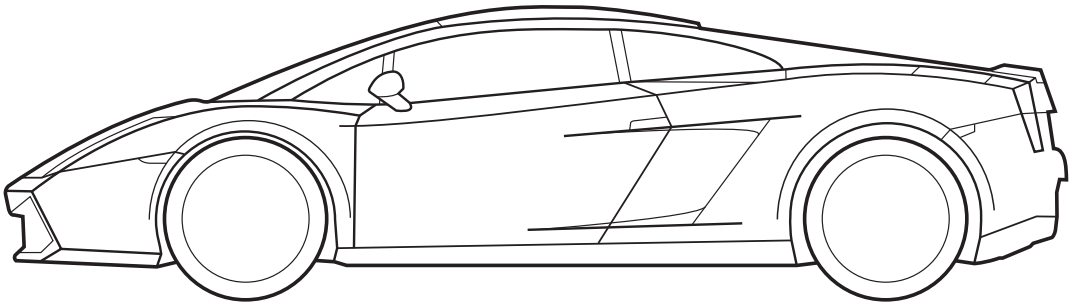

Parking Sensor Installation Instructions

Part number **900000358**

CE

The technical information included in the following manual must be considered strictly approximate and the manufacturing company will not be held liable in relation to said information. The technical staff appointed to installation is required to check, with due diligence and under their own responsibility, the information provided herein based on the type of vehicle (ex. specific connection points for the model).

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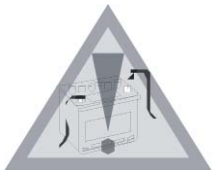
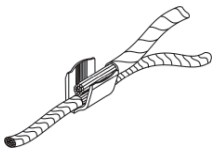
INSTALLATION REGULATIONS





- Before performing any operation, disconnect the negative pole on the battery.
- The electronic control units of the kits must be installed exclusively inside the car cabin.
- To attach them we recommend using velcro or straps, avoid drilling holes in the sheet metal on the car.
- For position and connections it is good practice to refer to the instructions.
- To avoid vibrations, we recommend wrapping the system cables with fabric tape.
- Strictly avoid quick electrical couplings.
- To set up connections to the vehicle's system, crimp the wire using splices and insulate the joint with insulating tape.

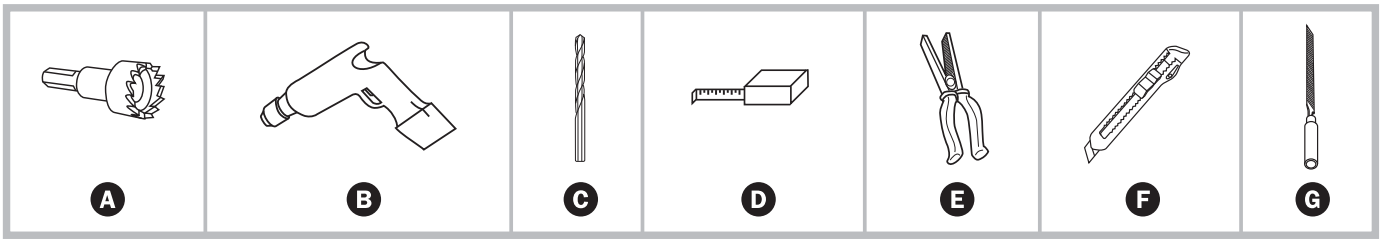
OPERATING PRINCIPLE

This product is an electronic device designed to make it easier to park vehicles.
This system is compatible for applications on the front and rear of the vehicle.
NB: It is not possible to install the system on the front on vehicles with an original rear system.
The parking sensor is based on the principle of sound wave reflection when they encounter obstacles. Knowing the speed that the sound travels at through the air, and measuring the time that elapses between the emission and reception of an impulse train when it has been reflected by an obstacle, it is possible to calculate the distance of the obstacle from the source of the sound energy. In this specific case, there are 4 available sources of sound energy that uniformly cover the part of the vehicle that needs to be protected. Each of these sources is comprised of an ultrasound capsule which also acts as a receiving element for the reflected wave. An intermittent sound, common to all 4 channels, is audible when the vehicle gets closer to the obstacle. The closer the car gets to the obstacle, the faster the sound frequency. The sound becomes continuous when the car reaches the "OFFSET" minimum safety distance.

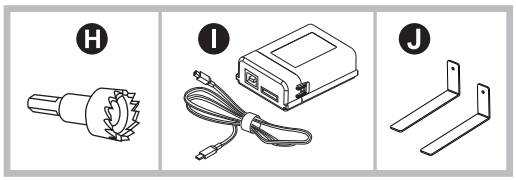
COMPATIBILITY

The product is designed to be installed on LAMBORGHINI GALLARDO cars with standard bumpers.

TOOLS INDISPENSABLE FOR INSTALLATION

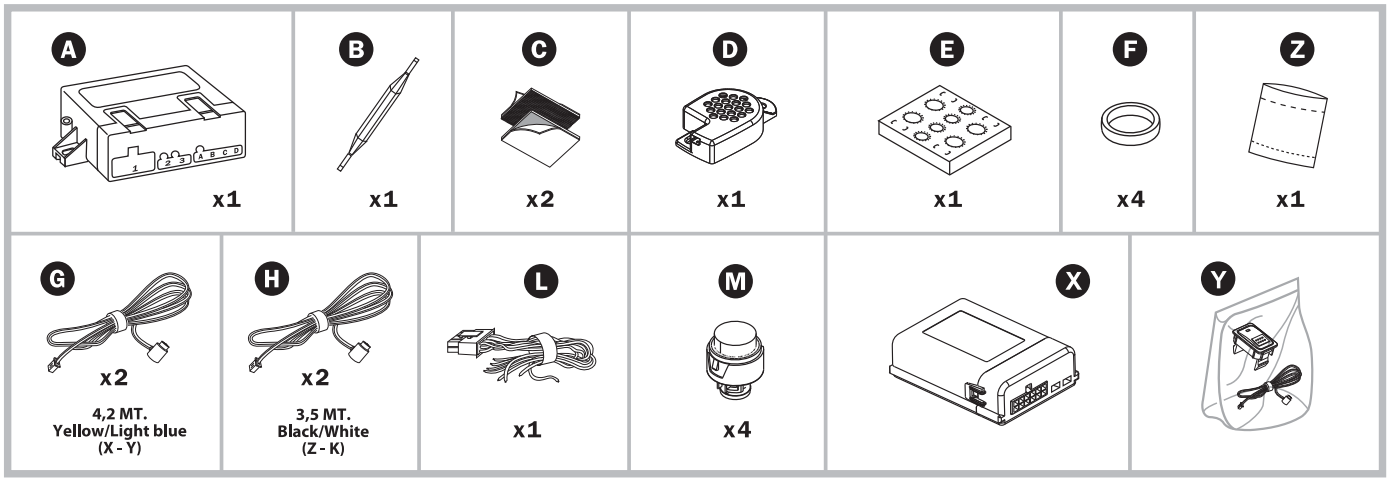


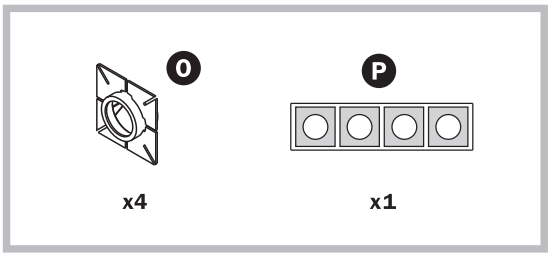
LEGEND
- **A** - Hollow mill Ø 30/35 mm
- **B** - Drill
- **C** - Drill bit Ø 2,5 mm
- **D** - Wind up measuring tape
- **E** - Pliers
- **F** - Utility knife
- **G** - Small round file



TOOL KIT 900000359
- **H** - Hollow mill Ø 19 mm
- **I** - PRG007 Programmer
- **J** - Brackets for plate masking

THE KIT INCLUDES





LEGEND

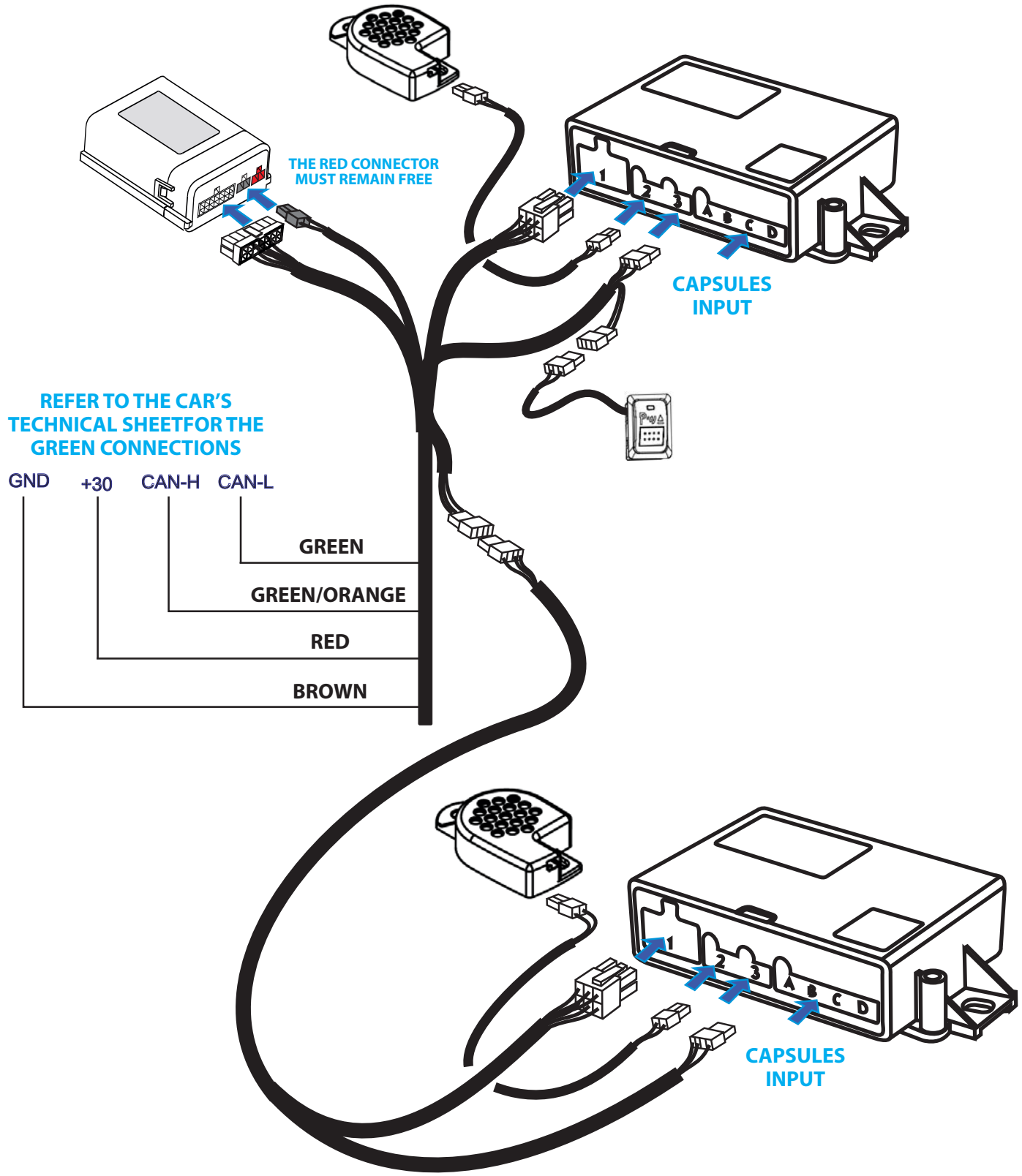
Composition of the kit

A - Control unit
B - Screwdriver for calibration
C - Velcro
D - Buzzer
E - Painting template
F - Silicone ring
G - Capsule wires 4,2 m
H - Capsule wires 3,5 m
I - Buzzer wire
L - Wiring
M - Capsules
Z - Mechanical accessories kit
X - Utility Can Converter control unit
Y - ON/OFF Button/LED for front parking sensor installation.

Accessories for installation without locking ring

O - Supports
P - Support stickers

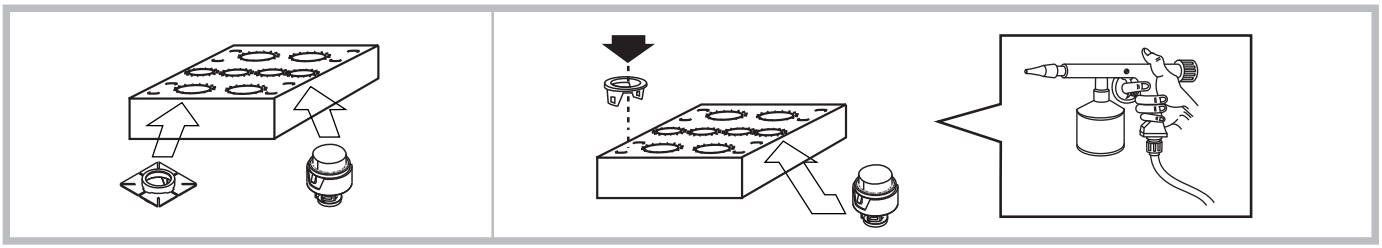
GENERAL WIRING DIAGRAM



TECHNICAL FEATURES

Power ..... 12 Vcc (10V-15V)
Current absorption with the system active ..... < 50mA

PAINTINGS THE CAPSULES AND THE RELEVANT SUPPORTS



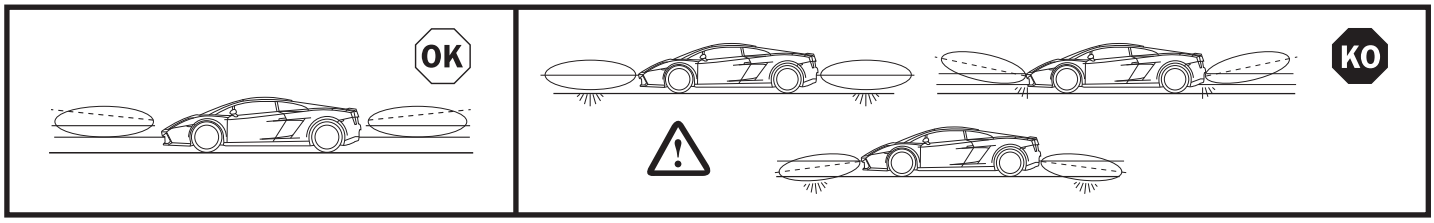
Before assembling the components of the sensors it is advisable to paint the capsules and supports in the same colour of the car.
Use the carton mask, included into the kit, for painting in order to prevent paint from getting on parts of the capsule which would alter its performance.
Specific primers must be applied first before painting; make sure the paint is completely dry before assembling the components.

GENERAL RECCOMENDATIONS

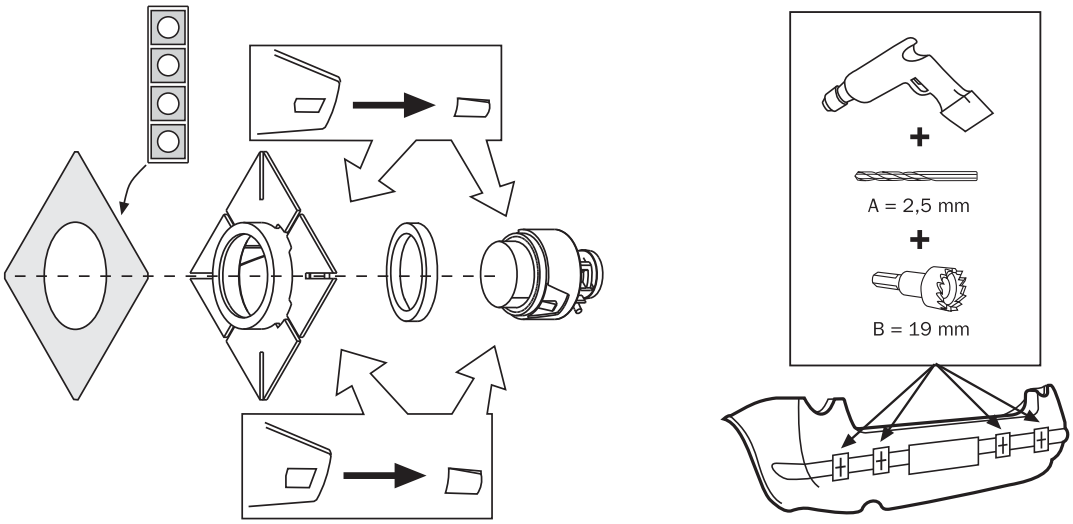
The performance and accuracy of the system are strongly influenced by the position and orientation of the sensors. For this reason certain conditions have to be checked before starting the installation:

- On the positions chosen to place the sensors the bumper must provide enough depth internally and room for assembly without any forcing;
- Follow the positioning instructions and the tips on the accessories to be used, depending on the height and shape of the bumper.

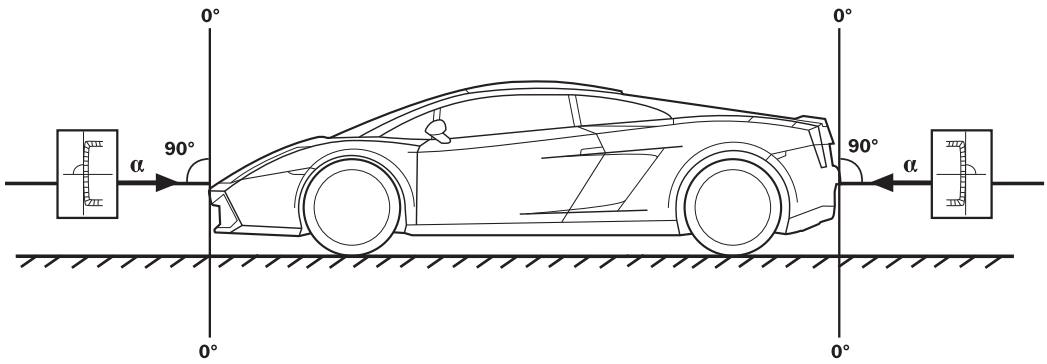
It is extremely important to fit the sensors on the bumper and keeping a height that can vary from a maximum of about 65 cm to a minimum of 35 cm. It is important that the sensors are as vertical as possible from the ground.

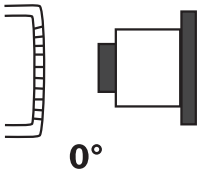


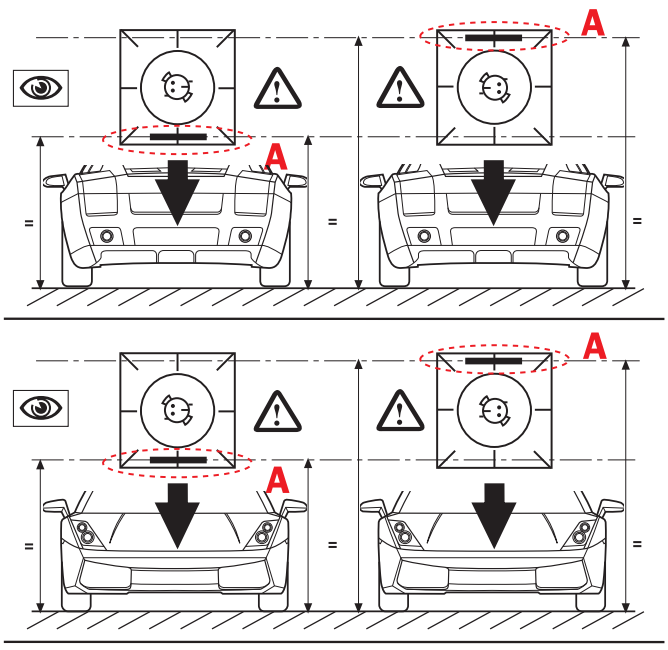
Installation with the ISH system

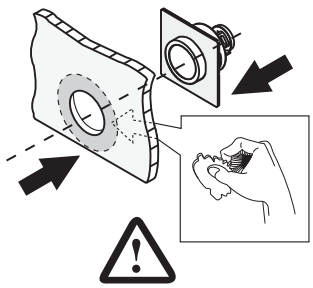


NOTE: DRILL THE BUMPER FROM THE OUTSIDE









NOTE: DEGREASE THOROUGHLY BEFORE APPLYING THE TWO-SIDE ADHESIVE TAPE

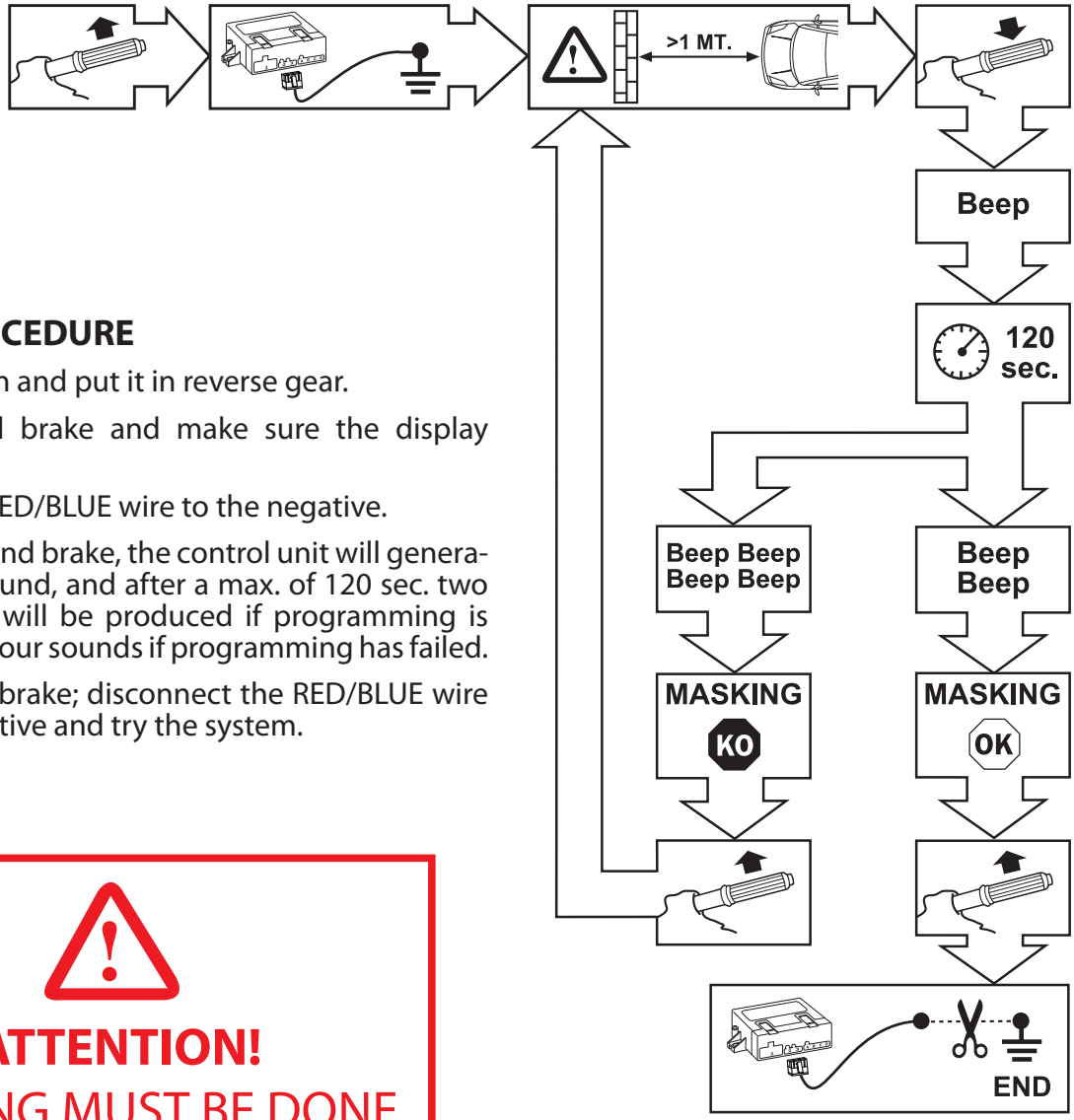
NOTE: TO MAKE SURE OF A CORRECT WORKING, CHECK THAT THE POSITIONING REFERENCE ITEM (A) IS HORIZONTAL. ONCE THE SENSORS ARE FITTED TO THE BUMPER DO NOT WET OR FORCE THEM FOR THE NEXT 8 HOURS.

REDUCING THE SYSTEM'S PERFORMANCE

This function must only be used if strictly necessary. It drastically lowers system performance therefore avoiding false readings due to unsuitable installation for the specified characteristics.
To set this function simply connect the **RED/BLUE wire to the 8-PIN RED - WHITE CONNECTOR wire**.

MASKING PROCEDURE

The system can exclude fi xed objects, such as the tow hook or spare wheel (in case of rear application) or protruding parts (front application) that are always inside the detection area of the sensors and ensure that they will no longer be detected during each parking manoeuvre.
To programme follow these steps:
NOTE: make sure that no objects are around the vehicle. Keep at least 1 m of clearance from any object before launching this procedure.



MASKING PROCEDURE

1. Turn the car on and put it in reverse gear.
2. Pull the hand brake and make sure the display switches off.
3. Connect the RED/BLUE wire to the negative.
4. Release the hand brake, the control unit will generate an acute sound, and after a max. of 120 sec. two other sounds will be produced if programming is successful, or four sounds if programming has failed.
5. Pull the hand brake; disconnect the RED/BLUE wire from the negative and try the system.

ATTENTION!
MASKING MUST BE DONE WITH RUNNING ENGINE

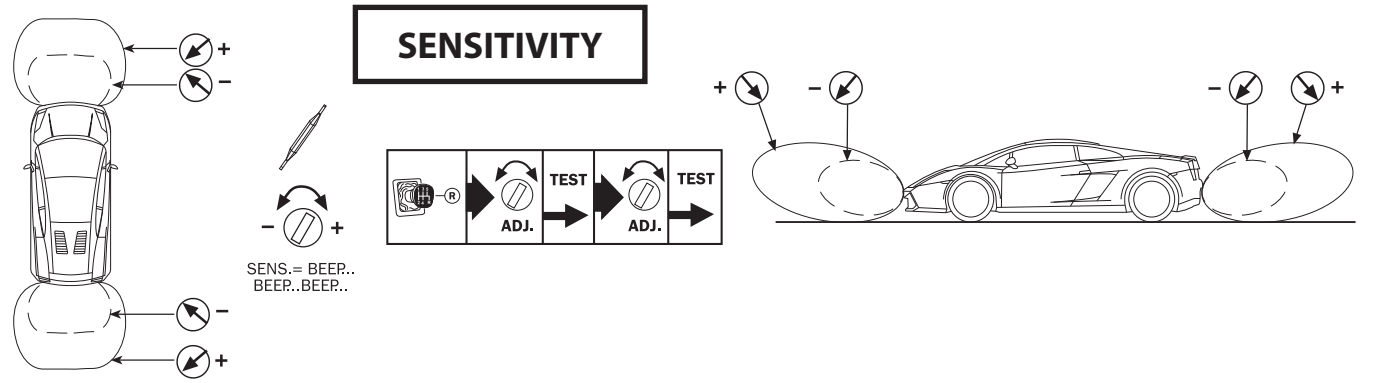
CALIBRATION

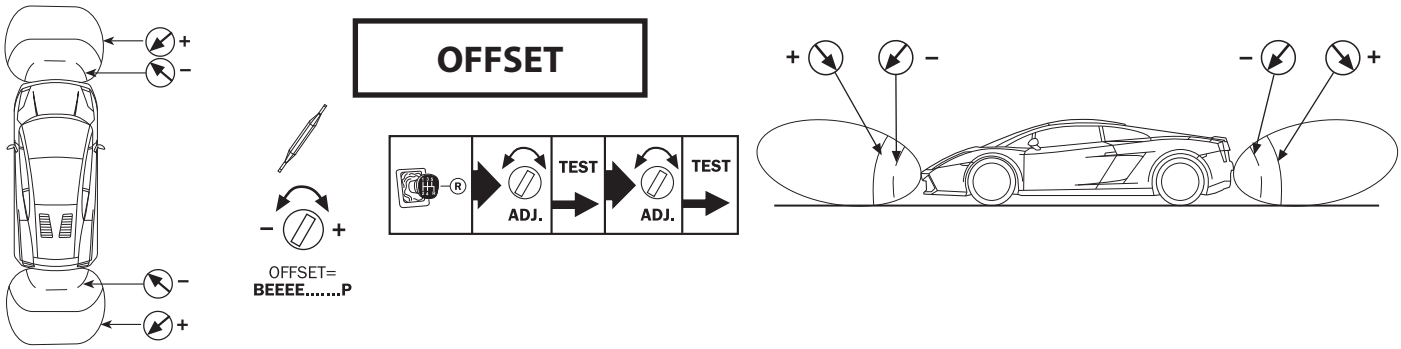
With the three trimmers on the front of the control unit it is possible to fi nely tune the system's performance on the basis of the customer's requirements or on the shape of the bumper. The trimmers manage the three following functions:

SENSITIVITY: Adjusting the capsules' reading sensitivity. Therefore it is possible to modify the protection space.

OFFSET: Danger zone "continuous sound" detection distance.

VOLUME: To manage the loudspeaker's volume.





RECORDING THE SPEED THRESHOLD

If it is necessary to change the factory-set speed value (20 Km/h) it is possible to change the configuration by using the optional button.

To adjust the front parking system switch-off speed, you will need to do the following:

1. **Turn the vehicle on. The vehicle must not be in reverse gear.**
2. **Release the hand brake and make sure the Button/LED is on.**
3. **Press the Button/LED once and make sure it switches off.**
4. **Press and hold the Button/LED down for approximately 30 seconds and wait for a series of signals (6 Beeps) indicating access to the system in speed adjustment mode.**
5. **Proceed with the vehicle (we recommend not exceeding 30 Km/h) and when you have reached the desired speed press the Button/LED to confirm saving it.**

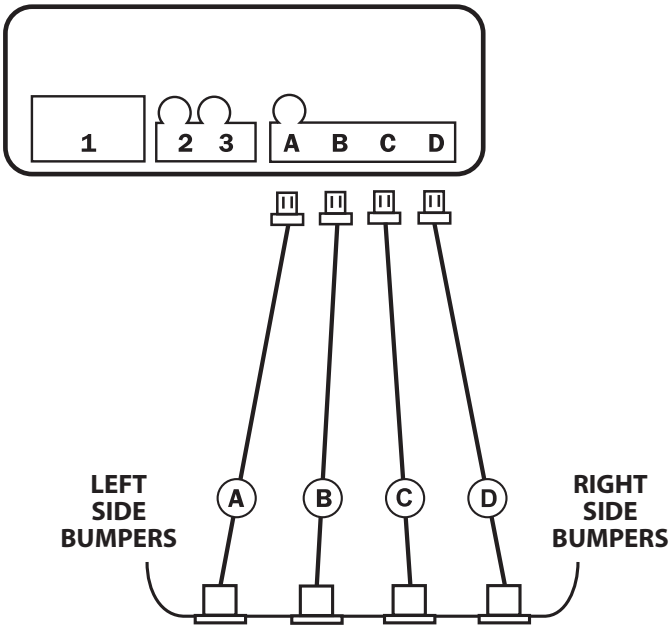
To check if the system has recorded the right speed value, exceed this speed and check that, after a few seconds, the system turns itself off (push button/LED OFF).

DIAGNOSTICS

While the system is working, it always keeps a self-diagnosis procedure active to warn the user - by means of acoustic signals - in case one or more sensors do not work correctly. If failures are found after the system has been turned on, one or more acoustic signals are generated:

- **long beep with diff erent tone+n°1 short beep = sensor n°A fault;**
- **long beep with diff erent tone +n°2 short beeps = sensor n°B fault;**
- **long beep with diff erent tone +n°3 short beeps = sensor n°C fault;**
- **long beep with diff erent tone +n°4 short beeps = sensor n°D fault;**

After the system has provided the above mentioned information, it will cut-off the faulty sensors and then start working as usual. It will only warn the driver each time it is activated. If the failure occurs during operation, the control unit will interrupt its standard signalling of a detected obstacle to produce the diagnostics signal described above.



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