

Think Safety Think Steelmate

Steelmate Automotive UK Ltd
Unit D1 Ivinghoe Business Centre
Blackburn Road
Houghton Regis
Bedfordshire
LU5 5BQ



T: 01582 475677 F: 01582 476497
W: www.steel-mate.co.uk
E: enquiry@steel-mate.co.uk



STEELMATE
AUTOMOTIVE

PTS400EX

*Parking assist
system*



Installation And User Manual

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User's Manual

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Parking Assist System

User's Manual

Important notice

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

1. This unit is for vehicles with 12V DC only.
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 a test after 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. The area into which the vehicle is to be reversed must be constantly visually monitored while parking.

The manufacturer and its distributors do not guarantee or assume liability for collisions or damages while reversing your vehicle.

About the product

The PTS400EX is a 4-sensor rear parking assist system that is an ultrasonic distance monitoring device. It electronically detects the area behind your vehicle while reversing, and alerts you with audible tones and/or optional visual display, if the system detects an obstacle. If you have one of the optional displays fitted with the digital numbers the system will accurately show the distance to the obstacle. With features like self-test and the learning function the PTS400EX is ideal for cars with tow-bars or spare wheels.

The various optional displays available are suitable for dash, interior mirror or rear roof mounting. When the display is mounted on the rear roof it can be easily viewed from the interior mirror.

Key features

- The system can be upgraded to use a display with built-in buzzer
- Can be used as a 2-sensor system
- Dual intelligent functions for cars with tow-bars, spare wheels or other protrusions
- Precise detection range
- Self-test function
- Anti-false alert technology

Technical specifications

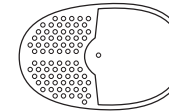
- Input voltage: 12V DC
- Working power: <2.5W
- Detection range: 0.1~2.5m/0.3~8.2ft
- Alarm range(Buzzer): 0.1~1.5m/0.3~4.9ft
- Operating temperature: -40°C ~ +85°C/
-40°F~+185°F
- Buzzer SPL: 70 ~ 90dB

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Buzzer & Display (optional)

The alert buzzer can be upgraded to a display. These pictures are for reference only, the actual display may vary.

Only some LED displays have a set button or digital indication. Digital indicator and adjustable volume function depend on the display you choose.

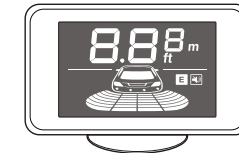
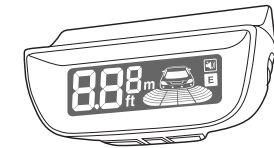


Buzzer

LED display



LCD display



3

Self test function

Rear parking system

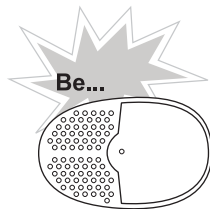
When reverse gear is selected, the system will test the rear sensors A, B, C and D automatically.

If all sensors are working normally, the buzzer will beep once.

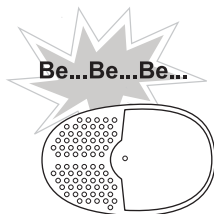
If a damaged or defective sensor is detected, then the system will:

- Beep three times
- Other sensors will continue to function normally.

1. All sensors are working normally

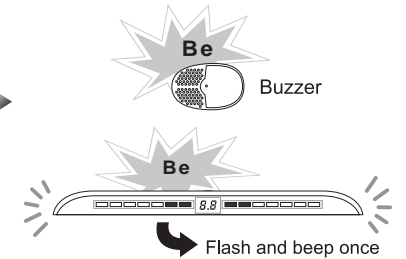
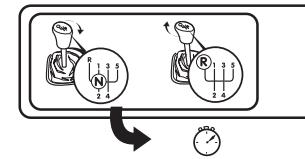
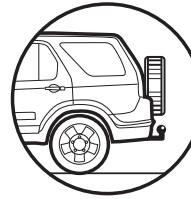


2. Damaged sensor is detected



4

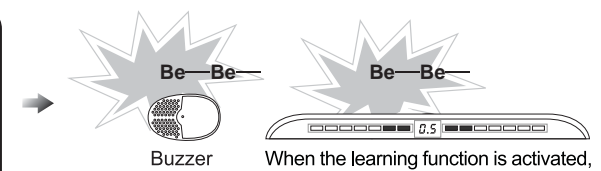
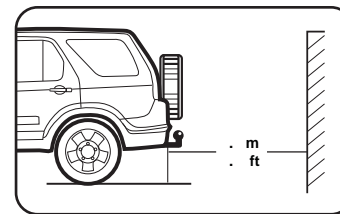
Learning function for cars with tow-bars or spare wheels



With the ignition on change gear from P to R times
Each gear change must be within 10 seconds at the 1 st time
leave the vehicle in the R position for 10 seconds to complete the learning process.

With the ignition on change gear from P to R times
Each gear change must be within 10 seconds at the 1 st time
leave the vehicle in the R position for 10 seconds to clear the learning function and reset the system.

Note: If you make a mistake while carrying out the above procedure leave vehicle in the R position for 10 seconds to clear the system memory and then start the procedure again.

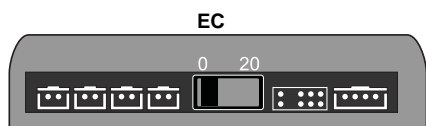
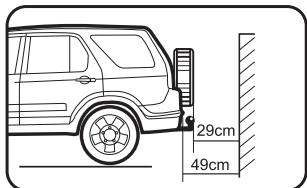


When the learning function is activated, the system will ignore the tow-bar or spare wheel and only detect other objects behind the vehicle.

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

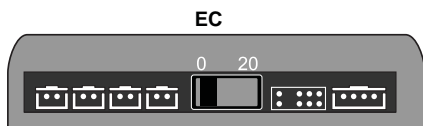
5

Dual intelligent function for spare Wheels (optional)

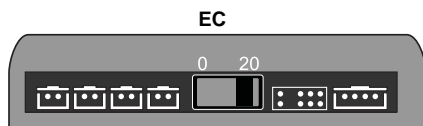


In "0" position: The measured distance is between sensor and obstacle.

In "20" position: The measured distance is between spare wheel (20 cm) and obstacle.



In "0" position

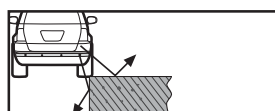
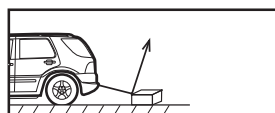
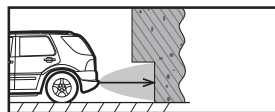
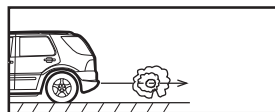
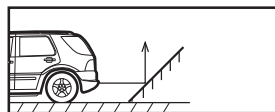


In "20" position



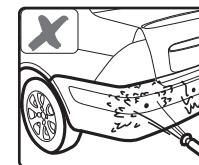
Attention

False detection may occur in the following situations:

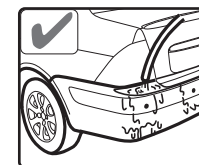


- After installation, please fully test the system before use.
- Heavy rain, dirty or damaged sensors may cause false warning occasionally.
- Ensure that the self-test procedure is completed and all sensors are functioning before using the system.

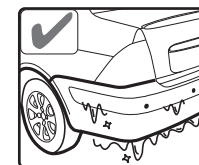
sensor maintenance



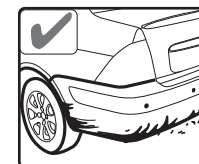
Do not wash the sensor with a pressure washer or scrub them forcibly.



Please wash car with low-pressure water.

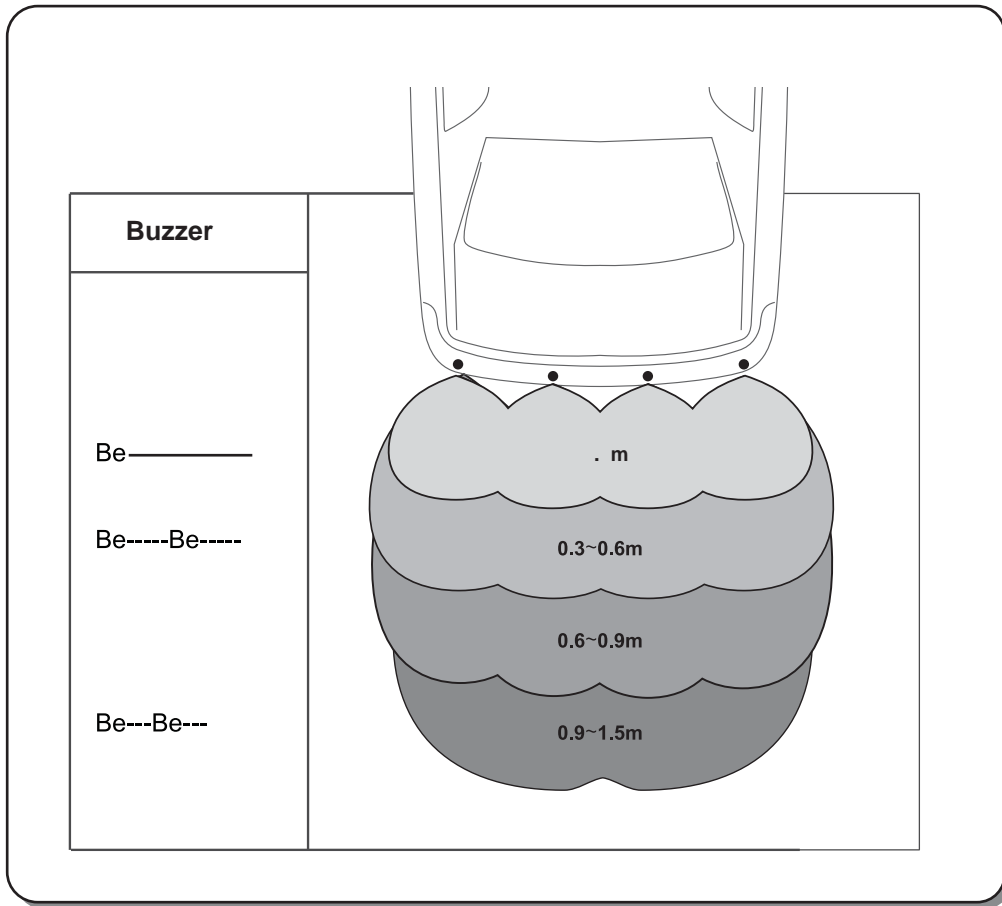


Please melt the ice with water when the sensors are covered by ice.



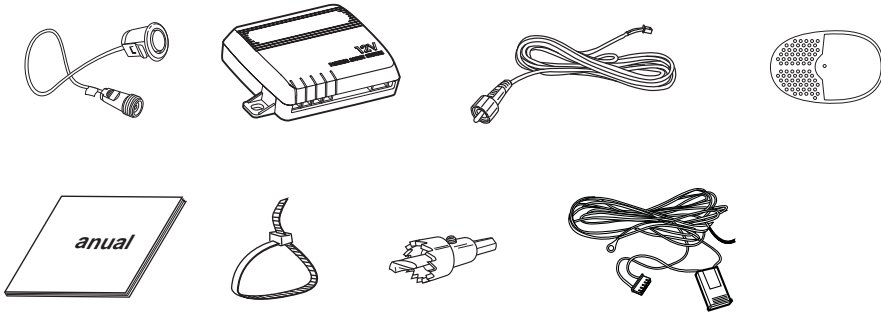
Please clean the sensors with cloth or low-pressure water when the sensors are covered by dirt or snow.

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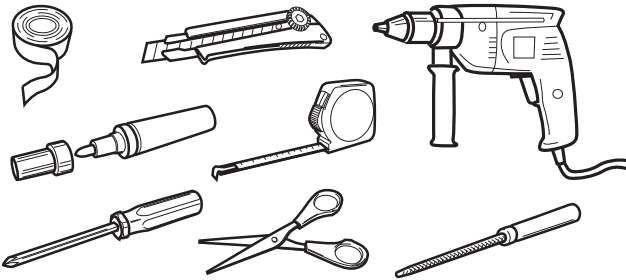
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Installation Manual

Accessories List



↗ The actual sensor may vary from the image shown above

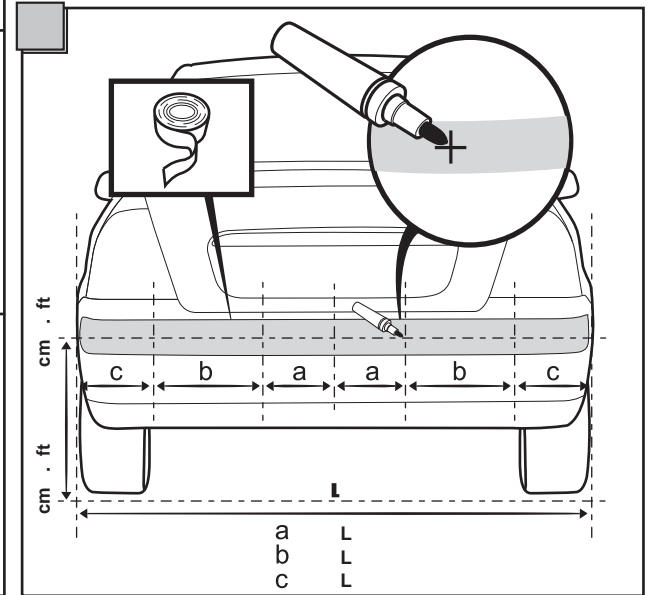
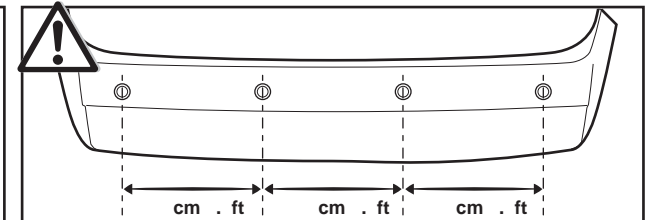
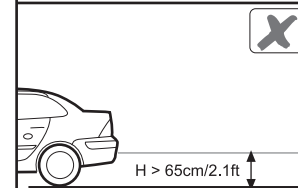
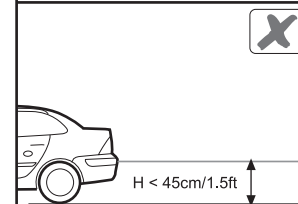
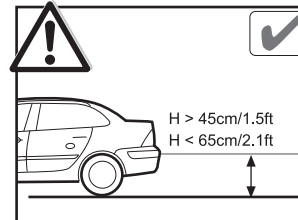
Installation Tools



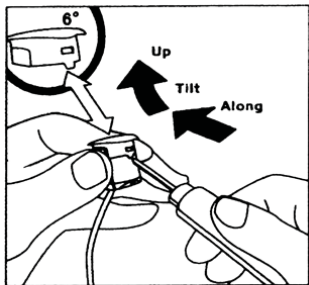
30' ~ 60'

Sensor Installation

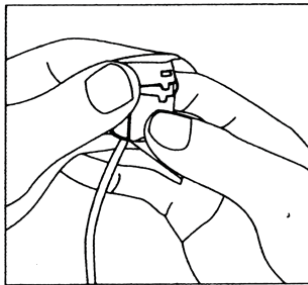
Note: The sensor head angle can be changed to compensate for angled bumpers see instructions overleaf



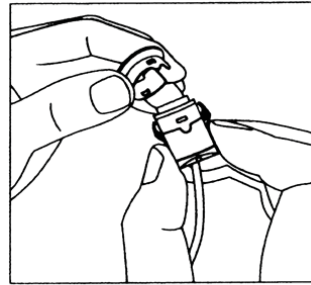
Use a small flat bladed screwdriver to release the clip on head as below



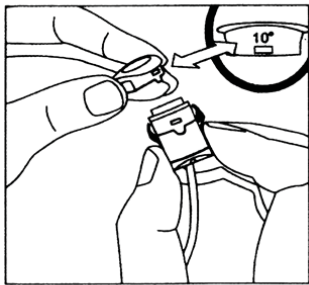
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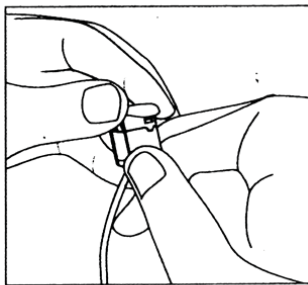
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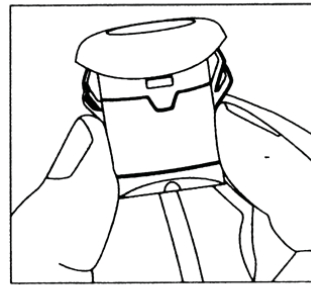
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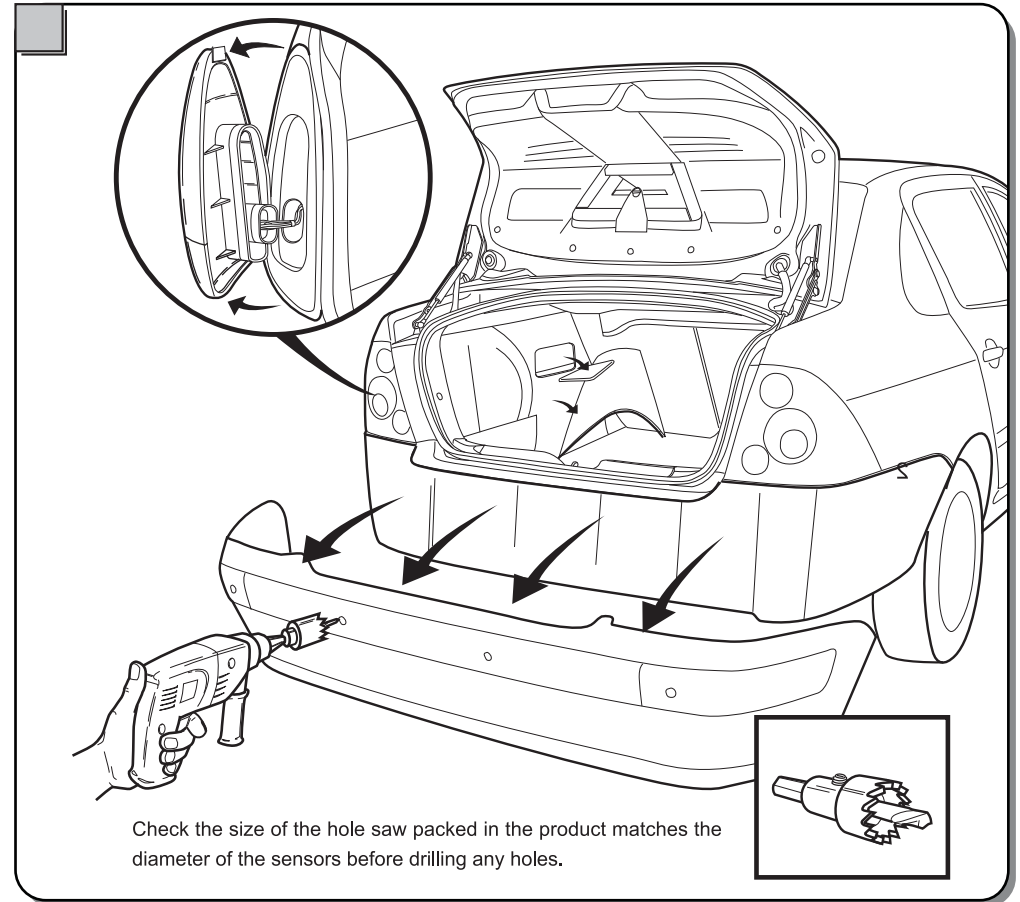
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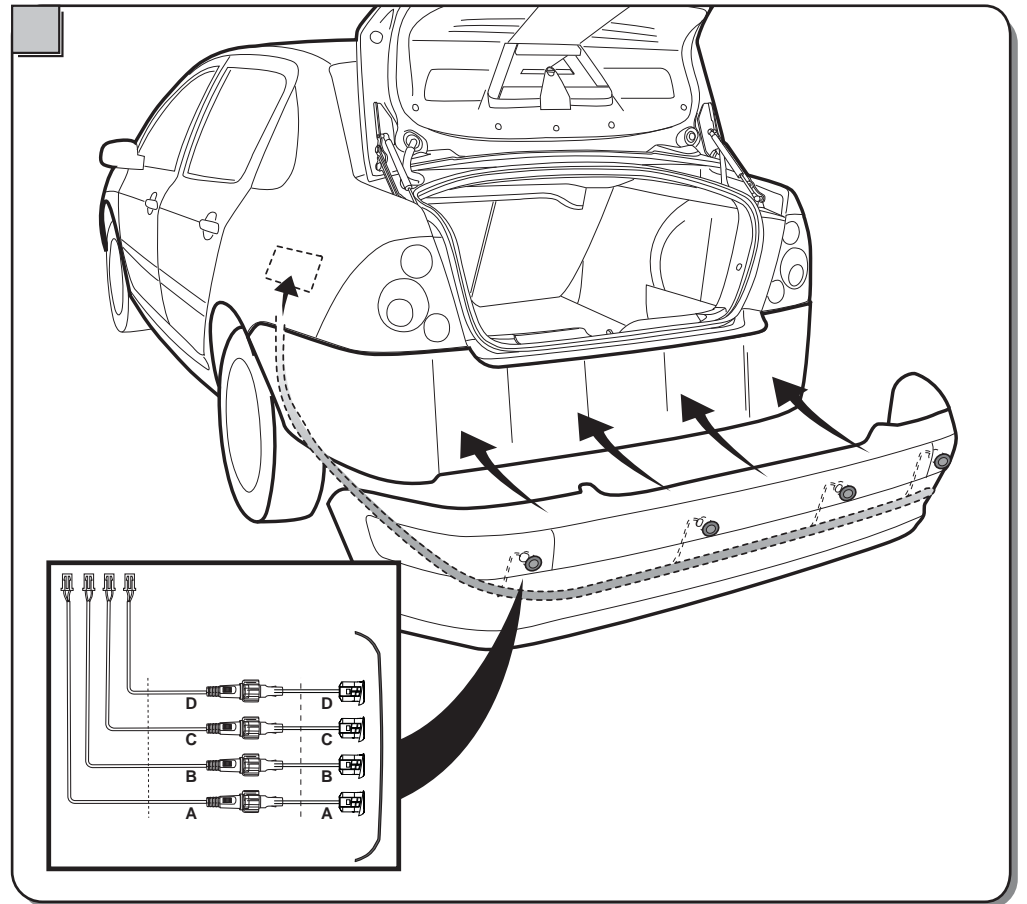
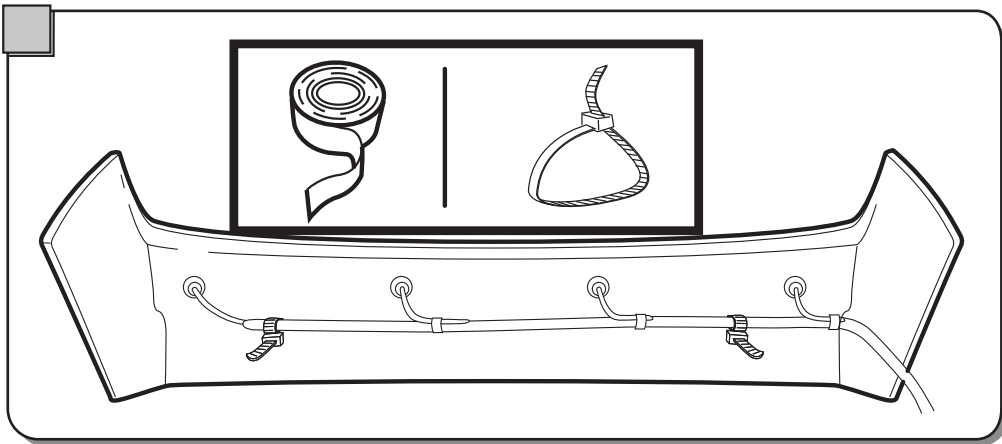
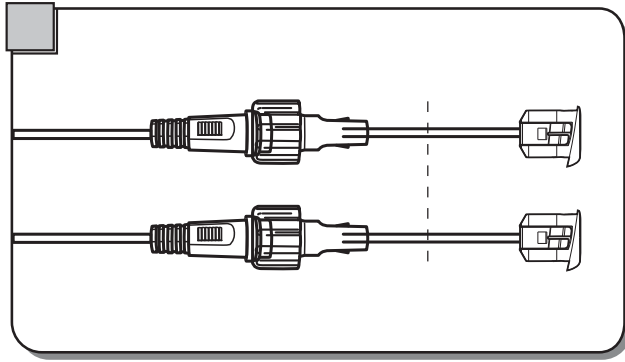
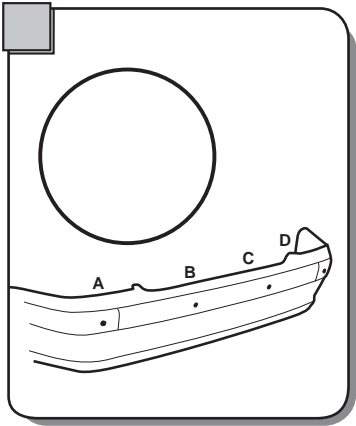
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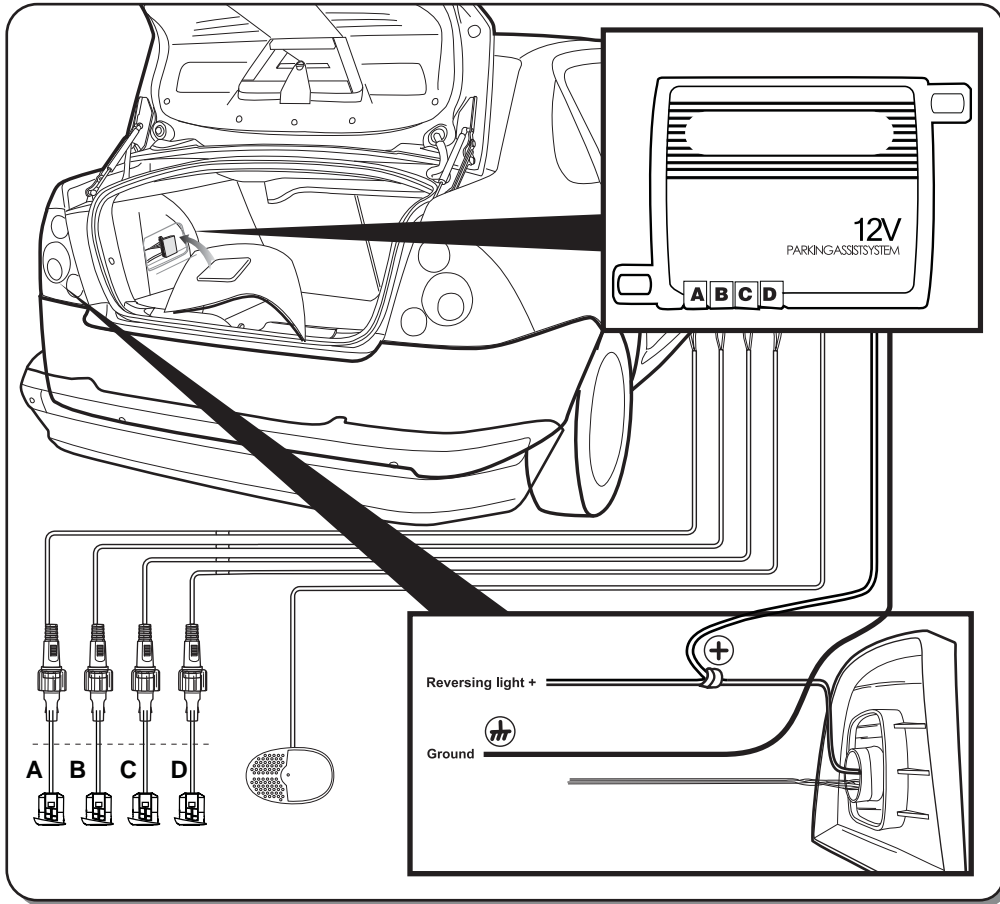
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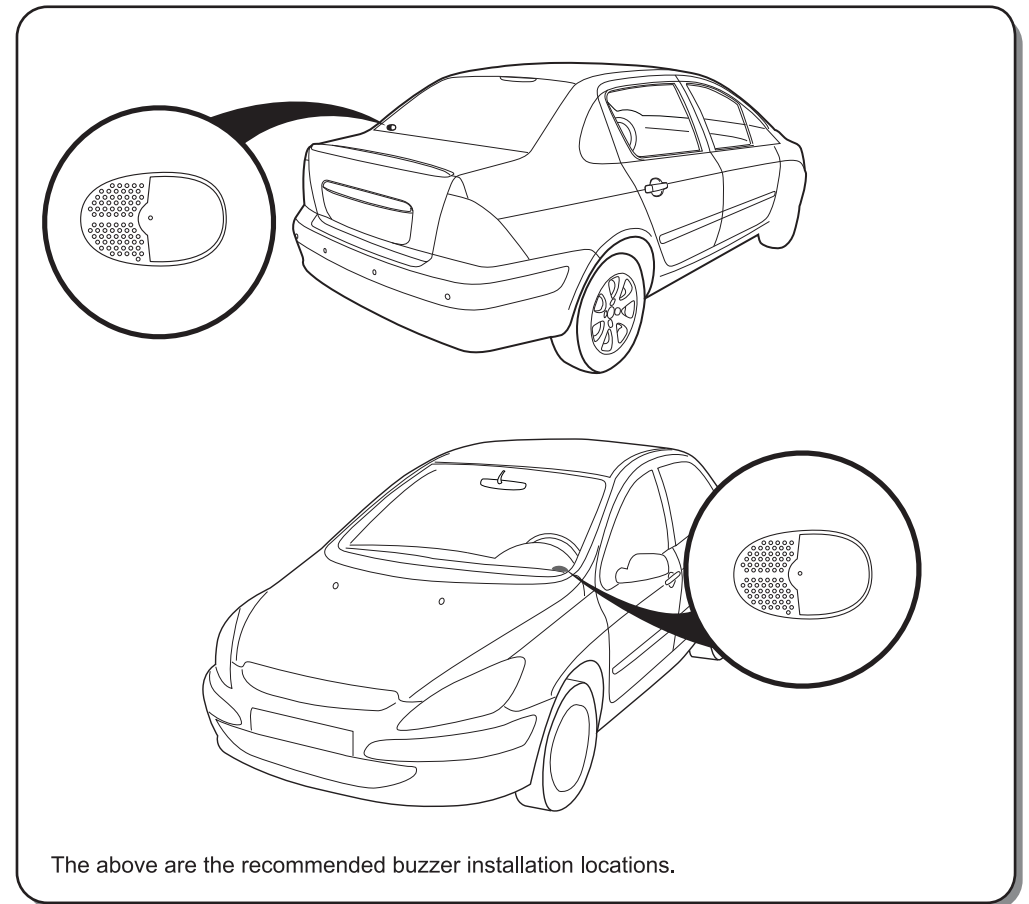
Check the size of the hole saw packed in the product matches the diameter of the sensors before drilling any holes.



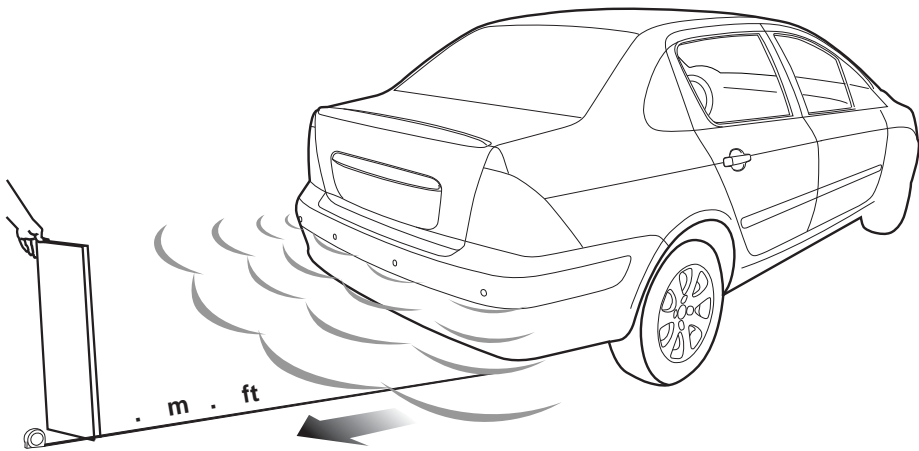
EC installation



Buzzer installation

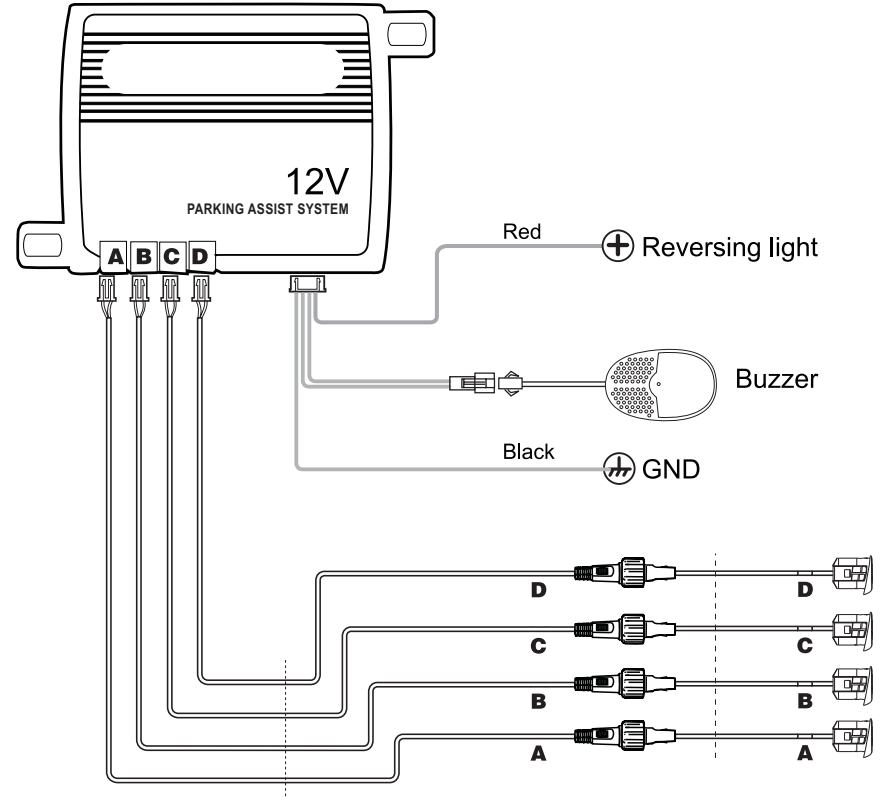


Function test after installation



Function test is performed by holding a wooden board (0.3mx1m) standing at the back of the car, and reverse the car slowly to test each function respectively as shown in this manual.

Wiring diagram



Wiring diagram for PTS400EX.

Troubleshooting

After installation, the buzzer or display doesn't work

- a) Are all wires connected properly?
- b) Is the vehicle's ignition ON?
- c) Is reverse gear engaged (the reverse light should be on)?

Damaged sensor detected

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

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 (display)

- a) Press the Set button to adjust the volume to a suitable level.

If the problem persists, please follow these steps

- a) For consumer: contact your dealer or nearby service centre.
- b) For installer or dealer:
 - 1) Test the sensors with certified ECU by using a flat wooden board.
 - 2) Replace the ECU and recheck the system.

- 3) Plug the certified sensors into the ECU and recheck.
- 4) Email your question to us and we will reply ASAP.

Warranty information

Dear Customer:

Thank you for choosing a Steelmate product. This product comes with our standard month warranty. To receive our additional limited product lifetime warranty for this product you must complete the warranty registration form that can be found at the web address below

www.steel-mate.co.uk

ur standard month warranty and our limited product lifetime warranty only covers parts. Steelmate are not liable and will not pay any labour costs incurred during the removal and or re-installation of warranted equipment or parts. The limited product lifetime warranty applies only to the original end user/customer of the product for so long as the original end user/customer owns the product. This limited warranty is not-transferable. When registering for the additional warranty online it is not essential to supply the product serial number, however when making a claim the product serial number shown on the E must be on all claim correspondence. ll warranty claims should be processed as per the instructions on our website under the warranty section and proof of purchase must be provided for both our month and our limited product lifetime warranties .

ur warranty department is open from - on- ri and can be contacted by telephone on 4 or by email warranty@steel-mate.co.uk should you require any further assistance.

Steelmate limited product lifetime warranty is for the product lifetime which is limited to years.

arranty card

Dear user:

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

user's information

User:

Tel:

Vehicle registration No.:

Product model No.:

Serial No.:

Date of installation:

Name of the retailer