

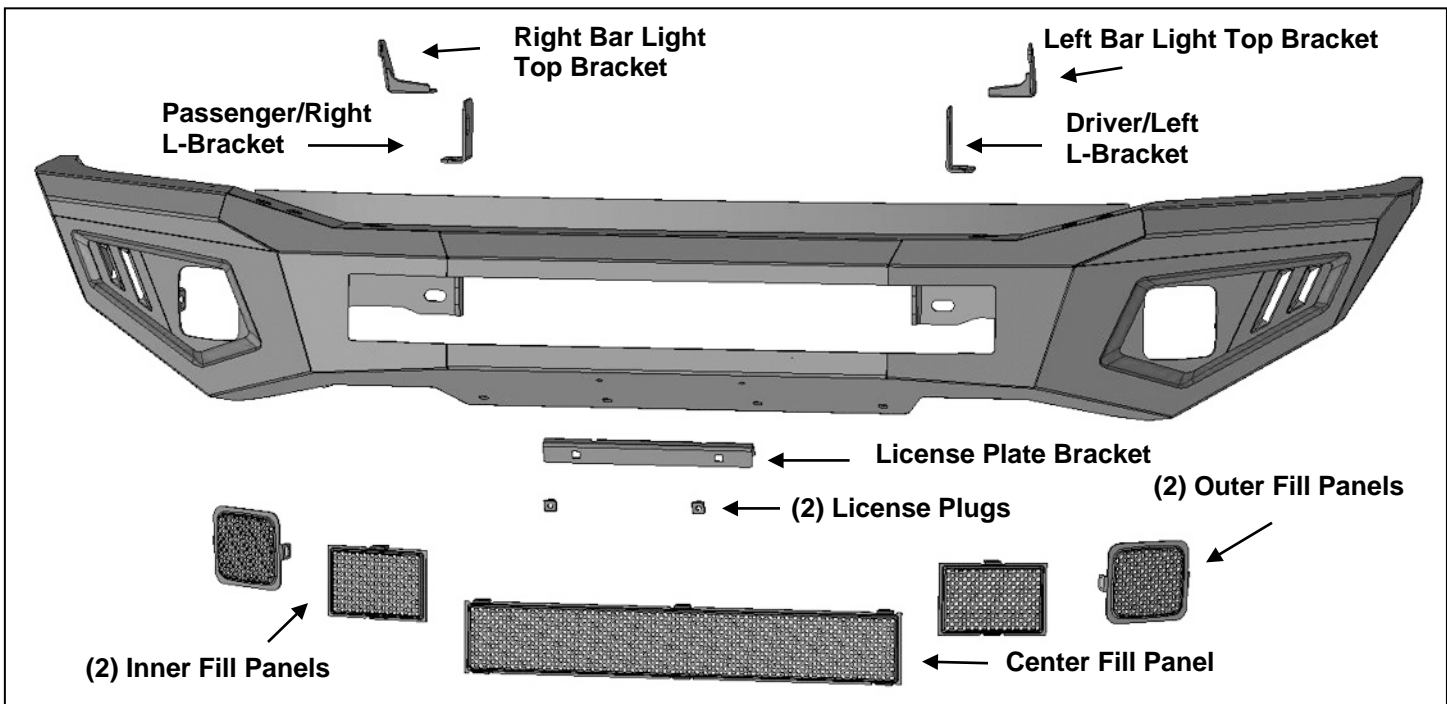


## AB2219

Endurance Truck Front Bumper for 19-20 FORD RANGER

### PARTS LIST:

1	LD2 Front Bumper	2	8-1.25mm x 16mm Hex Bolts
1	Long Center Mesh Plate	14	8mm x 24mm x 2mm Flat Washers
2	Short Inner Mesh Plates	8	8mm Lock Washers
2	Small Outer Mesh Plates	6	8mm Hex Nuts
1	Driver/Left Bumper Top Light Mount	14	6-1.0mm x 20mm Combo Bolts
1	Passenger/Right Bumper Top Light Mount	2	6-1.0mm x 20mm Button Head Bolts
1	Driver/left "L" Bracket (center LED light)	2	6-1.0mm x 16mm Hex Bolts
1	Passenger/right "L" Bracket (center LED light)	6	6mm x 18mm x 1.6mm Flat Washers
1	License Plate Bracket	2	6mm Lock Washers
2	License Plate Plugs	14	6mm Flange Nuts
4	8-1.25mm x 25mm Button Head Bolts	2	6mm Nylon Lock Nuts
2	8-1.25mm x 25mm Hex Bolts	1	5mm Hex Wrench
		1	4mm Hex Wrench



### 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 and the tow hooks, **(Figures 1 & 2)**.
2. Unplug the center wire harness located in the hole in the bumper under the license plate on the right side, if equipped, **(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. Models with adaptive cruise control sensor, unplug and remove sensor to access bumper hardware.

3. Place blocks or jack stands under the front bumper to support it during hex nut removal. Once the bumper has been safely supported remove the large factory hex nuts from the front of the bumper bracket 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. With assistance, hold the bumper in position, unplug the outer wiring harness located underneath the Driver/Left headlight, **(Figure 7)**.
4. Remove bumper and place on a stable, clean surface.
5. Carefully unwrap the LD2 Bumper assembly. Determine if accessory lights, (not included), or Screen Fill Panels will be installed at this time. **IMPORTANT:** It may be easier to install Center Fill Panels and/or lights before installing Bumper.

#### **Screen Fill Panel Installation (do not install fill panels if installing lights).**

- a. Select desired Screen Fill Panels. **NOTE:** Outer Panels are square with rounded corners, Inner panels are rectangular with sharp corners, **(Figure 8)**.
- b. Attach Screen Fill Panels as needed with the included 6mm Button Head Combo Bolts and 6mm Flange Nuts, **(Figure 8)**. Fully tighten Fill Panel hardware at this time. Repeat to install all Panels as desired.

#### **Inner center LED bar style light installation (light not included).**

- a. Select the driver/left "L" Light Bar Bracket. **NOTE:** "L" Brackets are offset to adjust for different widths of LED Bar Lights and can be installed on either side as needed.
- b. Attach the L Bracket to the slot on the back of the Bumper with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 9)**. Repeat this Step to install the remaining "L" Bracket on the other side of the Bumper. **IMPORTANT:** The Bumper features slots designed for 20" and 30" bar style lights. Attach the Brackets to the correct slots in the Bumper. If necessary, hold the light up to the slots to help determine correct slots to use and combination of Brackets.
- c. Attach the light to the "L" Brackets with the hardware included with the light or the supplied (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers or (2) 6mm x 16mm Hex Bolts, (2) 6mm Lock Washers and (2) 6mm Flat Washers, **(Figures 9 & 10)**. Do not fully tighten hardware at this time.

#### **Top mounted 30" bar style LED light (not included).**

- a. Remove the (2) rubber plugs from the driver/left side mounting holes, **(Figure 11)**.
- b. Select the driver/left Light Bracket. Attach the Bracket to the top of the Bumper with (2) 8mm x 25mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 11)**. Do not tighten hardware at this time.
- c. Repeat previous Steps to attach the passenger/right Bracket.
- d. Select the 30" light, (not included). Attach light to Top Brackets with the hardware included with the light. Adjust the width of the Brackets to the light and fully tighten bracket hardware.  
**IMPORTANT:** Top Light Brackets are designed to install 30" bar style LED lights with outside length dimensions of 31.653" (804mm) to 32.44" (824mm) only, **(Figure 12)**. Fully tighten top light hardware once adjusted.

#### **Outer LED cube style light installation (light not included).**

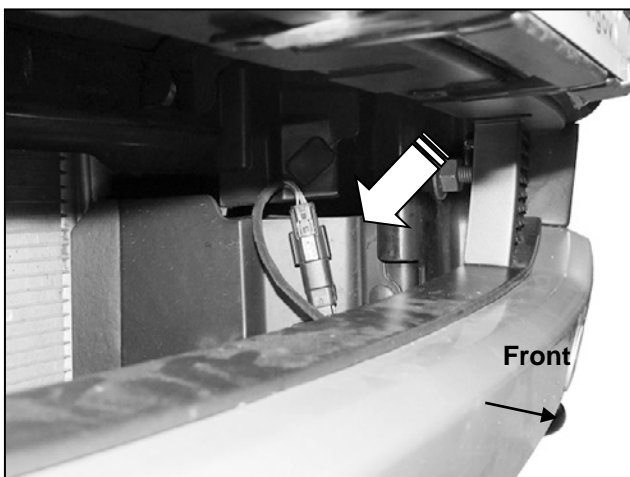
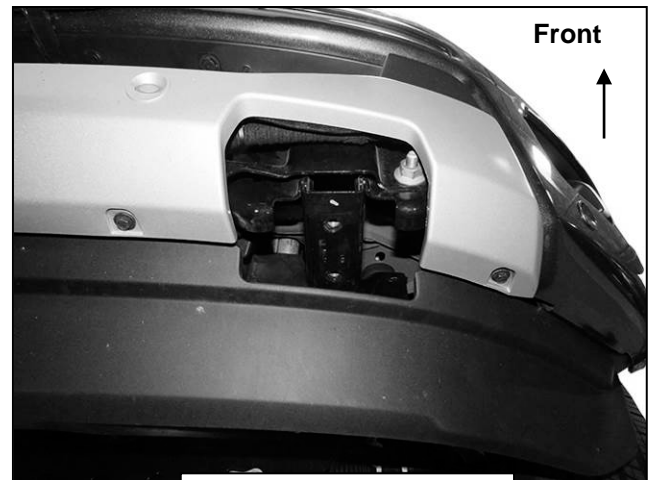
- a. Attach lights to mounting tabs on back of each end of the Bumper, **(Figure 8)**.
6. Models with adaptive cruise control sensor, refer to Relocation Bracket instructions (available separately) to reinstall wiring harness and sensor if desired.
7. Locate the front frame mounting locations, **(Figure 13)**. With assistance, slide the bumper over the factory bolt plates, **(Figure 14)**. 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.
8. Reuse the (3) factory hex nuts per side to attach the Bumper to the vehicle, **(Figures 14 & 15)**. Do not fully tighten hardware.



9. Level and adjust the Bumper and fully tighten all hardware.
10. Attach the License Plate Bracket to the holes in the bumper with the included (2) 6mm x 20mm Button Head Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts. Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 16)**.
11. 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/left Side Installation Pictured





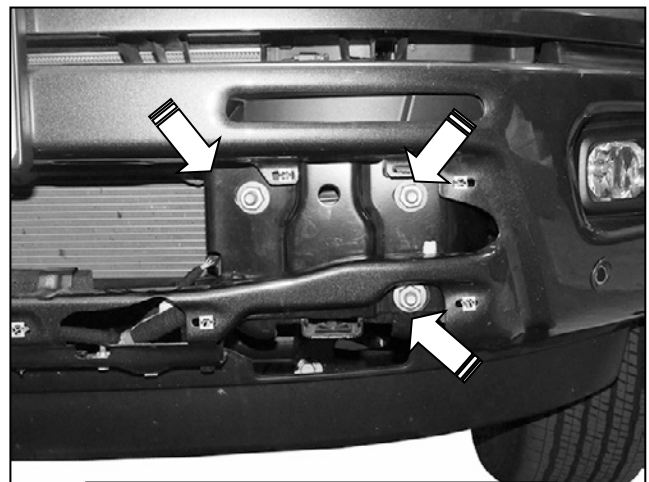
**Driver/left Side Installation Pictured**



**(Fig 5) Center plastic cover removed**

**Models with adaptive cruise control sensor, remove sensor from bumper (Fig 6). Refer to Relocation Bracket instructions (available separately) to move sensor to back of grille**

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

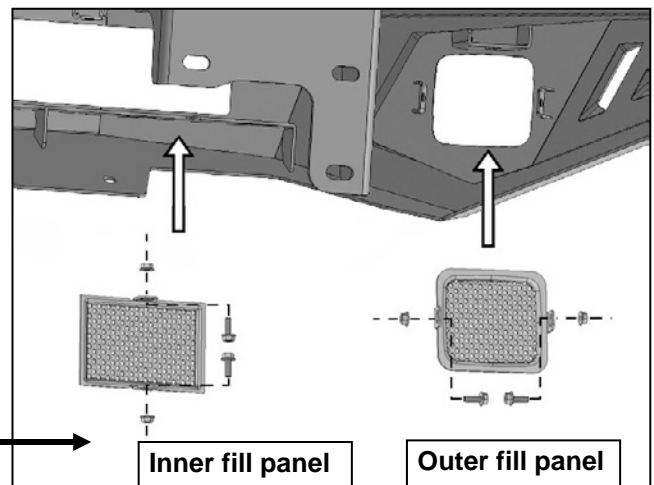


**(Fig 6) Remove the nuts attaching the bumper to the frame**



**(Fig 7) Pull the bumper out slightly and unplug the outer wire harness**

**6mm Button Head Combo Bolts  
6mm Flange Hex Nuts**

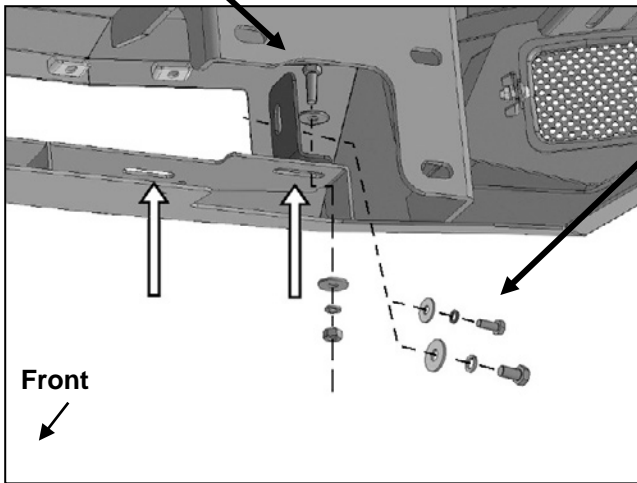


**(Fig 8) Attach Mesh Fill Panels as desired to fill unused openings for lights (lights not included). Passenger/right side illustrated**



**Passenger/right Side Installation Pictured**

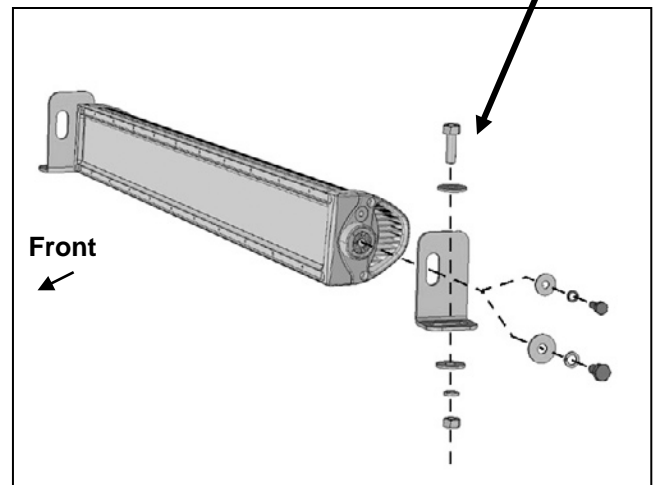
8mm x 25mm Hex Bolt  
 (2) 8mm Flat Washers  
 8mm Lock Washer  
 8mm Hex Nut



**(Fig 9) Note multiple slots for different widths of lights (arrows)**

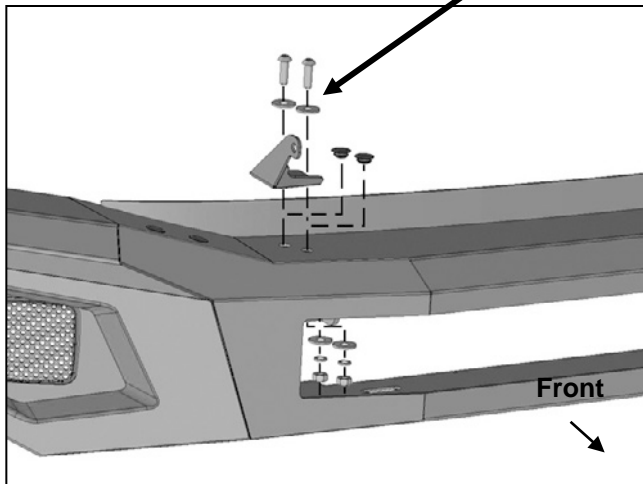
6mm x 16mm Hex Bolt  
 6mm Lock Washer  
 6mm Flat Washer  
 Or  
 8mm x 16mm Hex Bolt  
 8mm Lock Washer  
 8mm Flat Washer

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



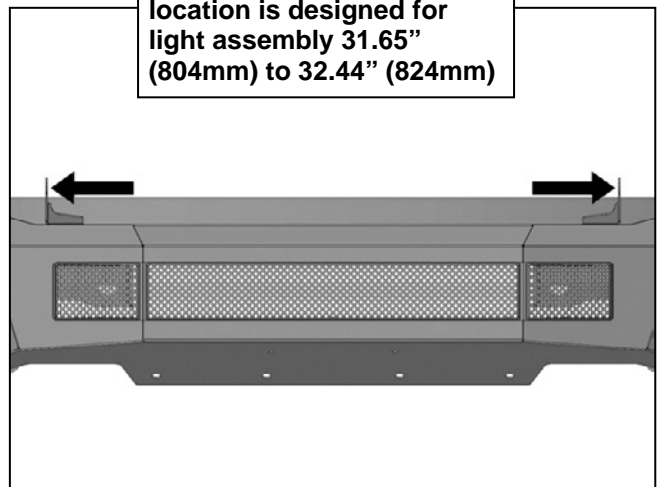
**(Fig 10) Bracket illustration is a suggestion only. Brackets are offset to allow adjustment for all widths of lights**

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



**(Fig 11) Remove rubber plugs to attach Top Light Bracket to Bumper**

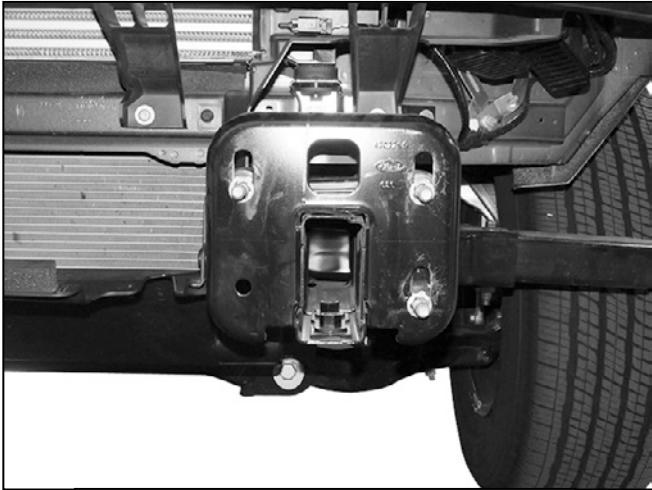
Top Light bracket mounting location is designed for light assembly 31.65" (804mm) to 32.44" (824mm)



**(Fig 12) Measure width of LED light (light only) before installation of Top Light Brackets**

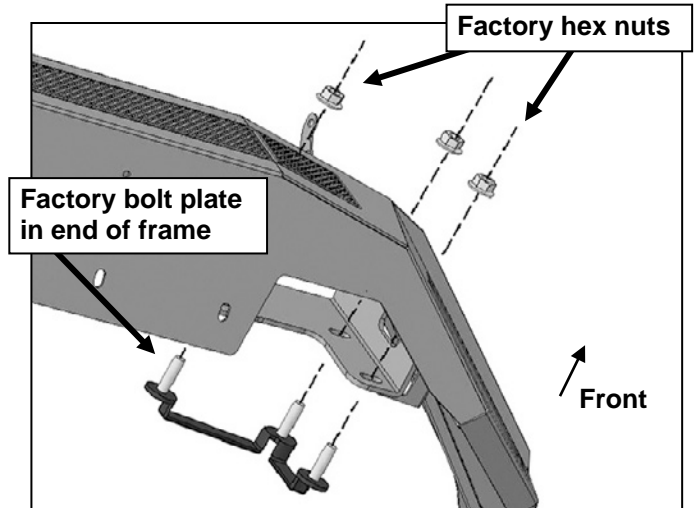


### Driver/left Side Installation Pictured

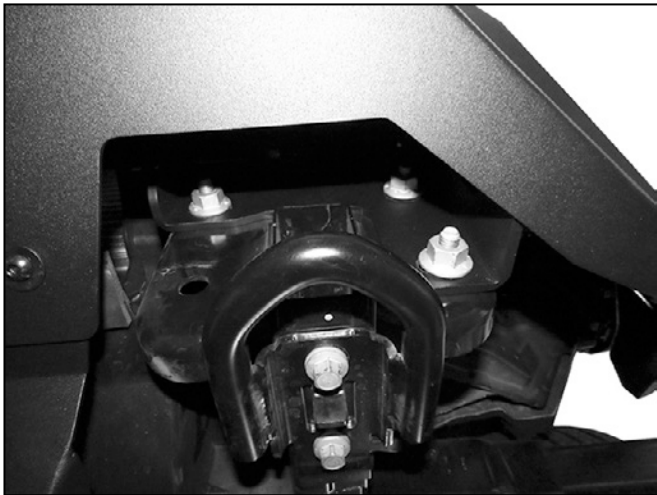


(Fig 13) Driver/Left mounting location

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

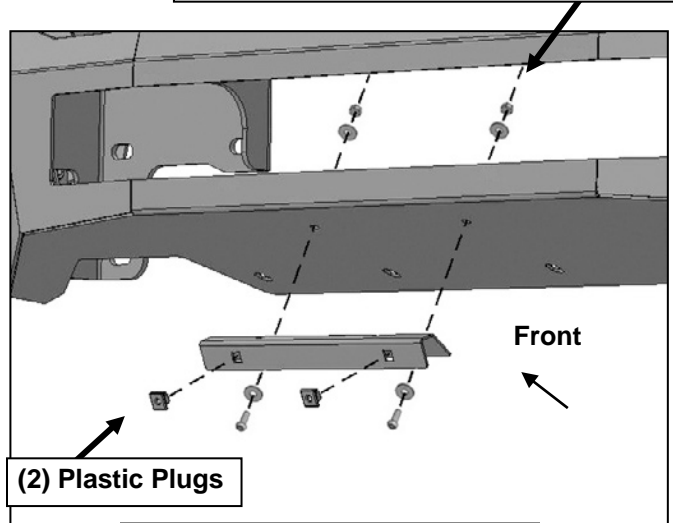


(Fig 14) Attach bumper to the mounting locations



(Fig 15) Driver/left side of Bumper installed

- (2) 6mm x 20mm Button Head Screws
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts



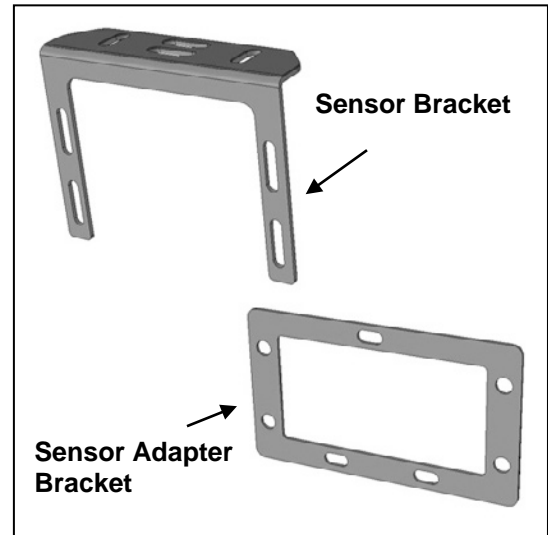
(Fig 16) Attach License Plate Bracket to Front Bumper





**PARTS LIST:**

1	ACC Sensor Main Bracket
1	ACC Adapter Bracket
3	8-1.25mm x 25mm Button Head Bolts
8	8mm x 24mm x 2mm Flat Washers
3	8mm Lock Washers
3	8mm Hex Nuts
6	6-1.0mm x 20mm Button Head Bolts
9	6mm x 15mm x 1.6mm Flat Washers
6	6mm Lock Washers
6	6mm Hex Nuts
1	5mm Wrench
1	4mm Wrench



**PROCEDURE:**

**REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. CUTTING/DRILLING IS REQUIRED. IMPORTANT: MODELS WITH CHROME GRILLE FEATURING CROSSBAR(S) AT TOP OPENING IN GRILLE BELOW HOOD, (SEE EXAMPLE FIGURE 1), MAY PARTIALLY BLOCK SENSOR RELOCATION, INSTALLATION NOT RECOMMENDED.**

12. Open the hood and remove the plastic cover from the top of the grille, between the grille and the radiator, **(Figure 2)**. Remove the hardware attaching the top of the grille to the radiator core support.
13. Release the clips attaching the top of the driver/left plastic cover surrounding the headlight, **(Figure 2)**. Carefully pull the cover next to the grille, straight outward to release from the clips, **(Figure 3)**. Remove the hardware attaching the driver/left side of the grille to the inner body. Repeat this Step to release the passenger/right side of the grille. Pull grille out slightly, unplug inner shutter mechanism and remove grille, **(Figure 5)**. Place grille on a clean working surface.
14. Unplug and remove ACC sensor from factory bumper if equipped, **(Figure 4)**. **NOTE:** Sensor is located behind the driver/left plastic bumper pad. Pull pad straight out to release from clips.
15. Select the ACC (adaptive cruise control) sensor removed from the factory bumper. Note the design of the sensor.

**Vehicles with early style ACC with tabs on ends:**

- a. Select the Relocation Mounting Bracket. Insert (3) 6mm x 20mm Button Head Bolts through the Bracket and out through the ACC sensor, **(Figure 6)**. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts.

**Vehicles with late style ACC with tabs on top and bottom:**

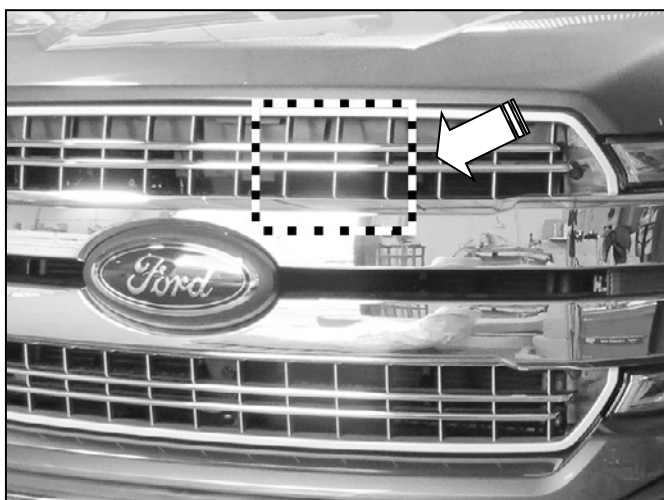
- a. Select the Adapter Bracket, **(Figure 7)**.
- b. Attach the ACC sensor to the back of the Adapter with the included (3) 6mm x 20mm Button Head Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 7)**.
- c. Attach the ACC sensor and Adapter to the front of the Mounting Bracket with the included (3) 6mm x 20mm Button Head Bolts, (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 8)**.

16. Remove the plastic hold down bracket from the back of the shutter mechanism, **(Figure 9)**. Temporarily remove the driver/left shutter blades.



17. Insert the sensor and Bracket assembly into the space between the shutter blades and the back of the grille. With sensor facing forward, find a flat location on the underside of the grille for the top of the Bracket. Mark the location of the slots onto the grille, **(Figure 10)**. If possible, use (2) slot locations to attach Bracket, **(Figure 11)**. Drill (2) 5/16" holes through the top of the grille. **IMPORTANT:** Make sure there is clearance for hardware before drilling. Avoid the plastic ribs on the top of the cover, **(Figure 12)**.
18. Attach the Mounting Bracket and sensor to the underside of the grille with the included (2) 8mm x 25mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figures 12—14)**. **NOTE:** Additional hardware has been included, use is optional.
19. Adjust the sensor up or down to center between the wide horizontal bars on the grille.
20. Locate the wire harness behind the bumper leading to the sensor, **(Figure 15)**. Unwrap the outer cover to locate and separate the wires for the sensor plug only. This will allow the sensor harness to extend up to the new mounting location. On installations retaining the factory bumper, it will be necessary to cut an opening into the rubber splash guard to insert the plug and wire harness through, **(Figure 16)**. Find a location approximately 3" in from the front edge of the splash guard. Check length with grille temporarily held in place and once properly extended, rewrap all wires.
21. Next, cut an approximately 2" x 1" hole in the bottom of the grille for the sensor plug, **(Figure 17)**.
22. With assistance, place the grille in position but leave loose. Push the harness plug up through the hole in the grille, **(Figure 18)**. Plug the harness into the sensor. Reinstall the shutter blades and mechanism, **(Figure 19)**. Fully attach the grille, headlight surrounds and top cover.
23. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

**By installing this product, you are accepting liability for potential changes in the characteristics/sensitivity of your adaptive cruise control system. After installation of this product, your adaptive cruise control module may have to be recalibrated by a Ford technician.**

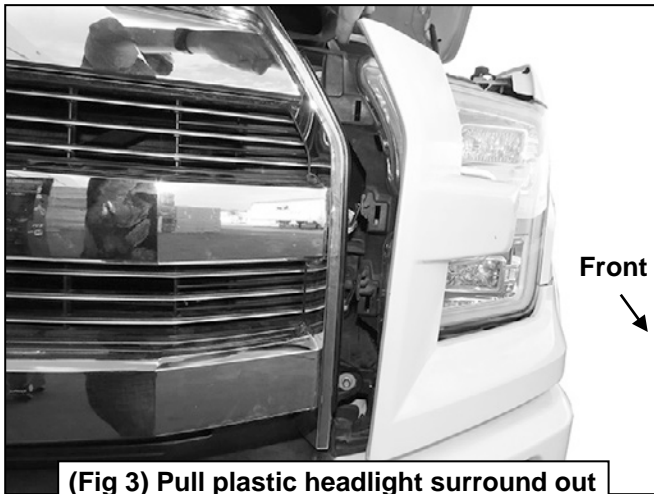


**(Fig 1) IMPORTANT:** Installation not recommended on 2018-on models with chrome horizontal bar or bars at top of grille (arrow) . The thick, reflective chrome horizontal bars may interfere with sensor operation. **NOTE:** Lariat model with chrome package pictured. Applies to chrome versions of grille only

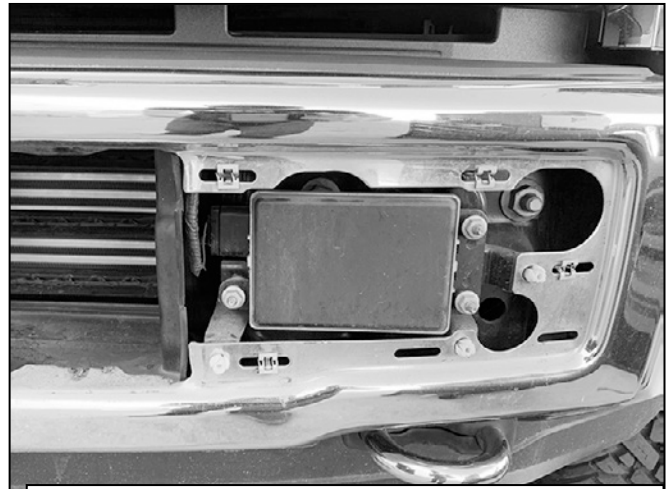


**(Fig 2) Remove cover from top of grille (arrow). Remove hardware attaching top of grille to radiator core support. Release clips attaching top of plastic headlight surrounds (arrows above headlights)**





**(Fig 3) Pull plastic headlight surround out to access grille hardware along sides**

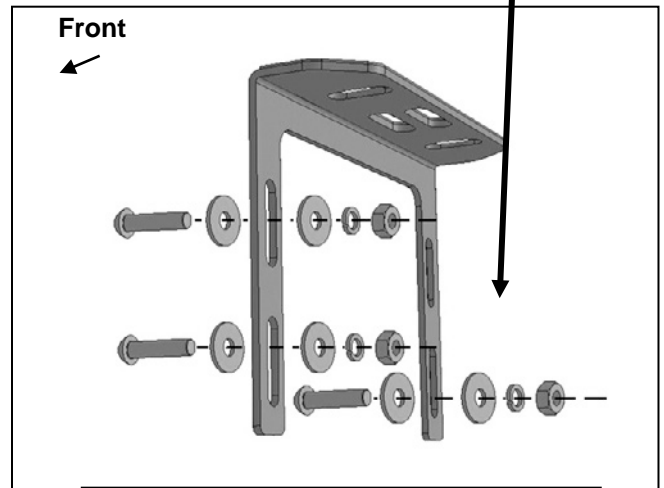


**(Fig 4) Remove plastic bumper pad to locate, unplug and remove sensor from factory bumper**

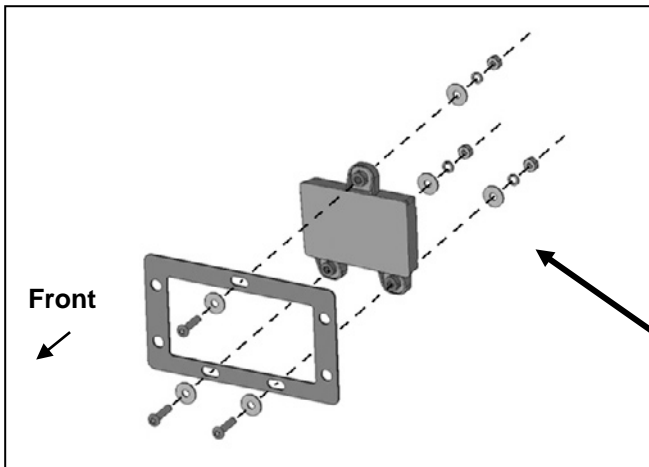


**(Fig 5) Unplug harness leading to shutter assembly in grille. Remove grille assembly**

- (3) 6mm x 20mm Button Head Bolts
- (6) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



**(Fig 6) Attach "early" style sensor with tabs on sides to Relocation Bracket**

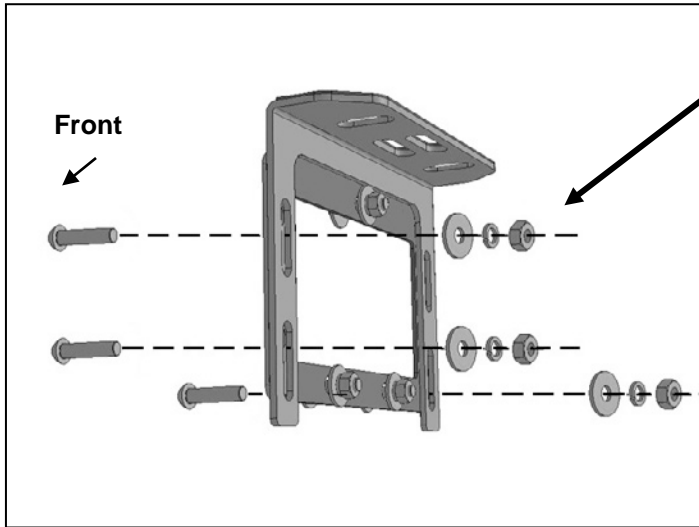


**(Fig 7) Attach late style Sensor to Adapter Bracket**

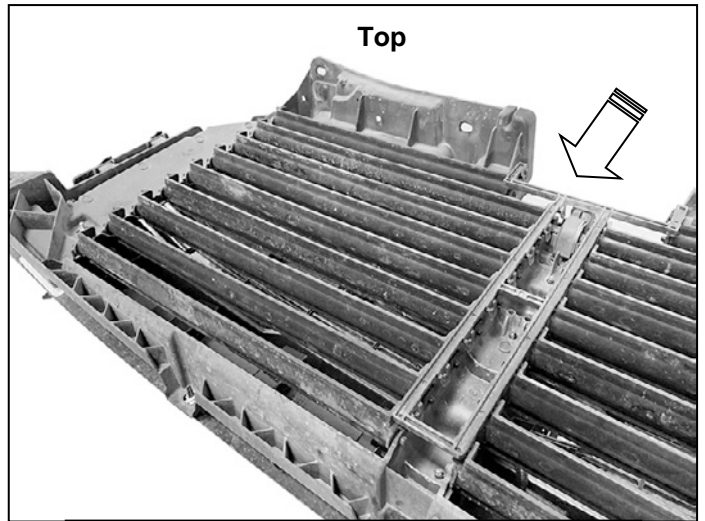
- (3) 6mm x 20mm Button Head Bolts
- (6) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



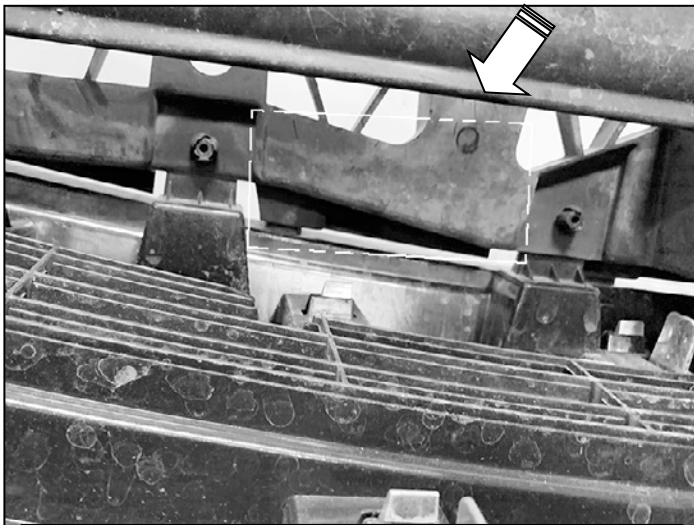
- (3) 6mm x 20mm Button Head Bolts
- (3) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



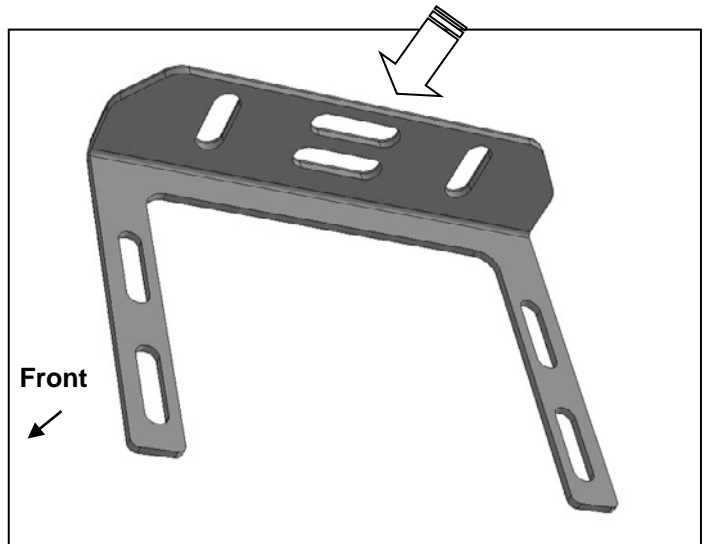
(Fig 8) Attach Adapter Bracket and sensor to front of Relocation Bracket. NOTE: Install with sensor on back of Adapter Bracket



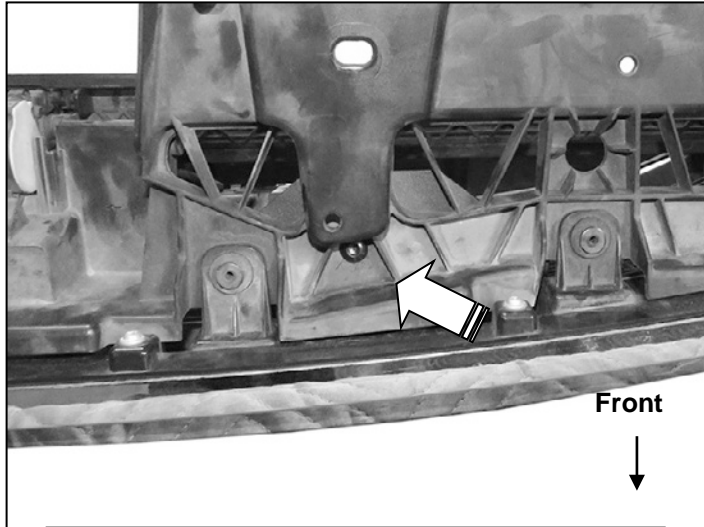
(Fig 9) Shutter assembly in back of grille. Remove center lock (arrow) to disassemble driver/left side of shutter assembly



(Fig 10) Hold Relocation Bracket assembly up to underside of top of grille. Locate flat location to mount assembly (dashed line). Mark suitable hole locations on Bracket (see Fig 11 & 12) to drill.

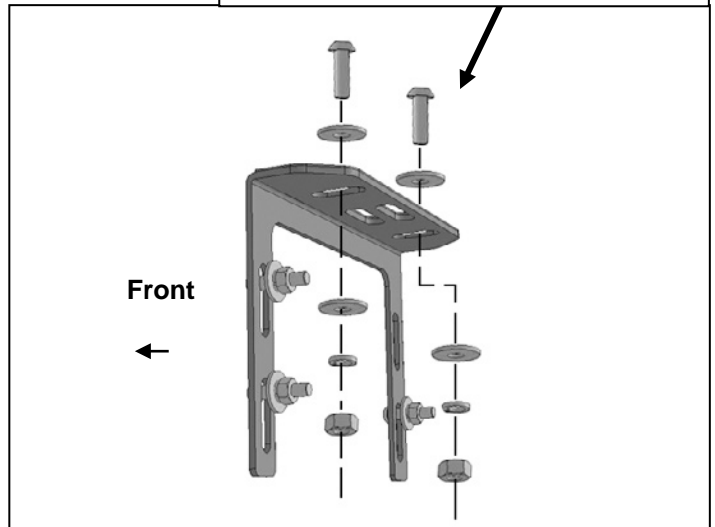


(Fig 11) Mark mounting slot locations onto underside of grille (Fig 10)

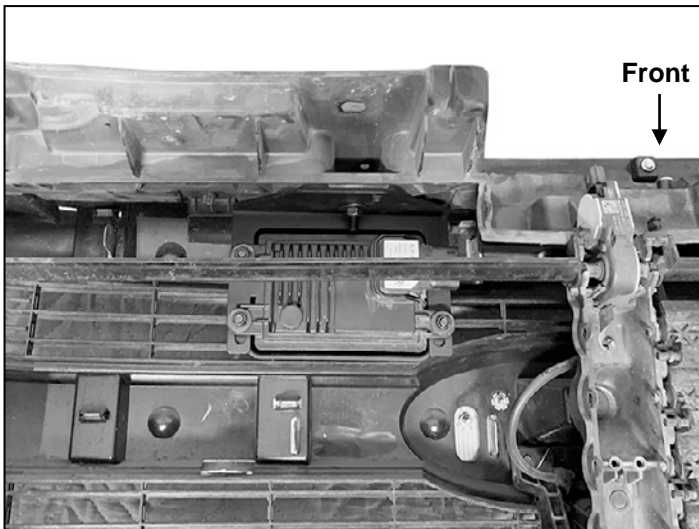


**(Fig 12) Before drilling holes, make sure holes and hardware will be clear of reinforcing ribs molded into the top of the grille (arrow)**

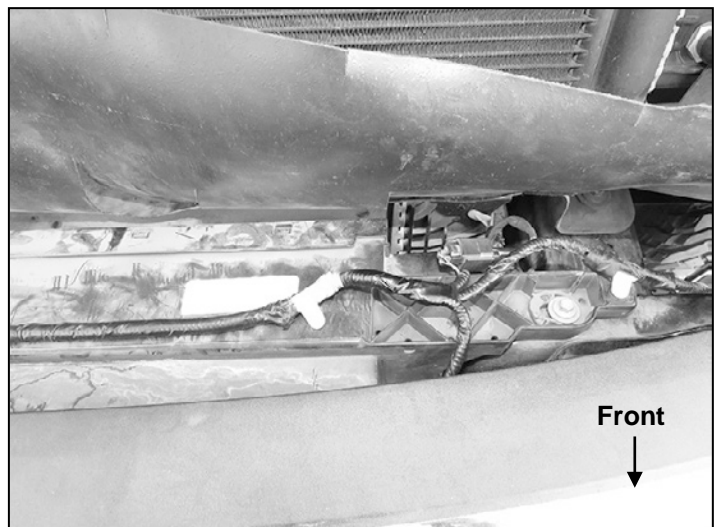
- (2) 8mm x 25mm Button Head Bolts**
- (4) 8mm Flat Washers**
- (2) 8mm Lock Washers**
- (2) 8mm Hex Nuts**



**(Fig 13) Attach Relocation Bracket and sensor to previously drilled holes. (2) Bolts are preferred**



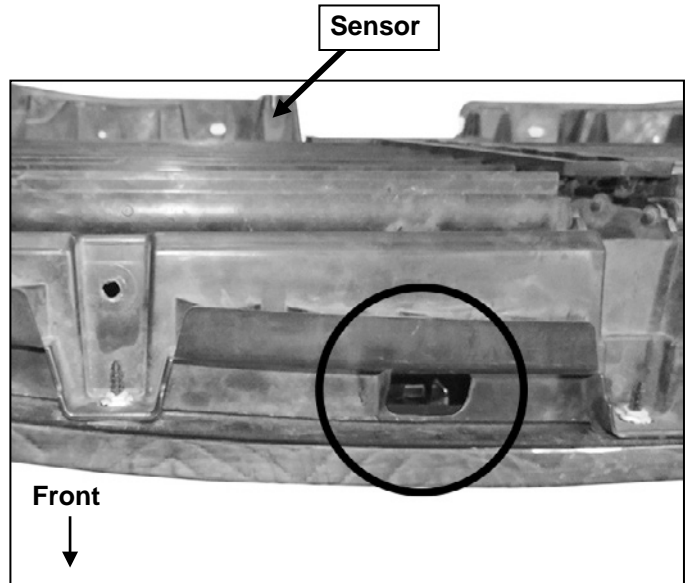
**(Fig 14) Attach Relocation Bracket and sensor to previously drilled holes. (2) Bolts are preferred, Bracket installed with (1) Bolt for example only**



**(Fig 15) Locate the wiring harness to the sensor. From the plug, unwrap approximately 24" of the harness.**



**(Fig 16)** On installations using factory bumper, cut an opening in the rubber splash guard approximately 3" back from front edge



**(Fig 17)** Cut an opening approximately 2" x 1" hole in the bottom of the grille



**(Fig 18)** Push sensor plug up through opening. Pull harness up between shutter blades and grille to sensor. NOTE: Temporarily remove shutter blades as necessary for access to harness and sensor



**(Fig 19)** Plug harness into sensor. Check fit of harness, secure harness to grille. Rewrap wiring harness. Reinstall shutter blades. Reinstall grille assembly