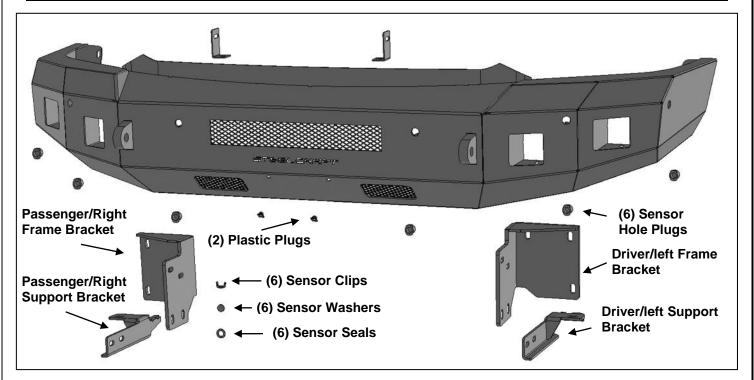


PARTS LIST:

. /			
1	Fortis Bumper Assembly	2	14mm x 44mm x 3mm Flat Washers
1	Driver/left Frame Mounting Bracket	2	14mm Lock Washers
1	Passenger/right Frame Mounting Bracket	14	12-1.75mm x 55mm Hex Bolts
1	Driver/left Support Bracket	28	12mm x 32mm x 3mm STD Flat Washers
1	Passenger/right Support Bracket	14	12mm Nylon Lock Nuts
1	Driver/left "L" Light Bracket	2	8-1.25mm x 25mm Hex Bolts
1	Passenger/right "L" Light Bracket	2	8-1.25mm x 16mm Hex Bolts
2	Plastic Plugs for license plate mount	6	8mm x 24mm x 2mm Flat Washers
6	Sensor Hole Plugs	4	8mm Lock Washers
6	Foam Washer	2	8mm Hex Nuts
6	15.5mm x 25mm x 2mm Foam Front Seal	12	4mm x 10mm Button Head Bolts
6	Sensor Retaining Rings	1	2.5mm Allen Wrench
2	14-2mm x 50mm Hex Bolts	1	Sensor Cover Kit



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 and bracket.
- 2. Move to the driver/left side of the bumper. Remove the screws attaching the plastic splash guard to the outside of the lower frame. Repeat to remove the screws from the passenger/right side of the frame, (Figure 1). On models equipped with active front air dam, temporarily remove the air dam assembly for easier access to bumper hardware, (Figure 2).
- **3.** On models with factory fog lights and/or sensors, unplug wiring harness leading to the bumper. Move harness away from bumper to avoid damage.
- **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 (3) hex nuts attaching each bumper bracket to 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 off of the end of the frame.

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- 5. On models equipped with tow hooks, loosen the hex bolts and slide the tow hook out from under the hardware, (Figures 3 & 4). IMPORTANT: The rear bolts attaching the tow hooks to the bottom of the frame are body mounting bolts and <u>cannot be removed</u>. Only loosen the bolts enough to remove the tow hook and to install the Support Brackets, (Step 7, Figure 7). NOTE: Tow hooks cannot be reinstalled.
- 6. Select the driver/left side Frame Mounting Bracket, (Figure 5). Attach the Bracket to the end of the frame with (3) 12mm x 55mm Hex Bolts, (6) 12mm Flat Washers and (3) 12mm Nylon Lock Nuts, (Figures 5 & 7).
- 7. Select the driver/left Support Bracket, (Figure 6). Slide the inner end of the Support Bracket under the inner body bolt. Attach the forward end of the Support Bracket to the bottom of the frame with the included 14mm x 50mm Hex Bolt, 14mm Lock Washer and 14mm Flat Washer, (Figures 6 & 7). NOTE: On models with tow hooks, reuse the factory hex bolt to attach the Support Bracket to the frame, (Figure 4 & 7). Leave hardware loose.
- 8. Repeat Steps 5—7 to install the passenger/right side Frame and Support Brackets, (Figure 8).
- **9.** Determine if the vehicle is equipped with sensors in the front bumper.

Models without bumper sensors:

- a. Select the included (6) Rubber Plugs.
- **b.** From behind bumper, push plugs into sensor mounting holes, **(Figure 8)**.

Models with bumper mounted sensors:

- **a.** Remove the sensors and wiring harness from the factory bumper, **(Figure 9)**. Note location of each sensor for correct reinstallation.
- **b.** Remove the seal from the end of the sensor, **(Figure 10)**. Replace seal with the included larger Foam Seal. Push the sensor into the mounting socket in the back of the bumper.
- **c.** Apply (1) Foam Washer to the plug end of the sensor, **(Figure 11)**. Trim Washer as required.
- d. Secure the sensor to the socket with (1) Sensor Retaining Clip, (Figure 11).
- e. Repeat previous Steps for remaining sensor installations.
- f. Reinstall the factory wiring harness. **NOTE**: It may be necessary to remove some of the outer wiring cover to extend the reach of the harness to the sensors. Secure harness to the Bumper as required.

10. Center LED light installation (sold separately).

- a. Select the L/R "L" Brackets, (Figure 12). Attach the Brackets to the top of the (2) mounting tabs welded onto the back of the bumper with the included 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 12)**. 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 your light manufacturer if possible, to install hardware larger than 8mm.
- **c.** Follow light manufacturer's instructions to properly wire the light to the vehicle.
- **11.** With assistance, position the Bumper Assembly up to the inside of the Frame Brackets, **(Figure 13)**. 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.
- **12.** Line up the driver/left side mounting plate on the back of the Bumper with the slots in the Frame Bracket. Attach the Bumper to the Frame Bracket and Support Bracket with the included (4) 12mm x 55mm Hex Bolts, (8) 12mm Flat Washers and (4) 12mm Nylon Lock Nuts, **(Figure 13—15)**. Leave hardware loose. Repeat this **Step** to attach the passenger side of the Bumper to the Brackets.
- **13.** Level and adjust the bumper and fully tighten all hardware.
- **14.** Reattach the factory wiring harness to the main harness. Reinstall the active air dam if previously removed, **(Step 2)**.
- **15.** Use the included (2) push-in Plastic Nuts to attach the front license plate, (if required), to the (2) holes in the front of the Bumper, **(Figure 16)**.
- **16.** Do periodic inspections to the installation to make sure that all hardware is secure and tight.

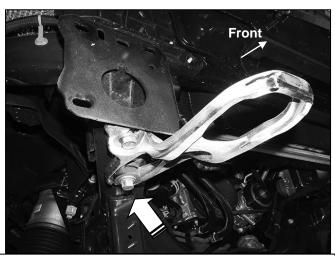
To protect your investment, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Bumper assembly.

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Driver/left Side Installation Pictured



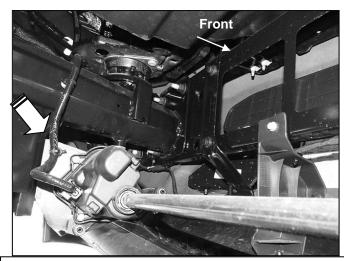
(Fig 1) Remove screws attaching plastic splash guard to frame (arrow). Passenger/right side pictured



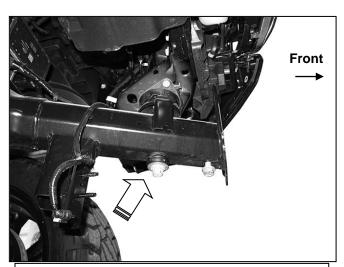
(Fig 3) Loosen hex bolts and slide off tow hook. IMPORTANT: Loosen but do not remove rear bolt (arrow). Passenger/right side pictured

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

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



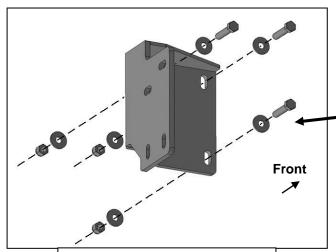
(Fig 2) Remove hex nuts attaching bumper. Temporarily remove active air dam for better access to bumper hardware. Back of bumper pictured



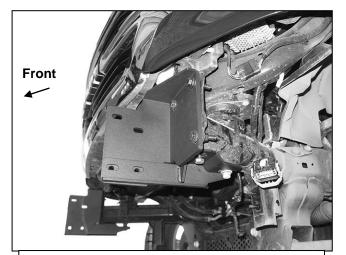
(Fig 4) IMPORTANT: Loosen but do not remove rear bolt (arrow). Driver/left side pictured

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Driver/left Side Installation Pictured



(Fig 5) Attach driver/left Frame Bracket to end of frame

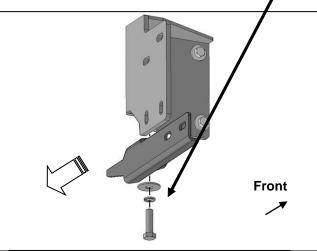


(Fig 7) Frame and Support Brackets installed

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

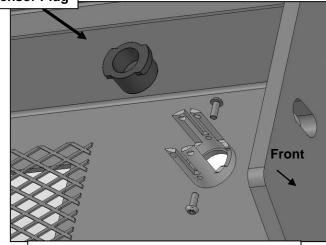
- (3) 12mm x 55mm Hex Bolts
- (6) 12mm STD Flat Washers
- (3) 12mm Nylon Lock Nuts

Reuse factory bolt (tow hook model) or 14mm x 50mm Hex Bolt 14mm Lock Washer 14mm Flat Washer



(Fig 6) Slide inner end of driver/left Support Bracket under body mount bolt. Attach Support Bracket to bottom of frame

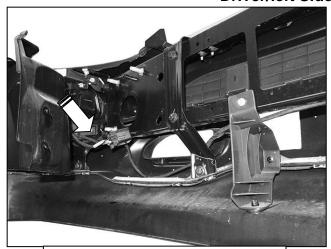
Sensor Plug



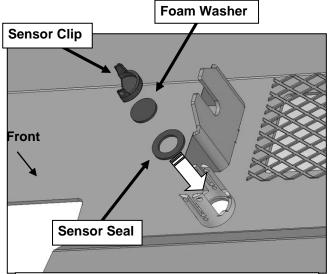
(Fig 8) Push sensor plug into mounting sleeve. Use of 4mm Screws is optional

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Driver/left Side Installation Pictured



(Fig 9) Remove sensors and wiring harness from factory bumper



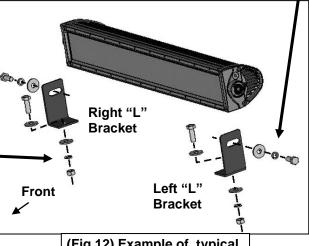
(Fig 11) Slide sensor into sleeve, insert Foam Washer and Clip to lock sensor in sleeve

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



(Fig 10) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

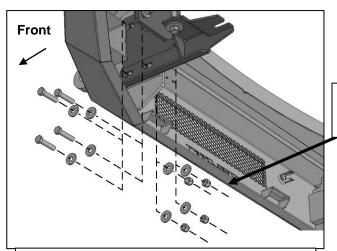
- (2) 8mm x 16mm Hex Bolts
- (2) 8mm Lock Washers
- (2) 8mm Flat Washers



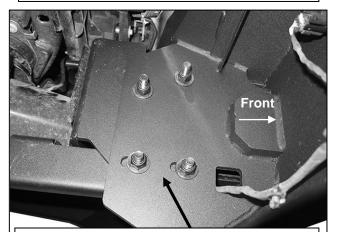
(Fig 12) Example of typical center light installation

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Driver/left Side Installation Pictured



(Fig 13) Attach Driver/left side of Bumper to inside of Frame Bracket and Support Bracket

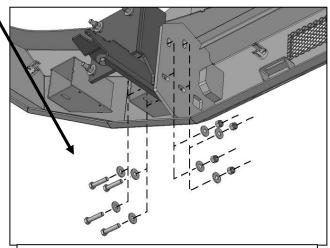


(Fig 15) Attach lower (2) slots in Bumper to inside of Frame Bracket and Support Bracket. Driver/left side pictured from behind Bumper

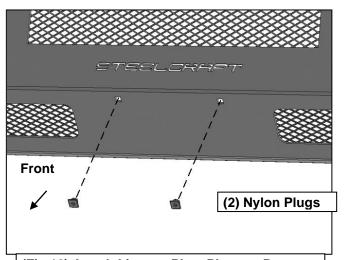


WARNING! Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.

- (4) 12mm x 55mm Hex Bolts
- (8) 12mm Flat Washers
- (4) 12mm Nylon Lock Nuts



(Fig 14) Attach Driver/left side of Bumper to inside of Frame Bracket and Support Bracket



(Fig 16) Attach License Plate Plugs to Bumper

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