

## Universal Radar Blind Spot System Brackets (Part #RDBS-1405)

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

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

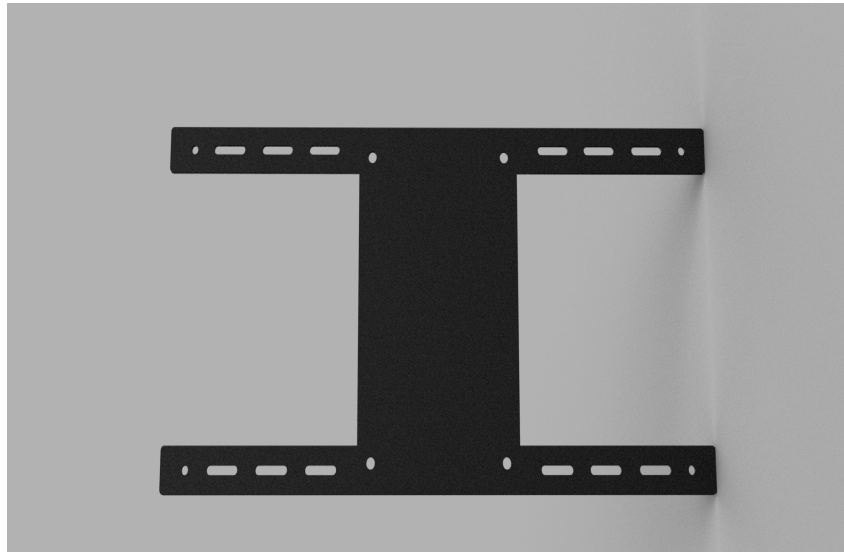
### **Items Included in the Kit:**

Driver side radar mounting bracket  
Passenger side radar mounting bracket  
8 3/4-inch stainless steel Phillips screws  
4 1-inch stainless steel Phillips screws  
16 Nyloc stainless steel nuts  
16 5mm stainless steel washers  
8 self-tapping 1/4-inch drive screws  
Protractor

### **Tools & Supplies Needed:**

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  
Mutli-Meter or computer-safe test light  
Zip Ties and Electrical Tape  
Plastic Trim Removal Tool

**Smart Phone App: iHandy Level (iPhone) or  
Bubble Level (Android)**



### **Safety Precautions:**

- Work in 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.

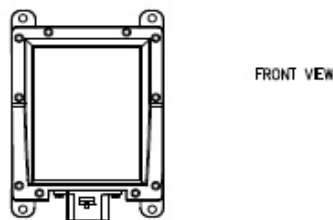
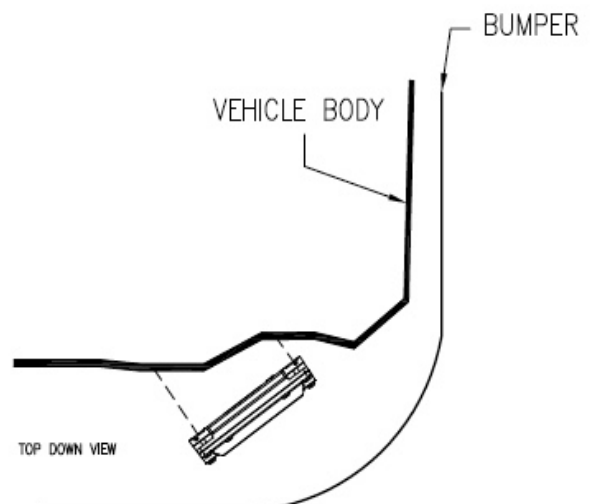
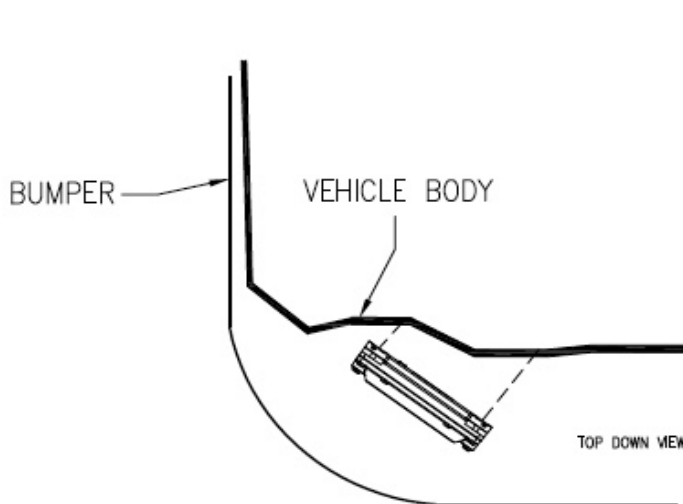
**NOTE: We strive to provide accurate and up-to-date installation instructions. For the latest full color instructions, as well as an installation video, please visit [www.brandmotion.com](http://www.brandmotion.com)**

## INSTALLATION:

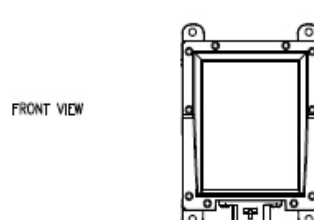
1. When installing the radar modules, use the recommended smart phone app (or the included protractor) to check the angle for the radar modules. Brandmotion recommends **57 degrees** from the back of the vehicle as optimal, but can be between 55 to 59 degrees. The elevation angle (or "pitch") from top to bottom should be between **1 to 3 degrees**.
2. The MASTER radar module is for the driver's side and the SLAVE radar module is for the passenger side. Both modules should be installed with the black side facing the exterior of the vehicle and connectors facing down toward the ground.
3. The vehicle wiring harness will run down the driver's side of the vehicle. For the radar module wiring harness, connect the shortest length wired connector to the MASTER radar module and the longer wired connector to the SLAVE radar module (refer to page 3 for harness diagram).

DETAIL MASTER SENSOR

DETAIL SLAVE SENSOR

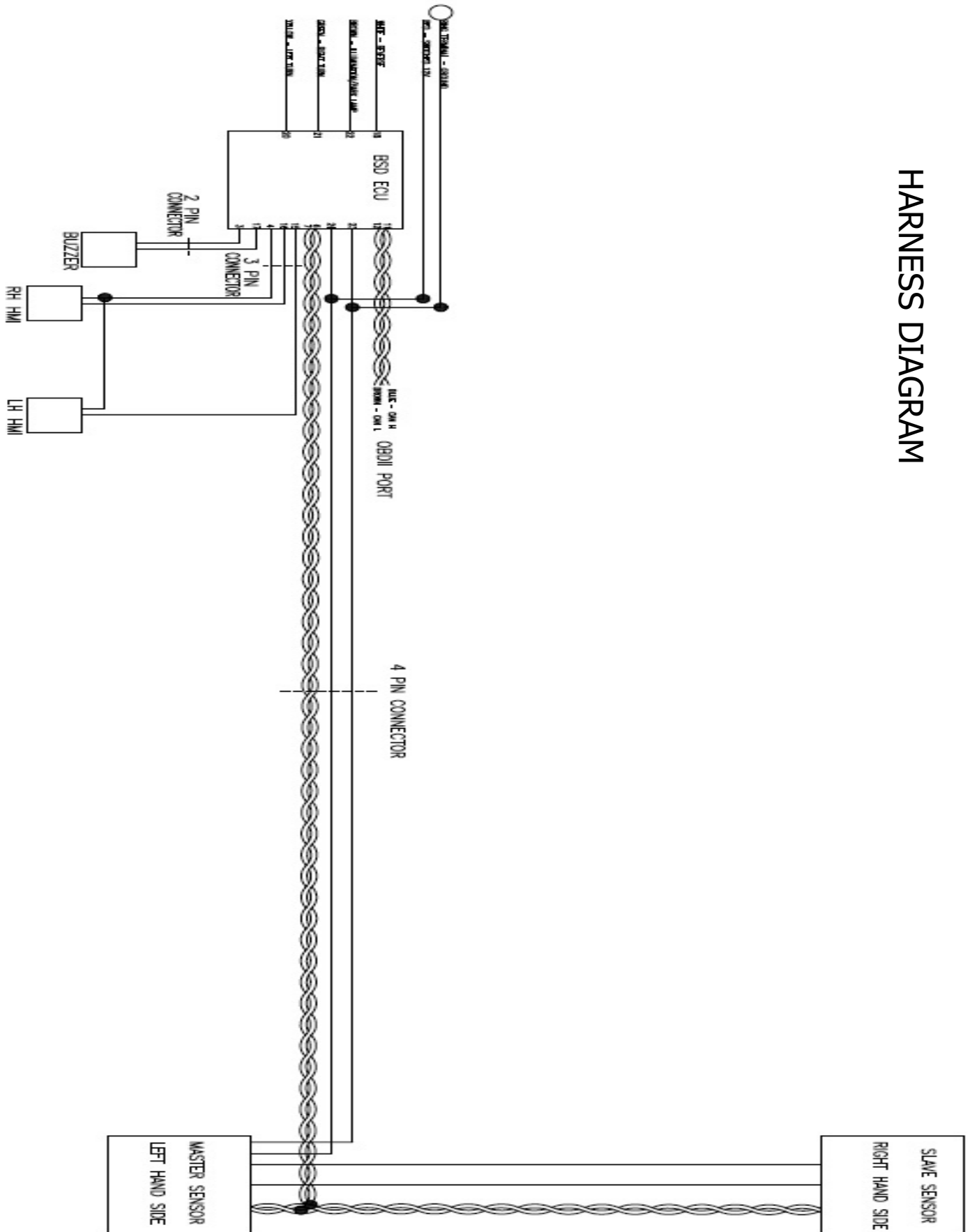


MASTER SENSOR CONNECTOR FACING DOWN:  
VIEW FROM REAR OF VEHICLE

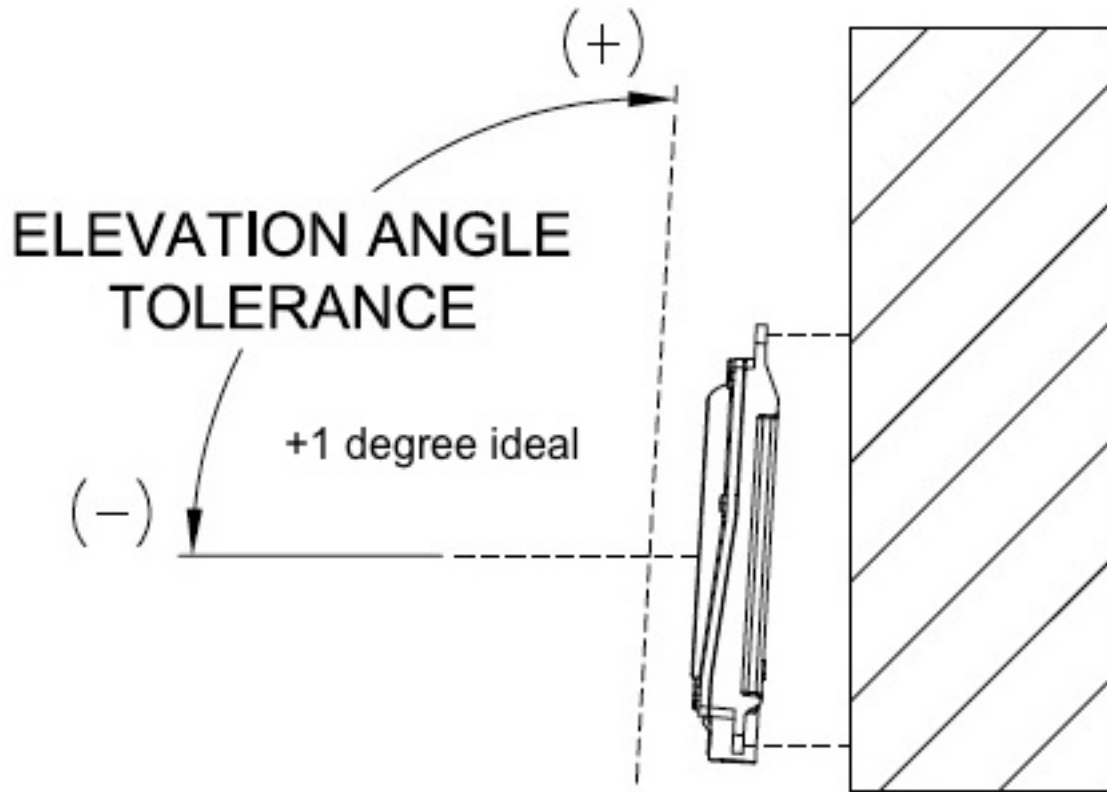
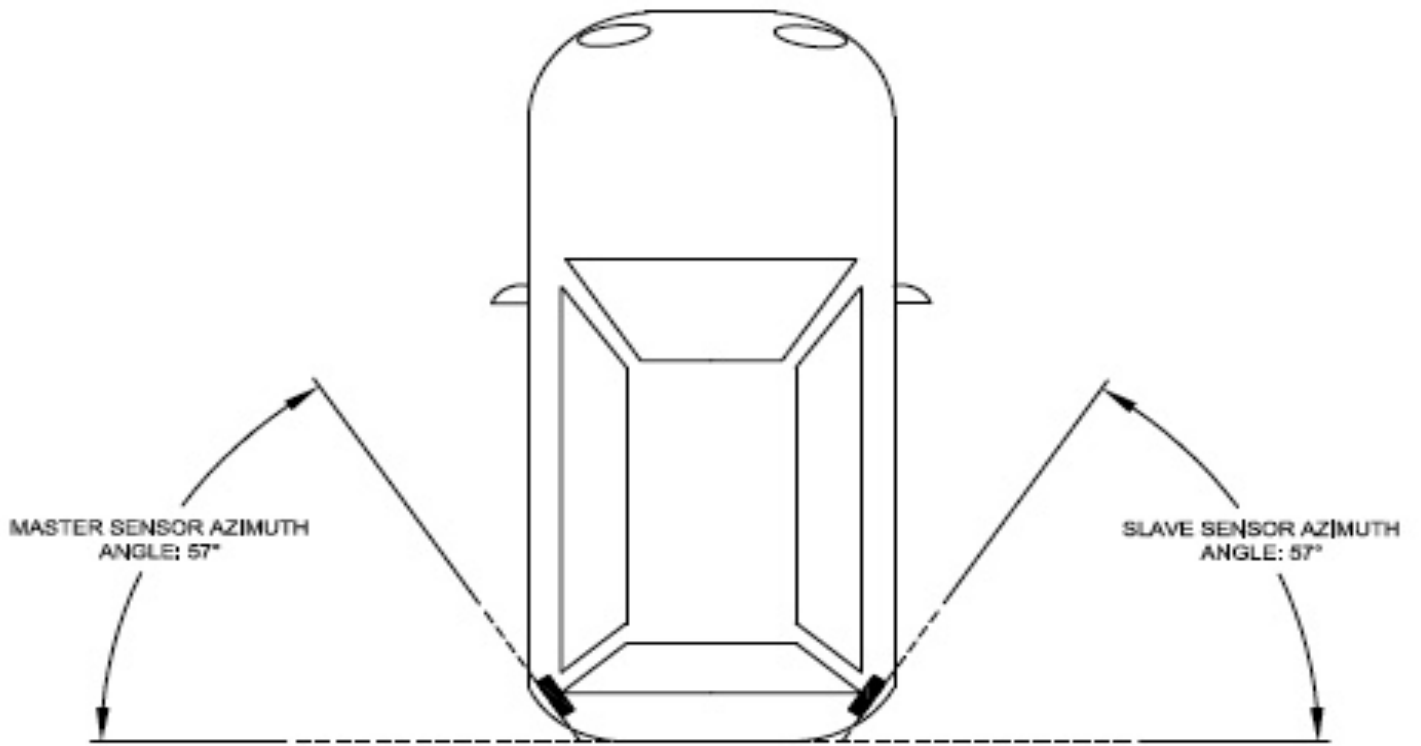


SLAVE SENSOR CONNECTOR FACING DOWN:  
VIEW FROM REAR OF VEHICLE

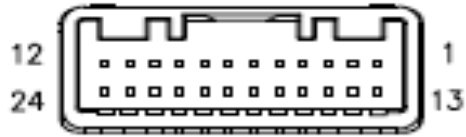
**HARNNESS DIAGRAM**



# INSTALLATION INSTRUCTIONS



4. For the interior harness installation:
  - a. GREEN wire connects to the vehicle's RIGHT TURN SIGNAL positive wire.
  - b. YELLOW wire connects to the vehicle's LEFT TURN SIGNAL positive wire.
  - c. WHITE wire connects to the vehicle's REVERSE lights.
  - d. BROWN wire connects to the vehicle's PARKING LIGHTS positive wire.
  - e. RED wire connects to vehicle IGNITION.
  - f. BLACK plastic-coated wire connects to a good, clean GROUND in the vehicle.
5. Pinouts for the ECU connector:



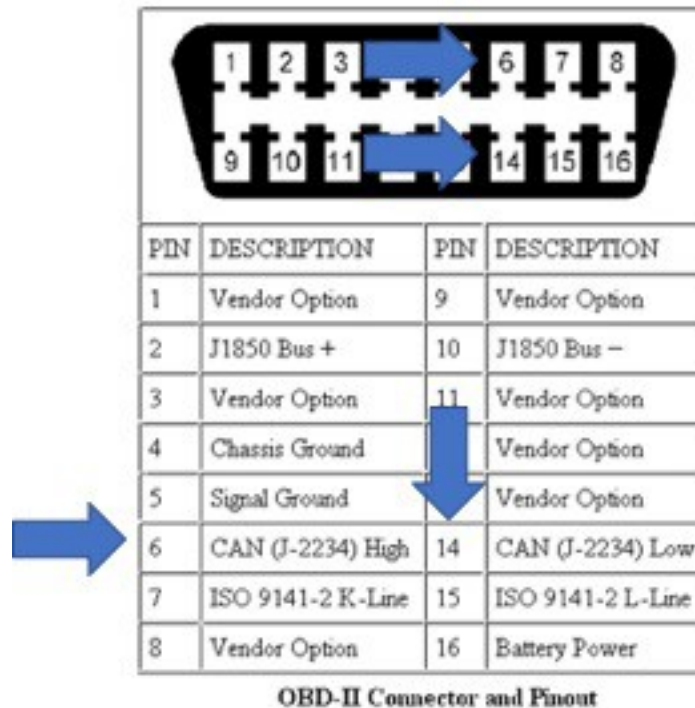
PIN	FUNCTION	DESCRIPTION
1	NC	SPEAKER OUTN
2	NC	SPEAKER OUTP
3	SWITCHED VBAT	BUZZER V+
4	SWITCHED VBAT	HMI V+
5	SWITCHED VBAT	SENSOR V+
6	CAN RADAR HIGH 0	SENSOR CANH
7	CAN RADAR LOW 0	SENSOR CANL
8	NC	—
9	NC	—
10	NC	—
11	CAN VEHICLE HIGH	VEHICLE CANH
12	CAN VEHICLE LOW	VEHICLE CANL
13	NC	—
14	NC	—
15	LOW SIDE DRVE	L. LED—
16	LOW SIDE DRVE	R. LED—
17	LOW SIDE DRVE	BUZZER—
18	INPUT	REVERSE
19	NC	—
20	INPUT	VEH L.IND
21	INPUT	VEH R.IND
22	INPUT	ILL
23	GND	GND
24	V+	ECU+

## 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 to mount HMI.
4. Mark the location on both A-pillar covers and using a 1/2-inch drill bit, carefully drill through each A-pillar.
5. Insert HMI into drilled hole and secure from the back side of A-pillar using retaining washer.
6. Plug HMI into HMI harness and reattach A-pillar covers to appropriate sides, taking care not to pinch HMI harness wires.
7. Plug the buzzer into the interior harness. Find a flat surface to mount the buzzer to and remove backing the double-sided tape to attach buzzer to preferred location. (The more hidden the location is, the lower the buzzer volume will be.)

## 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 the BLUE CAN HI wire from the ECU to pin location 6 on the vehicle's OBDII connector.
5. Attach the BROWN CAN LOW wire from the ECU to pin location 14 on the vehicle's OBDII connector.

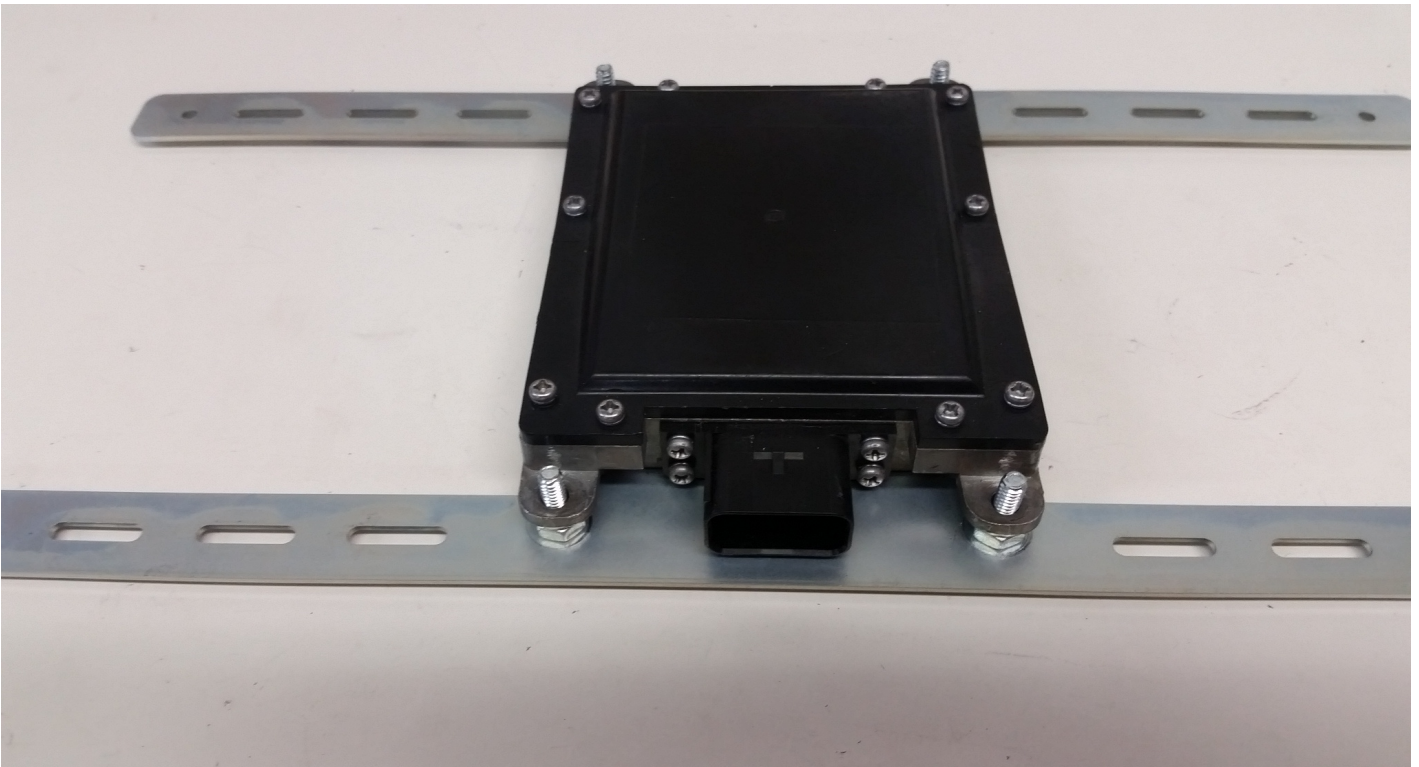


## PREPARING BRACKET

Placement of mounting studs in bracket:



Radar module mounted on studs:



Using protractor to measure mounting angles:



**BRACKET MOUNTING EXAMPLES:**









**HMI MOUNTING EXAMPLE:**

