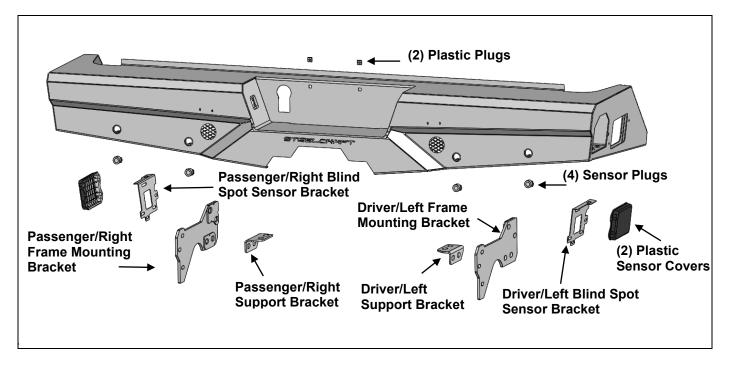
### **PARTS LIST:**

_			
1	Elevation Rear Bumper	12	10mm x 30mm x 2.5mm Flat Washers
1	Driver/Left Frame Mounting Bracket	6	10mm Lock Washers
1	Passenger/Right Frame Mounting Bracket	6	10mm Hex Nuts
1	Driver/Left Support Bracket	2	8mm x 25mm Hex Bolts
1	Passenger/Right Support Bracket	4	8mm x 16mm x 1.6mm Flat Washers
1	Driver/Left BSS Relocation Bracket	2	8mm Lock Washers
1	Passenger/Right BSS Relocation Bracket	2	8mm Hex Nuts
2	ACC Plastic Sensor Covers	6	6mm x 30mm Hex Bolts
2	License Plate Plugs	12	6mm x 12mm x 1.6mm Flat Washers
4	Sensor Plugs	6	6mm Lock Washers
1	Sensor cover kit	6	6mm Hex Nuts
8	14-1.5mm x 55mm Fine Thread Hex Bolts	8	5mm x 16mm Hex Bolts
16	14mm x 28mm x 2.5mm Flat Washers	8	5mm Lock Washers
8	14mm Lock Washers	8	5mm x 10mm x 1mm Flat Washers
8	14mm Fine Thread Hex Nuts	8	4mm Button Head Bolts
6	10-1.5mm x 40mm Hex Bolts	1	2.5mm Wrench



#### PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. SOME PARTS ARE SMALL AND WILL BE HIDDEN IN WRAPPINGS. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

- **1.** Begin at the rear of the vehicle. Remove the license plate from the bumper. Unplug all wiring harnesses leading to the rear bumper (**Figure 1**). Move all wiring harnesses away from bumper.
- 2. Determine if vehicle is equipped with factory receiver hitch Models without Factory Receiver Hitch
  - **a.** Place blocks or jack stands under the bumper to support it during factory bolt removal. Once the bumper has been safely supported, remove the factory hardware attaching the bumper brackets to the side of the frame, **(Figure 2)**. Remove complete Bumper with brackets from frame.

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- b. Select the Driver/Left Support Bracket. Reuse the (2) factory bolts to attach the Bracket to the bottom of the frame, (Figure 3 & 4). If the vehicle was not equipped with hardware, use the included (2) 14mm Hex Bolts, (4) 14mm Flat Washers, (2) 14mm Lock Washers and (2) 14mm Hex Nuts to attach the Bracket to the bottom of the frame, (Figure 3). Do not tighten hardware at this time.
- c. Select the Driver/Left Frame Mounting Bracket. Reuse the factory hardware to attach the Bracket to the outside of the frame, (Figure 5). Attach the Frame Bracket to the Support Bracket with (2) 14mm Hex Bolts, (4) 14mm Flat Washers, (2) 14mm Lock Washers and (2) 14mm Hex Nuts, (Figure 5). Do not tighten hardware at this time.
- **d.** Repeat previous **Steps** to attach the Passenger/Right Support Bracket and Frame Mounting Bracket to the frame, **(Figure 6)**.

# Models with Factory Receiver Hitch (Note, bumper must be disassembled to remove from receiver hitch/bracket assembly)

- a. Remove the plastic screw from behind the license plate, (Figure 7). Release the clips and factory hardware attaching the bottom and top of the outer bumper to the receiver hitch, (Figures 8 & 9).
- **b.** Use a flat blade screwdriver to pry up and remove the plastic cover from the top of the bumper, (**Figure 10**).
- **c.** Place blocks or jack stands under the bumper to support it during bolt removal. Once the bumper has been safely supported, remove the hardware attaching the bumper to the top of the receiver hitch and remove the bumper (**Figure 10**). **NOTE**: Leave hitch attached to vehicle.
- **d.** Place blocks or jack stands under the receiver hitch to support it during bolt removal. Remove the (4) hex bolts attaching the driver/left side of the receiver hitch to the frame.
- e. Select the driver/left Mounting Bracket. Reuse the factory hex bolts to attach the Bracket to the outside of the receiver hitch and frame, (Figure 11). Do not tighten hardware at this time. Repeat previous Steps to attach the passenger/right Mounting Bracket to the receiver hitch and frame, (Figure 12).
- **3.** Remove the wiring harness, lights and sensors if equipped. Mark each sensor and light with location for reassembly.
- **4.** Determine if vehicle is equipped with parking and blind spot (BSS) sensors.

# Models without parking sensors,

a. Insert (4) Sensor Plugs into mounts. Secure with (8) 4mm Button Head Bolts, (Figure 14).

#### Models with parking sensors,

- **a.** Remove the plastic ring from the driver/left outer sensor, **(Figure 13)**. Insert the ring into the front of the sensor mounting sleeve in the Bumper, **(Figure 15)**.
- **b.** Push the sensor into the back of the Mounting Sleeve and into the plastic ring. Secure Sensor to mount with (2) 4mm Button Head Screws, **(Figures 14 & 15)**. Screws are used to hold sensor in place, do not overtighten Screws or sensor may be damaged.
- **c.** Repeat previous Steps to install remaining parking sensors.
- **5.** All models, select (1) Plastic Cover. Attach the Cover to the inside of the driver/left end of the Bumper with (4) 5mm Button Head Bolts, (4) 5mm Lock Washers and (4) 5mm Flat Washers, **(Figure 16)**. Repeat this Step to install the passenger/right side Cover.

# Models with BSS "blind spot" sensors.

- a. Select the Driver/Left BSS Bracket and sensor, (Figures 17a, 17b, 18a, & 18b), the shape of the sensor differs depending on vehicle model year (MY14-17, MY18-21). Attach the BSS sensor to the Bracket with (3) 6mm Button Head Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts. Depending on vehicle model year, the BSS sensor will either mount vertically or horizontally. (Figures 18a & 18b).
- **b.** Attach the sensor Bracket assembly to the top of the tab on the back of the Bumper with (1) 8mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 19)**.
- **c.** Repeat previous Steps to install the passenger/right BSS sensor.
- **6.** Install the wiring harness. Remove the license plate lights from the plastic housings. Insert the lights into the Bumper, **(Figure 22)**. Plug harness into lights and sensors as equipped.

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- 7. Locate the mounting slots in the tabs on the back of the Bumper to install accessory lights if desired, (Figure 20). NOTE: Lights not included.
- **8.** 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.
- Attach the Bumper to the Mounting Brackets with the included (6) 10mm Hex Bolts, (12) 10mm Flat Washers, (6) 10mm Lock Washers and (6) 10mm Hex Nuts to the back of the bumper, (Figures 20 & 21). IMPORTANT: Attach Bumper to outside of Brackets on models without receiver hitch, inside of Brackets on models with receiver hitch, (Figure 21). Do not fully tighten hardware.
- **10.** Level and adjust the bumper and fully tighten all hardware.
- **11.** Reinstall the trailer plug, **(Figure 22)**. **NOTE**: Use a flat blade screwdriver to carefully pry out the metal clips on the plug to grab the edge of the opening.
- **12.** Use the included (2) License Plate Plugs to attach the rear license plate to the (2) holes in the Bumper, (**Figure 22**).
- **13.** Attach the wiring harness to the trailer plug. Plug in the Bumper harness to the main wiring harness.
- **14.** 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.



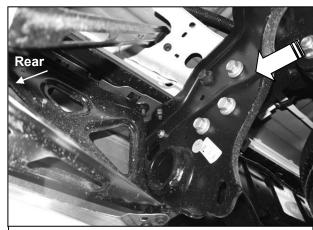
(Fig 1) Unplug all wire harnesses leading to the rear bumper

Reuse factory hardware if equipped

Rear

(Fig 3) Models without receiver hitch, attach Support Bracket to bottom of frame (diver/left side Support Bracket illustrated)

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



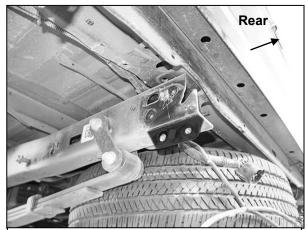
(Fig 2) Models without receiver hitch, remove hardware attaching bumper and brackets to side of frame to remove complete bumper assembly (passenger/right side pictured)

Models without factory hardware use:

- (2) 14mm Hex Bolts
- (4) 14mm Flat Washers
- (2) 14mm Lock Washers
- (2) 14mm Hex Nuts

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#### **Driver/left Side Installation Pictured**

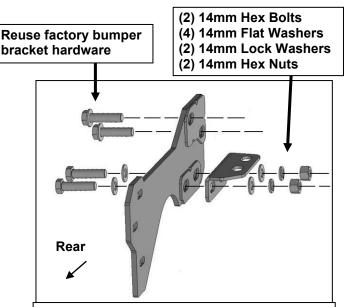


(Fig 4) Driver/left Support Bracket installed (models without hitch only)

Rear

(Fig 6) Attach Mounting Bracket to the frame and support bracket. passenger/right side pictured

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

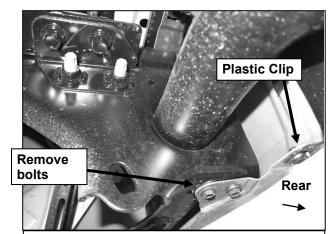


(Fig 5) On model without receiver hitch, attach driver/left Frame Bracket to frame and Support Bracket. Note install Frame Bracket with spacers on Bracket against side of frame



(Fig 7) Models with receiver hitch, remove license plate. Remove plastic screw behind license plate.

#### **Driver/left Side Installation Pictured**

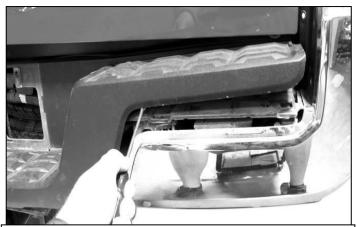


(Fig 8) Models with receiver hitch, remove all hardware and plastic clips attaching outer bumper to top and bottom (pictured) of receiver hitch.

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

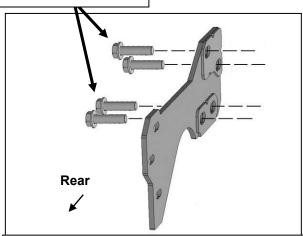


(Fig 9) Remove hardware attaching plastic top cover to top of receiver hitch (passenger/right side pictured from below/behind bumper



(Fig 10) Use a flat blade screwdriver to pry the plastic cover up from the top of the bumper to remove cover and access bumper mounting hardware

# Reuse factory bumper bracket hardware



(Fig 11) On model with receiver hitch, reuse the factory bolts to attach the driver/left Frame Bracket to frame and Support Bracket. Note install Frame Bracket with spacers on Bracket against side of frame

#### **Driver/left Side Installation Pictured**

Reuse (4) Factory Bumper Bolts

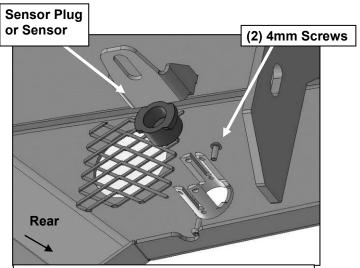
Rear

(Fig 12) Attach Mounting Bracket to outside of receiver hitch (passenger/right side pictured).

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

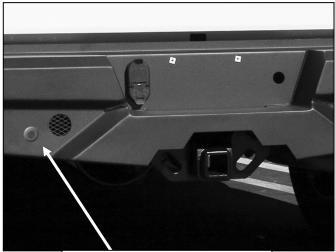






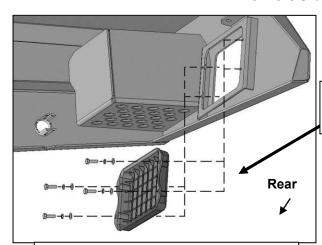
(Fig 14) Push Sensor into sensor mount and plastic ring, (Fig 15). Use 4mm Screws to lock sensor in place. Models without sensors, insert rubber Plug into sensor mount

(Fig 13) Remove sensor from plastic ring. Push plastic ring into mount from outside of Bumper. Push sensor into sensor mount and ring from back of Bumper, (also see Fig 15).



(Fig 15) Push Sensor into sensor mount and plastic ring

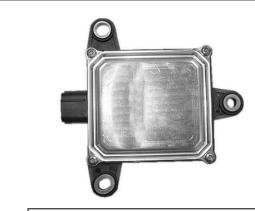
#### **Driver/left Side Installation Pictured**



(Fig 16) All models, attach Plastic Cover to Bumper (driver/left illustrated)

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

- (4) 5mm Hex Bolts
- (4) 5mm Lock Washers
- (4) 5mm Flat Washers

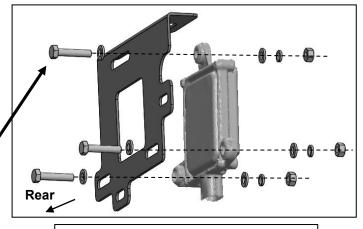


(Fig 17a) Disassemble factory bumper to remove Blind Spot Sensor (BSS) (MY18-21 pictured)

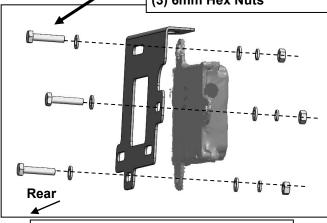


(Fig 17b) Disassemble factory bumper to remove Blind Spot Sensor (BSS) (MY14-17 pictured)

- (3) 6mm Hex Bolts
- (6) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



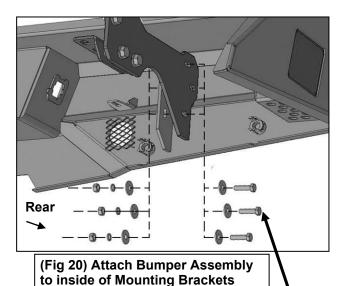
(Fig 18a) Attach driver/left BSS sensor to driver/left BSS Relocation Bracket (MY18-21 pictured)



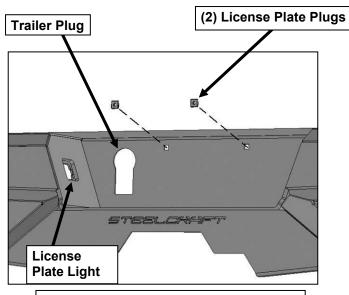
(Fig 18b) Attach driver/left BSS sensor to driver/left BSS Relocation Bracket (MY14-17-pictured)

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



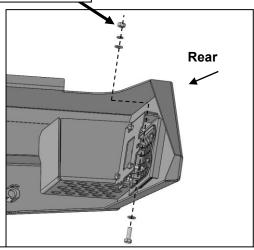
- (3) 10mm x 40mm Hex Bolts
- (6) 10mm Flat Washers
- (3) 10mm Lock Washers
- (3) 10mm Hex Nuts



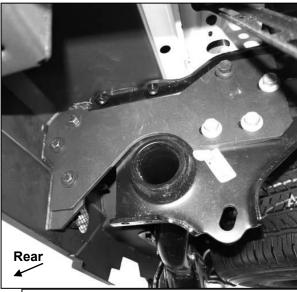
(Fig 22) Push factory license plate lights, towing plug and Plastic Plugs into Bumper. Reuse factory hardware to attach license plate to Plastic Plugs

# ELEVATION REAR BUMPER 2014-21 TUNDRA

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



(Fig 19) Attach BSS sensor and Relocation Bracket to top of the tab on the inside of the Bumper, directly behind the Plastic Cover



(Fig 21) Passenger/right side of Bumper attached to Mounting Brackets



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