



**TEL: 1-866-XANATOS**

## **INSTALLATION INSTRUCTIONS**

**SENSOR RELOCATION KIT 3" ROUND BULL BAR**

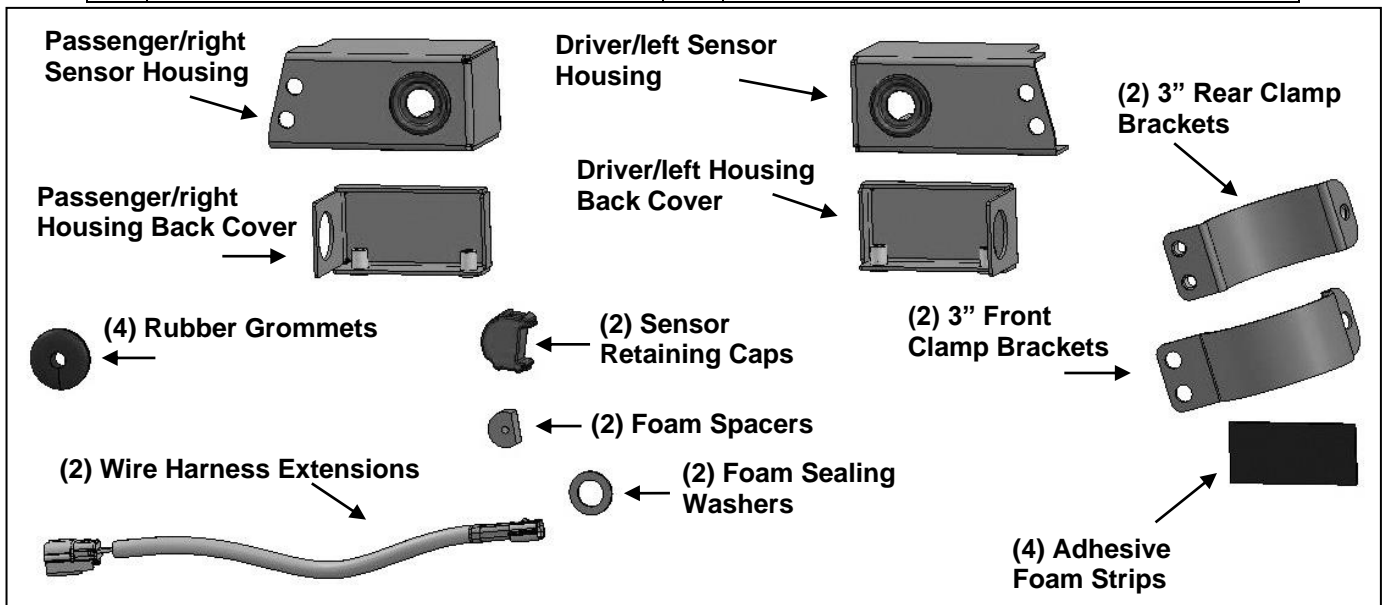
**2020-23 SILVERADO 2500-3500**

**2019-23 RAM 1500 (EXCL. REBEL & TRX TRIMS, 19-23 RAM 1500 CLASSIC  
AND 20-22 RAM 1500 DIESEL MODELS)**

**PART#BPS02S**

## Part List:

1	Driver/left Sensor Housing	4	Rubber Grommets
1	Passenger/right Sensor Housing	6	8-1.25mm x 20mm Button Head Bolts
1	Driver/left side Housing Back Cover	6	8mm x 16mm x 1.6mm Flat Washers
1	Passenger/right Housing Back Cover	6	8mm Lock Washers
2	3in Front Clamping Bracket	4	6-1.00mm x 20mm Button Head Combo Bolts
2	3in Rear Clamping Bracket	4	4mm x 15mm Self Tapping Screws
2	Sensor Retaining Caps	4	75mm x 35mm x 2mm Adhesive Foam Strips
2	20mm x 10mm Foam Spacers	1	4mm Wrench
2	15.5mm x 25mm x 2mm Foam Washers	1	5mm Wrench
2	Wire Harness Extensions		



## PROCEDURE:

### READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

- Unplug and remove the center sensors from the bumper, **(Figure 1)**. **NOTE:** Depending on the make and model of vehicle, it may be necessary to temporarily remove the Bull Bar and bumper to access and remove the sensors.
- Connect the end of the Harness Extension to the factory wiring harness in the bumper.
  - On models with plastic sensor clip, remove clip, **(Figure 2)**. Slide (1) Rubber Grommet onto the Harness and push into the hole in the bumper, **(Figures 3 & 4)**. **NOTE:** Grommet not used on all models.
  - Repeat previous Steps to attach remaining Wire Harness Extension to bumper harness.
  - Reinstall bumper and Bull Bar if previously removed.
- Select (1) Outer Clamp Half and (1) Foam Pad, **(Figure 5)**. Apply the Foam Pad to the inside of the Outer Clamp Half. Trim Foam as needed for proper fit. Next select (1) Inner Clamp Half. Repeat to apply (1) Foam Pad to inside of Clamp Half, **(Figure 5)**. Repeat previous **Step** to apply Foam Pads to inside of remaining Inner and Outer Clamps.
- Wrap (1) Inner and (1) Outer Clamp Half around the Bull Bar tube above the crossbar. Attach the Inner to the Outer Clamp with (1) 8mm x 20mm Button Head Bolt, (1) 8mm Lock Washer and (1) 8mm Flat Washer, **(Figure 6)**. Leave hardware loose.
- Select (1) sensor. Remove the silicone seal from the sensor, **(Figure 7)**. Slide the provided (1) Foam Sealing Washer over the front of the sensor. Select the driver/left Sensor Housing. Push the sensor into

the sensor mount in the Housing, **(Figure 8)**. Place (1) Foam Spacer over the sensor and snap the Retaining Cap onto the tabs on the Sensor Mount.

6. Insert the driver/left Sensor Housing between the Inner and Outer Clamps, **(Figure 9)**. Attach the Clamps to the Housing with the included (2) 8mm x 20mm Button Head Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers. Snug but do not fully tighten Clamp hardware.
7. Select (1) Rubber Grommet, **(Figure 10)**. Slide the Grommet onto the Wire Harness. Select the driver/left Sensor Housing Back Cover. Push the larger "female" end of the Harness through the hole in the Cover. Plug the end of the Harness into the sensor. Push the Grommet into the hole in the Cover.
8. Attach the Cover to the Sensor Housing with the included (2) 6mm x 20mm Button Head Combo Bolts, **(Figure 11)**. Fully tighten this hardware.
9. Repeat **Steps 3—8** to assemble and install the passenger/right side Sensor Housing.
10. Line up sensor Housings with sensor mounting locations in factory bumper.

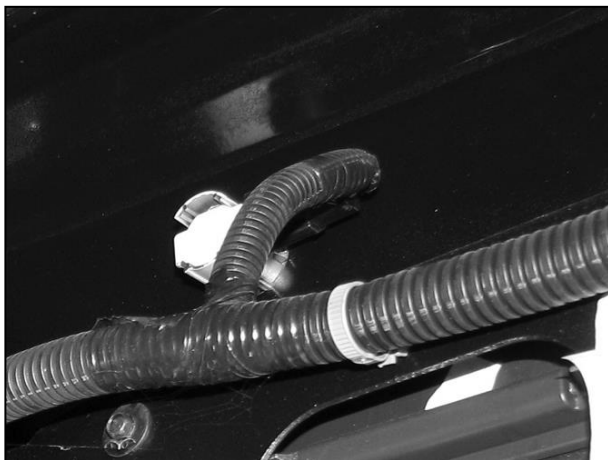
**2020-23 Silverado-Sierra 25-3500 models:**

- a. Line up sensor in housing with factory sensor location, with the bottom of the housing approximately 4-3/4" (120mm) above the center cross tube, **(Figure 12)**.

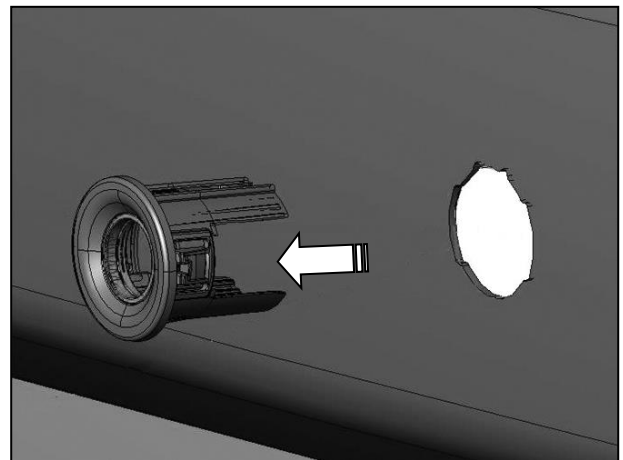
**2019-23 Ram 1500 models:**

- a. Line up sensor in housing with factory sensor location, with the bottom of the housing approximately 2-1/2" (65mm) above the center cross tube, **(Figure 13)**.
11. Properly level and adjust the Sensor Housing and Clamps to match the angle of the bumper. **NOTE:** It may be necessary to loosen the Bull Bar and adjust angle of the Bull Bar to parallel the face of the bumper for proper sensor function.
12. 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 Sensor Relocation assembly.



**(Fig 1) Unplug and remove OE center sensors from the back of the bumper (Example ONLY)**



**(Fig 2) Remove OE sensor retainer from bumper if equipped**

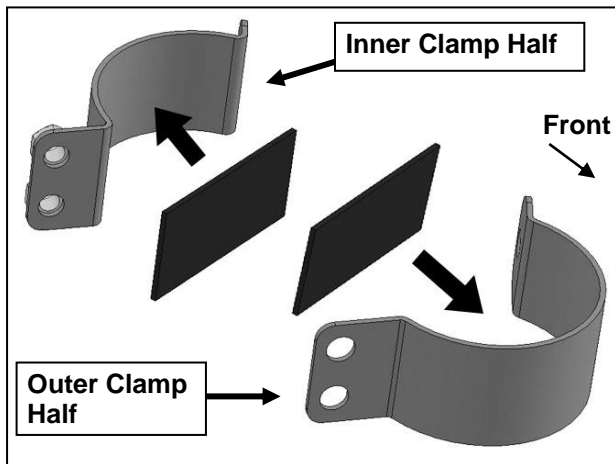
### Driver/Left Side Installation Pictured



(Fig 3) Slide (2) Rubber Grommets onto Wire Harness Extension

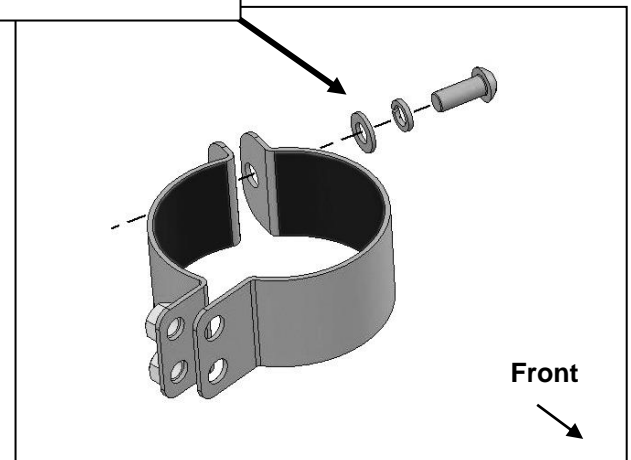


(Fig 4) Plug Harness Extension into factory harness. Push Grommet into sensor hole in bumper. Bumper pictured for example only-grommet may not fit into all bumpers

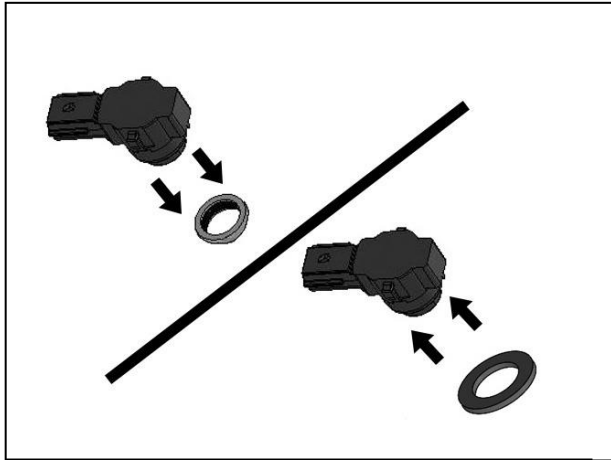


(Fig 5) Apply Foam to inside of Clamps

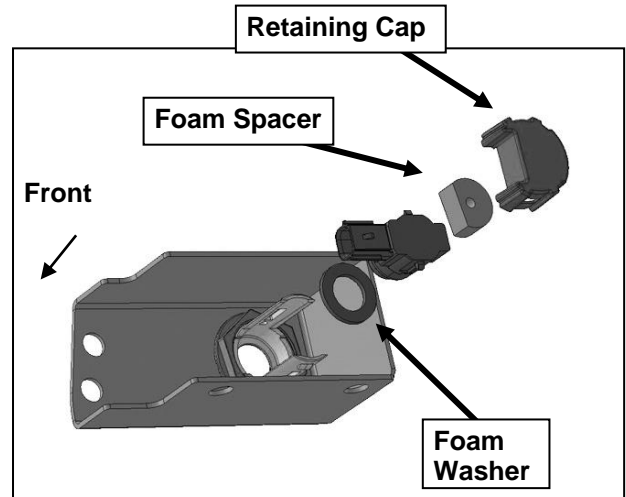
8mm Button Head Bolt  
8mm Lock Washer  
8mm Flat Washer



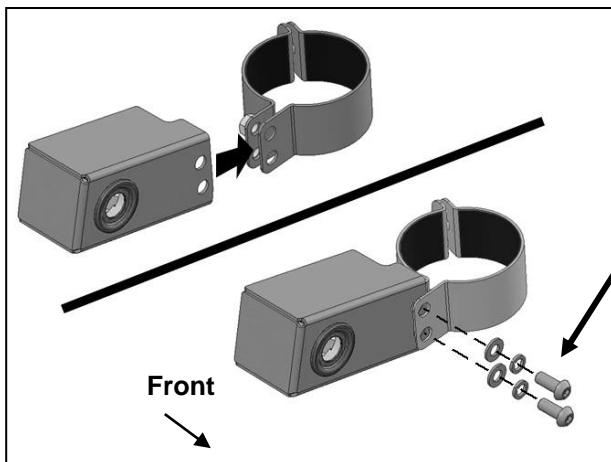
(Fig 6) Attach outer Clamp half to inner Clamp half



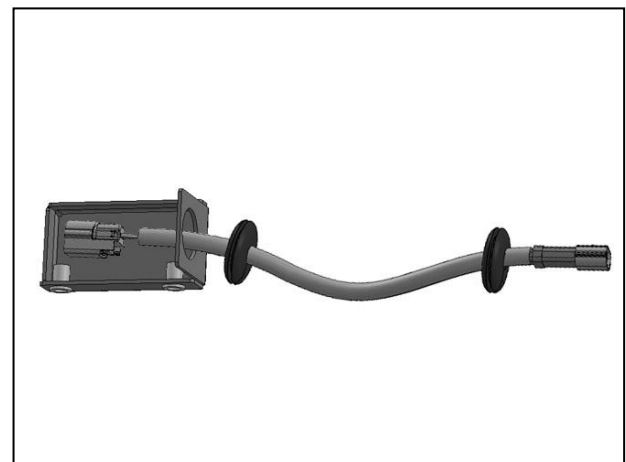
(Fig 7) Remove silicone seal from sensor. Slide large Seal over end of sensor (sensor used for example only)



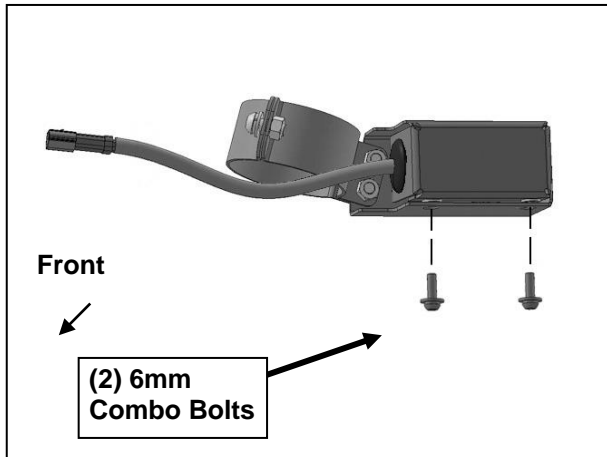
(Fig 8) Push sensor into mount on inside of Housing. Slide Foam Spacer and Retaining Cap onto sensor and snap onto mount. Driver/left side Front Bracket illustrated



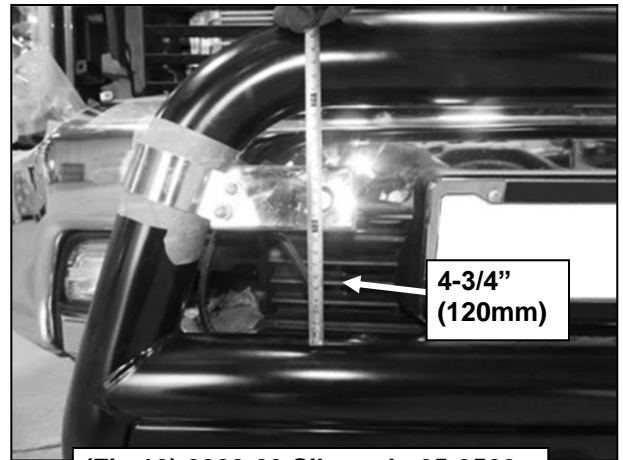
(Fig 9) Slide Sensor Housing between inner and outer Clamp Halves



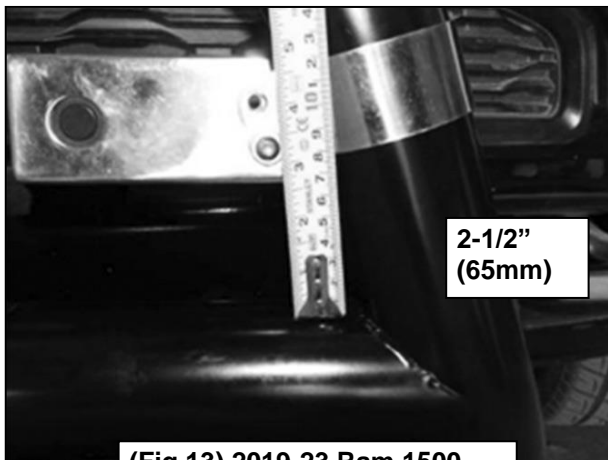
(Fig 10) Insert Harness Extension into driver/left Back Cover and plug into sensor in Housing



(Fig 11) Attach Back Cover to driver/left Housing. Push Grommet into hole in Cover



(Fig 12) 2020-23 Silverado 25-3500



(Fig 13) 2019-23 Ram 1500