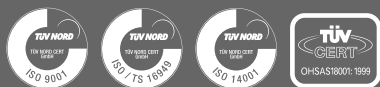


**STEELMATE**  
*Automotive*

PTS800V8

***Think safety think Steelmate***



**STEELMATE CO., LTD.**  
[www.steel-mate.com](http://www.steel-mate.com)

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*Front & rear parking assist system*  
*Display precise detection up to 0.01m*



Manual

### User's Manual

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## Parking Assist System

### User's Manual

Parking assist systems help to provide assistance when driving forward or reversing. Driving skills, such as slowing down, use of mirrors etc, is always essential.

1. This unit is for vehicles with 12V DC.
2. Unit should be installed by a professional auto technician.
3. Route wiring harness away from heat sources and electrical components.
4. It is strongly recommended to check the position of the sensors before the actual drilling of the holes.
5. Perform test after finishing the installation.

## Disclaimer

The parking assist system is designed as a driver assistance device, and should not be used as a substitute for safe parking practices. You must constantly check the outside circumstance while parking.

Its distributors do not guarantee or assume liability for collisions or damages while parking your vehicle.

## About the product

Parking assist system is an ultrasonic distance monitoring system. It electronically detects the area in front of and/or at rear of your vehicle while parking, and alerts you with audio and visual warnings. It assists the driver when parking and in manoeuvring situation.

PTS800V8 is a front and rear parking assist system with blue LCD display. All the detachable sensors are water-resistance and can be easily changed. Combined with the anti-interference and anti-false alert technology, the system can detect obstacles in any weather conditions and response quickly. The system has intelligent detection, which is ideal for cars with tow-bar or spare tire.

Every piece of our products has passed the most stringent test before releasing to the market. It is reliable at a wide temperature range (  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$  /  $-40^{\circ}\text{F} \sim 176^{\circ}\text{F}$  ) and becomes very useful when you are parking at a raining day, snowing day or at night etc. With the help of parking assist system, you can enjoy a comfortable, relaxed and safer parking experience.

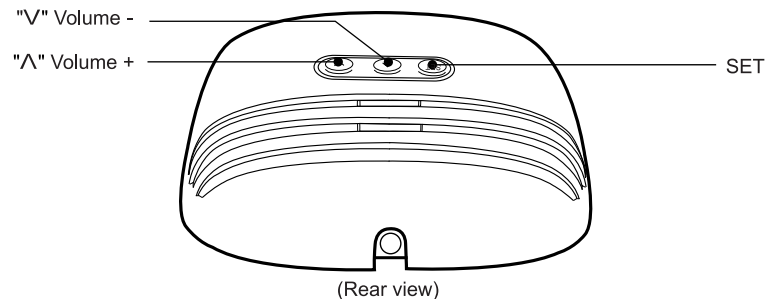
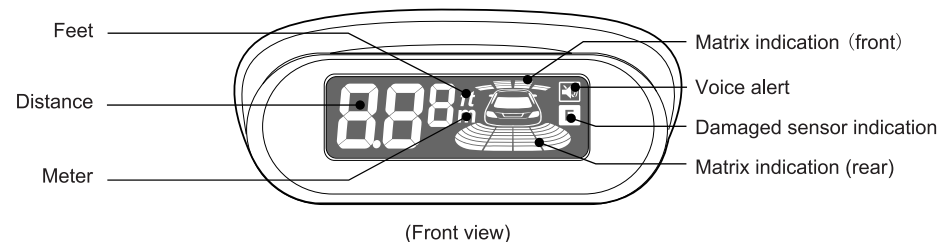
## Key feature

- Complete front & rear protection
- 0.08s response time
- Can be used as 6 sensor system ( 2 front and 4 rear )
- Anti-false alert technology
- Blue LCD display with precise detection up to 0.01m/0.1ft
- Self-test function
- Voice / beep alert selectable
- Intelligent detection, supper for cars with tow-bar, spare tire or other protrusion

## Technical specifications

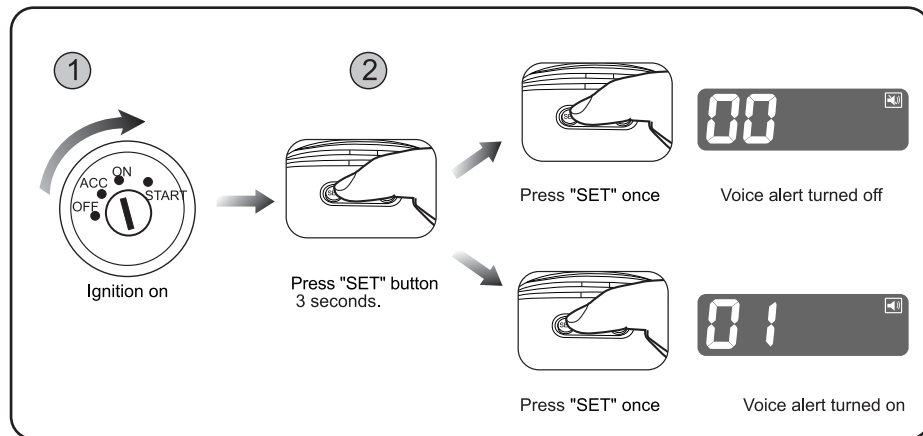
- Input voltage: 9 ~ 16VDC
- Working current: < 300mA
- Static current: < 80mA
- Operation temperature:  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$   
 $-40^{\circ}\text{F} \sim +176^{\circ}\text{F}$
- Beep volume: 70~90dB
- Detection range:
  - Front: 0.10~0.99m/0.3~3.2ft
  - 0.10~0.69m/0.3~2.2ft (reversing)
  - Rear: 0.10~2.59m/0.3~8.4ft
- Display range:
  - Front: 0.30~0.99m/1.0~3.2ft
  - 0.30~0.69m/1.0~2.2ft (reversing)
  - Rear: 0.3~2.59m/1.0~8.4ft

## LCD display

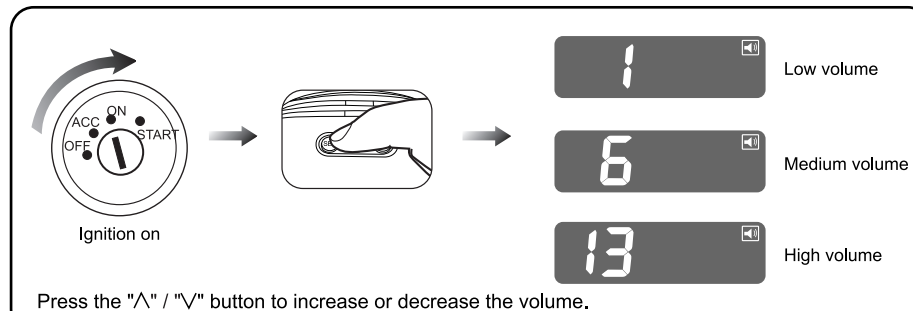


## Voice and volume adjustment

### Turning ON/OFF voice alert



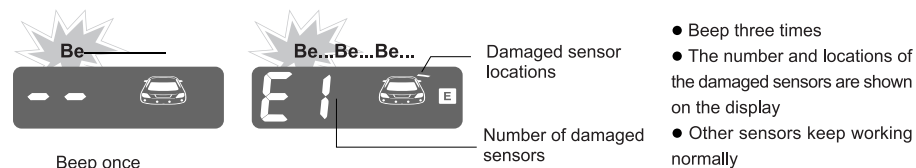
### Volume adjusting



## Self-test function

1. Once the ignition is turned on, the system will test the 4 front sensors E, F, G and H automatically.

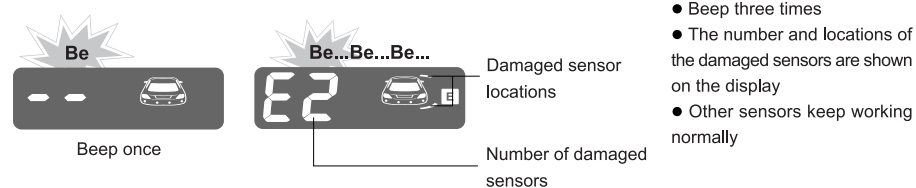
1) All sensors are working. 2) Damaged sensors are detected.



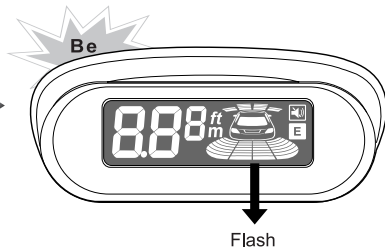
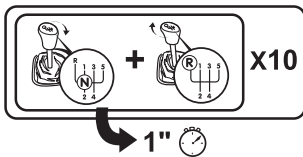
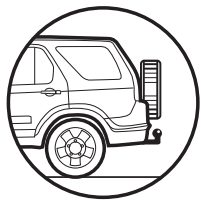
3) Once the self-test procedure is completed, the system will detect the obstacle in front of the car for 5 seconds.

2. When the reverse gear is selected, the system will test the 4 rear sensors A, B, C, D and 2 front sensors E and H automatically.

1) All sensors are working. 2) Damaged sensors are detected.



## Learning function for cars with tow-bar or spare wheel

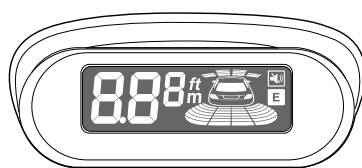
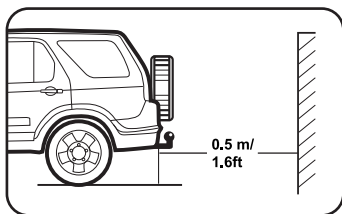


Ignition on, shift the gear from "N" to "R" and shift back in 1 second and repeat for 10 times. At the 10th time stay at "R" position for 6 seconds to achieve the learning function.

Ignition on, shift the gear from "N" to "R" and shift back in 1 second and repeat for 12 times. At the 12th time stay at "R" position for 8 seconds to clean the learning function.

Note: If you forget the shift-times, please stay at "R" position for 2 seconds to clean the memory and next time will be the first time.

The display will flash 3 times then beep once, this indicates that the learning function is successful and the system will not warn for tow-bar or spare wheel.

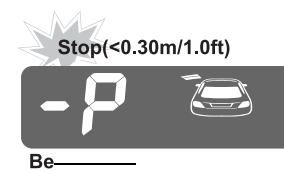
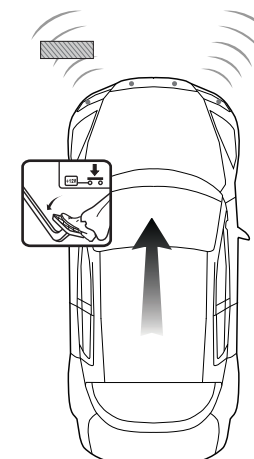
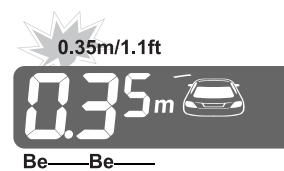
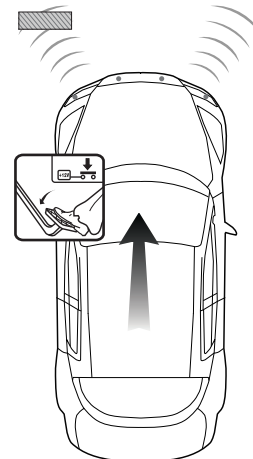
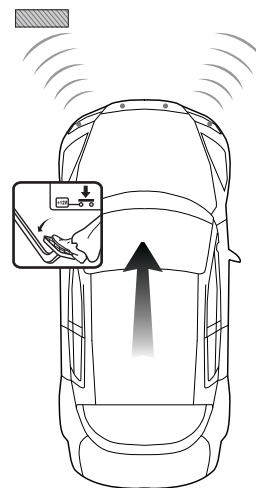


When the learning function is activated, the system will ignore the tow-bar or spare wheel and only detect other objects behind the vehicle.

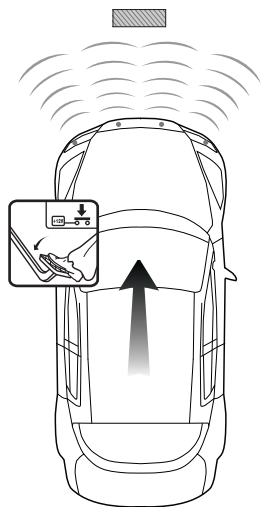
Note: If the vehicle does not have tow-bar or spare wheel, you do not need to use this function.

## How does the system work

### Driving forward (6 sensor)



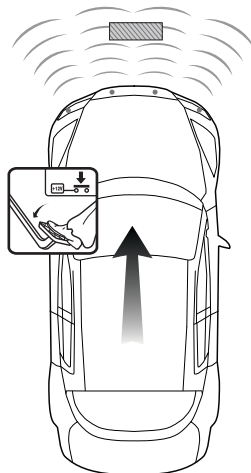
## Driving forward (8 sensor)



0.81m/2.6ft

0.8 1m 

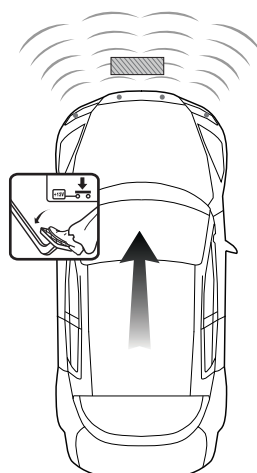
No beep



0.40m/1.3ft

0.40m 

Be—Be—

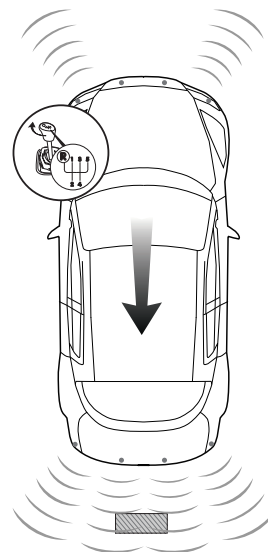


Stop(<0.30m/1.0ft)

-P 

Be—

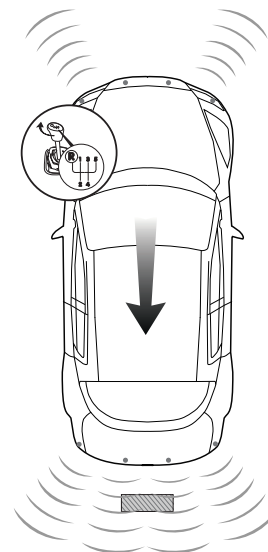
## Reversing



1.21m/4.0ft

1.2 1m 

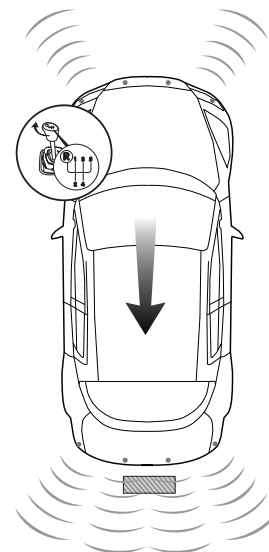
Be—



0.60m/2.0ft

0.60m 

Be--Be--

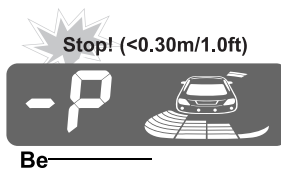
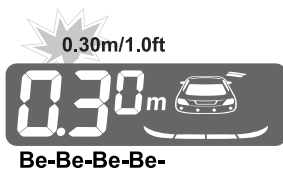
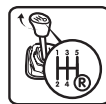
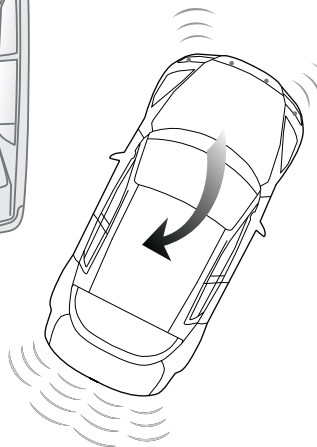
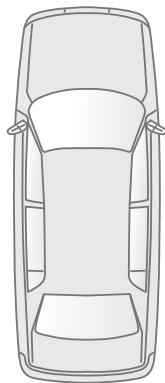


Stop(<0.30m/1.0ft)

-P 

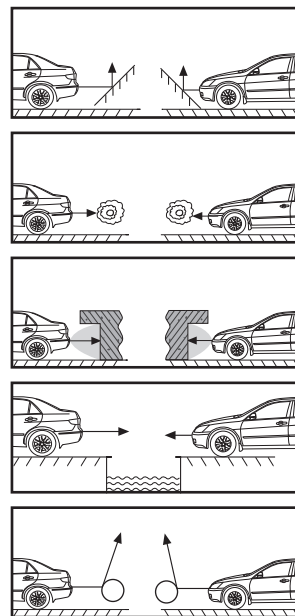
Be—

## Zigzag reversing



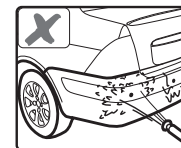
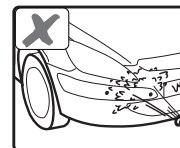
## Attention

False detection may occur in the following situations:

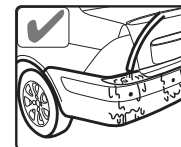
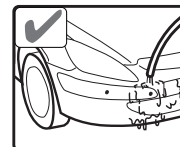


- After installation, please fully test the system before use.
- Dirty or damaged sensors can cause incorrect detection.
- Ensure that the self-test procedure is completed and all sensors are functioning before use.

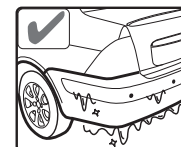
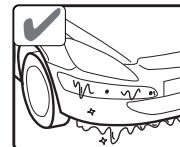
## Sensor maintenance



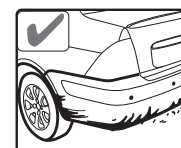
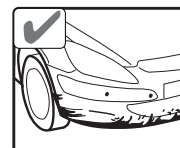
Do not wash the sensor with squirt gun or swab them forcibly.



Please wash car with low-pressure



Please melt the ice with warm water when the sensors are covered by ice.

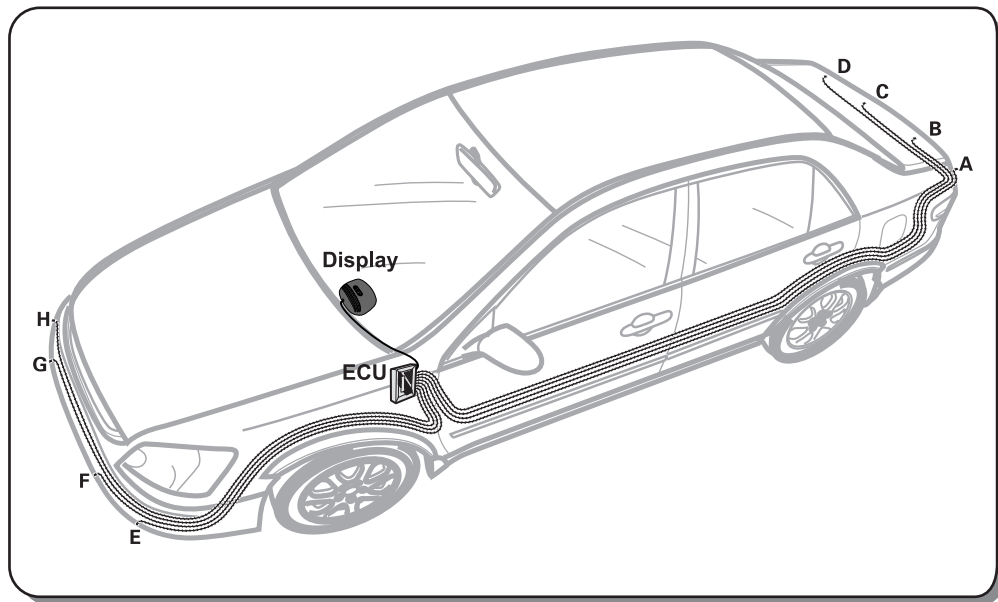


Please clean the sensors with cloth or low-pressure water when the sensors are covered by mud or snow.

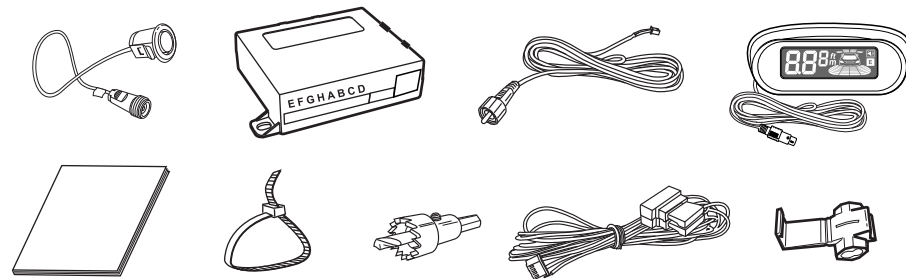
# Parking Assist System

Installation Manual

## Brief installation diagram

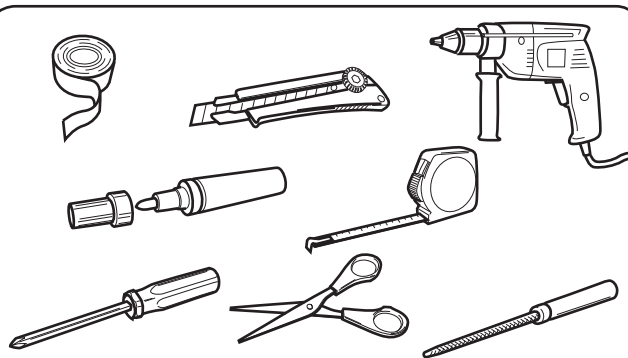


## Packing list



The actual sensor may vary from the image shown above

## Installation tools

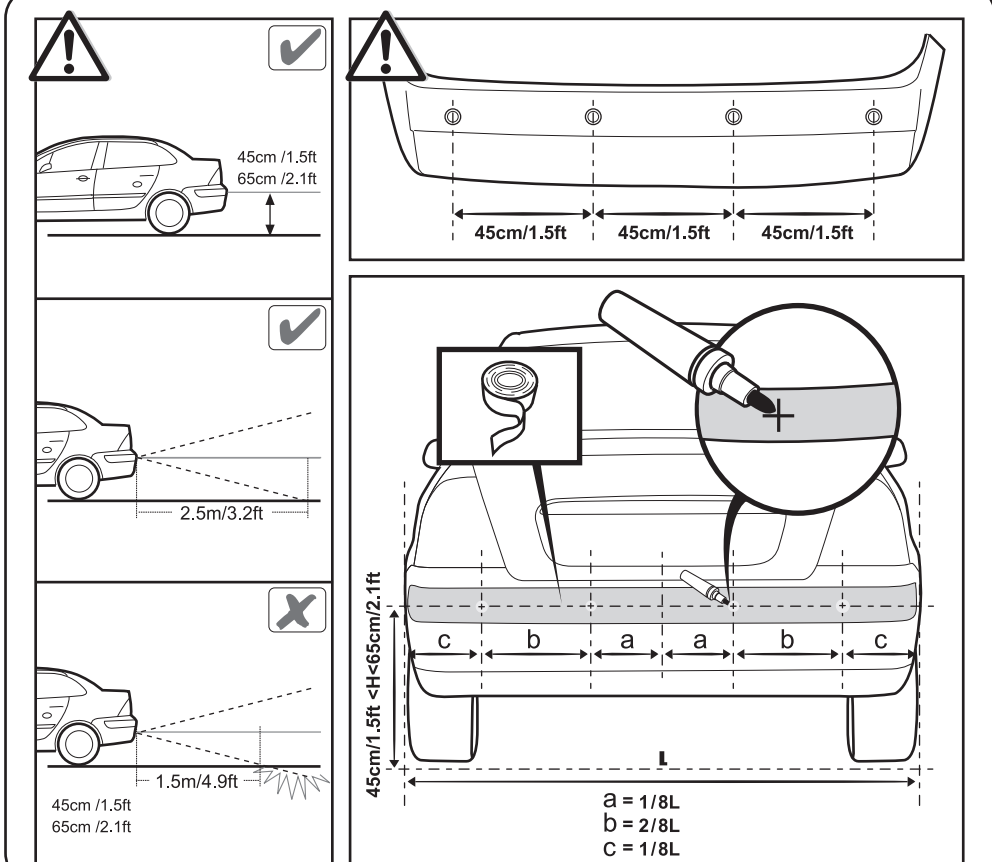
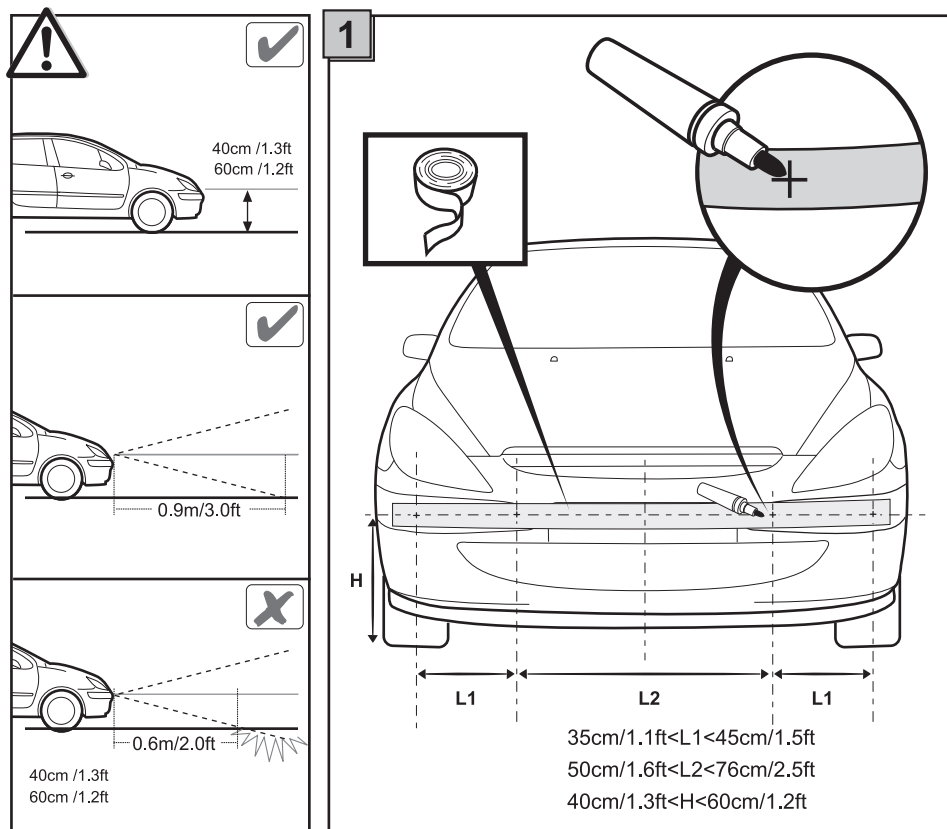


60' ~ 80'

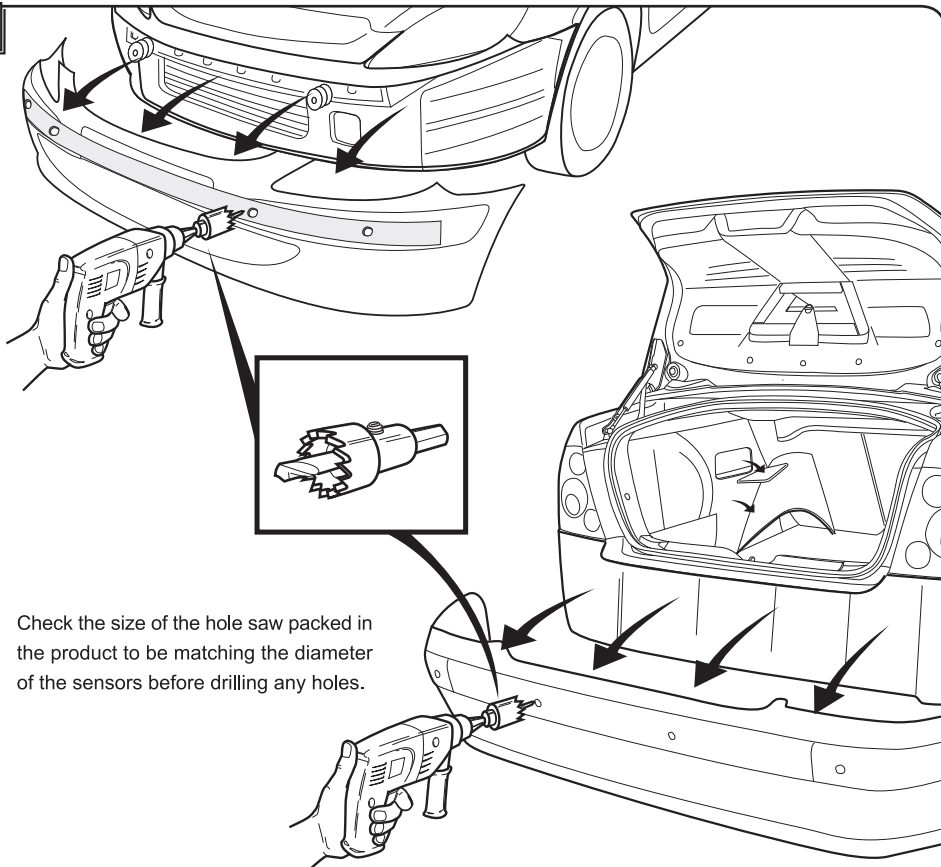


## Sensor installation

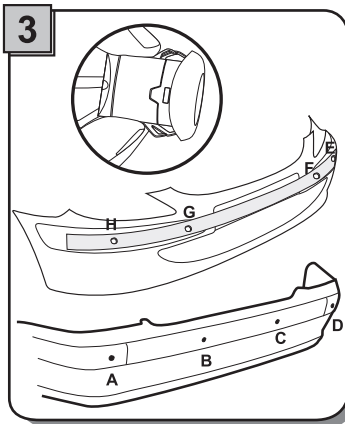
Pls adjust the sensor angle according to sensor height and bumper angle, avoid detecting to ground.



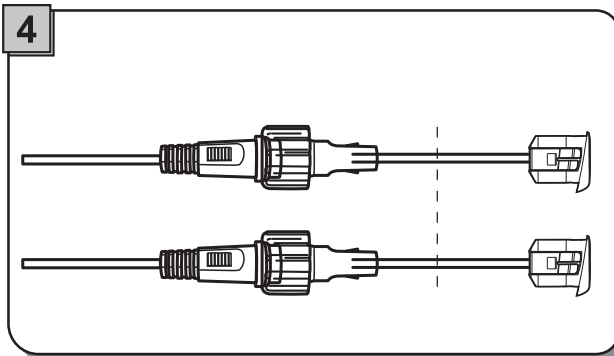
2



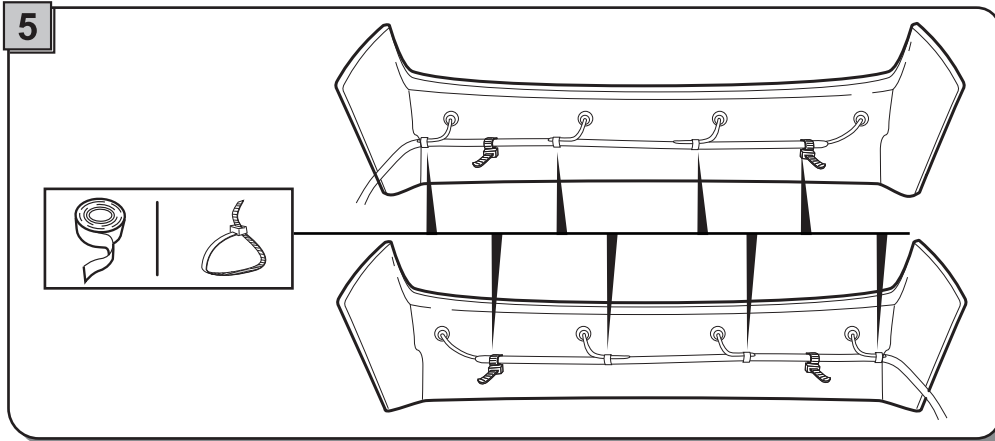
3



4



5



6

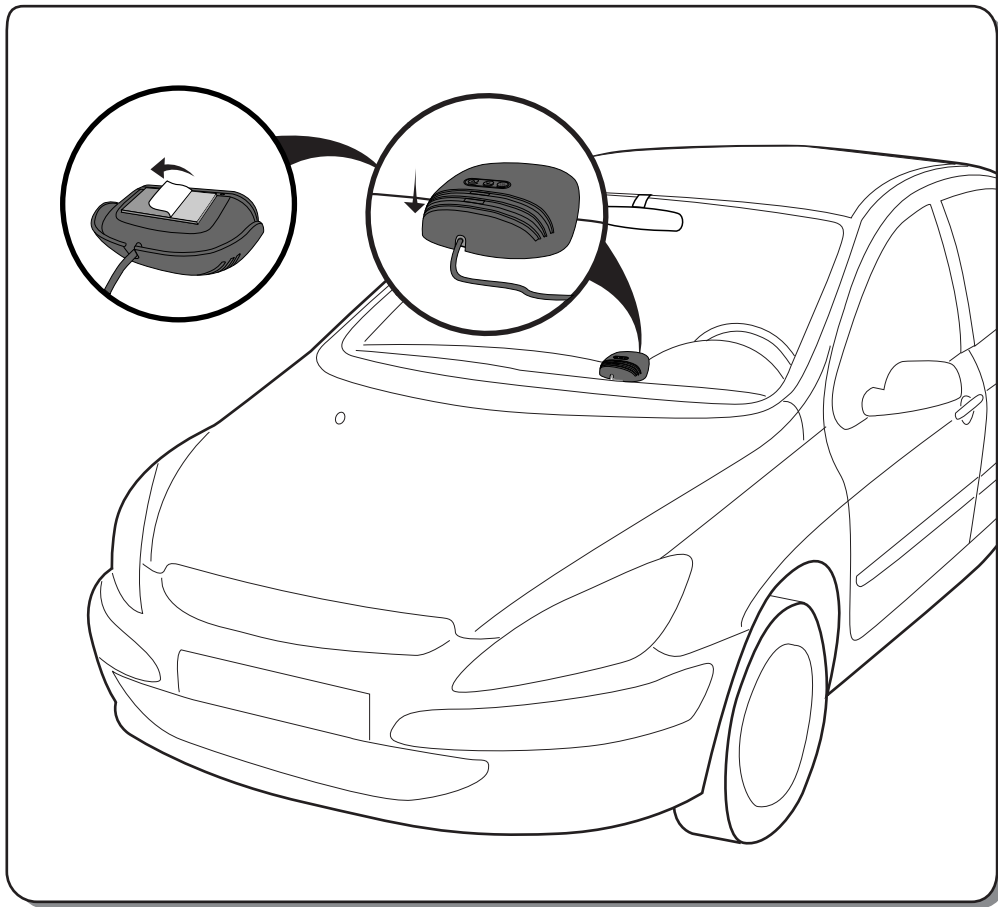
**7**

Power — **+**

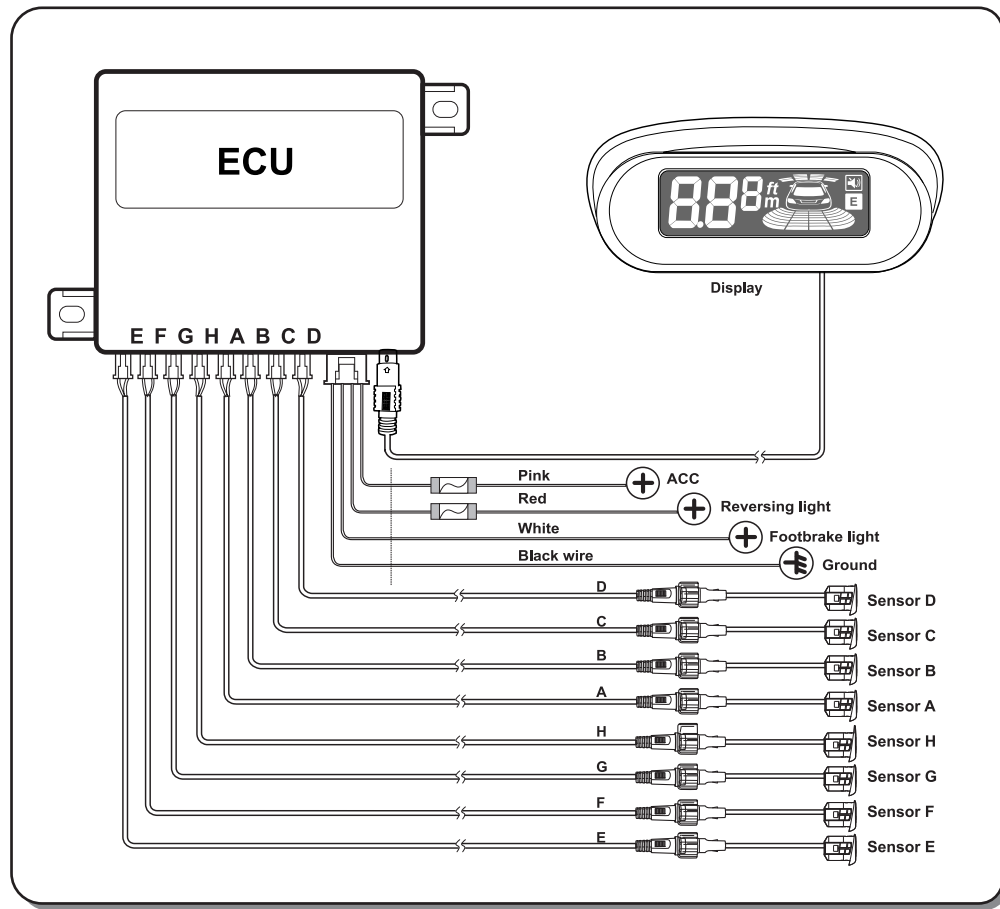
Reversing light + — **⏏**

Check the size of the hole saw packed in the product to be matching the diameter of the sensors before drilling any holes.

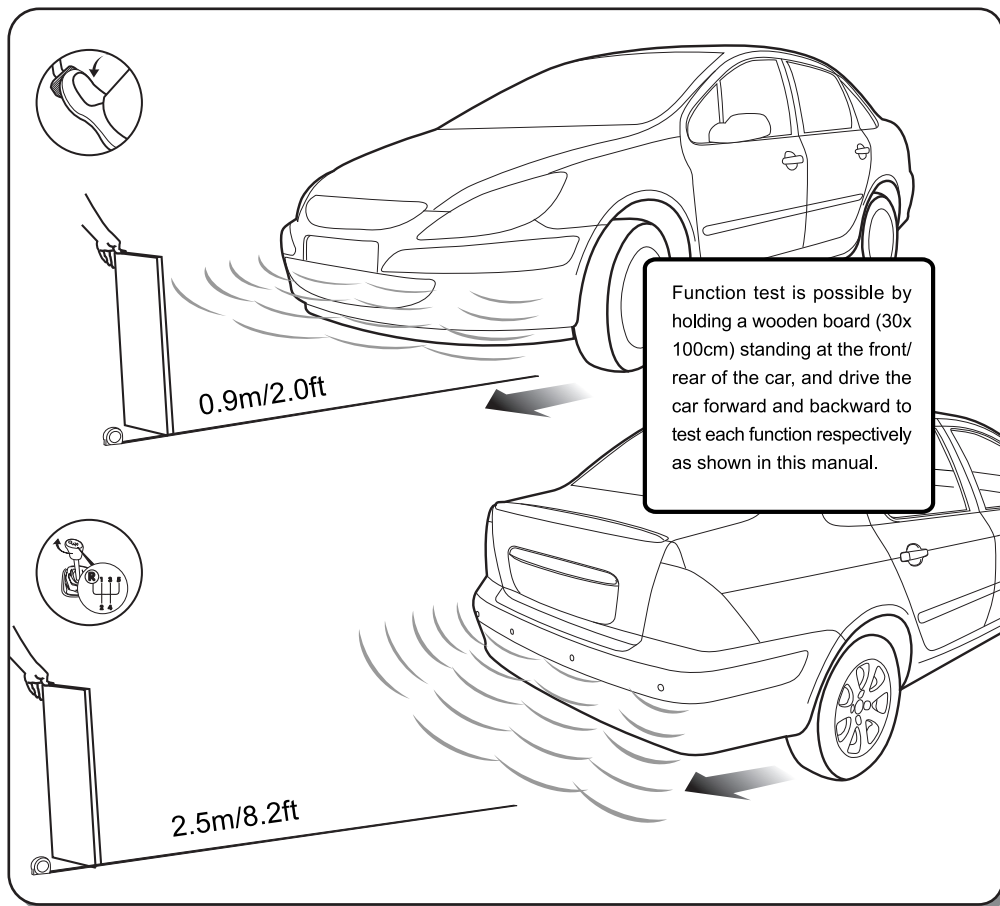
## Display installation



## Wire connection



## Function test after installation



## Troubleshooting

### • After installation, the display doesn't work

- a) Are all wires connected properly?
- b) Is the ignition turned on?
- c) Is the reverse gear selected or is the footbrake pressed?

### • Damaged sensor detected

- a) Are all sensors plugged into the ECU correctly and tightly?
- b) Is the sensor wire broken?
- c) Is the sensor covered by mud or snow?
- d) Is the sensor damaged?

### • The object position does not correspond to the correct indicator on the blue digital display.

- a) Are the sensor cables connected to the control unit (ECU) in the correct position?

### • False warning

- a) Are all sensors plugged into the ECU in the correct position tightly?
- b) Does any sensor detect the ground?

### • Warning sound is too low or too high

- a) Press the "Volume" buttons to adjust the volume to a suitable level.

### • No voice warning

- a) Check whether the voice warning is switched on.

### • The display always shows 0.4~0.6m.

- a) Are sensors mounted too low or detecting the ground?
- b) Check whether the sensor is installed up-side-down.
- c) Unplug 1 sensor at a time to check for root cause.

### • If the problem persists, please follow these steps

- a) For consumers: contact your dealer or nearby service centre.
- b) For installer or dealer : check system according to "Checking flow chart" from.

## Warranty terms

- I. The unit is warranted for a limited period of time from the date of purchase. In the unlikely event of a defect arising in this product when used in accordance with the manufacturer's instructions, the parts would be repaired or replaced free of charge.
- a) It is required to show warranty card when making any warranty claims.
  - b) The model and the unit's serial number must be the same as the information on the warranty card.
- II. This warranty is non-transferable and is automatically void if:
- a) The original purchaser has not completed the warranty card.
  - b) The unit's serial number is defaced, missing or altered.
  - c) The unit has been modified or used in not to its intended purpose.
  - d) The unit has been damaged by accident, unreasonable use, neglect, improper installation or service.
- III. The warranty does not cover:
- a) Damage caused by incorrect or poor installation, problems which may be caused by anomalies in the vehicle's electrical system or originating from the environment in which the system is operated;
  - b) Damage to the system caused by accident or improper use in any manner whatsoever not the fault, including but not limited to damage by water or as a result of excess voltage applied to the system or if misused or repaired or altered in any way other than by or it's authorized agent.
  - c) False information displayed in the panel of the dash board that is caused by car with CAN bus system.

## Warranty card

### Dear user:

Thank you for choosing this product.  
Please fill the form below and retain it.

### User's information:

User:

Tel:

Vehicle license No.:

Product model No.:

Serial No.:

Date of installation:

Name of the retailer

Signed by distributor