



INSTALLATION GUIDE

RV BLIND SPOT DETECTION SYSTEM: FOR MOTORHOMES

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1. WARNING

1. THE RV BLIND SPOT DETECTION SYSTEM DOES NOT REPLACE ANY FUNCTIONS DRIVERS SHALL ORDINARILY PERFORM IN DRIVING A MOTOR VEHICLE, NOR DOES IT DECREASE THE NEED FOR DRIVERS TO STAY VIGILANT AND ALERT IN ALL DRIVING CONDITIONS, TO OBEY ALL THE SAFE DRIVING STANDARDS, PRACTICES, TRAFFIC RULES AND REGULATIONS.
2. CUB DOES NOT GUARANTEE 100% ACCURACY IN THE DETECTION OF VEHICLES OR PEDESTRIANS, AND THEREFORE DOES NOT GUARANTEE THE PERFORMANCE OF ANY RELATED AUDIO OR VISUAL WARNING SIGNALS. FURTHERMORE, ROAD, WEATHER AND OTHER CONDITIONS MAY ADVERSELY AFFECT THE VEHICLE'S BLIND SPOT DETECTION SYSTEM RECOGNITION AND RESPONSE CAPABILITIES.
3. CAREFULLY READ THIS INSTALLATION GUIDE AND ITS IMPORTANT SAFETY INSTRUCTIONS AND WARNINGS PRIOR TO INSTALLING OR USING THE RV BSD SYSTEM.
4. IT IS RECOMMENDED THAT THE INSTALLATION BE CARRIED OUT BY QUALIFIED PERSONNEL.



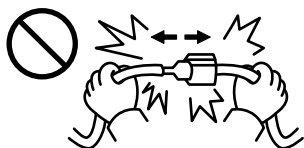
Wear proper protective gear



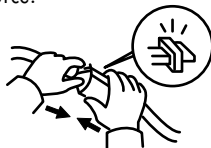
Deburr edges and use grommets



Use appropriate torque to fasten



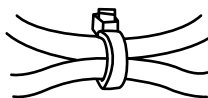
Do not pull the connectors with excessive force.



Fasten all connectors and terminals securely.

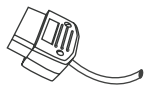


Do not pull the harness with excessive force.



Stress relieve harnesses and secure properly.

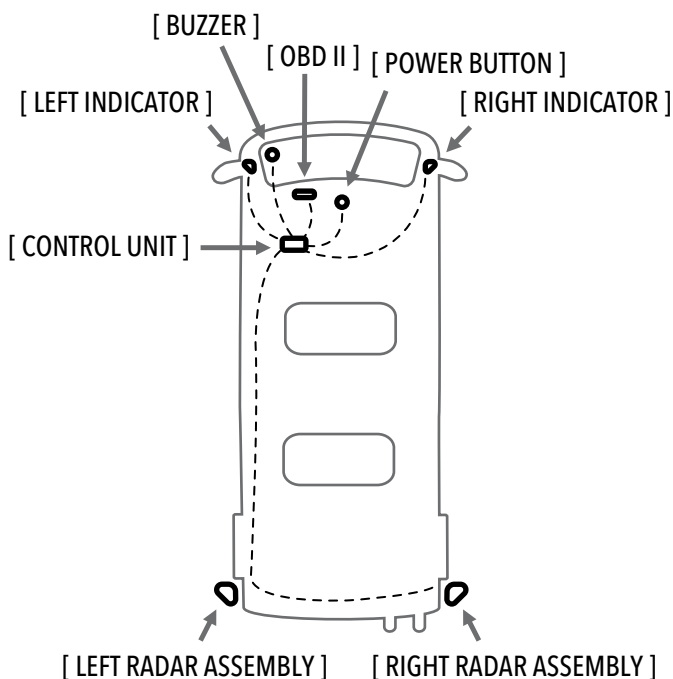
2. SYSTEM CONTENTS

No.	ITEM	Qty	PICTURE
1	Right RV Radar	1	
2	Left RV Radar	1	
3	Radar Mounting Gasket	2	
4	Control Unit	1	
5	Right Indicator	1	
6	Left Indicator	1	
7	Buzzer	1	
8	Power Button	1	
9	Harness Set	1	
10	OBD II Cable	1	
11	Manual Set/Accessories	1	

3. SYSTEM SPECIFICATIONS

No.	ITEM	SPECIFICATIONS
1	Operating Temperature	-40°C ~ +80°C
2	Storage Temperature	-40°C ~ +85°C
3	Environmental Protection Level	Radar : IP67
4	Input Voltage Range	9V - 16V
5	Current Consumption	Max. 800mA ± 5% @12V
6	Alarm Level	Level I : LED On (Constant) Level II : LED Flash+Buzzer On
7	Specifications	ISO 17387/ISO 16750
8	Radiation Regulations	FCC / NCC

4. SYSTEM LAYOUT



5. INSTALLATION

5.1 TOOLS REQUIRED

Painter's Tape

Philips & Flathead
Screwdrivers

Sockets & Wrenches

Plastic Pry Bars

Surface Cleaner
(i.e. rubbing alcohol)

Rags

Tape Measure

Level

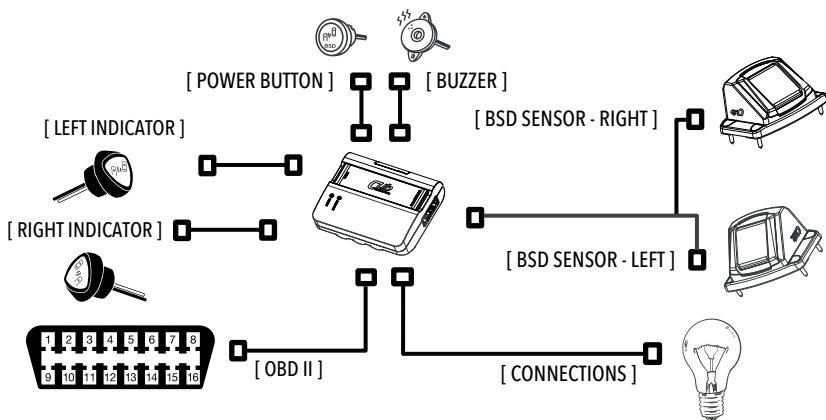
Pliers & Cutters

Electric Drill

Torque Wrench

1. Look for and use grommets for vehicle access to avoid drilling holes.
2. Ensure all harnesses are fully connected and locked in.
3. Use the cable ties to fasten harness while installing.

5.2 SYSTEM BLOCK



OBD pin 16 (Battery)	←	→	ORANGE (Right Turn/Stop)
OBD pin 4 (Chassis Ground)	←	→	YELLOW (Left Turn/Stop)
OBD pin 14 (CAN_L)	←	→	WHITE (Reverse)
OBD pin 6 (CAN_H)	←	→	BLUE (Ignition/Switched)

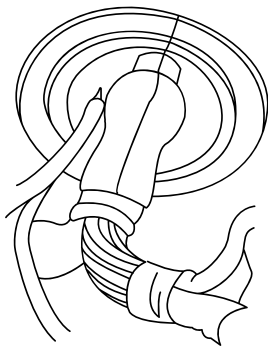
5. INSTALLATION

5.3 INSTALLATION

1. The BSD sensors will be installed to sides of the motorhome.
2. Locate an installation area between 29 - 41 inches from the ground and mark height line with painter's tape.
3. Locate the radar within 8 inches from the rear of the motorhome that is parallel to lane markings.
4. Level the sensor to be parallel to the ground.
5. You may have to remove panels and covers to install the sensors.
6. Use the Radar Mounting Gasket as a template to pre-drill the installation holes.
7. Use qualified hardware to affix the sensor.
8. Connect harnesses and electrical connections.
9. Secure all harnesses using cable ties.
10. Route harness assembly from the sensors to your engine bay grommet to pass the harness into the cabin. Secure the harness away from the heat sources and moving parts. Affix it to the vehicle using cable ties. You may skip this step and the next if the harness is run inside the coach.

5. INSTALLATION

11. Pass the harness through the grommet ensuring the harness and connector do not become damaged. Route the harness to the desired location which the Control Unit will be installed.

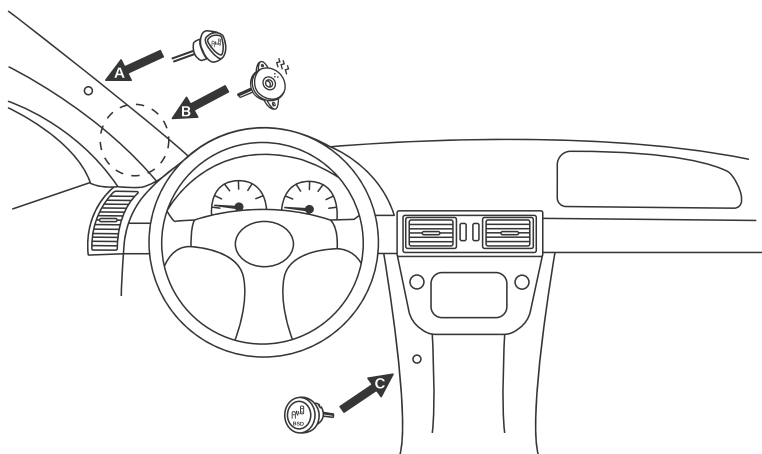


12. Instructions for A. indicator, B. buzzer & C. BSD power button.

A. Select locations for the right & left indicators to be installed, check for clearance behind the panel. Mark the locations to be drilled with the provided tool. Drill holes. Snap into place.

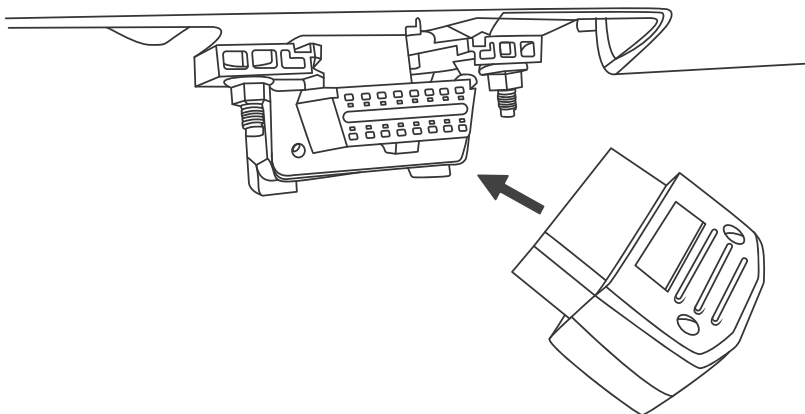
B. Locate a suitable location for the buzzer around the A pillar for maximum effect and ease of installation. Affix the buzzer using the adhesive patch or wire ties.

C. Locate a suitable location for the BSD power button which is accessible to the driver, inspect the area behind the panel for clearance. Drill a hole for the button and insert the button into the hole.

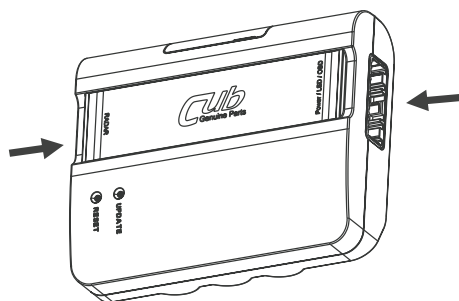


5. INSTALLATION

13. Locate the OBD-II connector and connect the adapter to the socket. Route the harness to the desired location for the Control Unit to be installed.



14. Connect IGN lead to a switched power source (i.e. cigarette lighter, radio accessory power, ignition switch). Connect the turn signals and reverse leads to the appropriate wiring in the vehicle.
15. Connect all the connections then route the harness to the Control Unit and affix the unit in a safe location in the vehicle (i.e. under the dashboard, under the seat, inside the console). Connect the harness connectors to the Control Unit.



6. ERROR DIAGNOSTICS

It is possible that the Blind Spot Detection System will trigger an alert even though there is no vehicle in the blind spot zone. The Blind Spot Detection System can detect objects such as: construction barrels, guard rails, lamp posts, etc. Occasional false alerts are normal.

STATUS	SOUND
Controller HMI CAN TX Failed	Do Re Mi
Radar System Error	Do Re Mi
Sleep Mode	1 second beep, stop .5 second & 1 second beep
System Initialization	3 second beep

7. TROUBLESHOOTING

ISSUE	SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Power On Self-test	The system does not respond after starting the engine	Incorrect connection or control unit failure	Confirm that the IGN, wiring, fuse, and controller are connected.
	The indicator does not light up	Damaged indicator	Contact your dealer
		Disconnected indicator	Verify connection
	The buzzer makes no sound	Damaged buzzer	Contact your dealer
		Disconnected buzzer	Verify connection
	The power switch does not work	Damaged power switch	Contact your dealer
		Disconnected power switch	Verify connection, press and hold the switch for 2 seconds.
System Operation	[Do Re Mi] alarm	Radar disconnection or no OBD connection	Abnormal power supply, wiring, or radar, please contact your dealer.
	Did not enter sleep mode after 5 minutes of IGN off	IGN lead connected to constant power	Change the IGN to a switched power source connection location
Functions	No Level 1 BSD alert	Vehicle speed is less than 12 mph	Normal operation
		Bad connection from OBDII	The vehicle is not compatible. Please contact the dealer.
			Press the RESET button on the control unit after starting the engine. Check the system again after the reboot is completed.
	No Level 2 BSD alert	Turn signal leads not connected	Confirm turn signal leads are connected
	No RCTA alert	Reverse lead not connected	Confirm that the reverse lead is connected

