

Parking Sensor System

Front or Rear

9002-3010



Recommended Tools				Difficulty Level
 Wrench	 Wire Strippers	 Wire Cutters	 Electrical Tape	 Install Time  1hr 30m - 2hr
 Screw Driver	 Panel Removal Tool	 Zip Ties	 Socket Set	
Questions? Call the Brandmotion technical support line at (734) 619-1250 or CLICK HERE				

Kit Contents

Recommended Tools

Components for installing the **9002-3010**



Kit Contents:

1x LED Display

1x Adjustable Speaker

1x Display Extension Cable

1x Sensor ECU

4x Flat Push-in Mounting Pieces

4x Curves Push-In Mounting Pieces

4x Tape-in Mounting Pieces

1x Power Harness

1x Body Harness

1x On/Off Switch

1x Sensor Harness

Identify if you will be installing the sensors in the Rear bumper (Section 1 - 2) or in the Front bumper (Section 3 - 4)

Section 1: Rear Bumper Installation

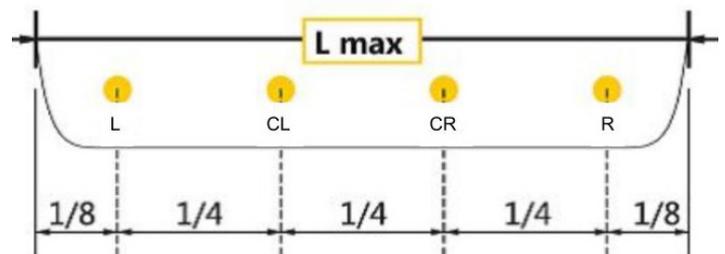
Identify if you will be installing on a plastic bumper (Part A) or on a metal bumper (Part B)

Part A

Plastic Bumper Sensor Installation

1. Remove bumper fascia from vehicle. Use manufacturer recommended procedure.
NOTE: Before you drill any holes into the fascia you must check to see if the sensor locations will have any interference with the sensor installation (such as metal beam, braces, bracketry). You may have to move the sensor slightly left or right to avoid the interference. If it is just interference from foam material, you may have to carve out space for the sensor. Ensure that there is enough clearance around the sensor to allow for movement.
2. Locate where to drill holes for sensors
 Sensor positions must be equally spaced along the bumper, refer to the picture. The two outside sensors must be angled towards the sides of the vehicle in order to detect obstacles on the outside.

The sensors must be positioned on an area of the bumper that has a flat vertical surface. The recommended height from ground is between 18" - 20"



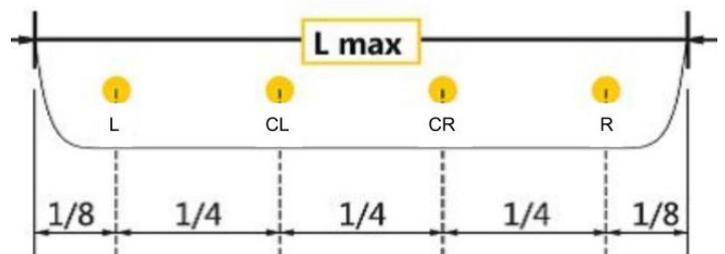
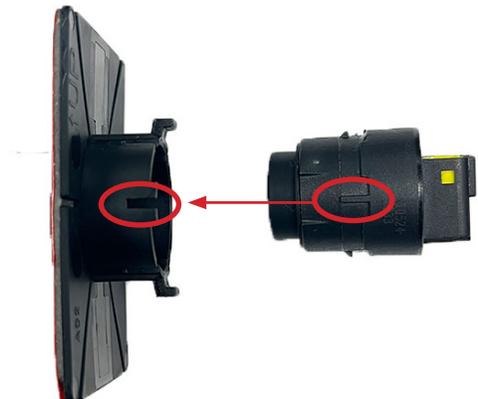
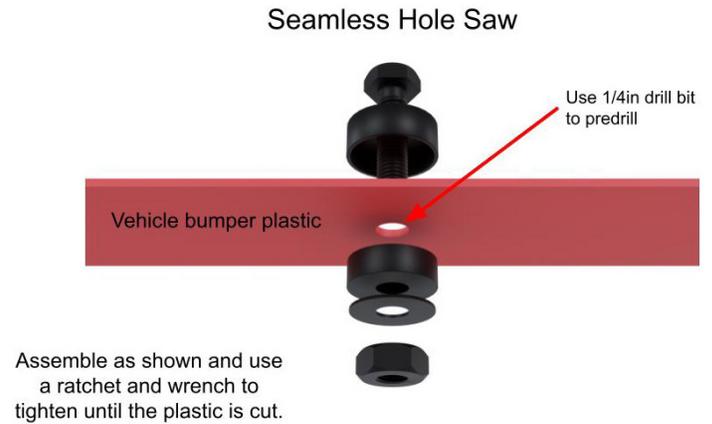
Part A

Plastic Bumper Sensor Installation

1. Prepare the bumper for the hole drilling. Using a 1/4" Drill bit, pre-drill holes at your desired location. Using the supplied 1/16" pole puncher & ratchet, cut into the bumper & clean any excess material.
2. Clean the inside of the bumper around the holes with an alcohol swab.
3. Insert the sensor into the flat mounting piece. There are two tabs on the side of the sensor, align these with the mounting piece and push in. The back connector on the sensor will be facing the right. You will hear a click, use the two pull method to ensure connection.
4. Remove the 3M protector from the mounting piece and position over the hole from inside the bumper with the arrowing facing UP. They should press firmly into place. If not, lightly sand and clean to open the hole.
5. Connect the correctly labeled portion of the Sensor harness to each sensor in the bumper. Note the orientation of L, CL, CR, & R in the image.

L	Driver Side Edge
CL	Driver Side off of Center
CR	Passenger Side off of Center
R	Passenger Side Edge

6. Reinstall the bumper (fascia) onto the vehicle. Route the sensor harness to the drivers side, under the dash. Be careful in routing the sensor harness so they do not get pinched and to prevent them from chaffing.



Part B

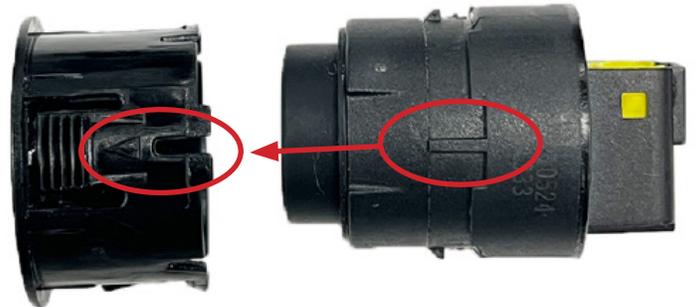
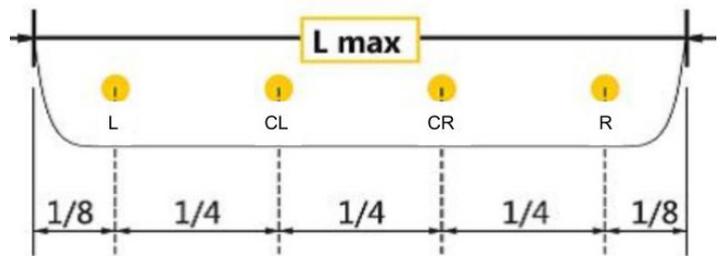
Metal Bumper Sensor Installation

1. Remove bumper fascia from vehicle. Use manufacturer recommended procedure.
NOTE: Before you drill any holes into the fascia you must check to see if the sensor locations will have any interference with the sensor installation (such as metal beam, braces, bracketry). You may have to move the sensor slightly left or right to avoid the interference. If it is just interference from foam material, you may have to carve out space for the sensor. Ensure that there is enough clearance around the sensor to allow for movement.

2. Locate where to drill holes for sensors
 Sensor positions must be equally spaced along the bumper, refer to the picture. The two outside sensors must be angled towards the sides of the vehicle in order to detect obstacles on the outside.

The sensors must be positioned on an area of the bumper that has a flat vertical surface. The recommended height from ground is between 18" - 20"

3. Prepare the bumper for the hole drilling. Using a 1/4" Drill bit, pre-drill holes at your desired location. Using a 3/4" seamless hole saw cut into the bumper & file any excess material.
4. Insert the sensor into the round mounting piece. There is a single line at the top of the sensor that aligns with the mounting piece. The back connector on the sensor will be facing the right. You will hear a click, use the two pull method to ensure connection.



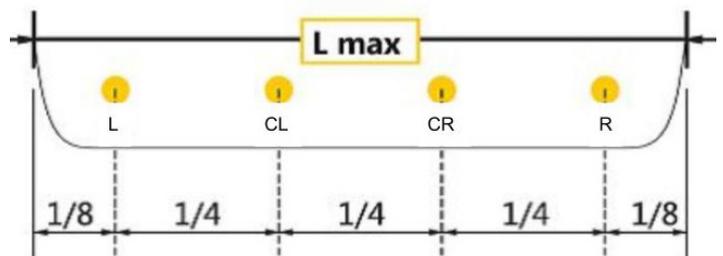
Part B

Metal Bumper Sensor Installation

1. From the front of the bumper push the sensors into the holes. **Note: the mounting piece has a small arrow that must be on the top as it is mounted.** They should press firmly into place. If not, lightly file and clean to open the hole.
2. Connect the correctly labeled portion of the Sensor harness to each sensor in the bumper. Note the orientation of L, CL, CR, & R in the image.
3. Reinstall the bumper onto the vehicle. Route the sensor harness to the drivers side, under the dash. Be careful in routing the sensor harness so they do not get pinched and to prevent them from chaffing.



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Section 2: Rear Bumper Wiring Installation

Part A

Display Placement & Wiring

1. Find a Display location that suites desired application and mount with supplied double-sided tape then run harness to the drivers side, under the dash. If need be, connect the display to the extension cable.
2. Connect the display harness/extension cable to the sensor harness at the labeled connection point.

Part B

Speaker Placement & Wiring

1. Find a speaker location that is somewhere within reach as the speaker has a volume switch and mount with supplied double-sided tape. Then run the speaker harness to the drivers side, under the dash.
2. Connect the speaker harness to the sensor harness at the labeled connection point.

Part C

ECU Placement & Wiring

1. Find an ECU location somewhere in the drivers side footwell. Be sure to choose a location that is both out of the drivers way & easily accessible.
2. Connect the ECU to the sensor harness.

Part D

Sensor Harness (solder connection recommended)

1. Connect the red wire (reverse) to the vehicles accessory
2. Connect the Black wire to ground of the vehicle

Section 3: Front Bumper Installation

Identify if you will be installing on a plastic bumper (Part A) or on a metal bumper (Part B)

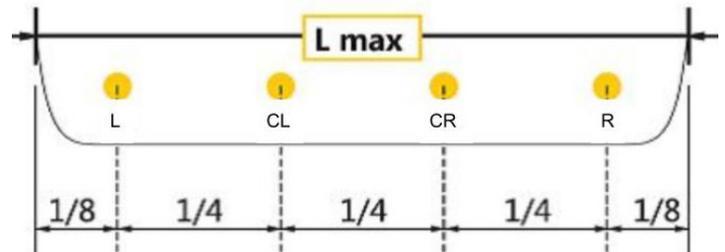
Part A

Plastic Bumper Sensor Installation

1. Remove bumper fascia from vehicle. Use manufacturer recommended procedure.
NOTE: Before you drill any holes into the fascia you must check to see if the sensor locations will have any interference with the sensor installation (such as metal beam, braces, bracketry). You may have to move the sensor slightly left or right to avoid the interference. If it is just interference from foam material, you may have to carve out space for the sensor. Ensure that there is enough clearance around the sensor to allow for movement.

2. Locate where to drill holes for sensors
 Sensor positions must be equally spaced along the bumper, refer to the picture. The two outside sensors must be angled towards the sides of the vehicle in order to detect obstacles on the outside.

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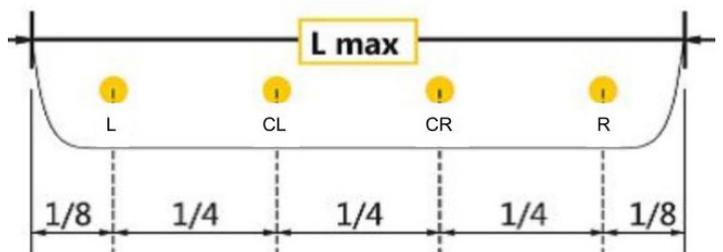
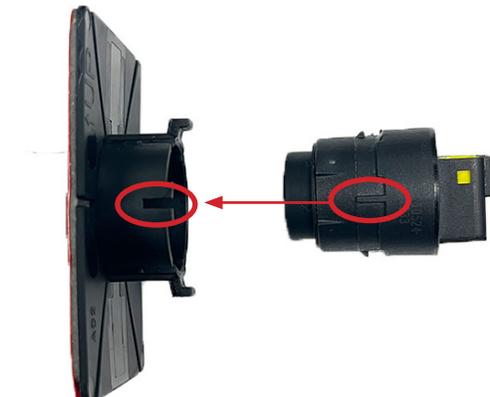
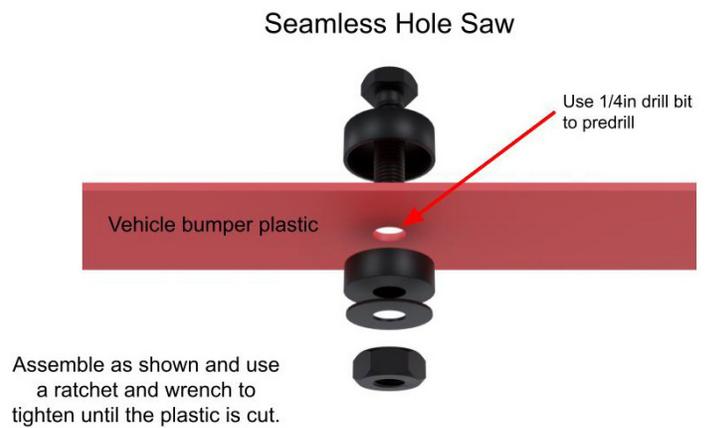
Part A

Plastic Bumper Sensor Installation

1. Prepare the bumper for the hole drilling.
 Using a 1/4" Drill bit, pre-drill holes at your desired location. Using the supplied 1/16" pole puncher & ratchet, cut into the bumper & clean any excess material.
2. Clean the inside of the bumper around the holes with an alcohol swab.
3. Insert the sensor into the flat mounting piece. There are two tabs on the side of the sensor, align these with the mounting piece and push in. The back connector on the sensor will be facing the right. You will hear a click, use the two pull method to ensure connection.
4. Remove the 3M protector from the mounting piece and position over the hole from inside the bumper with the arrowing facing UP. They should press firmly into place. If not, lightly sand and clean to open the hole.
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6. Reinstall the bumper (fascia) onto the vehicle. Route the sensor harness to the drivers side, under the dash. Be careful in routing the sensor harness so they do not get pinched and to prevent them from chaffing.



Part B

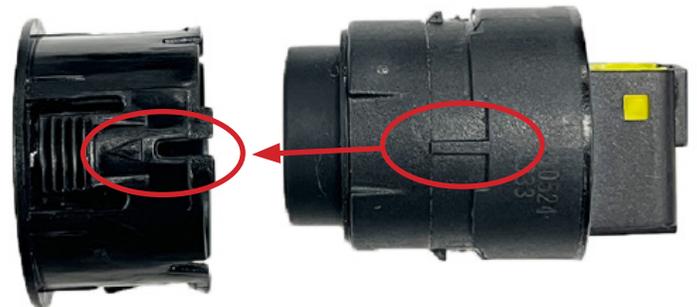
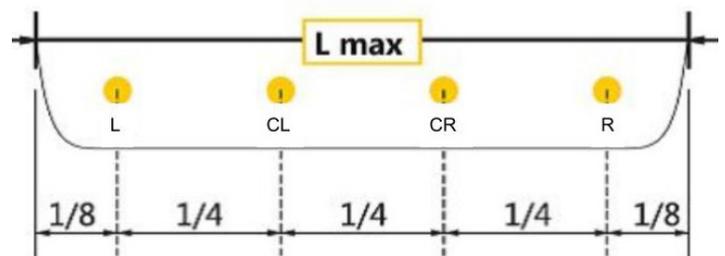
Metal Bumper Sensor Installation

1. Remove bumper fascia from vehicle. Use manufacturer recommended procedure.
NOTE: Before you drill any holes into the fascia you must check to see if the sensor locations will have any interference with the sensor installation (such as metal beam, braces, bracketry). You may have to move the sensor slightly left or right to avoid the interference. If it is just interference from foam material, you may have to carve out space for the sensor. Ensure that there is enough clearance around the sensor to allow for movement.

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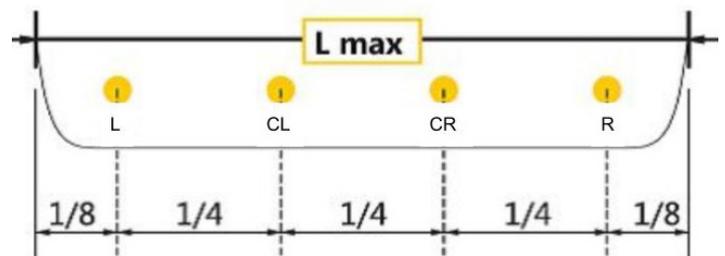
Part B

Metal Bumper Sensor Installation

1. From the front of the bumper push the sensors into the holes. **Note: the mounting piece has a small arrow that must be on the top as it is mounted.** They should press firmly into place. If not, lightly file and clean to open the hole.
2. Connect the correctly labeled portion of the Sensor harness to each sensor in the bumper. Note the orientation of L, CL, CR, & R in the image.
3. Reinstall the bumper onto the vehicle. Route the sensor harness to the drivers side, under the dash. Be careful in routing the sensor harness so they do not get pinched and to prevent them from chaffing.



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R	Passenger Side Edge



Section 4: Front Bumper Wiring Installation

Part A

Display Placement & Wiring

1. Find a Display location that suites desired application and mount with supplied double-sided tape then run harness to the drivers side, under the dash. If need be, connect the display to the extension cable.
2. Connect the display harness/extension cable to the sensor harness at the labeled connection point.

Part B

Speaker Placement & Wiring

1. Find a speaker location that is somewhere within reach as the speaker has a volume switch and mount with supplied double-sided tape. Then run the speaker harness to the drivers side, under the dash.
2. Connect the speaker harness to the sensor harness at the labeled connection point.

Part C

ECU Placement & Wiring

1. Find an ECU location somewhere in the drivers side footwell. Be sure to choose a location that is both out of the drivers way & easily accessible.
2. Connect the ECU to the sensor harness.

Section 4: Front Bumper Wiring Installation

Part D

On/Off Switch Placement

1. Find a switch location that is within reach of the driver, drill a small hole in the dash for the wire & utilize the 3M tape on the back. **NOTE: You will only utilize this switch to turn the sensors on and off by pressing the switch.**
2. Then run the harness to the drivers side, under the dash.
3. Connect the supplied black connector to the corresponding connector on the Power Harness.
4. Place the 4 wires into the black connector by matching the colors.
 - Blue - Blue
 - Black - Black
 - White - White
 - Red - Red



Part E

Sensor Harness (solder connection recommended)

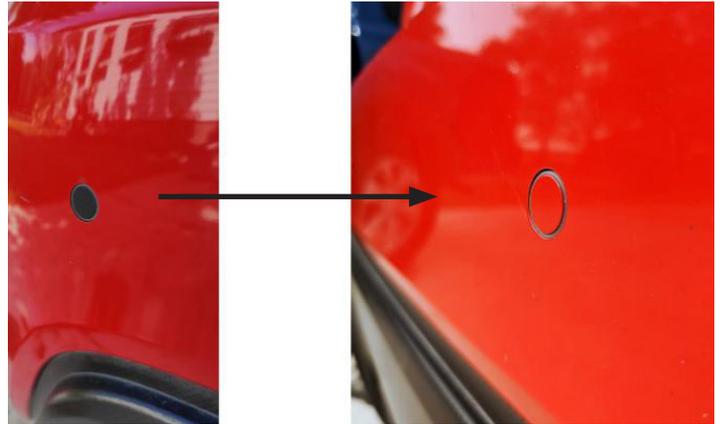
1. Connect the red wire to the vehicles accessory
2. Connect the Black wire to ground of the vehicle

Section 5: Final Touches

Part A

Painting Sensors

1. These sensors are capable of being painted over with an OEM grade paint to match your vehicle.



Section 6: FAQs

Part A

Sensor Not Beeping

1. In the event your sensors are not beeping at the point of installation refer to the following steps.
2. Ensure the speaker volume is on either Low or High
3. Connect the switch & click the button and test again