

Meta EasyTarga2



REVERSING SYSTEM WITH SENSORS RTG 2012 (Plate Sensor 2012)

MAIN TECHNICAL AND PRODUCT FEATURES

- **Power** 12 Vdc (10V ÷ 15V).
- **Absorption** >50 mA (only when the control panel is ON and reverse gear engaged).
- **Paintable sensors** 2 pcs model TARGA RTG 2012.
- **Acoustic warning signal** Speaker with progressive signalling and volume >70 dbm/1 mt (not adjustable).
- **Detection sensitivity** Max 150 cm sensitivity, adjustable with a trimmer.
- **Offset** Programmable with a trimmer from Min. 25 cm to Max. 60 cm.
- **Obstacle masking** It can be activated during the installation.
- **Application** Number plate housing with a minimum width of 565 mm. Cars with incandescent lamp reverse lights (Not LEDS).
- **Display** Output to pilot the display (OPT specific for EasyPark).

OPERATING PRINCIPLE

The product is an electronic device designed to park the vehicle easier and is based on the principle of sound wave reflection when an obstacle is detected. For this purpose there are 2 sensors allowing to completely protect the vehicle's surfaces. An intermittent beep warns about the approaching of the vehicle to an obstacle by proportionally increasing the beeping frequency on the distance. The sound becomes continuous when the OFFSET area is reached (~30cm).

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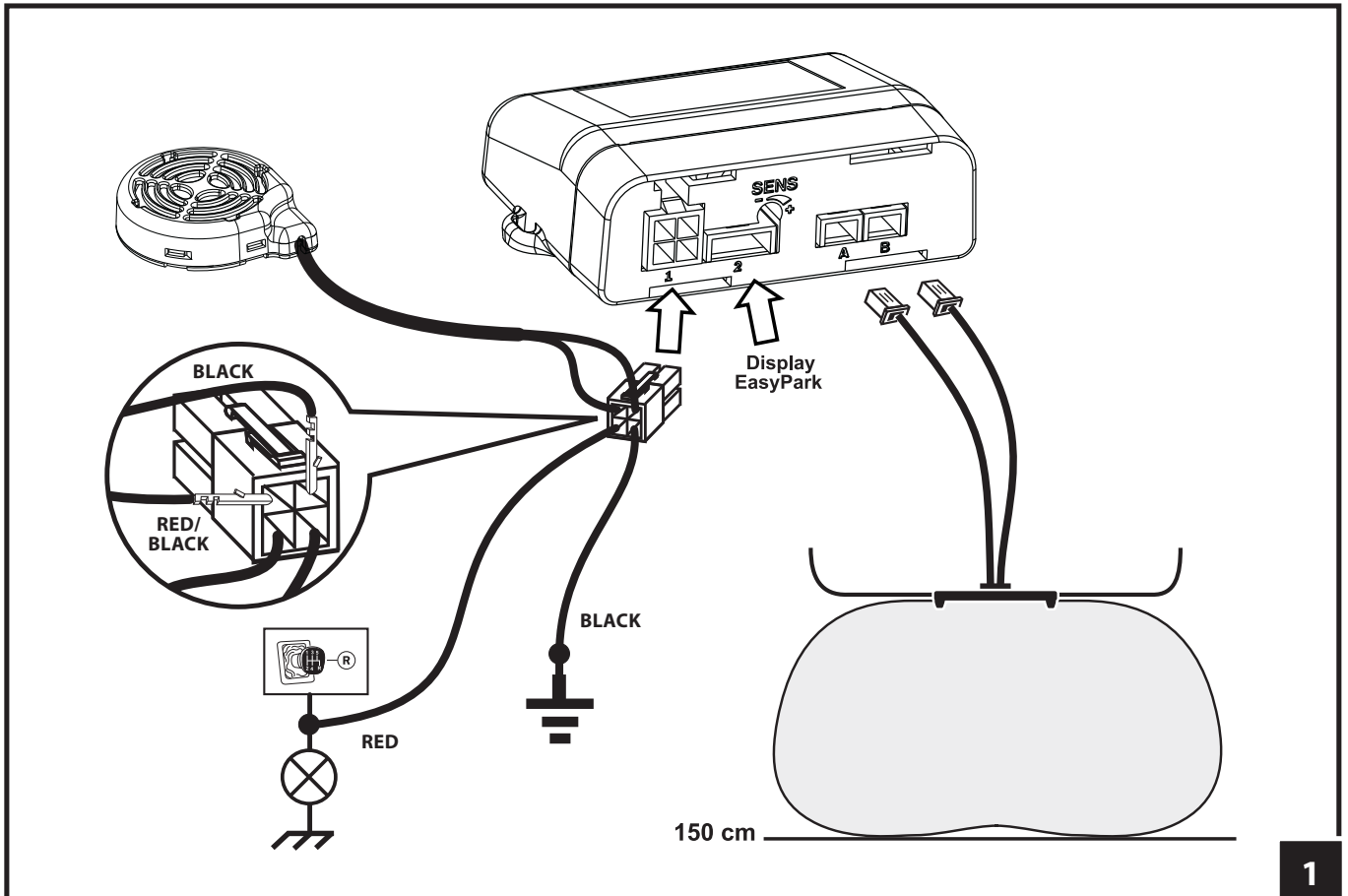
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THE KIT INCLUDES

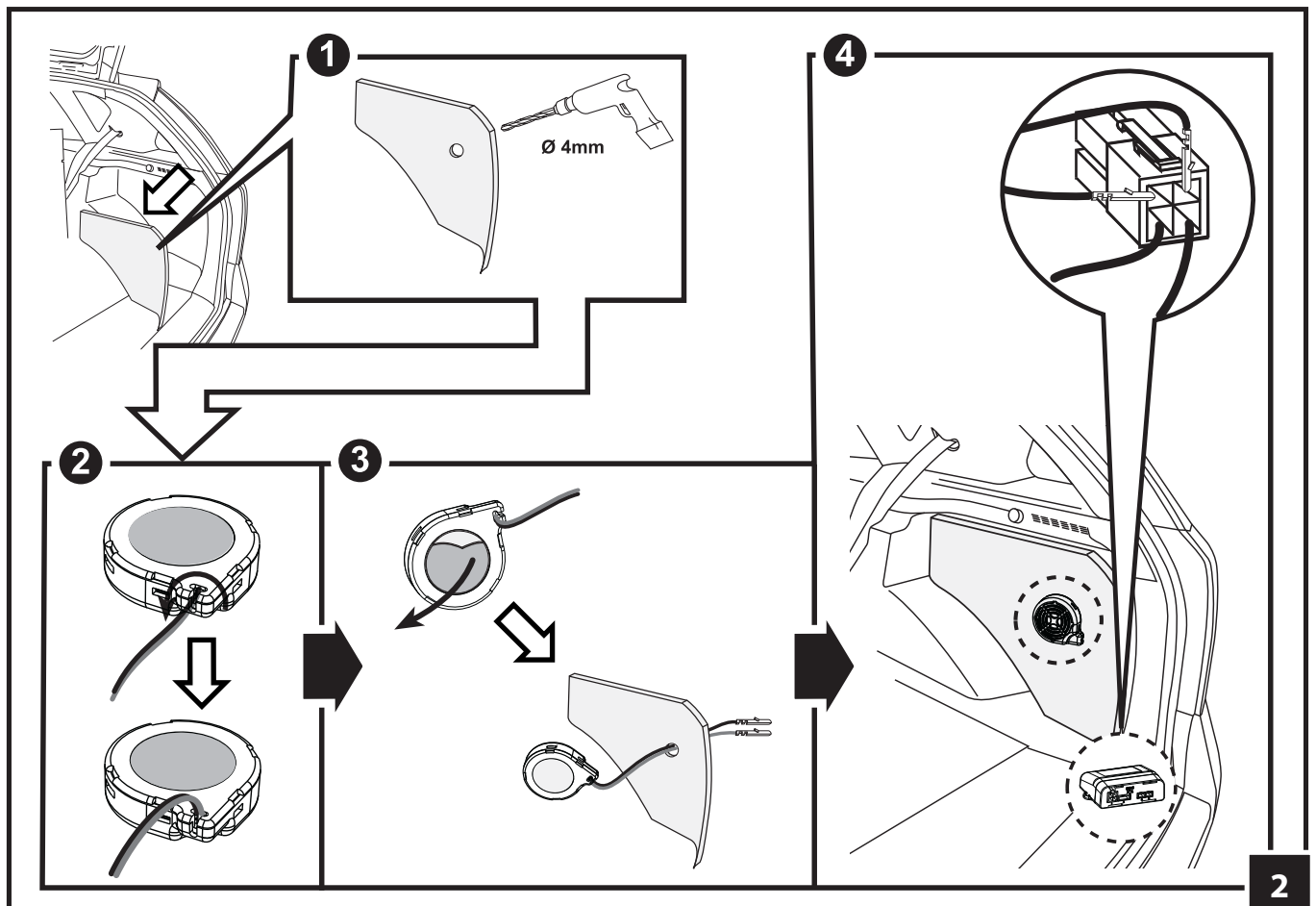
OPTIONAL

x1 Meta EasyPark2 Control Unit	x1 Main ECU wire harness	x1 Buzzer	x1 Screwdriver for calibrating	OPT: ABP04070 Display EasyPark
x2 Adhesive Velcro	x2 Capsules	x1 Support for capsules	x1 Support for capsules	x1 Number-plate bracket
x2 Silicone Ring		x2 Cable gland	x1 Cable gland	

GENERAL WIRING DIAGRAM



FIXING AND CONNECTING THE SPEAKER

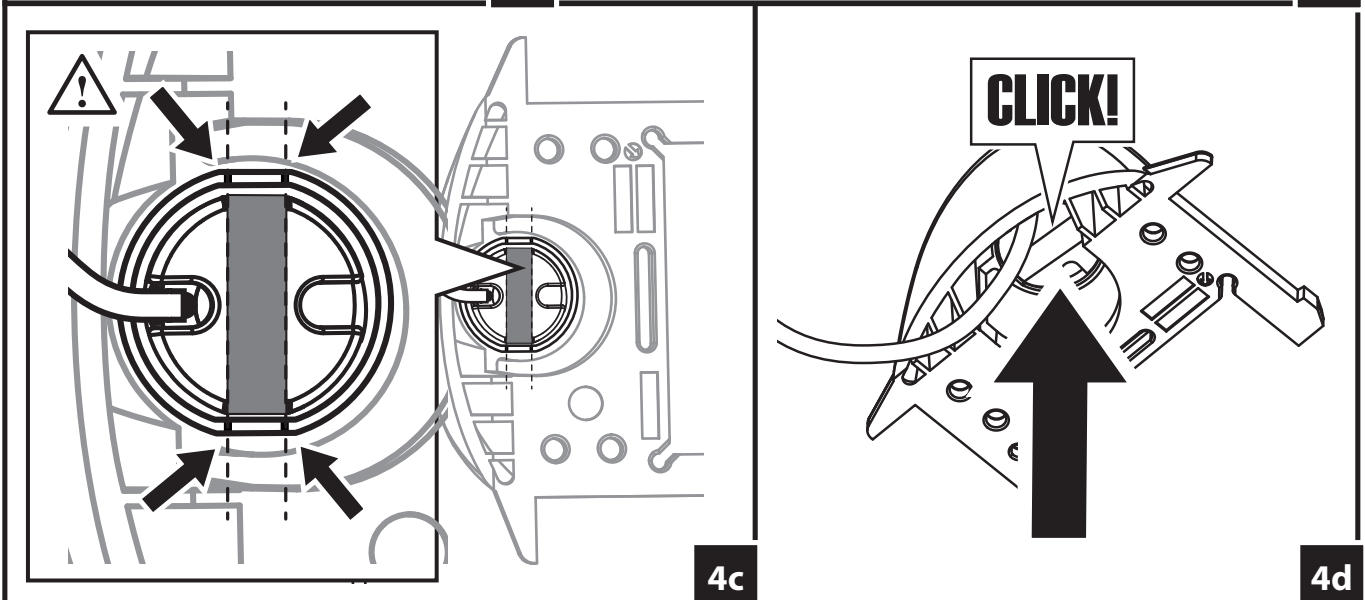
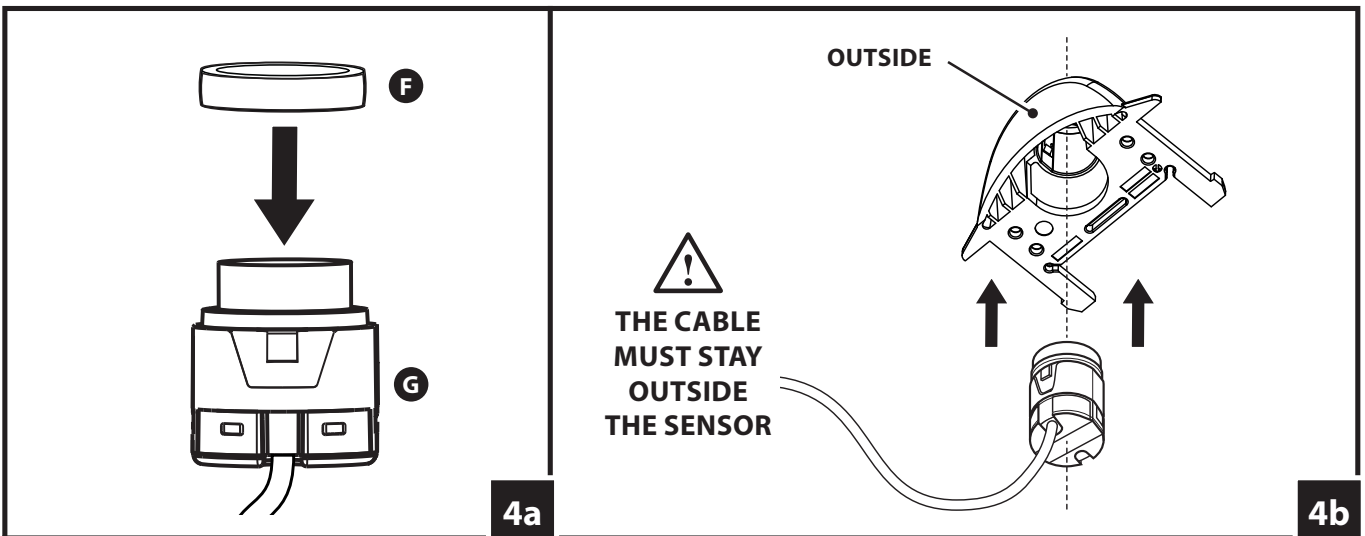
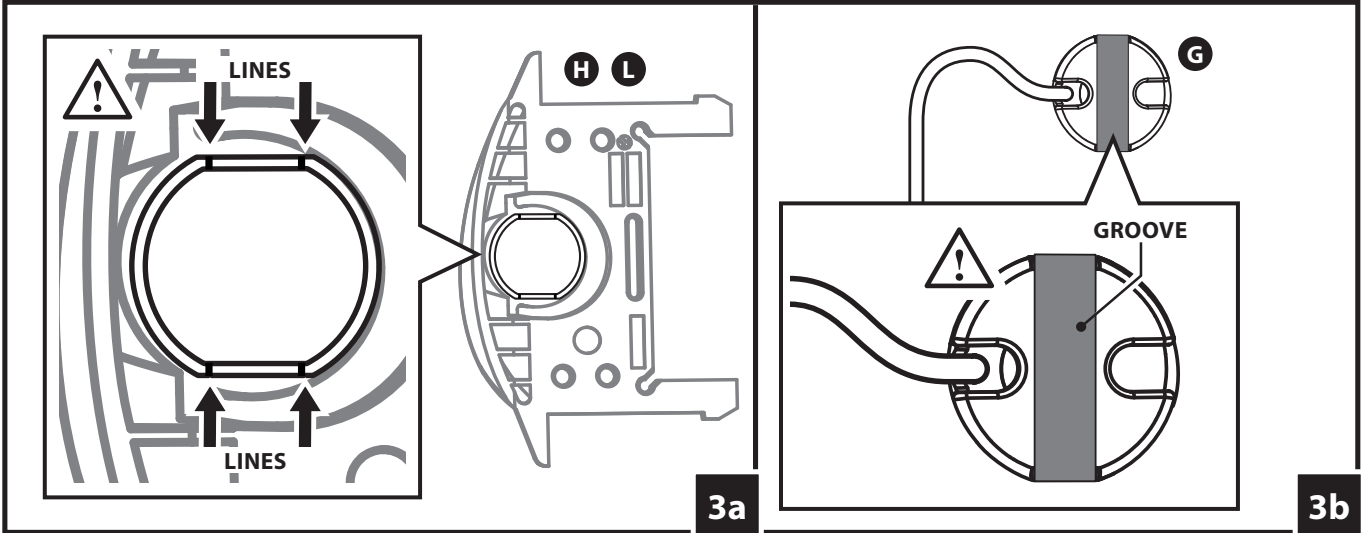


ASSEMBLING THE SENSORS WITH THEIR OWN NUMBER-PLATE BRACKETS

To grant proper operation of the system it is essential that the sensors are assembled with all their parts and ensure that they fit correctly in the support.

You can see 2 lines on the back of the support (Fig.3A) and a groove on the back of the sensor (Fig.3B) which make it easy to adjust the direction of the sensor when putting it in the support.

To ensure correct assembly, fit the rubber ring on the sensor (Fig.4A), insert the sensor in the support keeping the cable on the outside (Fig.4B) and once the groove is aligned with the lines (Fig.4C) insert the sensor until it locks - you will hear it clicks into place - (Fig.4D).



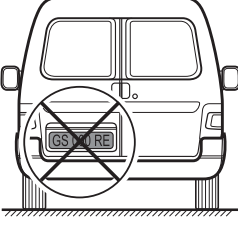
SENSOR DIRECTION SUGGESTIONS

The two sensors marked A and B have a 10° inclination which facilitates adjusting the system to the inclination and to the height of the number-plate in relation to the ground. By positioning the sensor marked with the A on the left of the number-plate bracket it will be aiming at the ground; if it is positioned on the right it will, instead, be aiming upwards. To evaluate the best solution, follow the indications given in the following table that regulate the height limit based on the inclination of the number-plate and also read the following suggestions.


SUGGESTIONS Correct system operation is strongly influenced by the position and direction of the sensors so before beginning to install them read and observe their assembly instructions, checking the following conditions:

- There must be enough room in the number-plate housing (at least 56.5 cm) for assembly without any mechanical forcing of the number-plate support with the sensors.
- Observe the recommendations according to the height and shape of the bumpers.
- Do not install on number-plates that are offset in relation to the middle of the car or if the base is too close to the ground; follow the indications given in the following table that regulate the height limit based on the inclination of the number-plate.
- Always take into consideration that if the car is fully loaded the distance of the number-plate from the ground is reduced by at least 5 cm.

DO NOT INSTALL THE SENSORS AT A HEIGHT OF ≤ 30 cm.

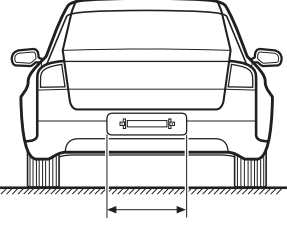


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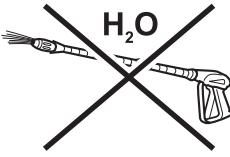


NO

> 180 cm

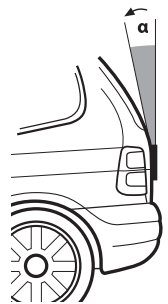
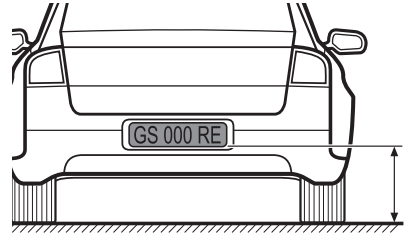
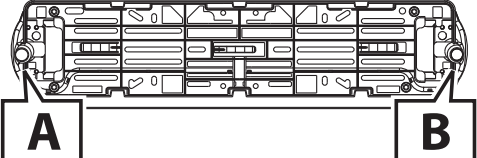
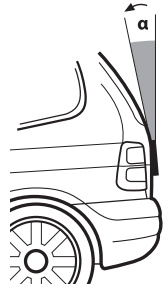
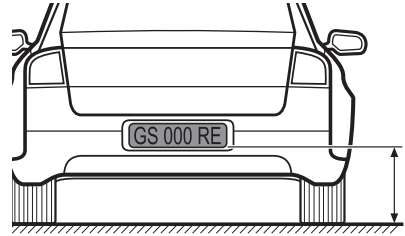
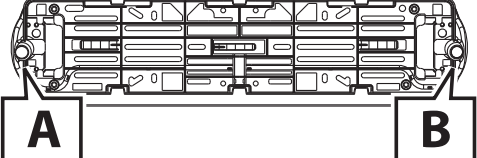
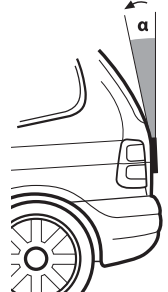
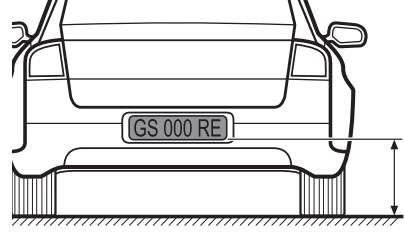
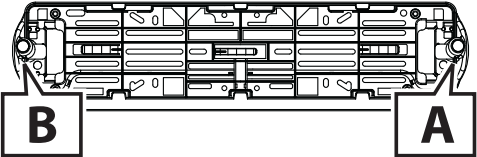


MIN 56,5 cm



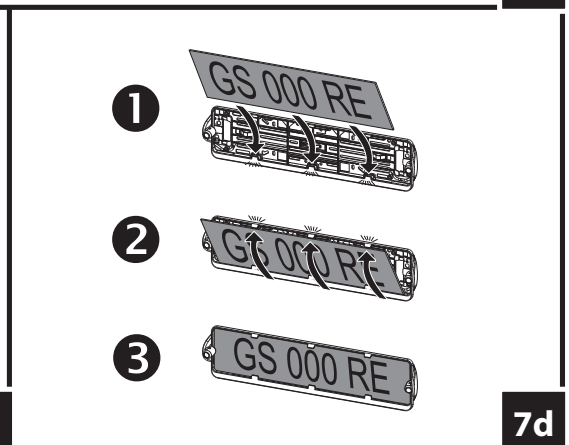
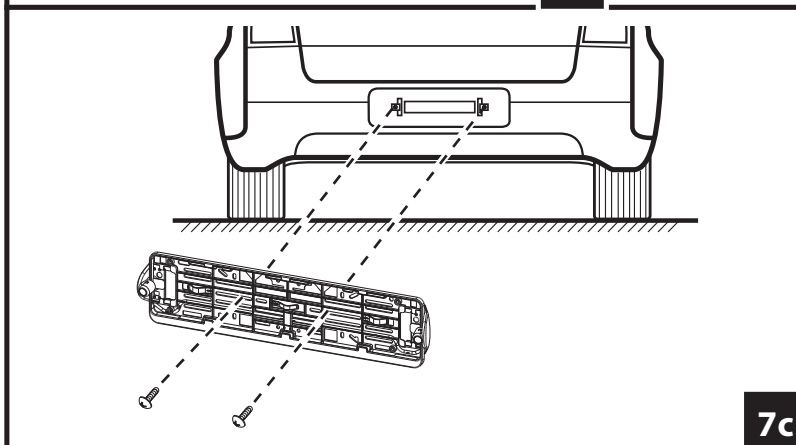
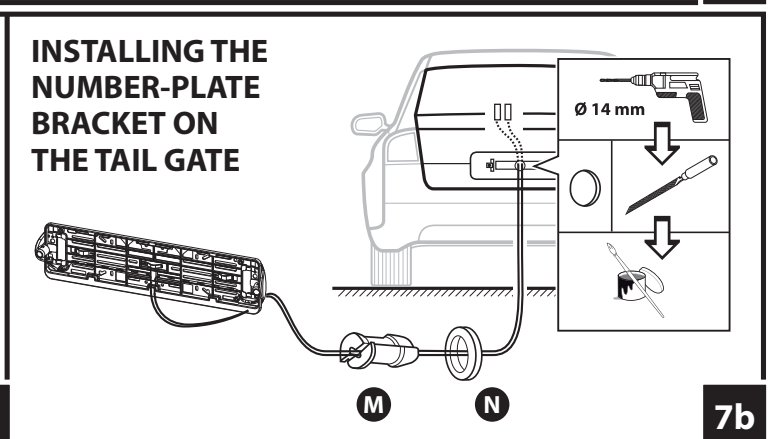
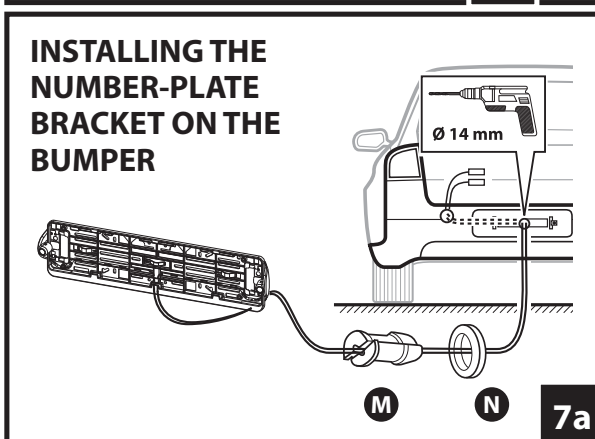
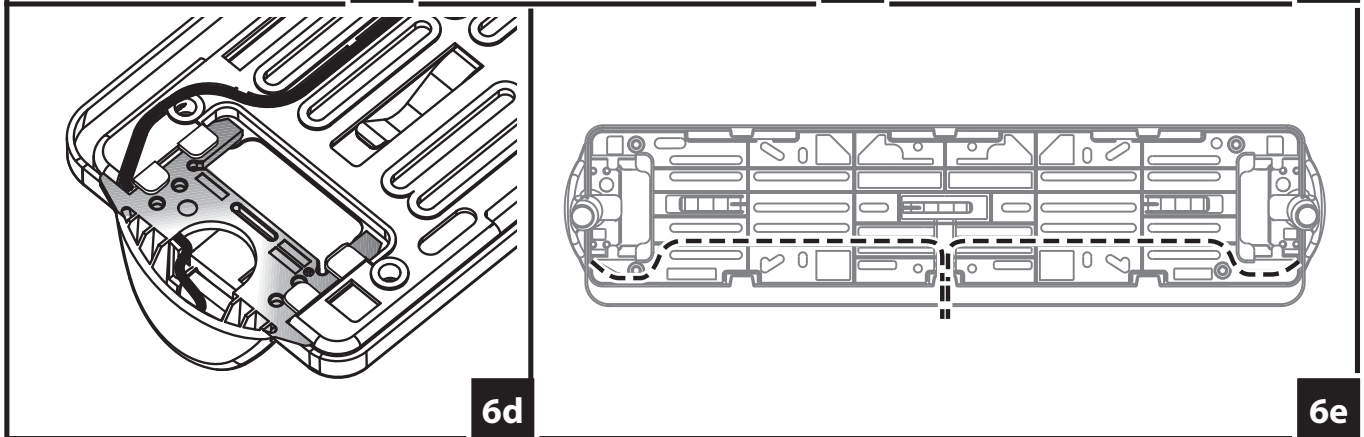
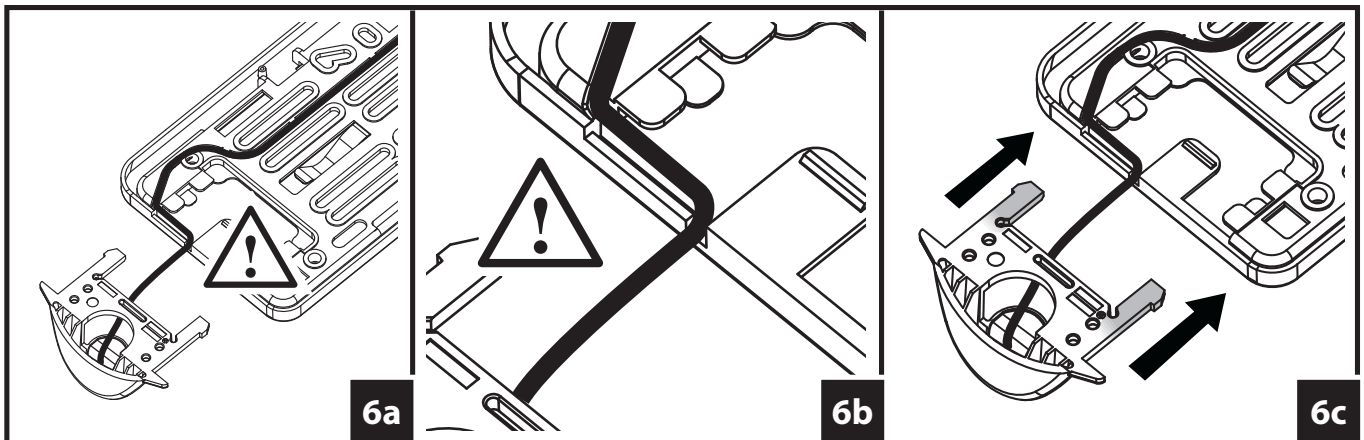
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NUMBER-PLATE INCLINATION	HEIGHT OF THE NUMBER-PLATE FROM THE GROUND	SENSOR DIRECTION
 <p>$\alpha \approx 0^\circ$</p>	 <p>$h = 45 \text{ cm} \div 80 \text{ cm}$</p>	<p>A = SX B = DX</p> 
 <p>$\alpha > 10^\circ$</p>	 <p>$h = 30 \text{ cm} \div 50 \text{ cm}$</p>	<p>A = SX B = DX</p> 
 <p>$\alpha = 0^\circ \div 10^\circ$</p>	 <p>$h = 30 \text{ cm} \div 50 \text{ cm}$</p>	<p>B = SX A = DX</p> 

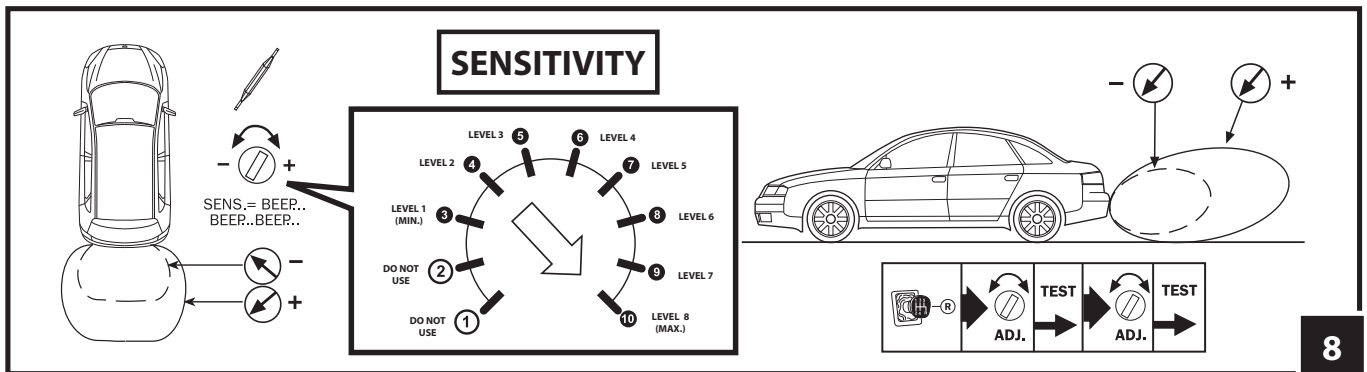
INSTALLING THE SENSORS IN THE NUMBER-PLATE BRACKET AND MOUNTING ON THE VEHICLE

Once you have decided how to install the sensors on the number-plate bracket, start by fitting the sensors in the bracket (see figures 6a/6b/6c/6d/6e) paying particular attention with the two cables: they must fit perfectly in their housing so they cannot be crushed between plastic and bumper. Drill a hole on the vehicle for the cables to go through and lock them with the cable glands supplied in the kit (see figures 7a/7b). Now fix the number-plate bracket in place on the bumper (see figures 7c/7d).



CALIBRATING SENSITIVITY

The area of protection can be adjusted via the trimmer on the front of the control unit, on the basis of the customer requirements or the structure of the bumpers.



8

ADJUSTING THE DEFAULT OFFSET

The product is programmed with a 30 cm OFFSET which can be set from a minimum of 25 cm to a maximum of 60 cm;

NOTE: before to start the procedure, choose the offset value to be set. See in figure 9 the corresponding trimmer position (ex. 45cm= Pos.7).

1. Unplug the main connector (1) from the Meta EasyPark2 control unit, turn on the ignition and engage the reverse gear.
2. Set the trimmer on position 2 (see figure 9).
3. Start the recording procedure by plugging in the main connector, wait the first Beep for the system activation followed by the double start Beep and immediately move the trimmer to the new OFFSET position).
4. AWait for a double Beep (about 10 seconds after START) confirming that the new OFFSET has been saved.
5. Turn OFF the ignition and after this operation remember to turn **the trimmer back into the position chosen for system sensitivity.**

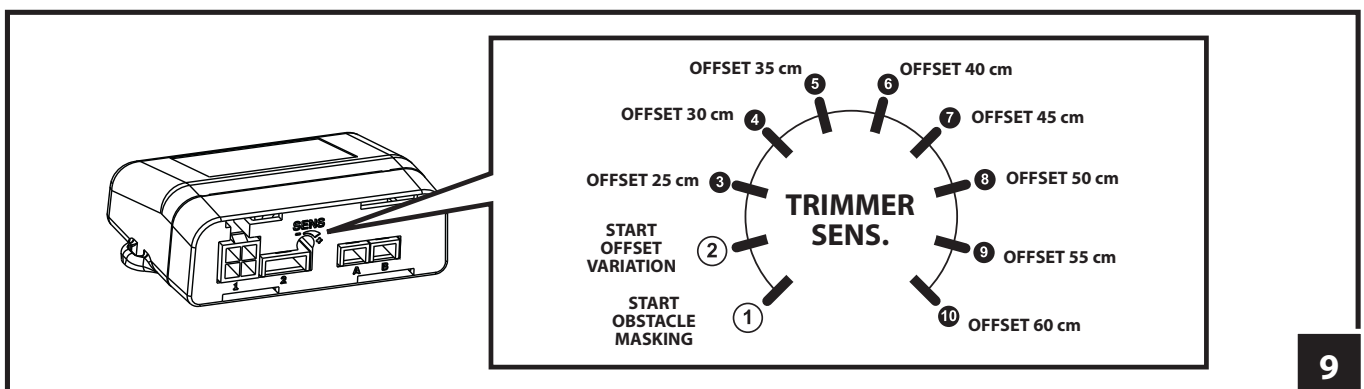
To change the OFFSET again repeat the procedure starting from point 1.

Example of changing the OFFSET: to programme the OFFSET to 25 cm start the procedure by positioning the trimmer on 2 and then, after the double beep, move it to 3 and wait for storing; to check, disengage and re-engage the reverse gear and check the offset, by approaching to an obstacle.

MASKING THE DETECTION OF OBSTACLES OR TOW HOOK

If obstacles are detected when the system is activated (e.g. tow hook) they can be excluded through the masking procedure described below:

1. Check that there are no objects near the car (at least 1 mt clearance)
2. Set the control unit for masking, by setting the trimmer on the step 1(see figure 9).
3. Start the engine, engage the reverse and wait for the system activation. Beep followed by a single Beep meaning the procedure has started.
4. Wait for the double Beep confirming masking (about 60 sec.) and then switch the vehicle off and turn **the trimmer back into the position chosen previously for system sensitivity.**



9

ACOUSTIC WARNING FOR A STILL OBSTACLE OR FOR AN APPROACHING OBSTACLE

To avoid annoying the user during the parking manoeuvre, when the obstacle is still and beyond the safety distance, Meta EasyPark2 gives an acoustic signalling only for 10 secs. After this time, it temporarily stops the acoustic warning, and waits for the obstacle to move. As soon as the obstacle moves towards the bumper, the Meta EasyPark2 central unit resumes signalling and only if the obstacle gets far the Meta EasyPark2 central unit doesn't give any warning signal, since no dangerous situations occur.