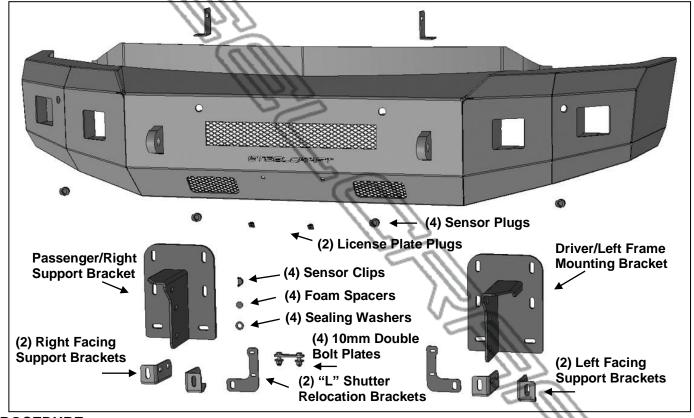
PARTS LIST:

1	Fortis Front Bumper	10	12-1.75mm x 45mm Hex Bolts
1	Driver/left Mounting Bracket	20	12mm x 32mm x 3mm Flat Washers
1	Passenger/right Mounting Bracket	10	12mm Nylon Lock Nuts
2	Left Facing Support Bracket	4	10mm x 35mm Double Bolt Plates
2	Right Facing Support Bracket	8	10mm x 27mm x 3mm Flat Washers
2 \$	Shutter Relocation "L" Brackets	8	10mm Nylon Lock Nut
1	Driver/left "L" LED Light Mounting Bracket	2	8-1.25mm x 25mm Hex Bolts
1	Passenger/right "L" LED Light Mounting Bracket	2	8-1.25mm x 16mm Hex Bolts
4	Sensor Plugs	6	8mm x 24mm x 2mm Flat Washers
4	Retaining Clips	4	8mm Lock Washers
4	Sealing Washers	2	8mm Hex Nuts
4	20mm x 2mm Foam Spacers	4	6-1.0mm x 20mm Hex Bolts
1	Sensor Cover Kit	8	6mm x 18mm x 1.6mm Flat Washers
2	Plastic Plugs for License Plate	4	6mm Nylon Lock Nuts



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. Start installation at the driver/left wheel opening. Remove the hardware attaching the fender liner to the front of the fender and the end of the plastic body panel, (Figure 1). Carefully pull the fender flare out to release the clips attaching it to the body panel, (fascia), and end of the fender, (Figure 2). IMPORTANT: Only release the forward end of the flare, it is not necessary to remove the flare. Remove the screws attaching the end of the fascia panel to the front fender, (Figure 3). Repeat this Step to release the passenger/right end of the fascia from the fender.
- 2. Pull along the center of the fascia to release the remainder of the clips, (Figure 4).

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- 3. Open the hood and remove the plastic cover from the top of the radiator and the grille, (Figure 4). Remove the hardware attaching the grille and pull it straight out from the vehicle. On models with grille mounted camera, unplug harness leading to the camera and remove the grille, (Figures 5 & 7).
- **4.** Unplug all wiring harnesses leading to the front bumper, **(Figure 6)**. Remove the license plate and bracket if equipped, **(Figure 7)**. Move all harnesses away from bumper.
- 5. Remove the outer bumper supports from the ends of the bumper, (Figure 8).
- **6.** Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, from above the bumper, remove the (2) factory upper and lower bumper bolts from each side, **(Figure 9)**. **WARNING!** Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Remove the bumper assembly.
- 7. Remove the factory bumper brackets and tow hooks, (if equipped), from the end of frame, (Figure 10 & 11). On models with lower radiator shutter assembly, unplug and remove the assembly, (Figure 10).
- 8. Select the driver/left Frame Mounting Bracket, (Figure 12). Reuse the factory hardware to attach the Bracket to the frame, (Figures 12 & 13). Do not tighten hardware at this time.
- 9. Next, select (1) 10mm Double Bolt Plate and (1) Left Facing Lower Support Bracket, (Figure 14). Insert the Bolt Plate up into the open end of the frame and through the holes in the outside of the frame, (Figure 13). Attach the Left Facing Support Bracket to the Double Bolt Plate with (2) 10mm Flat Washers and (2) 10mm Nylon Lock Nuts, (Figure 14 & 16). Attach the front of the Support Bracket to the back of the Mounting Bracket with (1) 12mm x 45mm Hex Bolt, (2) 12mm Flat Washers and (1) 12mm Nylon Lock Nut, (Figures 15 & 16). Do not fully tighten at this time. Repeat this Step to attach Right Facing Support Bracket to the inner side of the frame and back of the Mounting Bracket, (Figure 14 & 17).
- **10.** Repeat **Steps 8 & 9** to install the passenger/right Brackets.
- 11. On models equipped with lower radiator shutter system, remove shutter assembly from outer plastic housing, (Figure 18). Select (1) "L" Relocation Bracket. Use the previously installed (1) 12mm x 45mm Hex Bolt, (2) 12mm Flat Washers and (1) 12mm Nylon Lock Nut to attach the Bracket to the front of the Frame Bracket and Inner Support Bracket, (Figures 15 & 19). Repeat this Step to attach the remaining "L" Bracket to the passenger/right Frame Bracket. Attach the shutter assembly to the front of the "L" Brackets with the included (4) 6mm x 20mm Hex Bolts, (8) 6mm Flat Washers and (4) 6mm Nylon Lock Nuts, (Figures 19 & 20). Do not overtighten the 6mm hardware or damage to the shutter assembly may result. Plug wiring harness into shutter assembly
- **12. Optional Center LED light installation**, (sold separately). **NOTE**: Light may be easier to install in Bumper before Bumper Assembly is attached to Brackets.
 - a. Select the Driver side "L" Bracket. **NOTE**: "L" Brackets are offset for universal fitment for most LED bar style lights. Attach the Bracket to the top of the mounting tab on the back of the Bumper with the included (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 21)**. Do not tighten hardware at this time.
 - **b.** Repeat Previous Step for Passenger side "L" Bracket installation.
 - c. Attach the LED Light Bar to the Brackets with (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, (Figure 21). Do not fully tighten hardware at this time.
 - **d.** Center and adjust light position and tighten hardware.
 - **e.** Follow light manufacturer's instructions to wire the light to the vehicle's electrical system once Bumper has been fully installed.
- **13.** Determine if vehicle is equipped with parking sensors.

Models without bumper sensors:

- **a.** Select the included (4) Rubber Plugs.
- **b.** From behind bumper, push Plugs and Retaining Clips into sensor mounting holes, **(Figure 22)**.

Models with bumper mounted sensors:

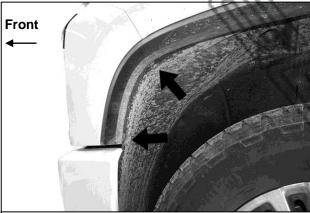
- **a.** Disassemble the front bumper to access the sensors and wiring harness, **(Figure 23)**. Unplug and remove sensors and wiring harness from factory bumper.
- **b.** Remove the silicone seal from the end of the sensor. Slide the included larger Sensor Seal over front of sensor, (Figure 24).
- c. Insert sensor with Seal into sensor mount, (Figure 25).

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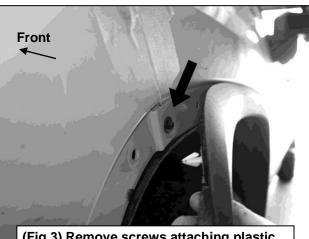
- **d.** Place Foam Spacer over end of sensor. Push Sensor Retaining Clip into sensor mount and lock into mounting holes, (**Figure 25**).
- e. Repeat previous Steps to install remaining sensors.
- f. Attach the wiring harness to the back of the Bumper and plug in all sensors.
- **14.** With assistance, position the Bumper Assembly up to the inside of the 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.
- **15.** Line up the (3) holes in the driver/left side of the Bumper with the (3) slots in the Frame Bracket. Attach the Bumper to the Bracket with the included (3) 12mm x 45mm Hex Bolts, (6) 12mm Flat Washers and (3) 12mm Nylon Lock Nuts, **(Figures 26 & 27)**. Do not fully tighten hardware at this time. Repeat this Step to attach the passenger/right side of Bumper to the Frame Bracket.
- **16.** Level and adjust the Bumper and fully tighten all 12mm hardware to 65-70ft-lbs.
- **17.** Use the included (2) push-in Plastic Plugs to attach the front license plate, (if required), to the (2) holes in the front Bumper, **(Figure 28)**.
- **18.** 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 Fortis Front Bumper assembly.

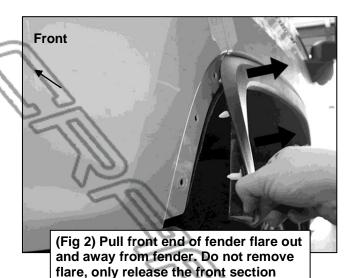
Driver/left Side Installation Pictured



(Fig 1) Release hardware attaching fender liner from plastic panel (fascia-see arrows)

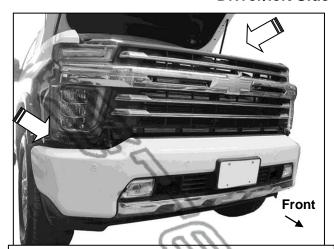


(Fig 3) Remove screws attaching plastic fascia panel to front end of fender (arrow)



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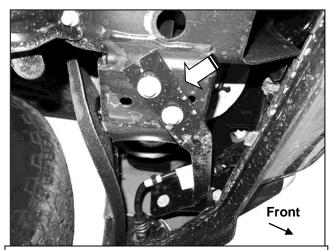
Driver/left Side Installation Pictured



(Fig 4) Remove plastic fascia from top of bumper



(Fig 6) Disconnect all wire harnesses leading to front bumper



(Fig 8) Remove outer bumper supports attached to bottom of frame (driver/left pictured)

Remove plastic cover from top of grille



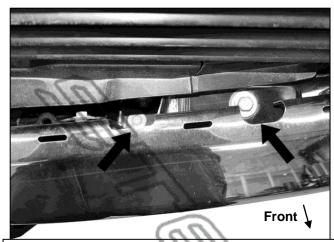
(Fig 5) Disconnect harness to camera (if equipped) and remove grille



(Fig 7) Grille and fascia removed

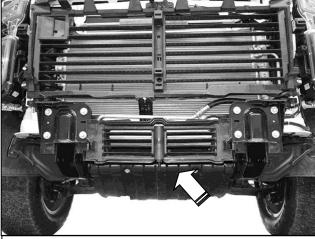
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Driver/left Side Installation Pictured

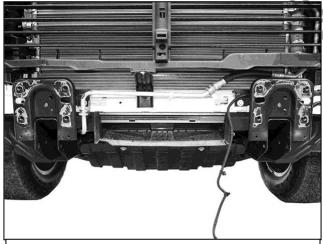


(Fig 9) From above, remove the hex bolts attaching the driver/left side of bumper to the frame, (arrows)

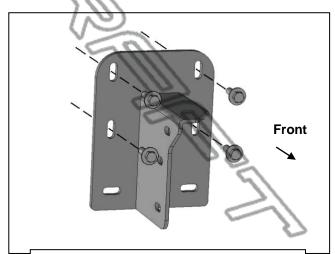
WARNING! Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.



(Fig 10) Remove tow hooks, bumper brackets and shutter assembly (arrow) if equipped



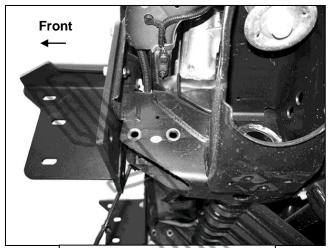
(Fig 11) Attach Frame Brackets to end of frame



(Fig 12) Reuse factory hardware to attach Driver/left Frame Bracket to end of frame

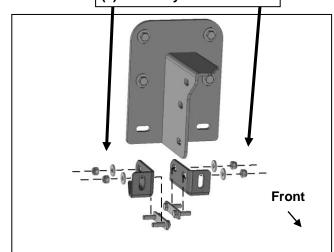
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Driver/left Side Installation Pictured

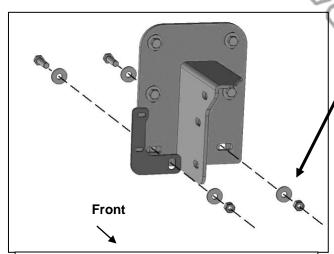


(Fig 13) Attach Driver/left Frame Bracket to end of frame

10mm Double Bolt Plate (2) 10mm Flat Washers (2) 10mm Nylon Lock Nuts

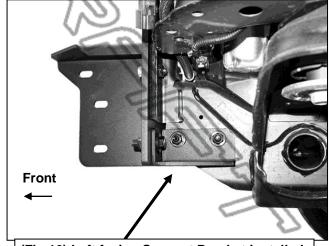


(Fig 14) Attach (1) Left Facing and (1) Right Facing Support Bracket to the sides of the frame



(Fig 15) Attach the Support Brackets to the bottom slots in the driver/left Frame Bracket. Models with shutter assembly, attach "L" Relocation Bracket to bottom inner mounting location (also see Figure 19)

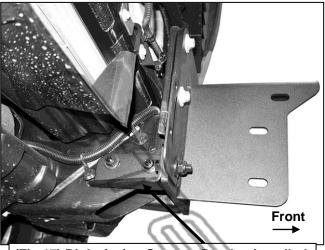
(4) 12mm x 45mm Hex Bolts(8) 12mm Flat Washers(4) 12mm Nylon Lock Nuts



(Fig 16) Left facing Support Bracket installed

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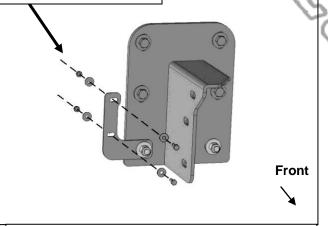
Driver/left Side Installation Pictured



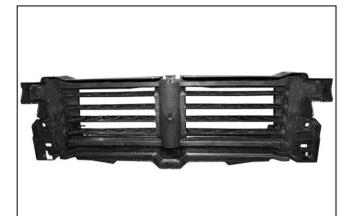
(Fig 17) Right facing Support Bracket installed



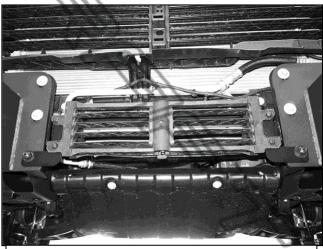
- (4) 6mm Flat Washers (2) 6mm Nylon Lock Nuts



(Fig 19) Attach "L" Relocation Brackets to front of Frame Brackets. Attach shutter assembly, (if equipped), to front of Relocation Brackets



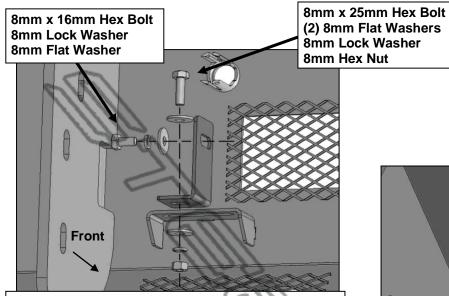
(Fig 18) Remove inner shutter assembly from plastic outer housing (if equipped)



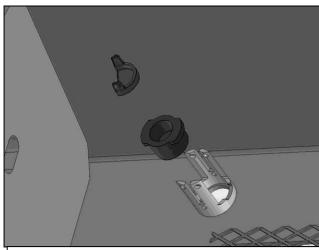
(Fig 20) Attach shutter assembly, (if equipped), to front of Relocation Brackets

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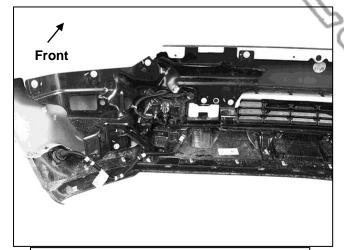
Driver/left Side Installation Pictured



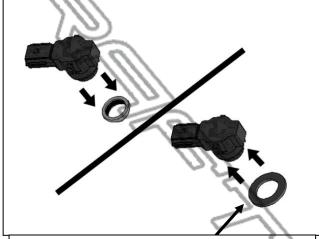
(Fig 21) Universal LED Brackets (light not included)



(Fig 22) Push sensor Plug and Clip into mount



(Fig 23) Disassemble bumper and remove sensors and wiring harness as equipped

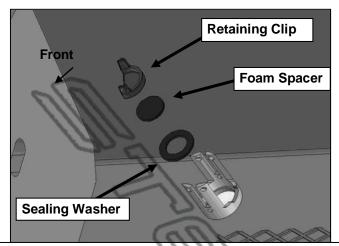


(Fig 24) Remove seal from sensor. Slide Foam Sealing Washer over end of sensor (arrow)

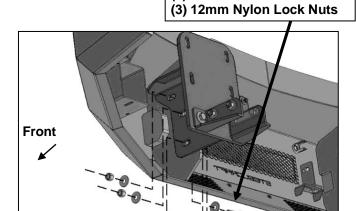
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(3) 12mm x 45mm Hex Bolts (6) 12mm Flat Washers

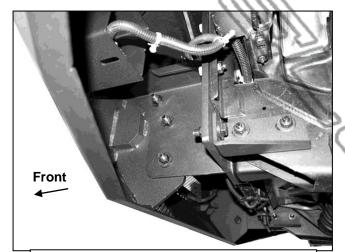
Driver/left Side Installation Pictured



(Fig 25) Insert sensor into Mount on back of Bumper

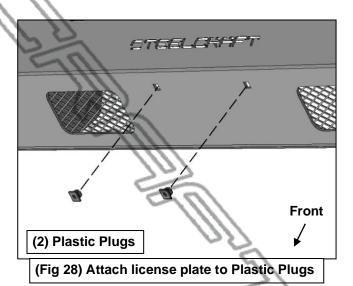


(Fig 26) Attach the Bumper to Frame Brackets



(Fig 27) Driver/left side of Bumper installed





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