
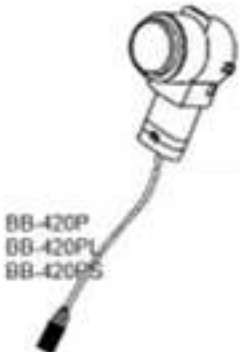
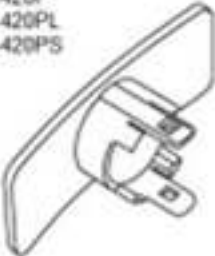





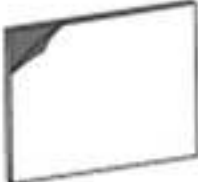

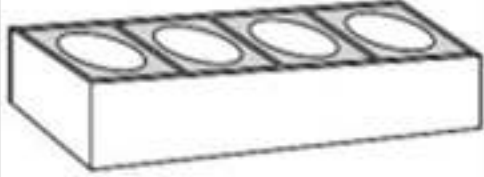


# 1. Kit Contents

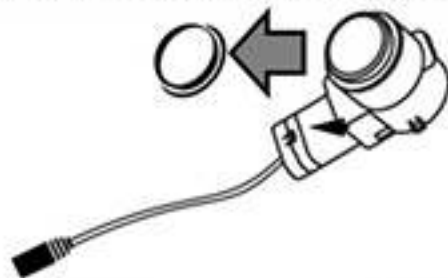
 <p><b>A</b></p> <p>X1</p>	 <p><b>B</b></p> <p>BB-420P BB-420PL BB-420PS</p> <p>X4</p>	 <p><b>C</b></p> <p>BB-420P BB-420PL BB-420PS</p> <p>X4</p>	 <p><b>D</b></p> <p>X1</p>	 <p><b>E</b></p> <p>EXTENSION CABLES</p> <p>X4</p>
 <p><b>F</b></p> <p>Power Wire</p> <p>X1</p>	 <p><b>G</b></p> <p>X1</p>	 <p><b>H</b></p> <p>X4</p>  <p>X1</p>  <p>X1</p>	 <p><b>I</b></p> <p>Paint Mask</p> <p>X1</p>	

## 2. Painting the Sensors

### 1) Preparation

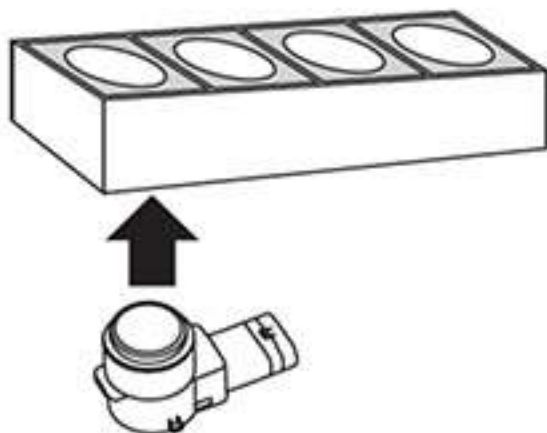
**For BB-420P/BB-420PL/BB-420PS**

Make sure the silicon rubber rings are not installed around the sensor head



- 2) Sand the surface of sensors with a fine sandpaper (1000 or 1200 grit) for better paint adhesion. Clean the sensor well to be free from sanding dust.

- 3) Place the sensors inside the paint mask box (provided).

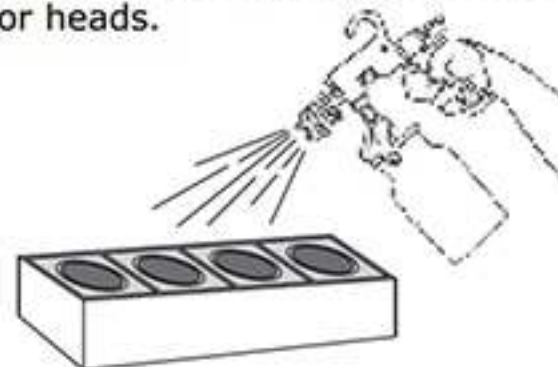


- 4) Spray and paint

Apply a thin coat of paint. Let it dry then paint again for better paint coating coverage.

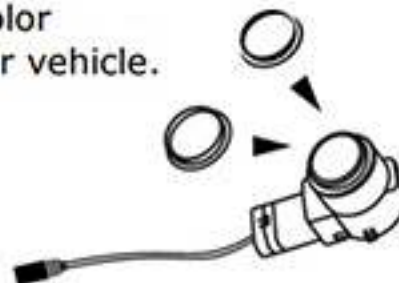
**For BB-420P/BB-420PL/BB-420PS**

Paint the plastic rings together with the sensor heads.



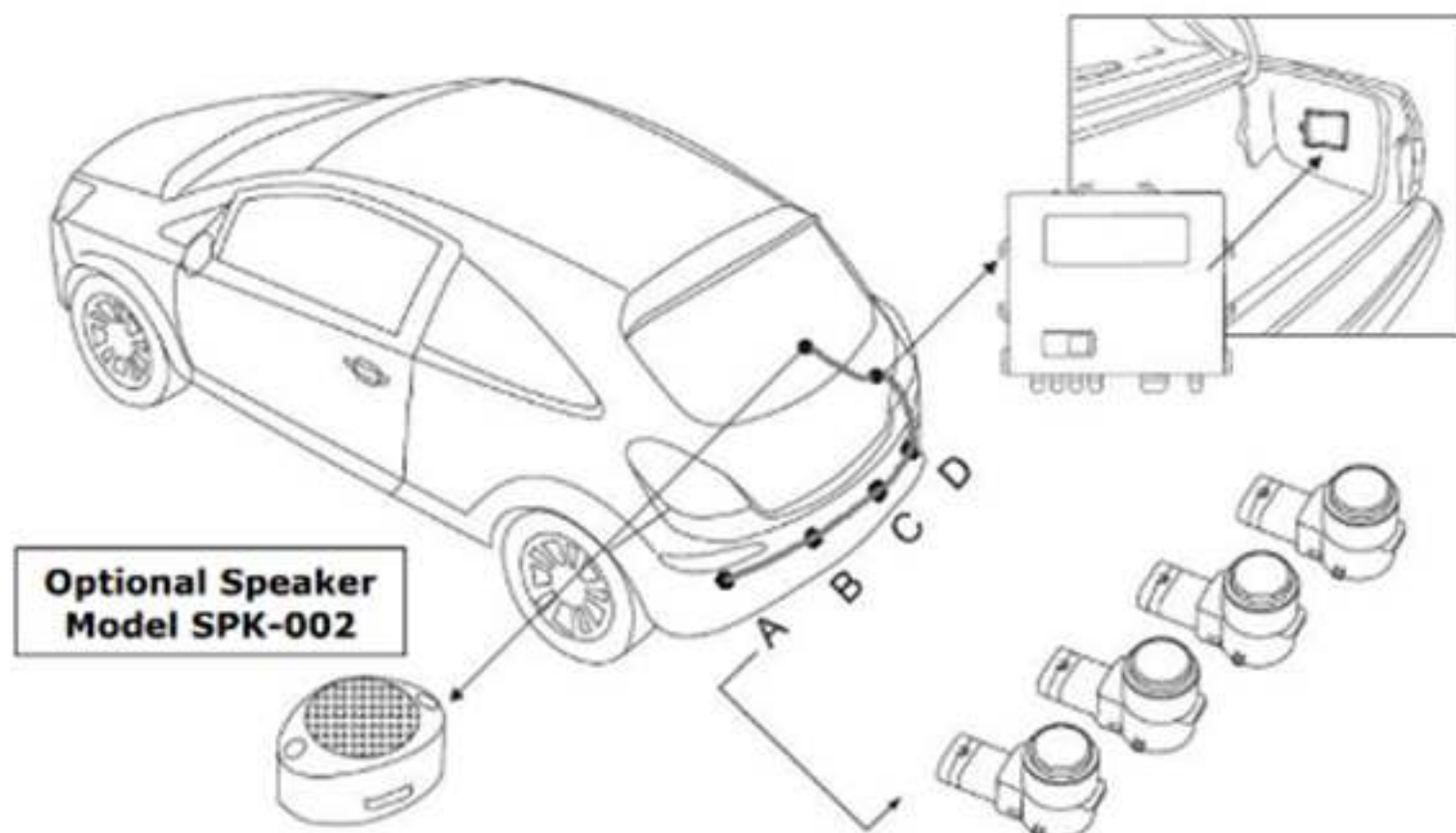
- 5) **For BB-420P/BB-420PL/BB-420PS**

Depending on the vehicle body color, place white silicon rubber rings for a lighter color vehicle, place black rings for a dark color vehicle.



### 3. System Overview

For a Passenger Car

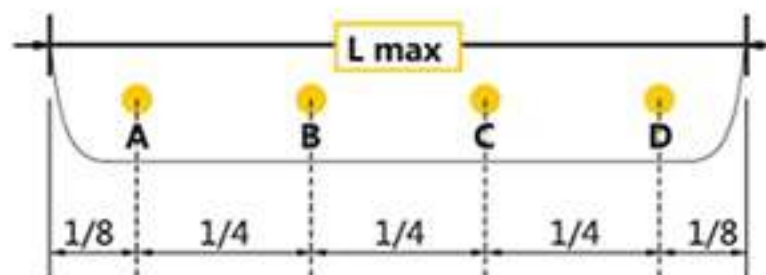
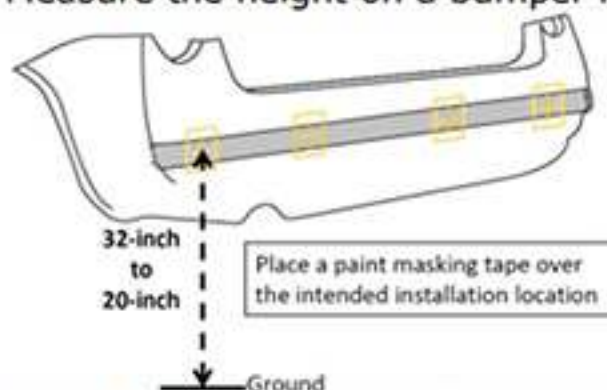


Place the speaker and control box inside a vehicle. Avoid from water damages. The speaker or buzzer sound will indicate the distance between the sensors and the object. Shorter pitch tone sound indicates getting closer to objects.



## 4. Installation

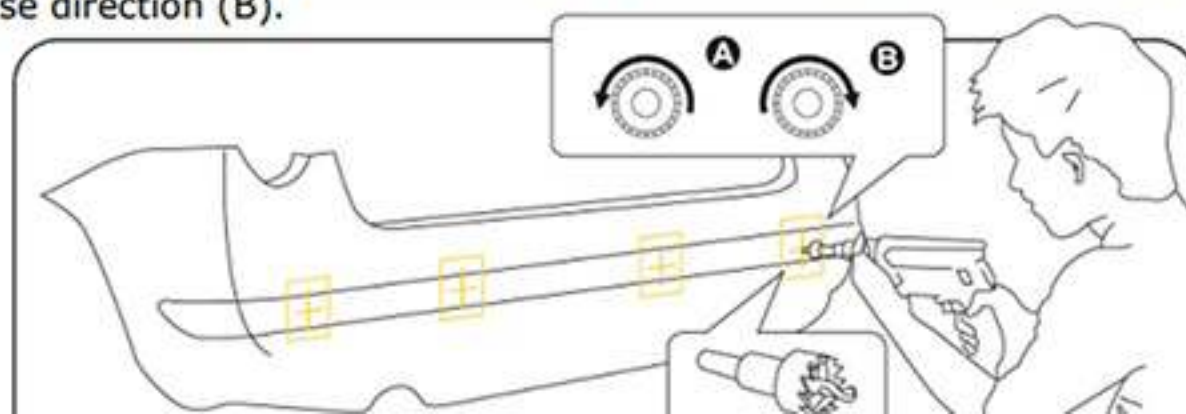
- 1) The proper placement of the sensors is important both for appearance and for the proper operation of the unit. Sensors should be mounted at 90° angles to the ground. It is important to avoid obstructions caused by bumper shape.
- 2) Measure the height on a bumper for proper installation locations.



- 3) Generally, it is the best to mount the sensors as high as possible in the bumper. Use paint masking tape and mark the location as above diagram for the proper spacing of the sensors.

**Important!**  
**MUST CHECK BEHIND THE BUMPER FOR ANY METAL BRACKETS OR  
INTERNAL BRACES BEFORE DRILLING**

- 4) Also be sure that the bumper surface and the sensors will fit at 90° to the ground. Make sure the hole surface is clean and start cutting the bumper surface in counter clockwise direction (A) first to prevent from paint to chip, then drill the hole in clockwise direction (B).



BB-420P sensors **MUST** be installed inside the bumper plastic skin and only the sensor head to exposed to outside. **Bumper removal is required for this installation.**

