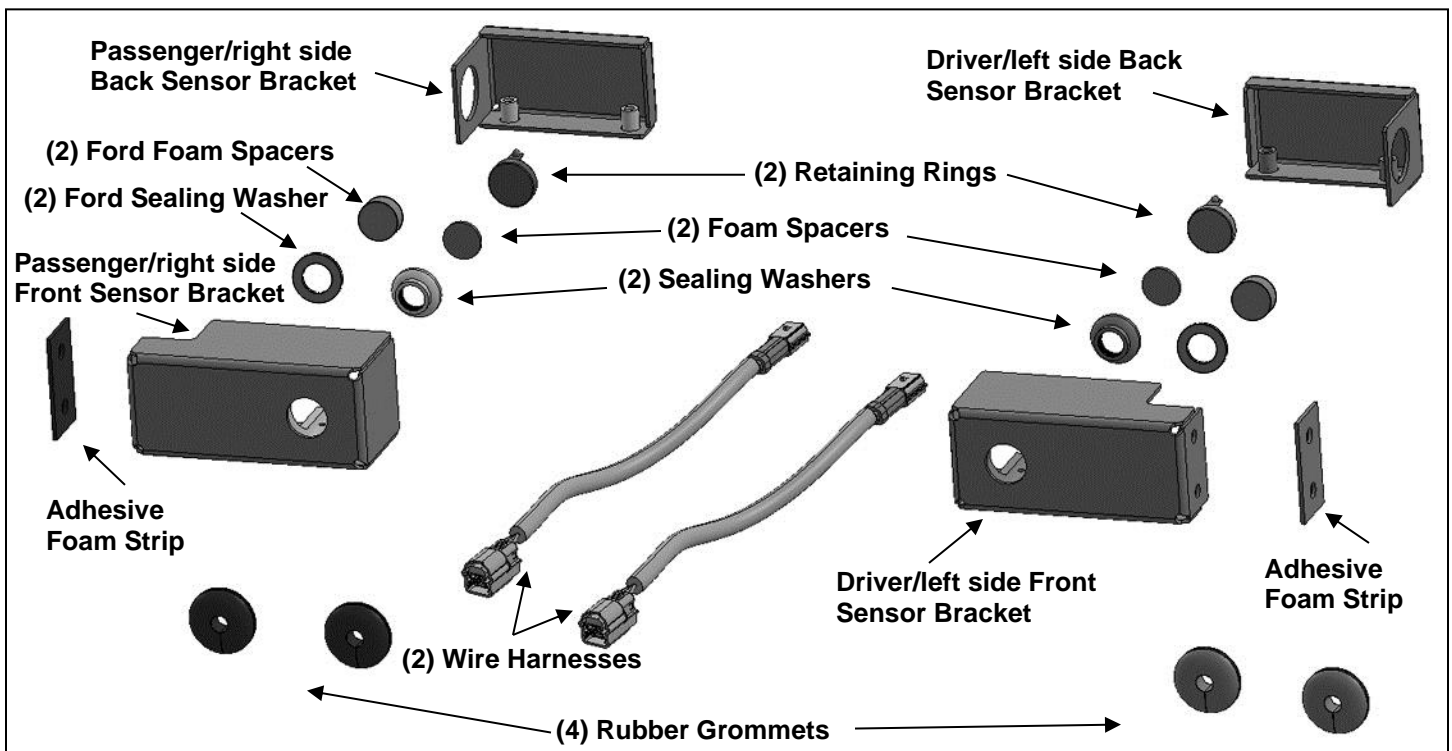


UNIVERSAL SENSOR RELOCATION KIT
2015-20 FORD
2014-18 GM
2016-19 NISSAN

Parts List:

1	Driver/left side Front Sensor Bracket	2	20mm x 2mm Foam Spacers
1	Passenger/right side Front Sensor Bracket	2	20mm x 10mm Ford Foam Spacers
1	Driver/left side Back Sensor Bracket	2	Retaining Rings
1	Passenger/right side Back Sensor Bracket	4	Rubber Grommets
2	Wire Harnesses	2	55mm x 30mm x 2mm Adhesive Foam Strips
2	Rubber Sealing Washers	8	6-1.00mm x 20mm Button Head Combo Bolts
2	Ford Foam Sealing Washers	1	Allen Wrench S=4mm



2014-18 SILVERADO/SIERRA 1500
2015-19 SILVERADO/SIERRA 2500/3500
2015-20 SUBURBAN/TAHOE
2016-19 TITAN XD

Specific GM Parts List:

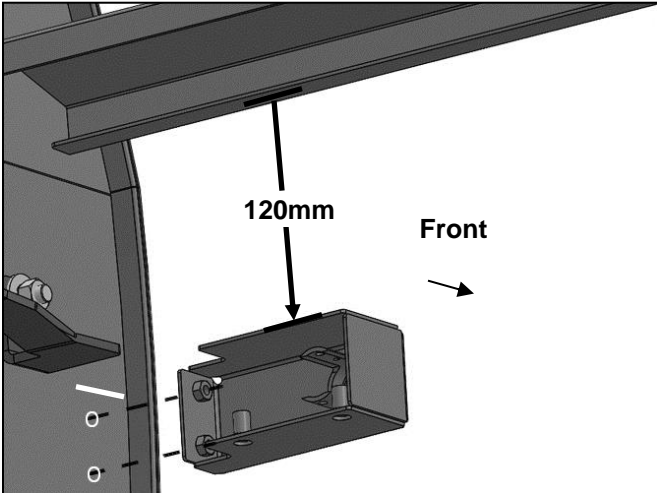
1	Driver/left side Front Sensor Bracket	2	20mm x 2mm Foam Spacers
1	Passenger/right side Front Sensor Bracket	2	Rubber Sealing Washers
1	Driver/left side Back Sensor Bracket	2	Retaining Rings
1	Passenger/right side Back Sensor Bracket	4	Rubber Grommets
2	Wire Harnesses – GM only	2	55mm x 30mm x 2mm Adhesive Foam Strips
		8	6-1.00mm x 20mm Button Head Combo Bolts

PROCEDURE:

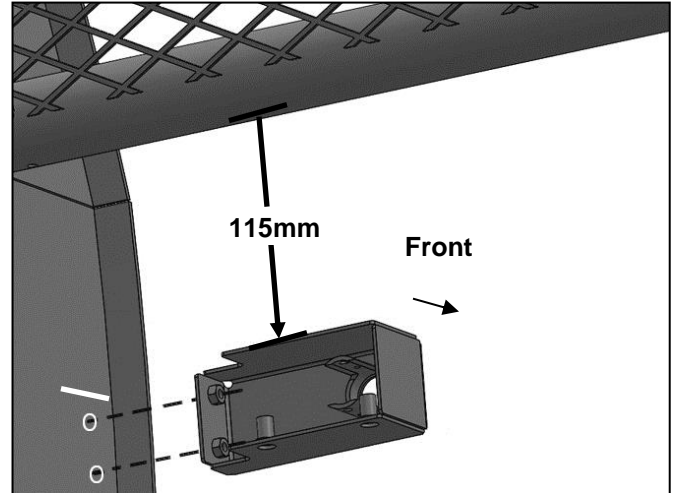
1. **READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. DRILLING MAY BE REQUIRED. Note: Wiring harness extension for GM vehicles only.**
2. Determine if the Grille Guard Uprights are equipped with (2) factory holes per side. If the Uprights are equipped with factory holes then continue to **Step 3**.
Grille Guard Uprights without factory holes:
 - a. Starting from the bottom of the center tube/panel, use a tape measure to measure a downward distance of **all Silverado models: 120mm** OR **all Sierra/Titan XD models: 115mm**, (**Figures 1, 2 & 3**). Mark a line on the Grille Guard Upright to indicate the measured distance.
 - b. Place the Driver/left side Front Sensor Bracket up against the corner of the marked line on the Grille Guard Upright. Push the Bracket forward to the front of the Upright. Mark through the (2) holes on the Bracket and onto the Upright, (**Figures 1—3**).
 - c. Use a 5/16" drill bit to drill through the (2) marked holes on the Upright.
 - d. Repeat **Steps 2a—2c** to drill out (2) holes on the passenger/right side Upright.
 - e. Proceed to **Step 3**.
3. Unplug the wiring harnesses from the two center parking sensors on the back of the bumper, Remove the two sensors from the bumper. (**Figure 4**) -{Titan XD must remove plastic panel in front of bumper for access. Use a plastic pry-tool to release clips (**Figure 4B**)}.
4. Remove the OE silicone rubber seal from the sensor. Slide the provided (1) Rubber Sealing Washer over the front of the sensor, (**Figure 5A**). Select the Driver/left side Front Sensor Bracket. Slide the sensor into the sensor sleeve on the back of the Bracket, (**Figure 6A**). **NOTE:** Sensor tabs may need to be trimmed to fit sensor into the sensor sleeve. Attach the adhesive side of the Foam Spacer to the Retaining Ring. Push the Retaining Ring into the sensor sleeve until it locks with the mounting holes, (**Figures 6A & 7**).
5. **On Titan XD:**
 - a. Select the Driver/left side Back Sensor Bracket. Insert the OE Wiring Harness through the front of the bumper then through the large hole on the Back Sensor Bracket and attach the end of the Harness to the Sensor. Next, slide the Bracket into the Front Sensor Bracket, (**Figures 7 & 8**).**On GM vehicles:**
 - b. Select the Driver/left side Back Sensor Bracket. Insert the supplied Wire Harness through the large hole on the Bracket and attach the end of the Harness to the Sensor. Next, slide the Bracket into the Front Sensor Bracket, (**Figures 7 & 8**).
6. Secure the Brackets with (2) 6mm Button Head Combo Bolts, (**Figure 8**). Use (1) Rubber Grommet to seal Wire Harness in place.
7. Locate the (2) holes on the driver/left side Grille Guard Upright. Select (1) Adhesive Foam Strip. Attach the adhesive side of the Foam Strip to the inside of the Grille Guard Upright.
8. Attach the driver/left side Bracket assembly to the inside of the Grille Guard Upright using (2) 6mm Button Head Combo Bolts, (**Figure 9**).
9. **{GM vehicles only}** Remove the OE sensor retainer from the bumper sensor hole. Connect the other end of the Wire Harness extension to OE sensor harness attached to the back of the bumper. Use (1) Rubber Grommet to secure the Wire Harness on the sensor hole, (**Figure 10 & 11**).
10. Repeat **Steps 2—9** for passenger/right side Sensor assembly installation.

11. Properly level and adjust the Bracket assembly and tighten all hardware.
12. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

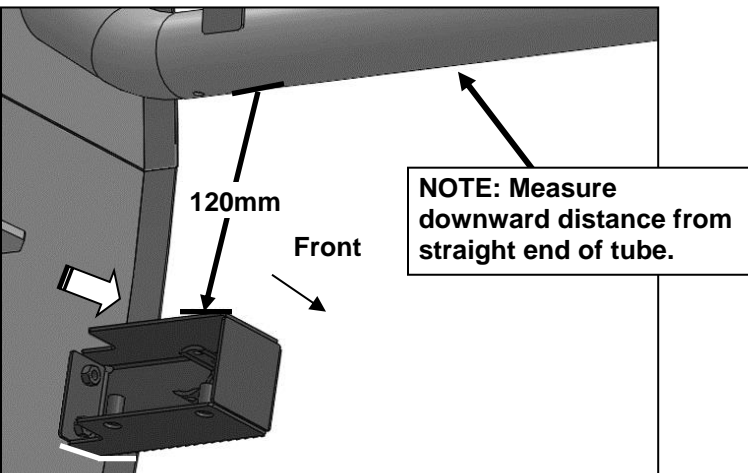
Driver/Left Side Installation Pictured



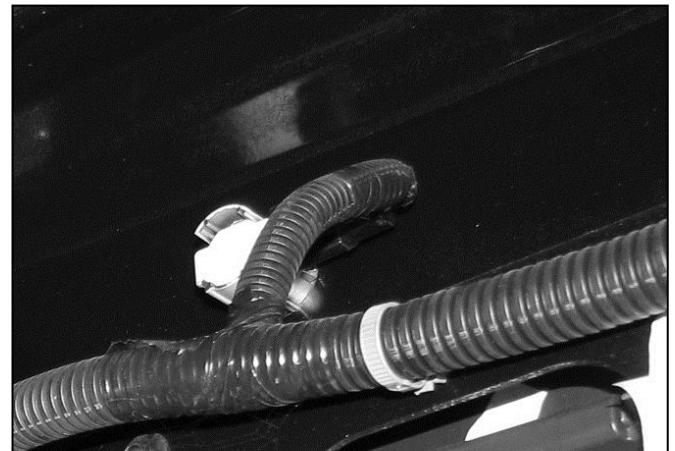
(Fig 1) For all Silverado models, measure a downward distance of 120mm from the center tube/panel



(Fig 2) For all Sierra/Titan XD models, measure a downward distance of 115mm from the center tube/panel



(Fig 3) Relocation Pod up against Upright for drilling

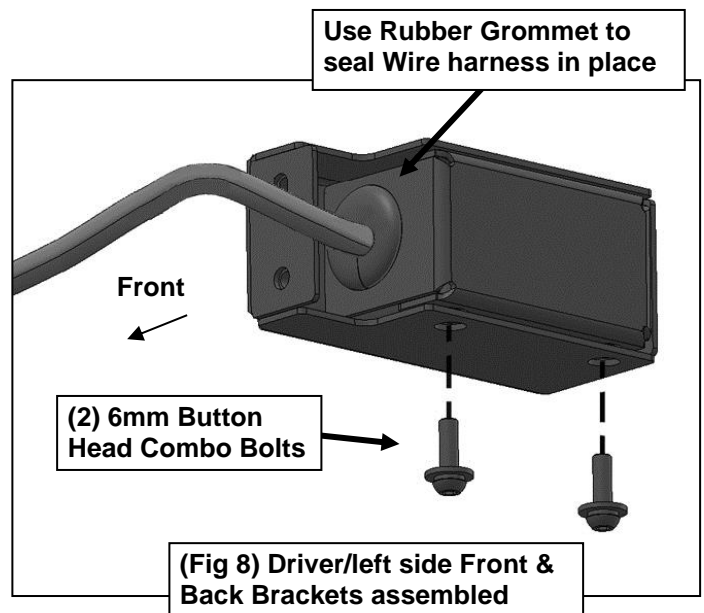
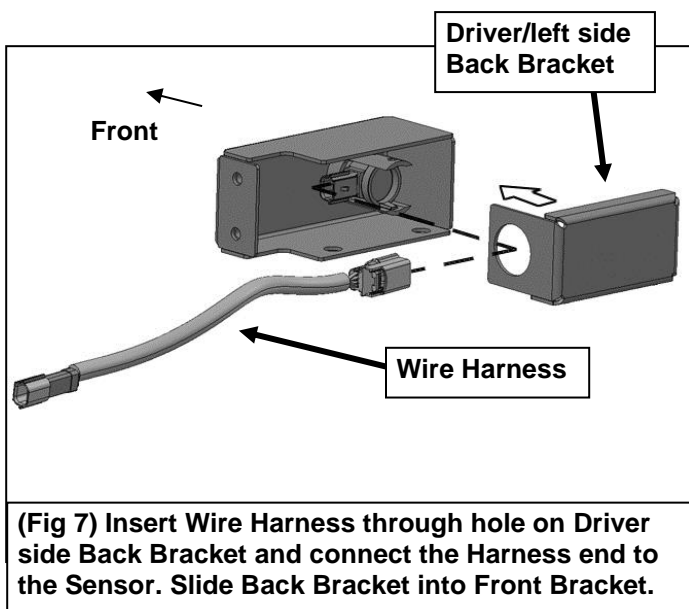
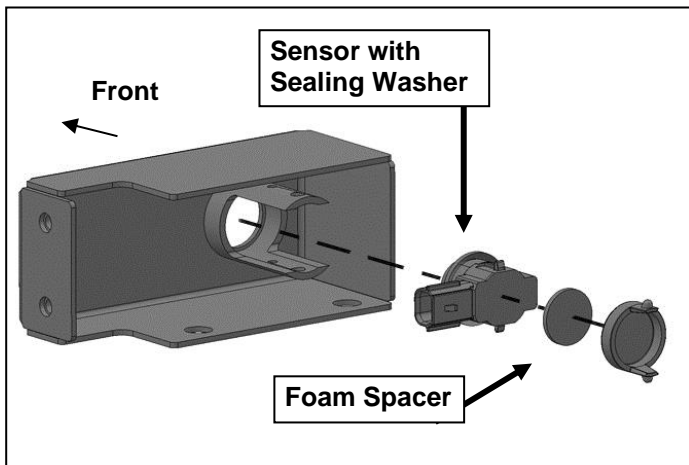
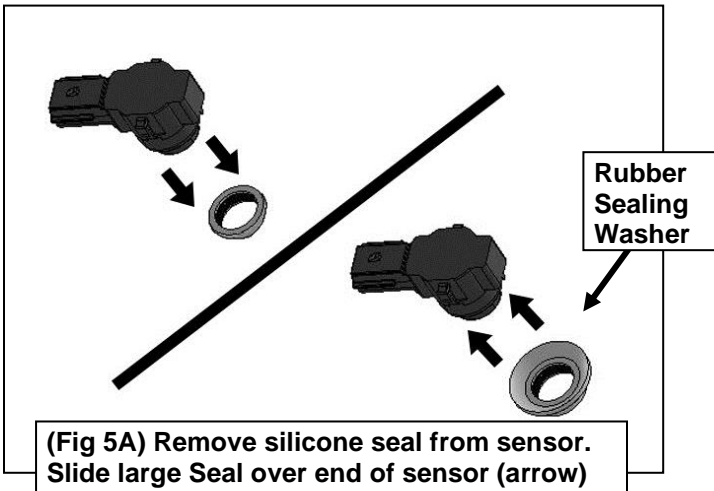


(Fig 4) Unplug and remove OE center sensors from the back of the bumper (Example ONLY)



(Fig 4B) Titan XD Only- Use pry tool to remove plastic panel for access to parking sensor

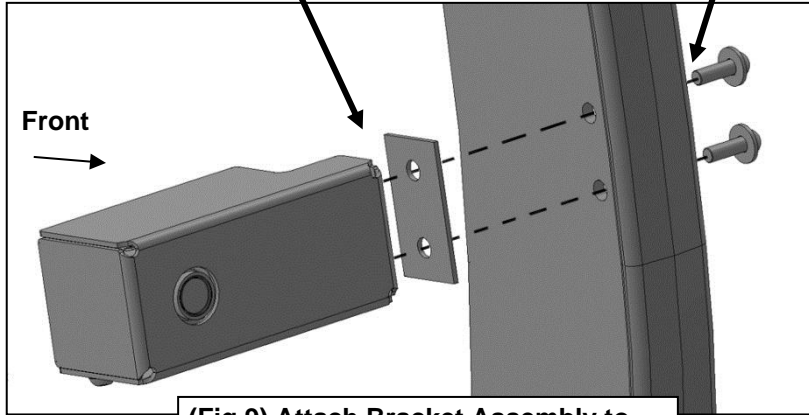
Driver/Left Side Installation Pictured



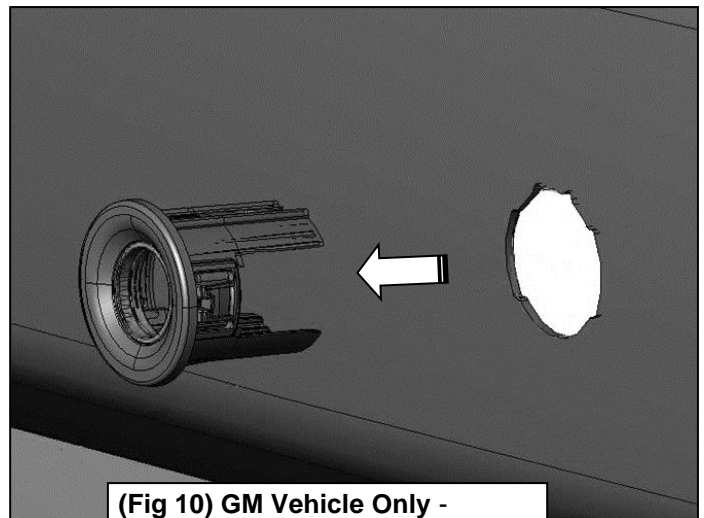
Driver/Left Side Installation Pictured

NOTE: Attach adhesive side of Foam Strip to the inside of the Grille Guard Upright.

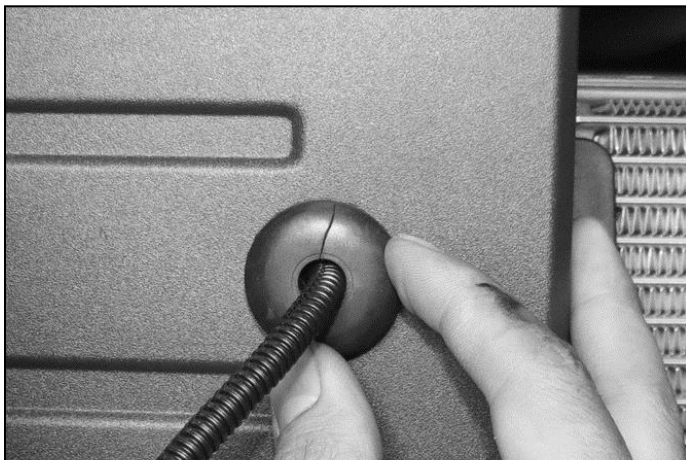
(2) 6mm Button Head Combo Bolts



(Fig 9) Attach Bracket Assembly to the inside of the Grille Guard Upright



(Fig 10) GM Vehicle Only - Remove OE sensor retainer from bumper sensor hole



**(Fig 11) Rubber Grommet fits snug on Bumper sensor hole
(Front Bumper used for GM Example Only)**

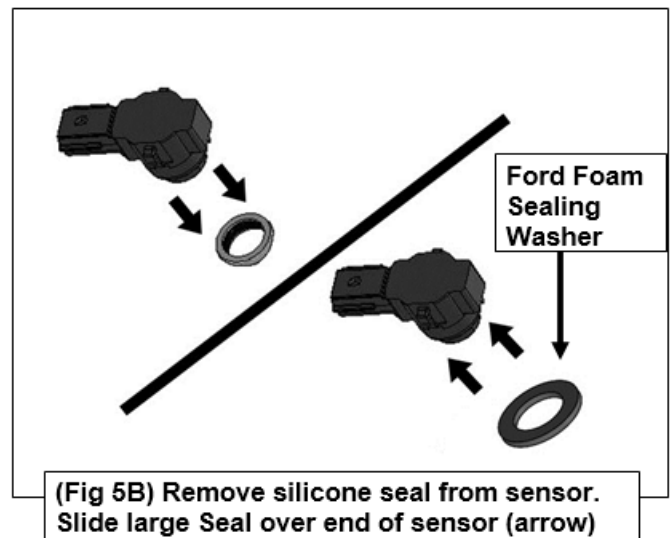
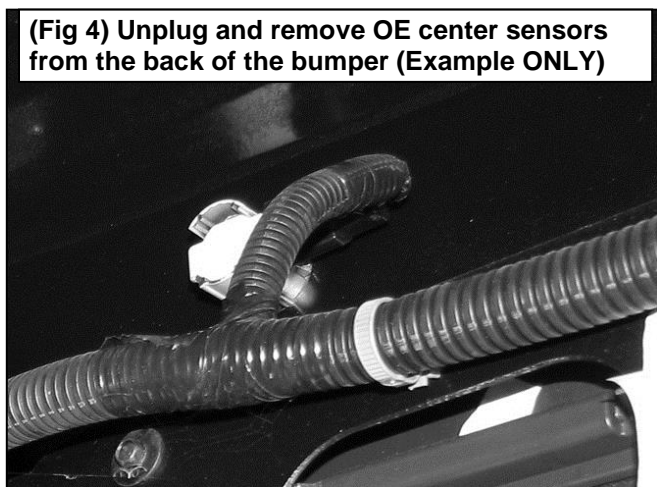
Specific Ford Parts List:

1	Driver/left side Front Sensor Bracket	2	Ford Foam Sealing Washers
1	Passenger/right side Front Sensor Bracket	2	20mm x 10mm Ford Foam Spacers
1	Driver/left side Back Sensor Bracket	2	Retaining Rings
1	Passenger/right side Back Sensor Bracket	2	Rubber Grommets
2	Wire Harnesses	2	55mm x 30mm x 2mm Adhesive Foam Strips
		8	6-1.00mm x 20mm Button Head Combo Bolts

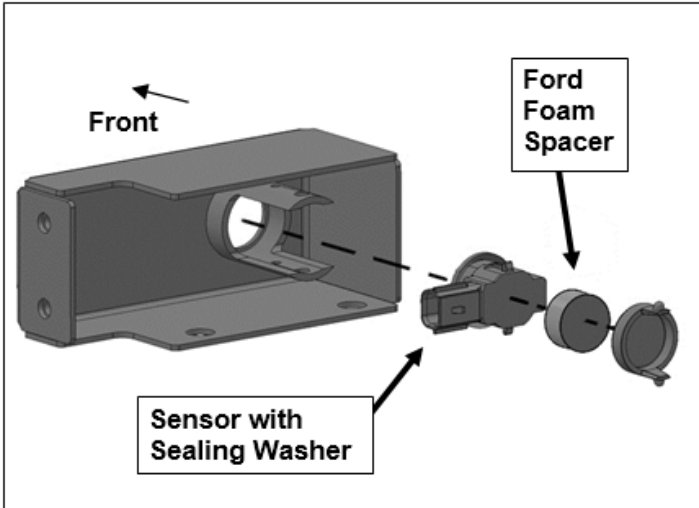
PROCEDURE:

1. **READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.**
2. Starting on the Driver/left side front of the vehicle, unplug the wiring harnesses from the two center parking sensors on the back of the front bumper, **(Figure 4)**. Remove the two sensors from the bumper.
3. Determine the correct Ford Foam Sealing Washer and Ford Foam Spacer for the Sensor. Remove the silicone rubber seal from the sensor. Slide the provided (1) Ford Sealing Washer over the front of the sensor, **(Figure 5B)**. Select the Driver/left side Front Sensor Bracket. Slide the sensor into the sensor sleeve on the back of the Bracket, **(Figure 6B)**. **NOTE:** Sensor tabs may need to be trimmed to fit sensor into the sensor sleeve. Attach the adhesive side of the Ford Foam Spacer to the Retaining Ring. Push the Retaining Ring into the sensor sleeve until it locks with the mounting holes, **(Figures 6B & 7)**.
4. Select the Driver/left side Back Sensor Bracket. Insert the Wire Harness through the large hole on the Bracket and attach the end of the Harness to the Sensor. Next, slide the Back Bracket into the Front Sensor Bracket, **(Figures 7 & 8)**.
5. Secure the Brackets with (2) 6mm Button Head Combo Bolts, **(Figure 8)**. Use (1) Rubber Grommet to seal Wire Harness in place.
6. Locate the (2) holes on the driver/left side Grille Guard Upright. Select (1) Adhesive Foam Strip. Attach the adhesive side of the Foam Strip to the inside of the Grille Guard Upright.
7. Attach the driver/left side Bracket assembly to the inside of the Grille Guard Upright using (2) 6mm Button Head Combo Bolts, **(Figure 9)**.
8. Insert the other end of the Wire Harness through the Bumper sensor hole and reconnect to sensor harness.
9. Repeat **Steps 2—8** for passenger/right side Sensor assembly installation.
10. Properly level and adjust the Bracket assembly and tighten all hardware.
11. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

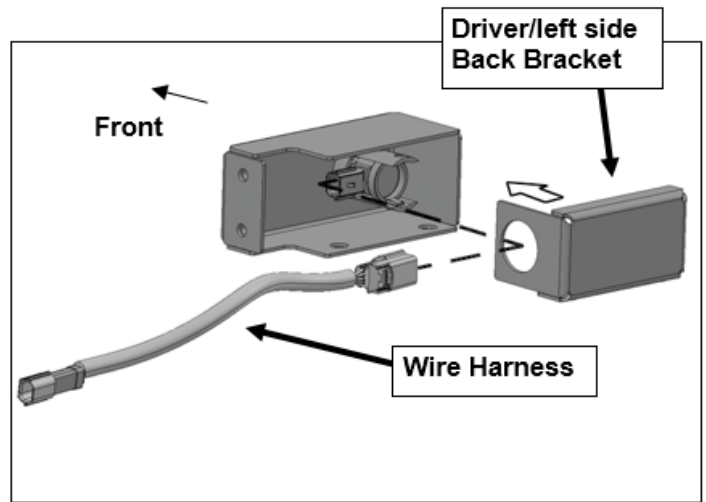
Driver/Left Side Installation Pictured



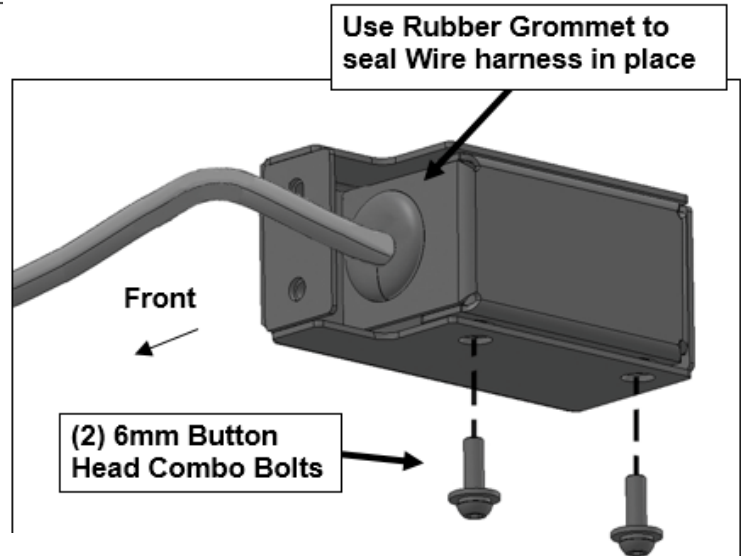
Driver/Left Side Installation Pictured



(Fig 6B) Sensor Assembly attached to the back of the sensor sleeve on the Driver/left side Front Bracket



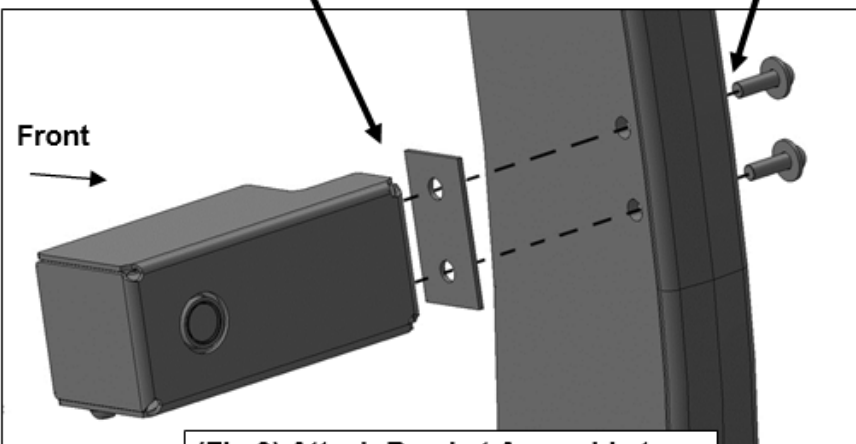
(Fig 7) Insert Wire Harness through hole on Driver side Back Bracket and connect the Harness end to the Sensor. Slide Back Bracket into Front Bracket.



(Fig 8) Driver/left side Front & Back Brackets assembled

NOTE: Attach adhesive side of Foam Strip to the inside of the Grille Guard Upright.

(2) 6mm Button Head Combo Bolts



(Fig 9) Attach Bracket Assembly to the inside of the Grille Guard Upright

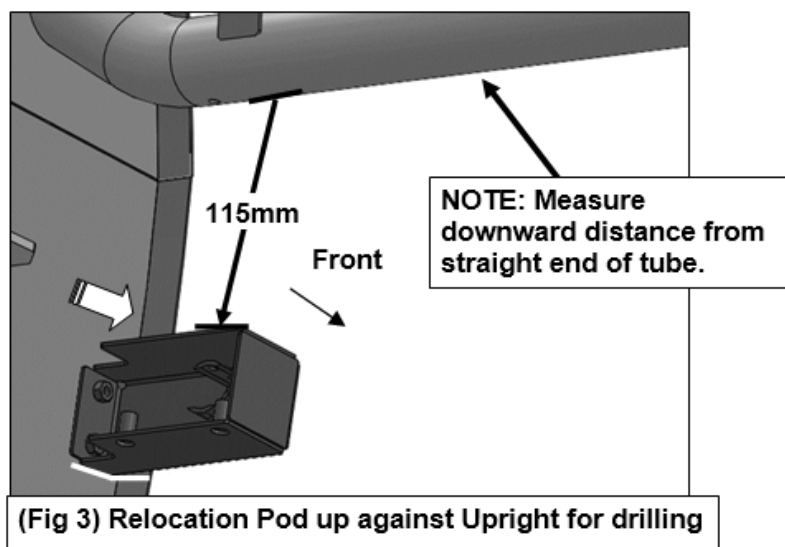
1	Driver/left side Front Sensor Bracket	2	20mm x 2mm Foam Spacers
1	Passenger/right side Front Sensor Bracket	2	Rubber Sealing Washers
2	55mm x 30mm x 2mm Adhesive Foam Strips	2	Retaining Rings
4	6-1.00mm x 20mm Button Head Combo Bolts		

PROCEDURE:**1. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.**

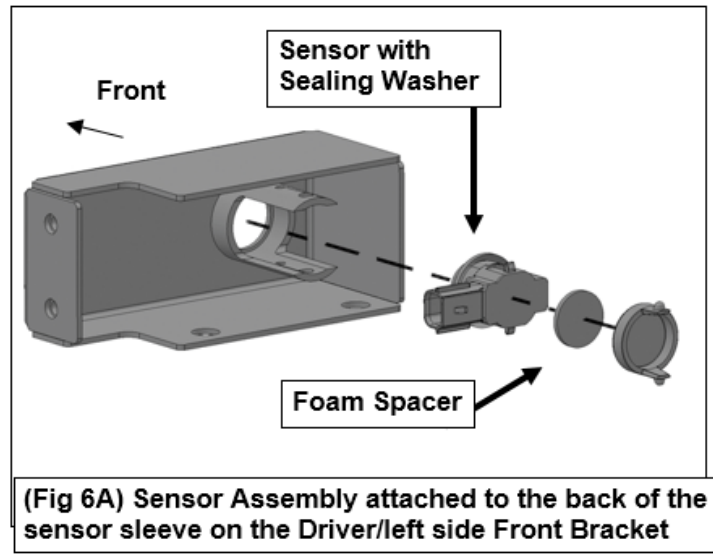
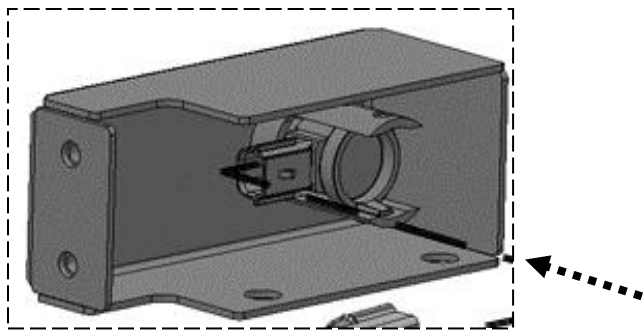
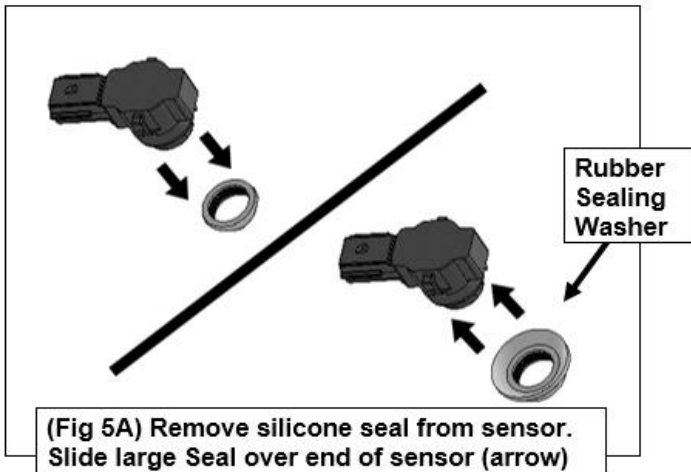
2. Determine if the Grille Guard Uprights are equipped with (2) factory holes on each side. If the Uprights are equipped with factory holes then continue to **Step 3**.

Grille Guard Uprights without factory holes:

- a. Starting from the bottom of the center tube/panel, use a tape measure to measure a downward distance of: **115mm**, (**Figure 3**). Mark a line on the Grille Guard Upright to indicate the measured distance.
 - b. Place the Driver/left side Front Sensor Bracket up against the corner of the marked line on the Grille Guard Upright. Push the Bracket forward to the front of the Upright. Mark through the (2) holes on the Bracket and onto the Upright, (**Figures 3**).
 - c. Use a 5/16" drill bit to drill through the (2) marked holes on the Upright.
 - d. Repeat **Steps 2a—2c** to drill out (2) holes on the passenger/right side Upright.
3. Locate parking sensors removed during grille guard install. Remove the silicone seal from the sensor. Slide the provided (1) Rubber Sealing Washer over the front of the sensor, (**Figure 5A**). Select the Driver/left side Front Sensor Bracket. Slide the sensor into the sensor sleeve on the back of the Bracket, (**Figure 5A**). **NOTE:** Sensor tabs may need to be trimmed to fit sensor into the sensor sleeve. Attach the adhesive side of the Foam Spacer to the Retaining Ring. Push the Retaining Ring into the sensor sleeve until it locks with the mounting holes, (**Figures 6A**).
4. Run the factory sensor wiring harness through the front of the bumper.
5. Locate the (2) holes on the driver/left side Grille Guard Upright. Select (1) Adhesive Foam Strip. Attach the adhesive side of the Foam Strip to the inside of the Grille Guard Upright.
6. Attach the driver/left side Bracket assembly to the inside of the Grille Guard Upright using (2) 6mm Button Head Combo Bolts, (**Figure 9**).
7. Reconnect the parking sensor the factory wiring harness.
8. Repeat **Steps 2—7** for passenger/right side Sensor assembly installation.
9. Properly level and adjust the Bracket assembly and tighten all hardware.
10. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

Driver/Left Side Installation Pictured

Driver/Left Side Installation Pictured



NOTE: Attach adhesive side of Foam Strip to the inside of the Grille Guard Upright.

(2) 6mm Button Head Combo Bolts

