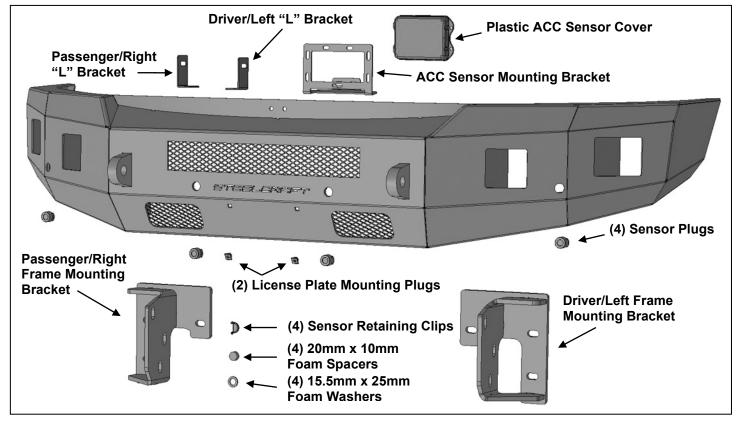
PARTS LIST:

1	Fortis Front Bumper	12	12mm Lock Washers
1	Driver/Left Frame Mounting Bracket	12	12mm Hex Nuts
1	Passenger/Right Frame Mounting Bracket	4	8-1.25mm x 25mm Hex Bolts
1	Driver/Left "L" Light Bracket	2	8-1.25mm x 16mm Hex Bolts
1	Passenger/Right "L" Light Bracket	10	8mm x 24mm x 2mm Flat Washers
1	ACC Mounting Bracket	6	8mm Lock Washers
1	ACC Plastic Cover	4	8mm Hex Nuts
4	20mm x 10mm Sensor Foam Spacer	7	6-1.0mm x 25mm Button Head Bolts
4	15.5mm x 25mm x 2mm Sensor Foam Washers	14	6mm x 18mm x 1.6mm Flat Washers
4	Sensor Retaining Clips	7	6mm Lock Washers
4	Rubber Sensor Plugs	7	6mm Hex Nuts
1	Sensor Cover Kit	8	4mm x 10mm Button Head Bolts
2	License Plate Plugs	1	4mm Wrench
12	12-1.75mm x 45mm Hex Bolts	1	2.5mm Wrench
24	12mm x 37mm x 3mm Flat Washers		



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS REQUIRED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

- 1. Move to the front of the vehicle. Remove the license plate. If the vehicle is equipped with tow hooks, remove the plastic covers surrounding the tow hooks and remove the tow hooks, (Figures 1 & 2).
- 2. Unplug the center wire harness, if equipped, located in the opening in the bumper under the license plate on the right side of the opening, (Figure 3). Remove the center plastic cover from the front of the bumper, (Figures 4 & 5). Release the wiring harness from the clips attached to the back of the plastic cover. Remove the center wiring harness from the plastic cover.

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- 3. Place blocks or jack stands under the front bumper to support it during hex nut removal. Once the bumper has been safely supported, loosen the factory hex nuts attaching the bumper to the frame, (Figure 6). WARNING! Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling.
- **4.** With assistance, continue to hold the bumper in position, pull the bumper out slightly to locate and unplug the outer wiring harness located under the Driver/Left headlight, **(Figure 7)**. Remove the bumper and place it on a stable surface.
- 5. Select the driver/left Frame Mounting Bracket. Reuse the factory hex nuts to attach the Bracket to the end of the frame. Repeat this Step to attach the passenger/right Frame Bracket. IMPORTANT: The plastic connecting the factory bolt plate can break. Hardware has been included to replace the bolt plates. Use a small flat blade screwdriver to pry off the clips holding the bolt plates in place and remove the bolt plates from the end of the frame. Attach each Frame Bracket to the end of the frame with the included (3) 12mm x 45mm Hex Bolts, (6) 12mm Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, (Figures 9 & 10). NOTE: Insert the 12mm Hex Bolts through the Bracket first then through the end of the frame. Do not fully tighten hardware at this time.
- **6.** Determine if the vehicle is equipped with bumper mounted parking sensors.

Models without front sensors.

- **a.** Select the included (4) Rubber Plugs.
- **b.** From behind bumper, push plugs into sensor sleeves, **(Figure 11)**. Use the included 4mm Screws to hold Plugs in sleeves (optional).

Models with front parking sensors.

- **a.** Remove the wiring harness and sensors if equipped, from the back of the bumper.
- **b.** Remove the silicone seal from the end of the sensor. Slide the 25mm x 15.5mm x 2mm Foam Washer over front of the sensor, **(Figure 12)**.
- **c.** Insert the sensor with Foam Washer into sensor sleeve.
- **d.** Place 20mm x 10mm Foam Spacer over the end of the sensor. Push the Retaining Clip into sensor mount and lock into mounting holes, **(Figures 12 & 13)**.
- e. Repeat previous Steps to install remaining sensors.
- f. Attach the factory wiring harness to the back of the Bumper. Plug all sensors into the harness.

7. Center LED light installation, (light sold separately).

- **a.** Select the L/R "L" Brackets, **(Figure 14)**. 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 14). 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.

Outer Light installation, (lights sold separately).

- a. Attach lights to the mounting location at the outer ends of the Bumper, (Figure 18).
- **b.** Follow the light manufacturer's instruction to properly wire lights once Bumper is installed.
- **8.** Determine if vehicle is equipped with Adaptive Cruise Control, (ACC). **NOTE:** Install the ACC assembly before attaching Bumper to vehicle. Models without ACC sensor, skip to **Step 9**.
 - **a.** Remove ACC sensor from factory bumper.
 - **b.** Attach the ACC sensor to the back of the Mounting Bracket with the included (3) 6mm x 25mm Button Head Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 15)**. **IMPORTANT**: Do not overtighten hardware to avoid damage to the sensor.
 - c. Attach the Plastic Sensor Cover to the front of the sensor and Bracket with the included (4) 6mm x 25mm Button Head Bolts, (4) 6mm Flat Washers, (4) 6mm Lock Washers and (4) 6mm Hex Nuts, (Figure 16). IMPORTANT: Do not overtighten hardware to avoid damage to the Plastic Cover.
 - **a.** Attach the complete ACC assembly to the top of the bumper with (2) 8mm x 20mm Hex Bolts, (4) 8mm Flat Washers and (2) 8mm Nylon Lock Nuts, (**Figure 17**). Tighten hardware.

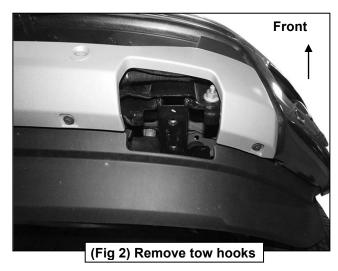
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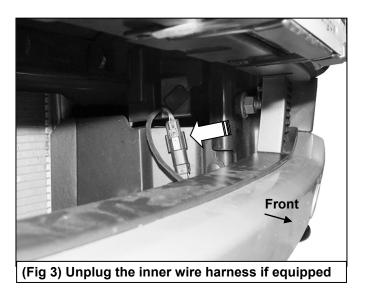
- **9.** With assistance, hold the bumper up to the inside of the Brackets on the end of the frame, **(Figure 15)**. Temporarily support the weight of the Bumper. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.
- 10. Attach the driver/left side of the Bumper to the inside of the Frame Bracket with the included (3) 12mm x 45mm Hex Bolts, (6) 12mm Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, (Figures 18 & 19). Repeat to attach the passenger/right side of the Bumper to the Bracket. Do not fully tighten hardware.
- **11.** Level and adjust the bumper and fully tighten all hardware.
- **12.** Insert the (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)**.
- **13.** Do periodic inspections to the installation to make sure that all hardware is secure and tight.

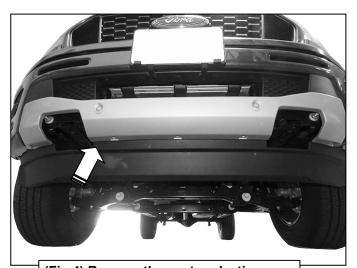
To protect your investment, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Bumper assembly.

Driver Side Installation Pictured









(Fig 4) Remove the center plastic cover

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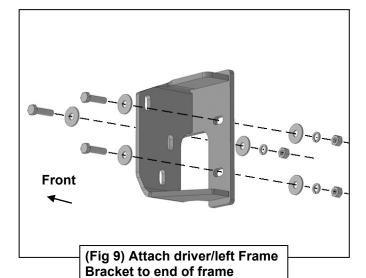
Driver Side Installation Pictured



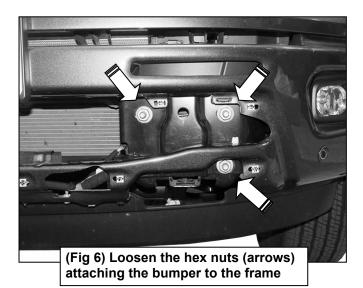
(Fig 5) Remove center plastic bumper cover and license plate



(Fig 7) Pull the bumper out slightly to access and unplug the bumper wire harness



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



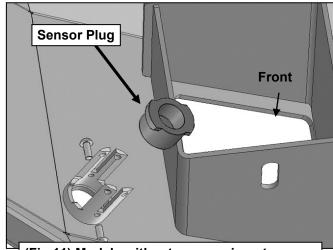
Front

(Fig 8) Remove factory bolt plates (arrow). NOTE: Factory bolt plates and hex nuts can be reused to install Frame Brackets or replace with included hardware (Fig 9)

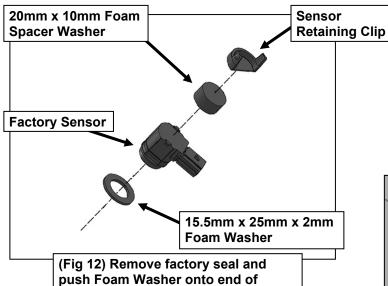
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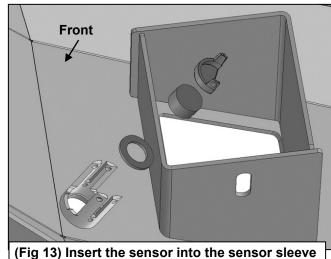
Driver Side Installation Pictured





(Fig 11) Models without sensors insert sensor plugs into the sensor mounting sleeve





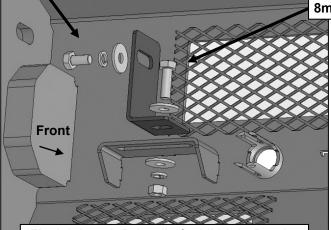
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Driver Side Installation Pictured

8mm x 16mm Hex Bolt 8mm Lock Washer 8mm Flat Washer

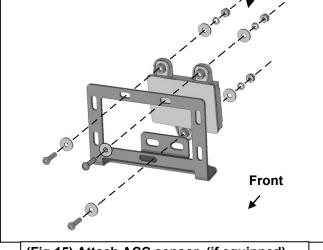
8mm x 25mm Hex Bolt (2) 8mm Flat Washers 8mm Lock Washer 8mm Hex Nut

- (3) 6mm x 25mm Button Head Bolts
- (6) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts

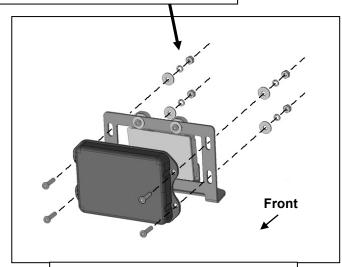


(Fig 14) Attach Driver/Left "L" Light Bracket to the tab on the back of the Bumper

- (4) 6mm x 25mm Button Head Bolts
- (4) 6mm Flat Washers (back only)
- (4) 6mm Lock Washers
- (4) 6mm Hex Nuts



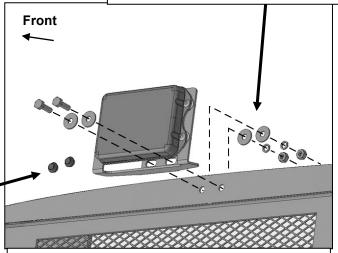
(Fig 15) Attach ACC sensor, (if equipped), to back of Relocation Bracket



(Fig 16) Attach Plastic Cover to front of Relocation Bracket, (if equipped).

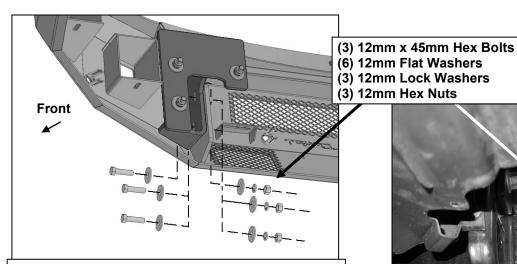
Models without ACC sensor, use the included (2) Rubber Plugs

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

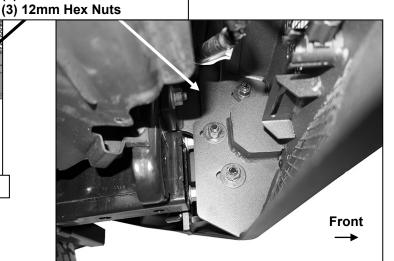


(Fig 17) Remove Rubber Plugs and attach Relocation Bracket with sensor to top of Bumper

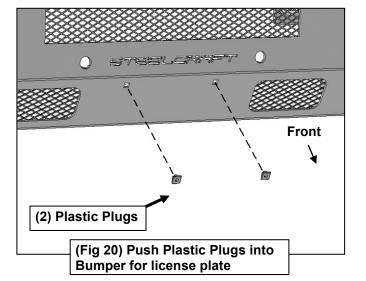
Driver Side Installation Pictured



(Fig 18) Attach bumper to inside of Frame Brackets



(Fig 19) Driver/Left side of Bumper attached to Bracket, (pictured from below/behind center of Bumper)





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