



**BLACK HORSE
OFF ROAD®**

TEL: 1-866-XANATOS

INSTALLATION INSTRUCTIONS

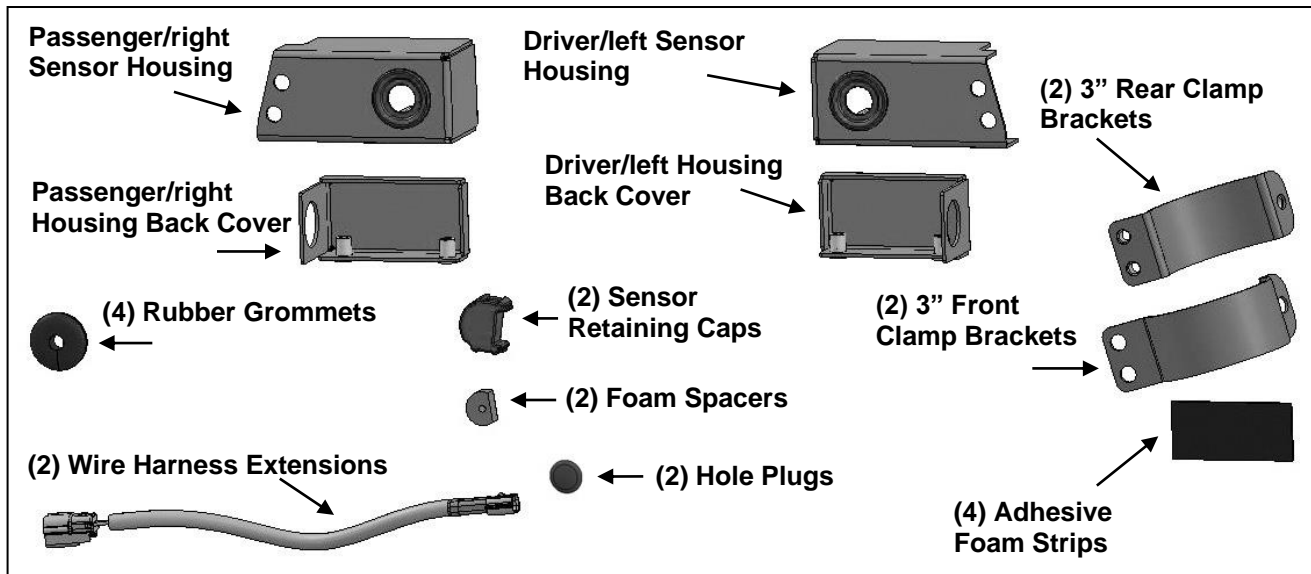
SENSOR RELOCATION KIT 3" ROUND BULL BAR

2009-18 RAM 1500-3500

PART#BPS04S/BPS04B

Part List:

1	Driver/left Sensor Housing	2	Hole Plugs
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	1	4mm Wrench
2	20mm x 10mm Foam Spacers	1	5mm Wrench
4	Rubber Grommets	4	75mm x 35mm x 2mm Adhesive Foam Strips
2	Wire Harness Extensions		



PROCEDURE:

READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

- Select (1) Outer Clamp Half and (1) Foam Pad, **(Figure 1)**. 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 1)**. Repeat previous **Step** to apply Foam Pads to inside of remaining Inner and Outer Clamp Halves.
- Wrap (1) Outer and (1) Inner Clamp Half around the Bull Bar tube. Attach the Outer to the Inner Clamp with (1) 8mm x 20mm Button Head Bolt, (1) 8mm Lock Washer and (1) 8mm Flat Washer, **(Figure 2)**. Leave hardware loose.
- Unplug and remove the center sensors from the bumper, **(Figure 3)**. **NOTE:** On 1500 models with steel bumper only, remove the sensor retainers from the bumper, **(Figure 3)**.
- Locate the driver/left Sensor Housing. Select (1) sensor. Push the sensor into the sensor mount in the Relocation Housing, **(Figure 4)**. Place (1) Foam Spacer over the sensor and snap the Retaining Cap onto the tabs on the Sensor Mount.
- Insert the driver/left Sensor Housing between the Inner and Outer Clamps, **(Figure 5)**. 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.

1500 models:

- Line up sensor in housing with factory sensor location, approximately 4-1/4" (110mm) down from the bottom of the top tube, **(Figure 6)**.

25-3500 models:

- Slide sensor housing down until it rests on top of the mounting tabs on the back of the Bull Bar, **(Figure 7)**.

- Select (1) Wire Harness Extension Cable and (1) Rubber Grommet, **(Figure 8)**. Slide the Grommet onto the Wire Harness. Select the driver/left Sensor Housing Back Cover, **(Figure 9)**. Push the larger

"female" end of the Harness though the hole in the Cover. Plug the end of the Harness into the sensor. Push the Rubber Grommet into the hole in the Cover. Attach the Cover to the Sensor Housing with the included (2) 6mm x 20mm Button Head Combo Bolts, **(Figure 10)**. Fully tighten this hardware.

7. Connect the end of the Harness Extension to the factory wiring harness.

1500 models:

- a. Guide the Harness Extension through the hole in the bumper, on models with a steel bumper, slide (1) Rubber Grommet onto the Harness and into the hole in the bumper, **(Figure 11)**.

NOTE: Grommet not used on models with plastic bumper cover.

25-3500 models:

- a. Insert the Hole Plugs into the bumper sensor mounts to fill the hole, **(Figure 12)**. Reroute the wiring harness up through the bottom of the bumper. Connect Harness Extension to the wiring harness.

8. Repeat **Steps 2—7** to assemble and install the passenger/right side Sensor Housing.

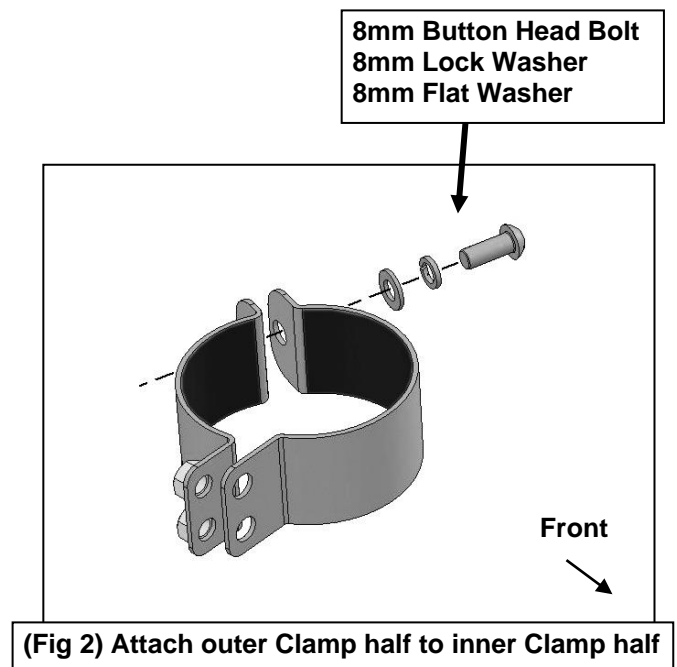
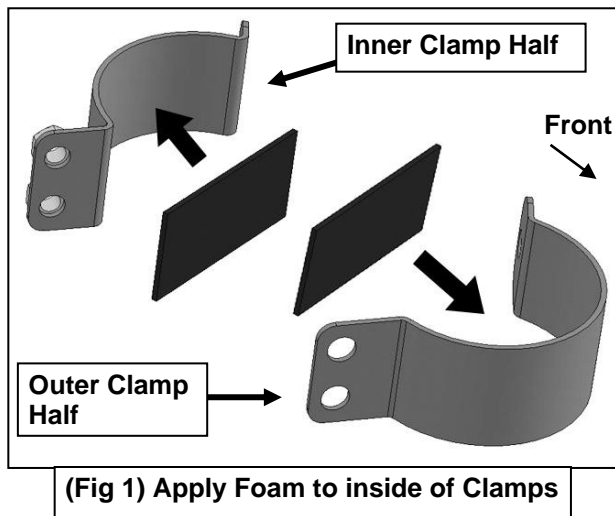
9. Properly level and adjust the Sensor Housing and Clamps to match the angle of the bumper. **NOTE:** It may be necessary to loosen the Bull Bar and adjust angle of the Bull Bar to parallel the face of the bumper for proper sensor function.

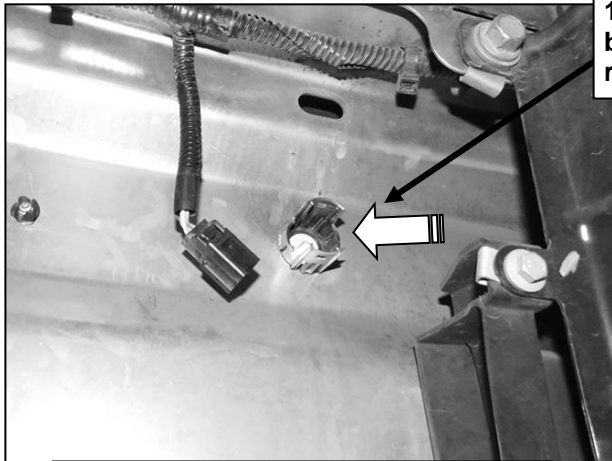
- a. On 1500 models, loosen hardware attaching Bull Bar to brackets. Adjust Bull Bar in toward vehicle and down as much in the slots in the Brackets as possible. Once properly adjusted and aligned, fully tighten all hardware and secure the Wire Harnesses.

10. 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.

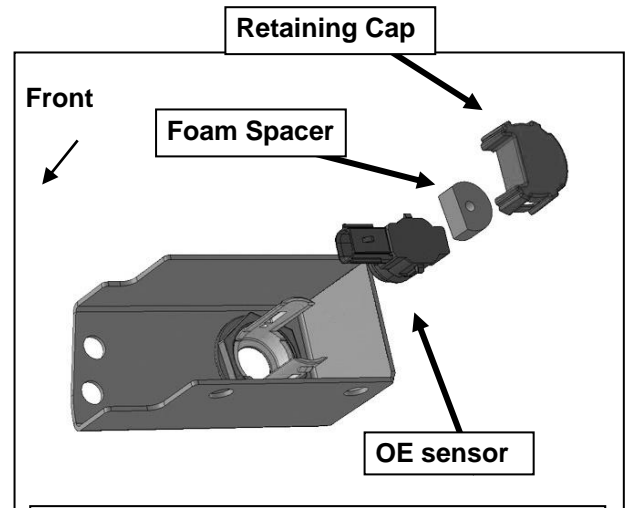
Driver/Left Side Installation Pictured



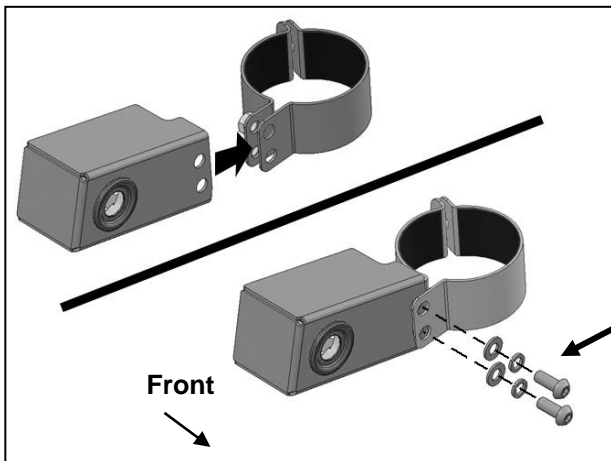


(Fig 3) Unplug and remove OE center sensors from the back of the bumper

1500 model only with steel bumper, also remove OE sensor retainers from bumper (arrow)



(Fig 4) Push sensor into mount on inside of Housing. Slide Foam Spacer and Retaining Cap onto sensor and snap onto mount



(Fig 5) Slide Sensor Housing between inner and outer Clamp Halves

(2) 8mm Button Head Bolts
(2) 8mm Lock Washers
(2) 8mm Flat Washers



(Fig 7) 25-3500 models: Slide Housing down tube as far as possible (arrow)

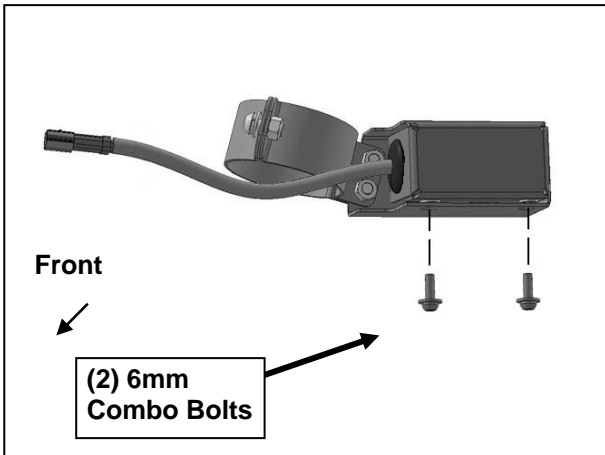


(Fig 6) 1500 models: Adjust height of Housing to approximately 4-1/4" down from bottom of top tube

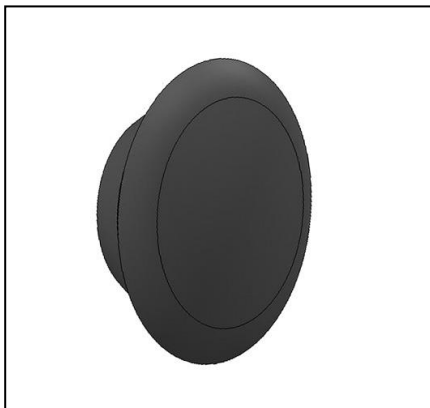
Driver/Left Side Installation Pictured



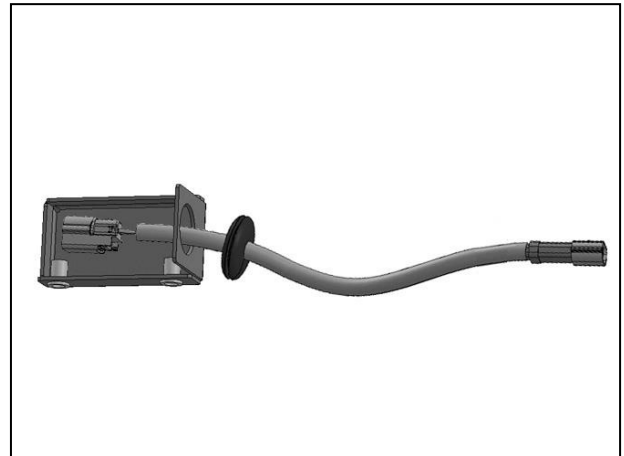
(Fig 8) Slide Rubber Grommet onto end of Wire Harness Extension



(Fig 10) Attach Back Cover to driver/left Housing. Push Grommet into hole in Cover



(Fig 12) 25-3500 all models: Plug hole in sensor mount in bumper with included Plastic Plugs



(Fig 9) Insert Harness Extension into driver/left Back Cover and plug into sensor in Housing



(Fig 11) Plug Harness into sensor harness

1500 model with steel bumper only:
Plug Harness Extension into factory sensor harness.
Push Rubber Grommet into sensor hole in bumper

1500 model with plastic bumper:
Push Wire Harness Extension through sleeve in bumper, no grommet used.

25-3500 all models:
Plug hole in sensor mount with included Plastic Plug (Figure 12). Reroute harness through center of bumper