

INSTALLATION GUIDE

BLIND SPOT DETECTION SYSTEM

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1. WARNING

- 1. THE 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. ECHOMASTER DOES NOT GUARANTEE 100% ACCURACY IN THE DETECTION OF VEHICLES OR PEDESTRI-ANS, 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.
- CAREFULLY READ THIS INSTALLATION GUIDE AND ITS IMPORTANT SAFETY INSTRUCTIONS AND WARN-INGS PRIOR TO INSTALLING OR USING THE 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



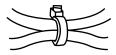
Do not pull the connectors with excessive force.



Fasten all connectors and terminals securely.



Do not pull the harness with excessive force.



Stress relieve harnesses and secure properly.

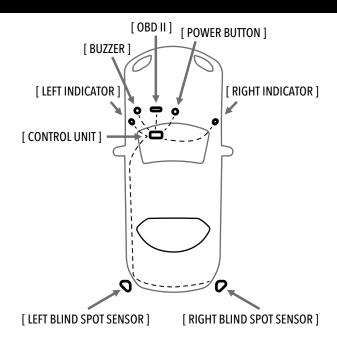
2. SYSTEM CONTENTS

No.	ITEM	Qty	PICTURE
1	Right Blind Spot Sensor	1	
2	Left Blind Spot Sensor	1	
3	Control Unit	1	
4	Right Indicator	1	(Sup)
5	Left Indicator	1	
6	Buzzer	1	, ¹ , 1
7	Power Button	1	
8	Harness Set	1	
9	OBD II Cable	1	
10	Manual Set/Accessories	1	

3. SYSTEM SPECIFICATIONS

No.	ITEM	SPECIFICATIONS
1	Operating Temperature	-40°C~ +85°C
2	Storage Temperature	-40°C ~ +90°C
3	Environmental Protection Level	Radar : IP67
4	Input Voltage Range	12V (9V - 16V)
5	Current Consumption	500mA@12V; 6.0W
6	Alarm Level	Level I : LED On (Constant) Level II : LED Flash+Buzzer On
7	Accuracy of Alarm	Vehicle: >99%
8	Specifications	ISO 17387/ISO 16750
9	Radiation Regulations	FCC / NCC / VSCC
10	Buzzer	75dB
11	Warning Light	5V Drive, A Pillar

4. SYSTEM LAYOUT

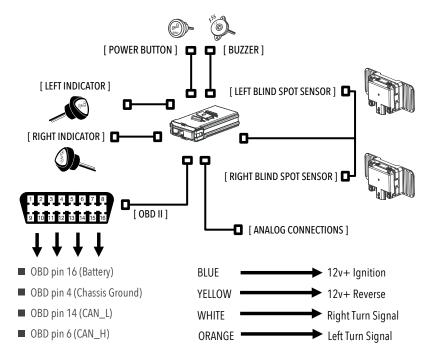


5.1 TOOLS REQUIRED

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	

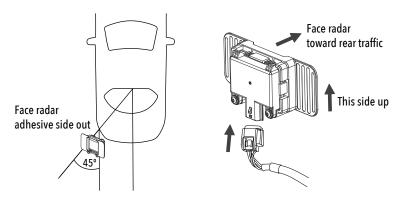
- 1. Look for and use grommets for vehicle access to avoid drilling holes.
- 2. Ensure all harnesses are fully connected and locked in.
- 3. Use the cable ties to fasten harness while installing.

5.2 SYSTEM BLOCK

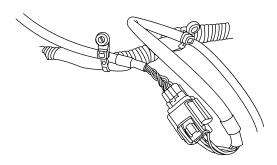


5.3 INSTALLATION

1. Measure the rear bumper locating a point suitable for installation which aims the sensor 45 degrees from the centerline of the vehicle. Along that axis, locate a position 19.5 to 28 inches from the ground what is parallel to the ground for the sensor to be installed inside the bumper. Mark this location with painter's tape on the outside of the bumper cover.



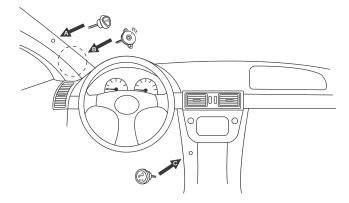
- 2. Remove the bumper cover and clean the inside of the cover where the sensor is to be placed. The area should be cleaned so that the adhesive pad on the sensor assembly may be securely attached. Affix the sensor to the bumper cover taking note of the direction, orientation, and designated location.
- 3. Connect the left and right radar sensors to the harness. Route the harness assembly from the rear exterior of the vehicle into the cabin utilizing a grommet. Secure the harness away from the heat sources and moving parts.
 Affix it to the vehicle using cable ties.



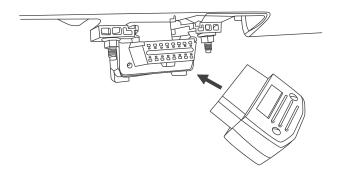
4. Pass the harness through the grommet ensuring the harness and connector do not become damaged. Route the harness to the desired location which the Control Unit will be installed.



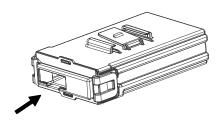
- 5. Instructions for A. indicator, B. buzzer & C. BSD power button.
 - A. Select locations for the right & left indicators to be installed, check for clearance behind the panel. Mark the locations to be drilled with the provided tool. Drill holes. Snap into place.
 - B. Locate a suitable location for 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.



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.



- 7. Connect IGN lead to a switched power source (i.e. cigarette lighter, radio accessory power, ignition switch). Connect REVERSE lead to the 12v+ reverse source (i.e. reverse light circuit, integration module output). Connect DIRECTION R and DIRECTION L leads to their corresponding turn signal sources (i.e. tail lamp, side marker, front turn signal). The turn signal leads also accept PWM signal sources in most cases.
- 8. 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 connector 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
	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
Power On		Disconnected indicator	Verify connection
Self-test	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	[Do Re Mi] alarm	Radar disconnection or no OBD connection	Abnormal power supply, wiring, or radar, please contact your dealer
Operation	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
	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
Functions			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

