes in the Bumper. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 20)**.

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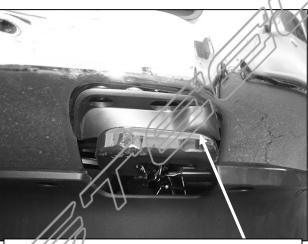
- **18.** Select Winch Access Cover. Attach Cover to top of bumper with included (5) 6mm Button Head Combo Bolts. **NOTE**: Installation is optional.
- 19. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

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.

Driver Side Installation Pictured

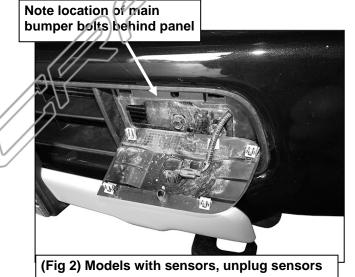


(Fig 1) Remove fill panel to access bumper bolts



(Fig 3) Remove plastic panel above tow hook

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

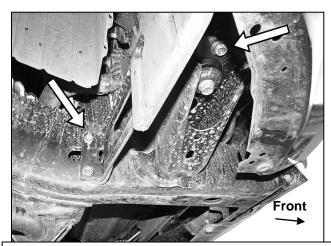




(Fig 4) Remove skid plate if equipped

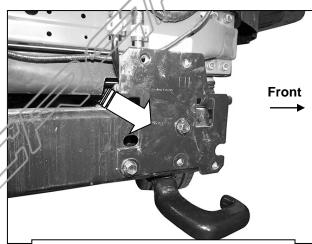
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Driver Side Installation Pictured



(Fig 5) Remove hardware attaching bumper supports to side of frame and body mount bracket, (see arrows). Passenger/right side pictured

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

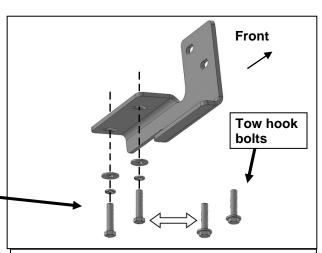


(Fig 6) Remove bumper bracket (arrow) and tow hook (if equipped)



(Fig 7) Driver/left side of frame

Reuse tow hook bolts or...
Models without tow hooks
use the included:
(2) 12-1.25mm x 55mm
Special Fine Thread Hex Bolts
(2) 12mm Lock Washers
(2)12mm Flat Washers

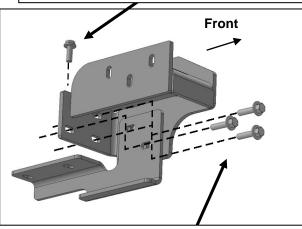


(Fig 8) Attach driver/left Support Bracket to threaded holes (tow hook) in bottom of frame

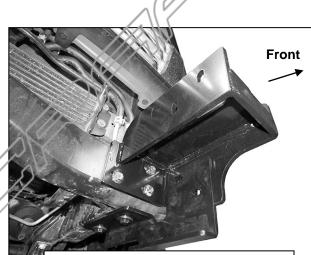
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Driver Side Installation Pictured

Reuse factory bumper bracket hardware to attach driver/left Frame Bracket to threaded holes in end of frame for bumper bracket

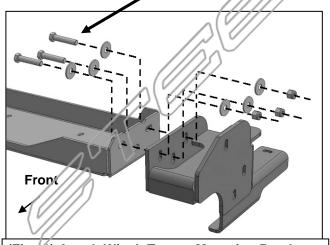


(Fig 9) Reuse factory bumper bracket hardware to attach driver/left Frame Bracket to threaded holes in end of frame for bumper bracket

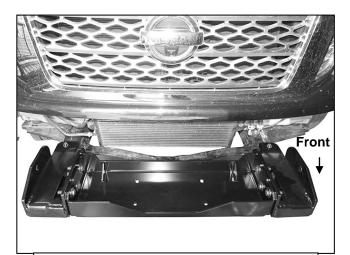


(Fig 10) Driver/left Frame Bracket and Support Bracket pictured from below

- (3) 12mm x 60mm Hex Boks
- (6) 12mm Flat Washers
- (3) 12mm Nylon Lock Nuts

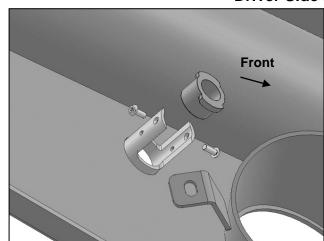


(Fig 11) Attach Winch Tray to Mounting Brackets



(Fig 12) Winch Tray and Brackets installed

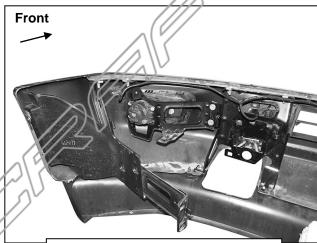
Driver Side Installation Pictured



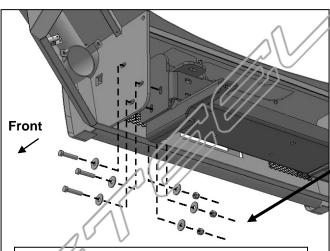
(Fig 13) On models without sensors, push sensor plug into mounting sleeve.

On models with sensors, push sensor into sleeve. Use 4mm Screws to lock sensor in place.

IMPORTANT: Sensors fit snug in sockets. The 4mm Screws are only 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.



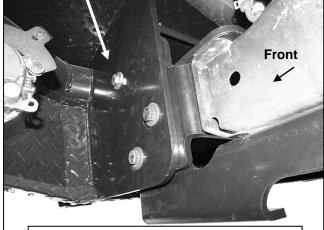
(Fig 14) Remove sensors, fog light and wiring harness from bumper



(Fig 15) Attach Bumper to Bracket assembly

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

- (3) 12-1.75mm x 60mm Hex Bolts
- (6) 12mm Flat Washers
- (3) 12mm Nylon Lock Nuts



(Fig 16) Attach Bumper to Frame Bracket and Support Bracket, (driver/left side pictured from behind bumper)

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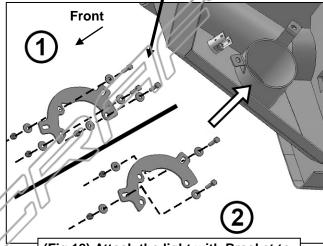
Driver Side Installation Pictured



(Fig 17) Attach Bumper to Frame Bracket and Support Bracket, (driver/left side pictured from below)



Attach the Adapter Bracket to the fog light first if equipped



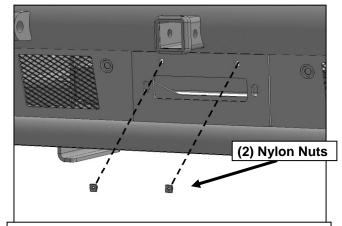
(Fig 18) Attach the light with Bracket to mounting tabs on the Bumper (arrow)



(Fig 19) Fog light with Bracket installed

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





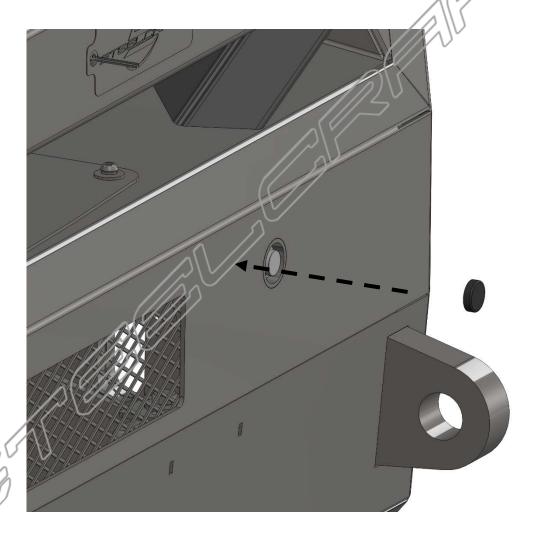
(Fig 20) Attach License Plate Bracket to Bumper

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Parking Sensor Covers

Re-installing OE parking sensors can be tedious and requires a lot of patience. Some models may have issues even after thorough care and troubleshooting.

If you experience issues, the provided covers will silence the sensors being triggered and avoid interior warnings. This action would be completely the customer's prerogative and Steelcraft is not recommending the sensors being covered.



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