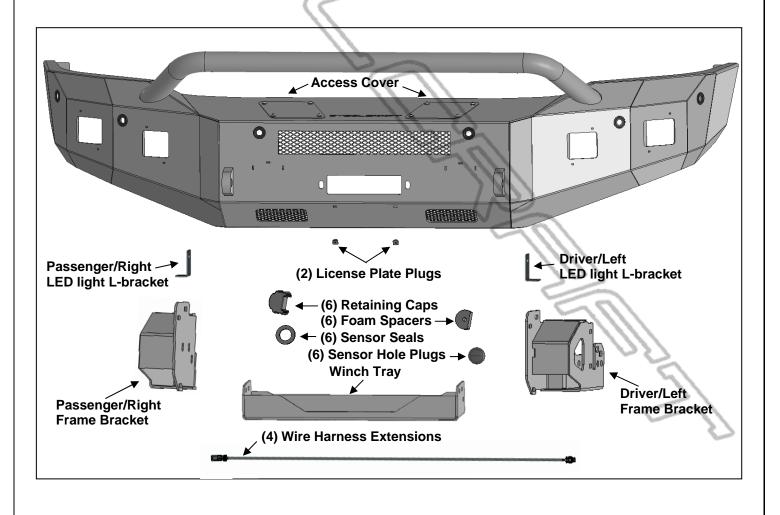
## PARTS LIST:

	Fortis Front Winch Bumper	2	8mm Hex Nuts
1	Winch Tray	4	8mm Lock Washers
1	Driver/left Mounting Bracket	2	8mm x 25mm Hex Bolts
1	Passenger/right Mounting Bracket	2	8mm x 16mm Hex Bolts
1	Driver/left LED light L-bracket	6	8mm x 24mm OD x 2mm Flat Washers
1	Passenger/right LED light L-bracket	8	12mm x 100mm Hex Bolts
2	License Plate Plugs	12	12mm x 50mm Hex Bolts
6	15.5mm x 25mm Foam Sensor Seal	24	12mm x 32mm x 3mm Flat Washers
6	Retaining Caps	16	12mm x 37mm x 3mm Flat Washers
6	20mm x 10mm Foam Spacer	20	12mm Hex Nuts
6	Sensor Plugs	20	12mm Lock Washers
4	Sensor Harness Extensions	1	Allen Wrench
6	Sensor Cover Kit	12	4mm Self-tapping Screws



#### **PROCEDURE:**

REMOVE CONTENTS FROM PACKAGING. SOME PARTS ARE SMALL AND WILL BE HIDDEN IN WRAPPINGS. VERIFY ALL PARTS ARE PRESENT AND DO NOT DISCARD PACKAGING UNTIL INSTALLATION IS COMPLETE. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS HIGHLY RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

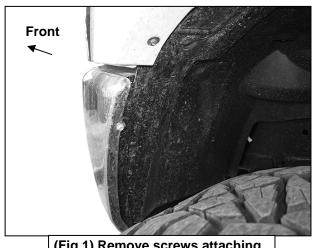
- 1. Remove the license plate. On models with bumper mounted sensors and/or fog lights, unplug the wiring harness leading to the front bumper. Move the wiring harnesses out of the way.
- 2. Remove the hardware attaching the fender liners to the ends of the bumper, (Figure 1).
- 3. Remove the tow hooks and hardware, (Figure 2). NOTE: Tow hooks cannot be reinstalled.
- Locate the factory bumper bolts attaching the inner bumper brackets to the end of the frame, (Figure 2). With assistance, remove the (2) long hex bolts per side to remove the bumper assembly, (Figure 2). WARNING! Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling.
- 5. Remove the lower frame extension from the Driver/Left side of the frame, (Figure 3). NOTE: Lower frame extensions cannot be reinstalled. Some models may not have lower frame extensions.
- 6. 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. Attach the Mounting Bracket to the frame with the included (4) 12mm x 100mm Hex Bolts, (8) 12mm x 37mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, (Figures 4). Snug but do not fully tighten hardware at this time. NOTE: If the lower frame extensions holes are missing, you only need to use ONE bolt at the top, (Fig 12).
- 7. Repeat Steps 5 & 6 to install the Passenger/Right side Mounting Bracket.
- Next, select the Winch Tray Assembly, (Figure 5). Slide the Winch Tray between the two Brackets. Attach the Winch Tray to the Brackets with (6) 12mm x 50mm Hex Bolts, (12) 12mm x 32mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, (Figure 5). 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. Optional Center 20-inch LED light bar (sold separately) side mount installation:
  - a. Select the L/R "L" Brackets. NOTE: "L" Brackets are offset for universal fitment for most side mount LED bar style lights. 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 6). Do not fully tighten hardware at this time. NOTE: Some hardware provided with the light can be used. "L" Brackets may require modification for hardware larger than 8mm or use brackets supplied with light if possible. Installation of a light bar can affect airflow to the coolers.
  - b. Attach the light and brackets to the top of the (2) tabs on 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, (Figure 6). Adjust light position and tighten hardware.
  - **c.** Follow light manufacturer's instructions to wire the light to the vehicle's electrical system once Bumper has been fully installed. Note: installation of a light bar can affect airflow to the coolers.
- **11.** Determine if truck is equipped with front parking sensors.
  - For vehicles not equipped with front parking sensors.
  - **a.** Select the included (6) Plastic Parking Sensor Plugs. From the front of the bumper, push plugs into sensor sleeves, (Figure 7).

### For vehicles equipped with front parking sensors.

- **a.** Remove the parking sensors and wiring from the factory bumper.
- b. 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 8).
- c. Insert sensor with Seal into sensor mount on back of bumper until it clicks into place, (Figure 9).

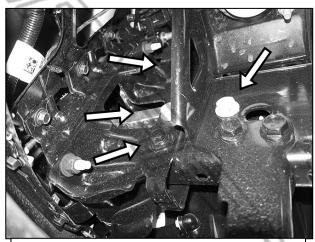
- **d.** Select the included (1) Foam Spacer and peel off the adhesive backing. Place Foam Spacer into (1) Sensor Retainer Cap. Push Sensor Retaining Cap and Foam Spacer onto sensor mount and lock into mounting holes, **(Figure 9)**.
- e. Repeat previous Steps to install remaining sensors.
- 12. Transfer factory bumper wiring to new Fortis bumper and connect all sensors, if equipped
- 13. LED cube light, pedestal mount installation at ends of bumper (sold separately).
  - a. Insert light into opening and up to mounting slots.
  - **b.** Follow light manufacturer's instructions to attach each light to the slot in the bottom of the light opening. On two light systems, attach flood light to outer slot and spot light to inner slot.
  - c. Follow light manufacturer's instructions to properly wire the light to the vehicle electrical system.
- 14. With assistance, carefully position the Bumper Assembly up to the outside of the Mounting Brackets, (Figure 10). 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. Models with LED light bar, check for winch clearance before fully installing Bumper assembly.
- Attach the Bumper to the Mounting Brackets with the included (6) 12mm Hex Bolts,
  (12) 12mm x 32mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, (Figure 10).
- **16.** Level and adjust the bumper, then fully tighten all hardware for the Winch Tray and Brackets.
- **17.** Insert (2) Plastic Plugs into the square holes in the front of the Bumper if front license plate is required. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 11)**.
- 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 Bumper Assembly.



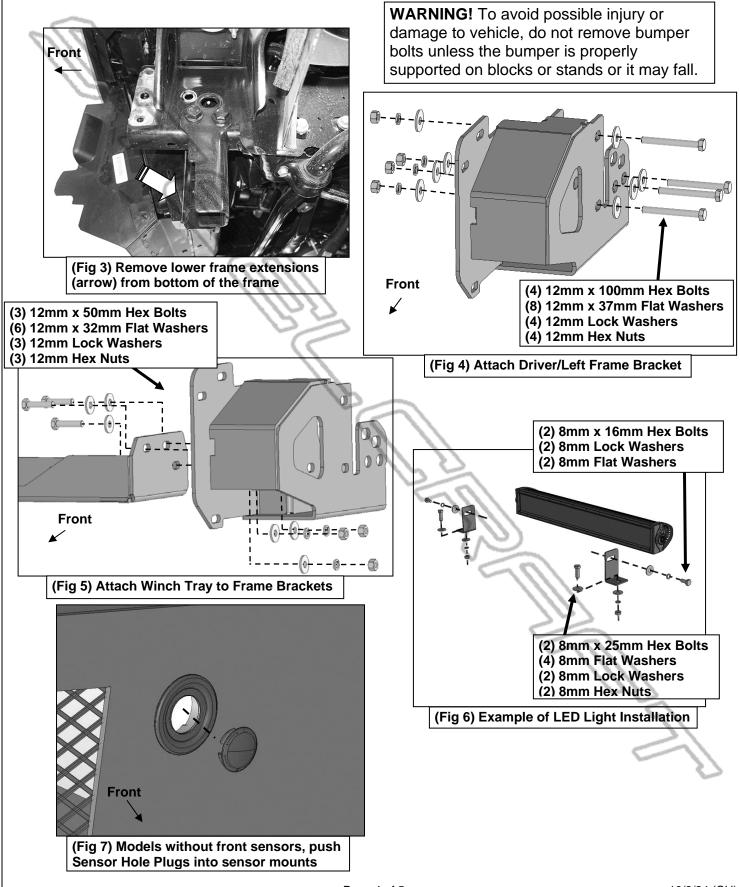
(Fig 1) Remove screws attaching ends of bumper to fender liners

# Driver/Left Side Installation Pictured



(Fig 2) Remove driver/left side tow hook and bumper bracket to frame hardware (arrows)

## **Driver/Left Side Installation Pictured**



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**Driver/Left Side Installation Pictured** 

