

# Radar Blind Spot Brackets for 2015-Current Suburban/Tahoe/Yukon (Part # RDBS-1430)

\*\*\*REQUIRES RDBS-1400 UNIVERSAL RADAR BLIND SPOT SYSTEM\*\*\*

Please read thoroughly before starting installation and check that kit contents are complete.

#### **Items Included in the Kit:**

Driver side radar mounting bracket Passenger side radar mounting bracket 8 ¾-inch stainless steel Phillips screws

- 4 1-inch stainless steel Phillips screws
- 16 Nyloc stainless steel nuts
- 16 5mm stainless steel washers
- 4 10mm nuts
- 8 self-tapping 1/4-inch drive screws

#### **Tools & Supplies Required:**

Torx T30 Bit

1/4-inch and 1/2-inch drill bit

3/4-inch bi-metal hole saw

1/4 inch,7mm, 8mm and 10mm sockets

Power drill

Deburring tool or round file

Multi-meter or computer safe test light

Zip ties and electrical tape

Plastic trim removal tool

<u>Smart phone app: iHandy Level or Bubble</u> level



## **Safety Precautions:**

- Work in a well-ventilated area that is clear of obstructions.
- Secure vehicle with tire chucks in both front and rear of tires.
- Turn vehicle accessories OFF and ensure ignition key is in OFF position.
- Wear safety goggles and snug fitting clothes.
- Use tools only for their intended purpose and which are in good repair.
- Only perform this task if confidence, skill, and physical ability permit.

NOTE: We strive to provide accurate and up-to-date installation instructions.

For the latest full color instructions please visit <a href="https://www.brandmotion.com">www.brandmotion.com</a>



**SECTION 1: REMOVE REAR BUMPER FASCIA** 









- 1. This step will require assistance. One person should hold the bumper fascia, while the other removes the fascia from the vehicle body. On the driver's side of the upper bumper fascia, use a plastic pry tool and begin to unsnap the fascia from the body working from the wheel well toward the rear of the vehicle. Repeat removing bumper fascia from passenger side.
- 2. Lift the bumper fascia off the bumper (checking for any wiring or harnesses that may need to be disconnected) and set aside in a safe place.
- 3. If the vehicle is equipped with factory backup sensors, then the plastic mount inside of the rear fascia will have to be removed.









## **SECTION 2: ATTACH BRACKETS and SENSORS**

- 1. Working on the driver's side, remove the (2) screws from the bottom of the taillight.
- 2. Insert the top tabs of the drivers side bracket under the taillight. Reinsert the screws to hold the bracket in place.



- 3. After bracket is test-fitted, insert the 4 Phillips screws from the back side and attaching them with the 10mm Nyloc nuts from the front. Screw threads will extend past the nuts.
- 4. Attach assembled bracket to vehicle using supplied self-tapping screws. You will need to use at least (3) per to mount the side of the bracket to the vehicle.





- 5. Mount radar sensor on the four studs with the connector pointing down (MASTER radar sensor mounts to driver's side, SLAVE mounts to passenger side). Secure sensor to studs with 4 additional Nyloc nuts.
- 6. Use Smart phone app to check the degree of the angle top to bottom. It should be 0°-1° pointing up.
- 7. Repeat steps 1-4 on passenger's side of vehicle.
- 8. Mark bottom side of the vehicle to drill ¾-inch hole. Drill hole using ¾-inch bi-metal hole saw (not supplied). Smooth edges of hole using deburring tool or round file. (We also recommend using Z-tech inhibitor or paint on the hole.)
- 9. Connect the rear bumper harness to the radars
- Connect shortest length wired connector to MASTER radar module. Route the longer wired connector over to the passenger side.
- 11. The (4) pin white connector will connect to the interior/chassis harness.
- 12. Secure the wire running across the back of the vehicle with zip ties.

#### **SECTION 3: INTERIOR WIRING HARNESS**

- 1. Inside the vehicle, remove the sill panels from the front and rear driver's side doors.
- 2. Remove drivers side kick panel and under dash cover.
- 3. Route the interior harness from the rear storage area to the front driver-side kick panel.
- 4. Splice the GREEN wire from chassis harness to the GREEN/PURPLE wire at the BCM. Black 26 pin plug, pin 3. This should be the RIGHT turn signal. Test the wire with a multimeter to confirm it is the RIGHT turn signal positive wire.



- 5. Splice the YELLOW wire from chassis harness to the BLUE/WHITE wire at the BCM. Brown 26 pin plug, pin 2. This should be the LEFT turn signal. Test the wire with a multimeter to confirm it is the LEFT turn signal positive wire.
- 6. Splice the WHITE wire from chassis harness to the BLUE/BROWN wire at the BCM. Brown 26 pin plug, pin 26. This should be the REVERSE lights. Test the wire with a multimeter to confirm it is the REVERSE lights positive wire.
- 7. Splice the RED wire from the interior harness to the PURPLE/YELLOW wire at the BCM. Green 25 pin plug, pin 15. Use the supplied fuse holder and 3A fuse, and splice into the RED wire approximately 3 inches from the previous spliced connection.
- 8. Splice the BROWN wire from chassis harness to the PURPLE/GRAY wire at the fuse box under the hood. Brown 58 pin plug, pin G1. This should be the PARKING LIGHTS. Test the wire with a multimeter to confirm it is the PARKING LIGHTS positive wire. The BROWN wire can be connected the headlight wire instead of running it under the hood. The headlight wire is WHITE/PURPLE at the BCM in a WHITE 26 pin plug, pin 16. You can use any 12-volt positive parking light wire.



9. Attach the black plastic-coated wire with the ringlet from the interior harness to a good, clean ground in the vehicle.

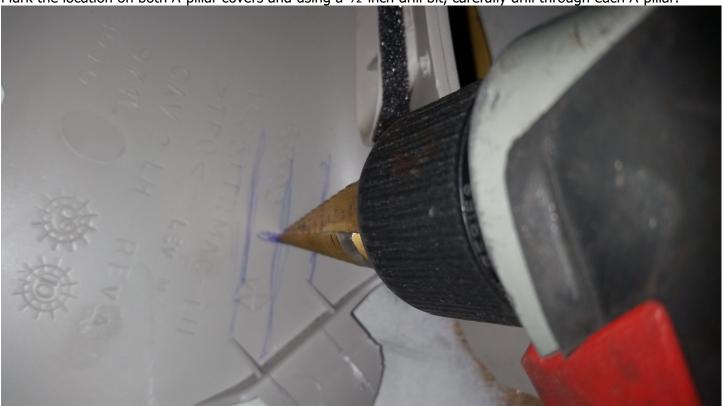
#### SECTION 4: INSTALL HMI (warning lights) and BUZZER

- 1. Plug in HMI (human-machine interface) harness to interior harness. The short wire with connector goes to the driver's side and the longer wire goes to the passenger side.
- 2. Remove both driver and passenger A-pillar covers from vehicle.
- 3. Find a visible location low on the A-pillars covers to mount HMI.

RDBS-1430 Instructions.docx Page 7 of 9 GS



4. Mark the location on both A-pillar covers and using a ½-inch drill bit, carefully drill through each A-pillar.



5. Insert HMI into drilled hole and secure from the back side of A-pillar cover using retaining washer.



6. Plug in HMI to HMI harness and re-attach A-pillar covers to appropriate sides, taking care not to pinch HMI harness wires.

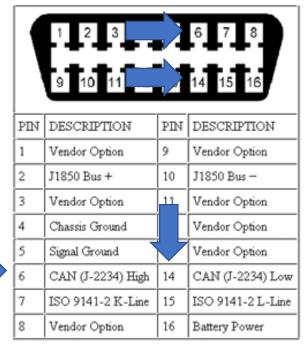
RDBS-1430 Instructions.docx Page 8 of 9 GS



7. Plug the buzzer into the interior harness. Find a flat surface to mount the buzzer to and remove backing of double-sided tape to attach to preferred location. (The more hidden the location is, the lower the buzzer volume with be.)

#### **SECTION 5: INSTALL ECU INTO VEHICLE**

- 1. Plug the interior harness into the ECU.
- 2. Determine best mounting position for ECU.
- 3. Mount the ECU.
- 4. Attach BLUE CAN HI wire from the ECU to pin location 6 on the vehicle's OBDII connector and attach the BROWN CAN LO wire from the ECU to pin location 14 on the vehicle's OBDII connector.



OBD-II Connector and Pinout

#### **SECTION 6: REASSEMBLE VEHICLE**

- Before reassembling vehicle and reattaching bumper fascia, it is highly recommended to test the blind spot system to make sure it is functioning properly (detecting objects behind or approaching from the sides while the vehicle is in reverse and at speeds above 20 MPH). If detection falses, it may be necessary to shim radar modules 1 degree up or down using included washer shims or longer 1-inch screw studs.
- 2. Use **Smart phone app: iHandy Level or Bubble level** to test angles.
- 3. Reassemble vehicle, following steps in reverse order. Test the blind spot system again to ensure proper functioning of the radar units under the rear bumper fascia.