

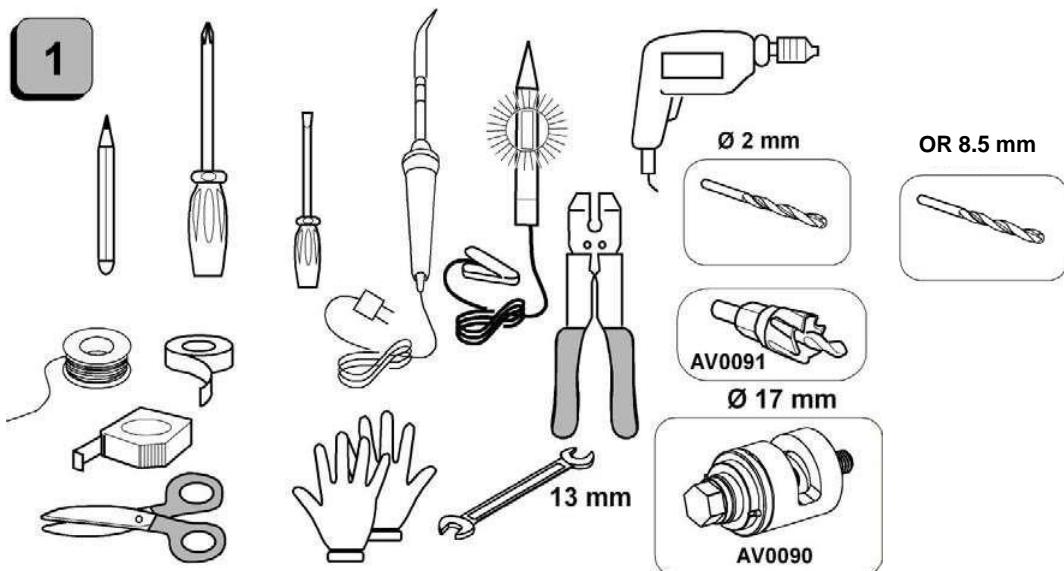


User Manual 09406

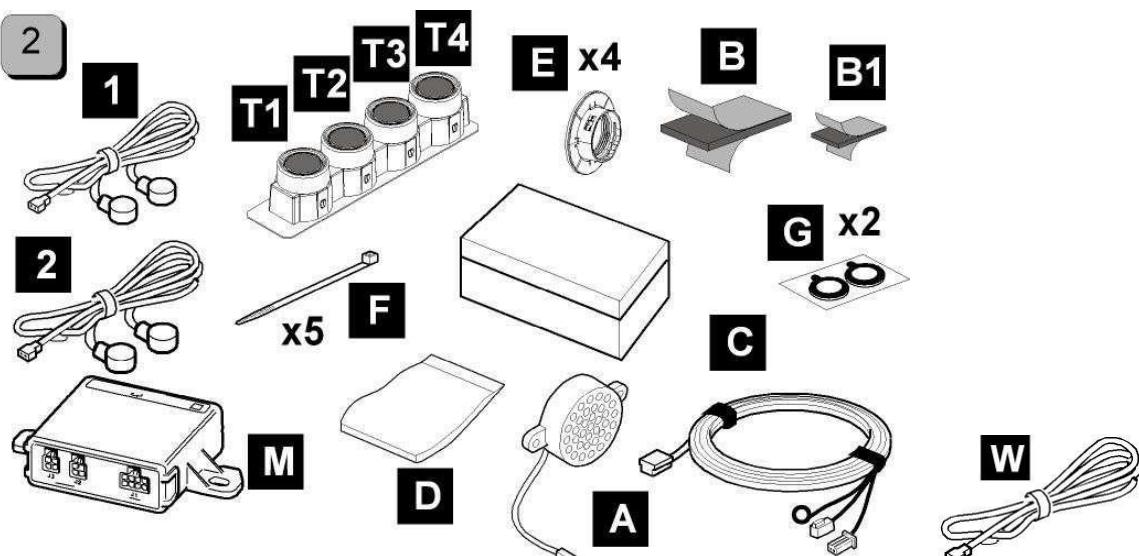
**Kit parking sensors
Front/Back**

Instructions Of installation And configuration

Tools For the installation



Content of the kit



1= Wiring sensors 1-2

2= Wiring sensors 3-4

T1-T2-T3-T4= Sensors

F= Cable ties

A= Speaker

M= Control unit

B= Double-sided tape for control unit
B1= Double-sided tape For speaker
G= Double-sided tape For flange

C= Wiring For control unit

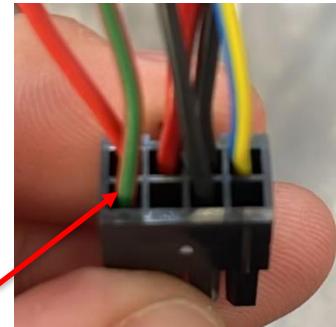
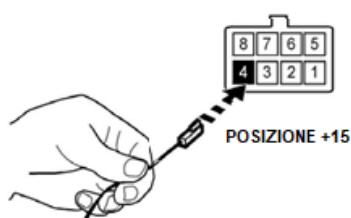
D= Sachet containing cloth soaked with primer

E= Flange

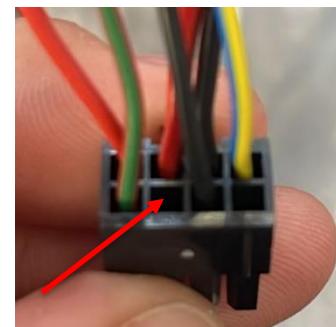
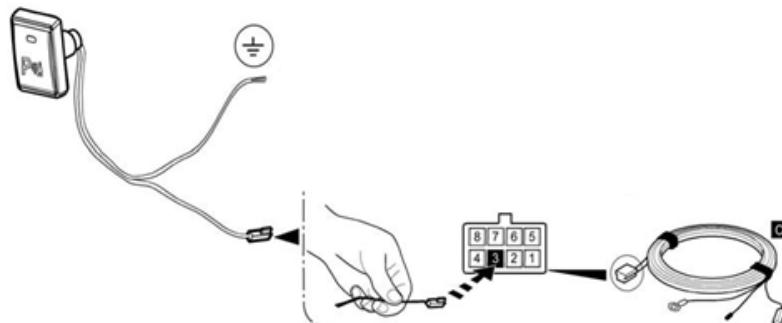
W= Row diet Front (Green-Red)

ELECTRICAL CONNECTIONS

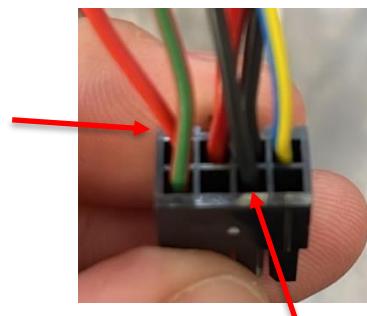
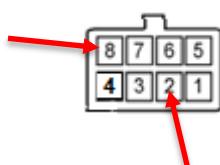
- **Green-Red Central PM (J4) (CENTRAL KEY)**



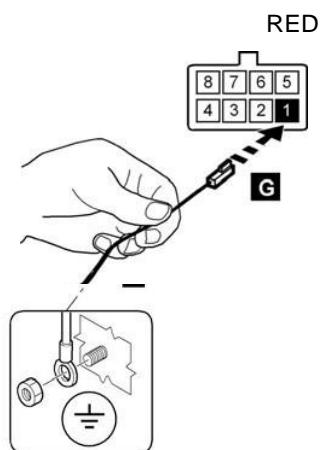
- **PM Button (NEGATIVE BUTTON) NEGATIVE FRAME**
- **Red Button (with Faston) to the J3 central connector.**



- **Central Black PM (J2) (CENTRAL NEGATIVE) FRAME NEGATIVE**
- **Red central PM (J8) (POSITIVE REVERSE)**



Exclusion detection hook Of towing



Insert The faston of the row RED cut during the installation, in the position 1 of the connector J1 And connect it to mass, to exclude the detection of the hook of towing.

Function Phone mute

Istruzioni di installazione e configurazione 09406

Use The row RED fastonato from 20 cm cut in precedence And insert it in the position 5 of the connector power supply to 8 streets.

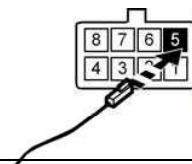
Connect the other boss of the row at the entrance Phone mute from the radio (The signal in exit from the system And negative).Every time the system is activated the radio volume is lowered, allowing you to hear the sound of the speaker of the system.

Command negative

Connection of the odometer signal

Insert in position 1 of the connector J1 The row RED cut from the wiring And connect it to the row of the odometer of the vehicle.

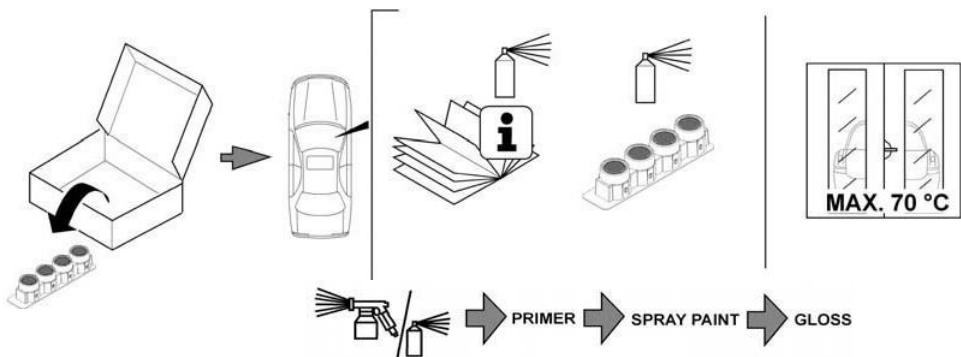
RED



Painting of the sensors

Istruzioni di installazione e configurazione 09406

3

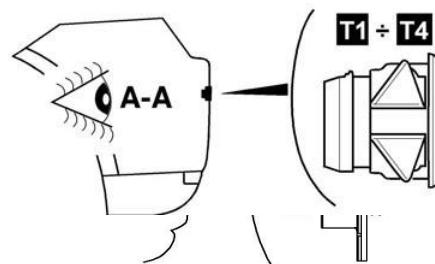
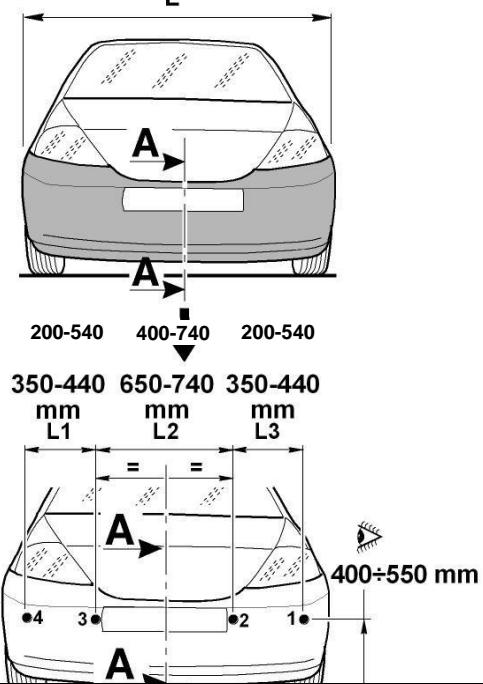


Before Of to paint check The code original from the paint. Spray The primer, When will be dry,Paint the sensors, let them dry and spray a coat of polish to protect the paint. maximum temperature of the oven must not overcome the 70° C

Installation recommended

4

Typical Installation



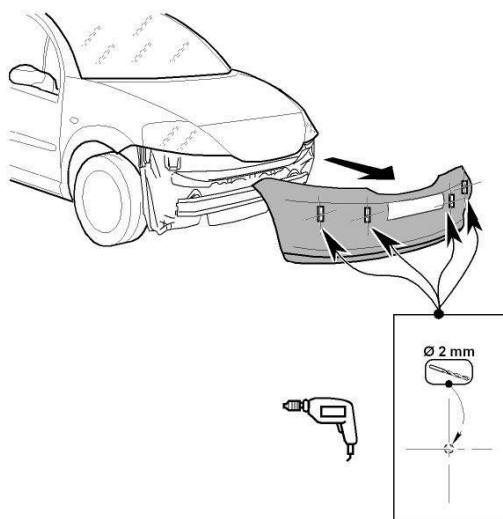
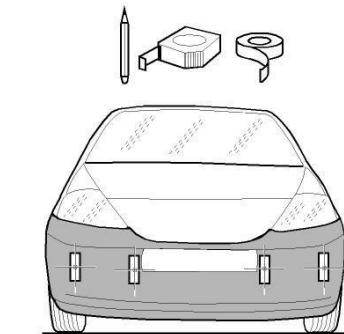
Installing the sensors with the distances indicated Between the limits indicated L1= min 350- max 440 – L2= min 650 max 740 – L3= min 350- max 440, it is not necessary to perform the configuration procedure from the control unit. After have performed the installation of the system, You we suggest Of to execute a test functional,if The result And negative, And necessary to execute there procedure Of configuration from the control unit (Chapters 18.3 And 18.4).

The height minimum Of installation of the sensors And Of 40 cm with an angle Of 0°.

If installed to a measure more high Of 55 cm the increase from the sensitivity could be to be required For guarantee a correct detection of the obstacles.

Position of the sensors, dismantling And drilling of the bumper

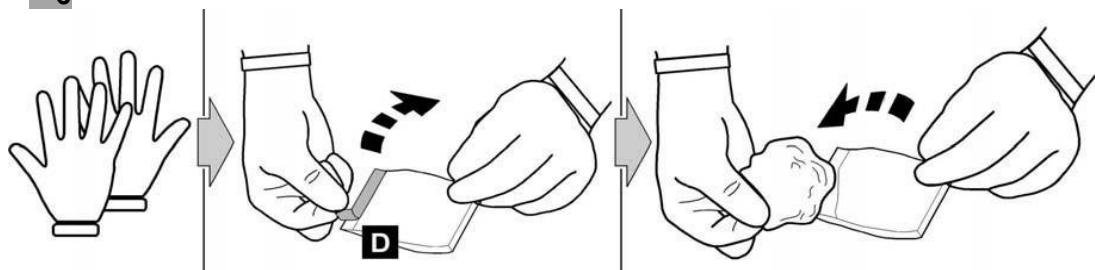
5



Use of the tape Of paper For score the positions of the holes For the sensors on the bumper.
After have marked the positions, take apart The bumper And check that there position choice be correct,
BeforeOf to execute the holes from 2 mm for each sensor.
(ATTENTION: And IMPORTANT to drill holding The drill in position horizontal)

How to use The cloth soaked Of primer

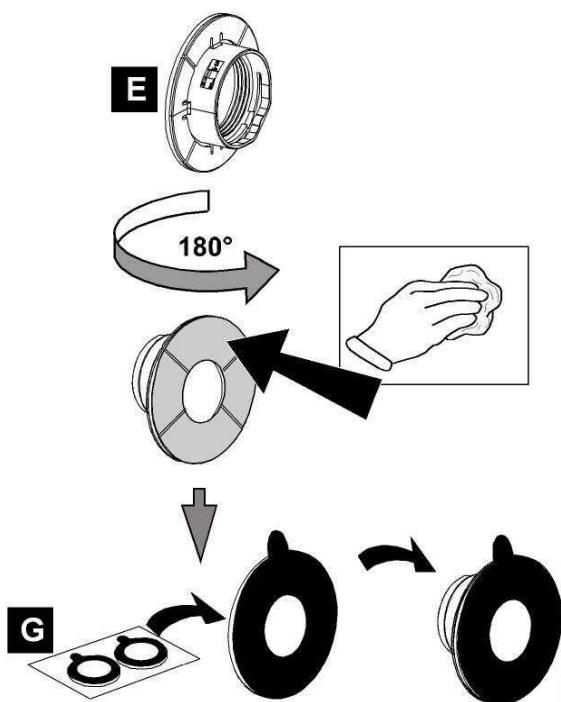
6



Wear gloves in latex Before Of open there sachet And handle The cloth soaked Of primer.Clean the flange (you see chapter 7) and Then The bumper (you see chapter 8)

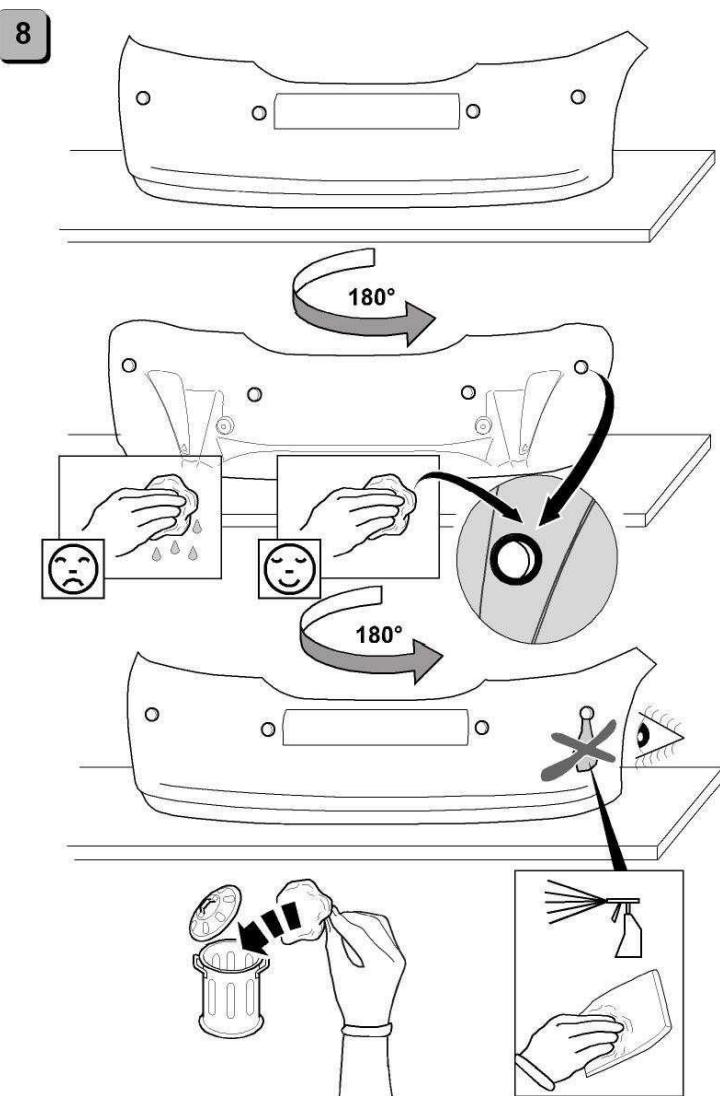
Positioning of the double-sided adhesive tape to ring on the flange

7



Take a flange, clean the surface with the cloth soaked in primer as shown in the figure, positioned a double-sided tape to ring on the flange, there film red Not must to be removed. Performed there same procedure For all the flanges.

Preparation bumper

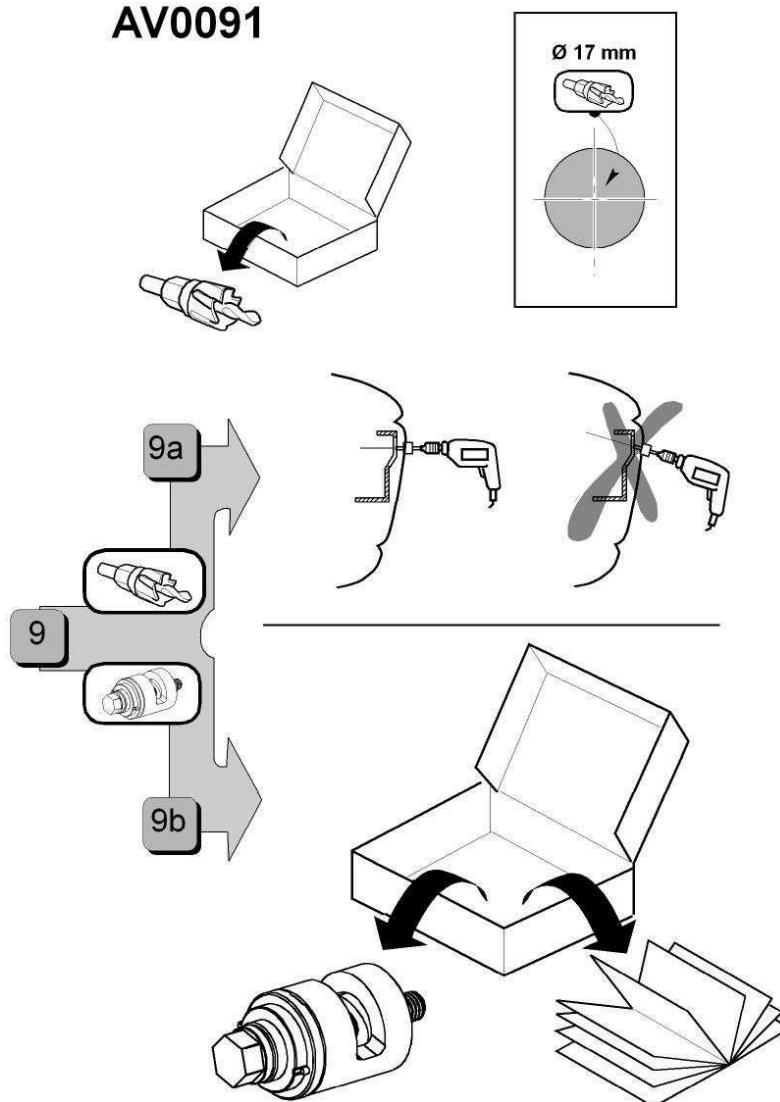


Clean there surface internal of the bumper, applying The primer For a area slightly more wide from the dimensions from the flange. **Not apply The primer on the part painted of the bumper, there paint canto be damaged .**

Drilling of the bumper with slice or cup cutter

9

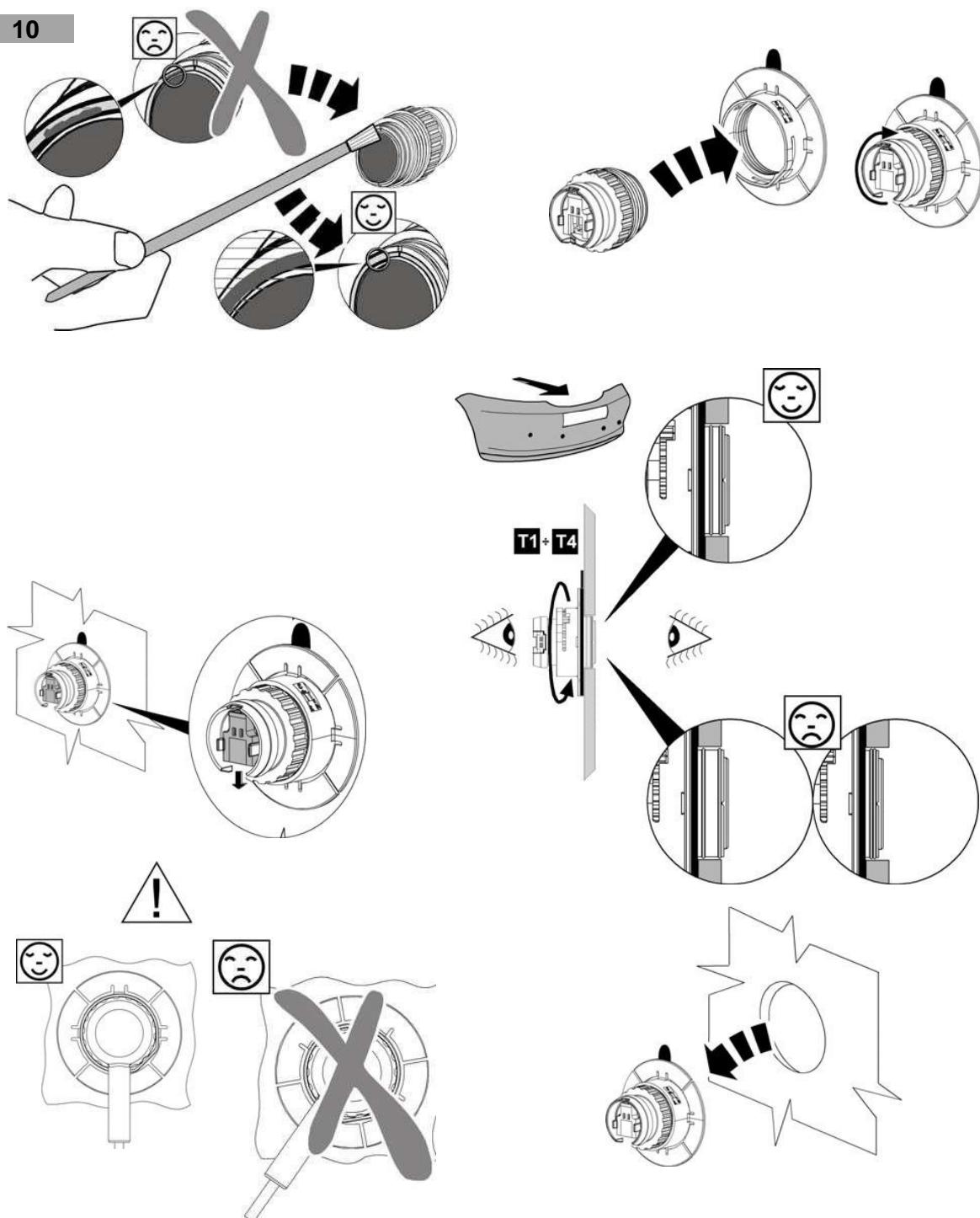
AV0091



AV0090

We recommend the use from the slice AV0090 For there drilling of the bumper, given That there paint will be ironed towardsthe internal part. AV0091 can be used as an alternative, a painting of the internal part of the hole could be necessary.

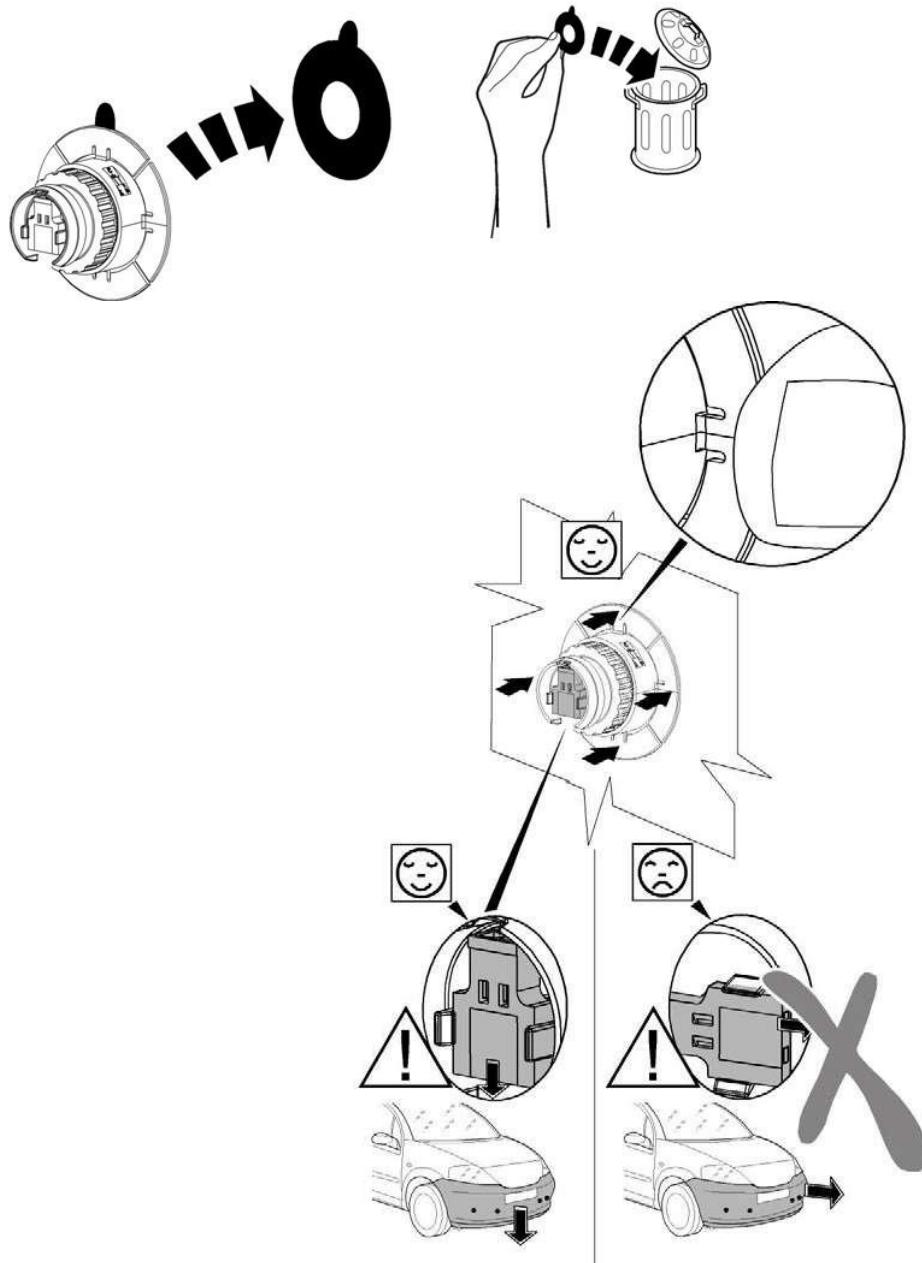
Cleaning, preparation And regulation of the sensors



Remove possible residues Of paint from the eraser white of the sensors. Screwed a sensor in the flange, without remove the red film, place the sensor in the hole in the bumper with the connector facing downwards and verified That The sensor is to row of the bumper (Max 0.5 mm protruding from the bumper). Performed there procedure For Everything is fine sensor, remembering you That Everything is fine sensor will have to to be installed In the hole Whereyou have performed the regulation.

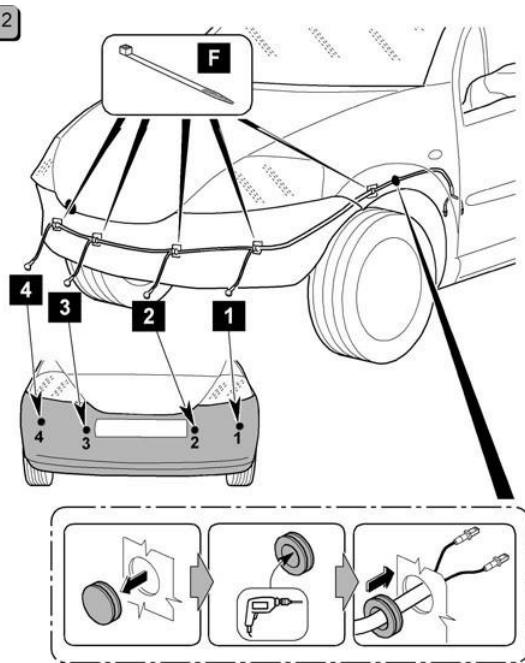
Fixing of the sensors on the bumper

11



Remove the red film, insert the sensor in the hole of the bumper (remember to insert everything fine sensor in the hole where the adjustment was made) with the connector facing downwards. They can be rotated 180° without prejudicing the correct operation.

Positioning of the wiring And connection of the sensors

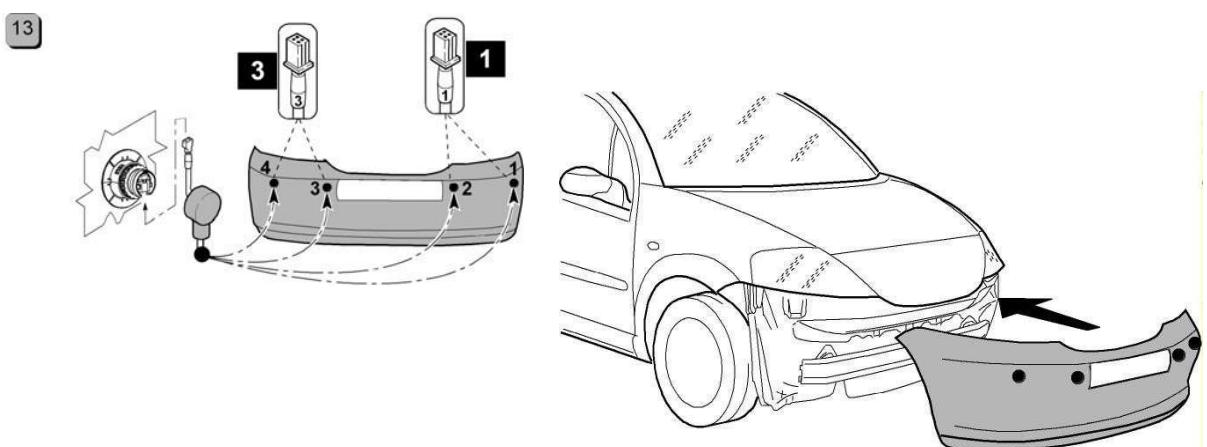


Use a cable gland original For bring the wiring of the sensors outside of the car.

Use from the cable ties For stop The wiring on the car, This operation You will facilitate during Thereassembly of the bumper. THE wiring of the sensors 1 And 2 I am more shorts respect to the sensors 3 And 4.

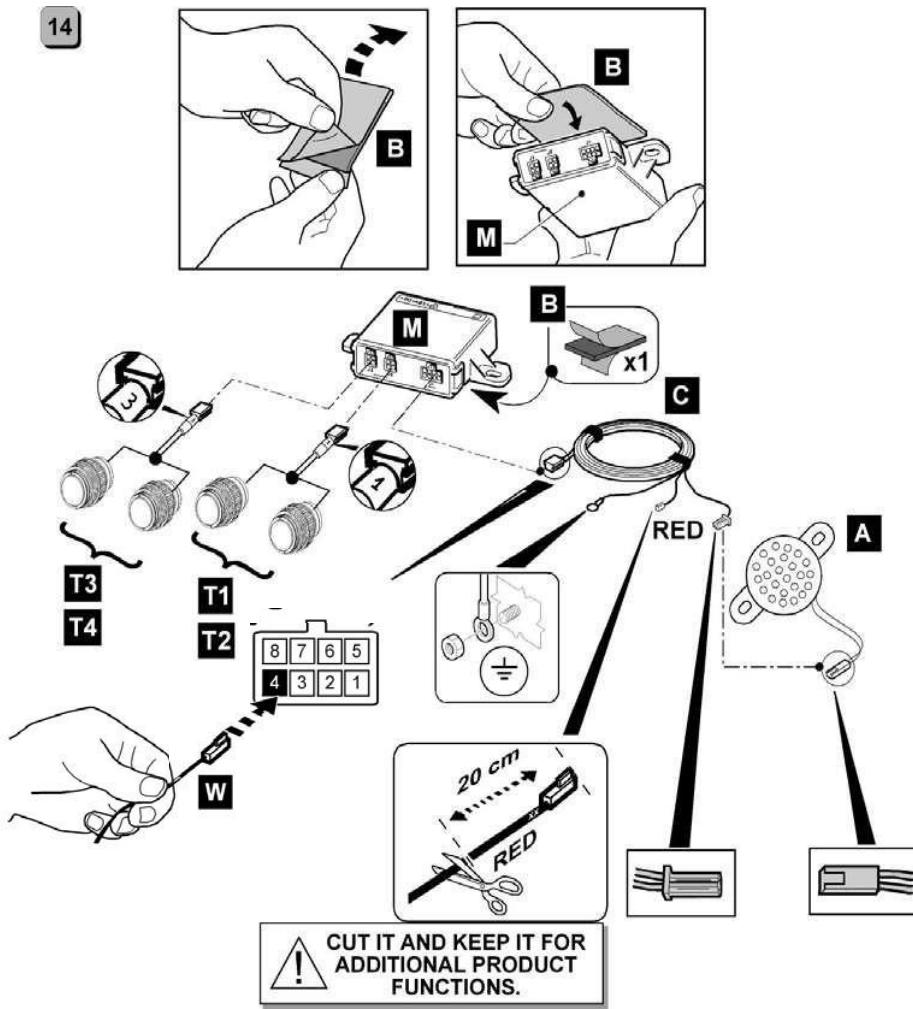
THE sensors 1 And 2 they must to be positioned on the bumper from the part Of exit of the wiring.

Reassembly of the bumper



After have connected the sensors to the wiring, to place correctly there headphones Of protection Of eraser Andto reassemble The bumper on the car, lending Attention to the wiring.

Scheme Of connection diet And sensors



Use The double-sided tape B For secure there control unit, connect The connector signed 1 in J2 And The connector signed3 in J3.

Connect The row black with terminal to eyelet to mass.

Insert in position n. 4 of the connector of power supply The row Green/Red (W), connect the other boss of the rowGreen/Red (W) to the row of the under key (+15/54).

Cut 20 cm of the row RED That can to be used For the functions specials

(You see chapter 20). Connect the other boss of the row RED of the wiring principal to the row That he commands there light Ofreverse gear.

Positioning control unit

15

A

IDENTIFY A POSITION FOR LOUDSPEAKER
FAR FROM THE PARKING SYSTEM CENTRAL UNIT,
VEHICLE CONTROL UNITS AND WIRINGS, TO
AVOID INTERFERENCE.

-DO NOT FIXING NOW- (see fig.19)

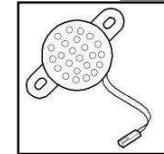


VEHICLE ECU

M

INSTALL THE CENTRAL UNIT
FAR FROM THE VEHICLE
CONTROL UNITS AND WIRINGS,
TO AVOID INTERFERENCE.

A



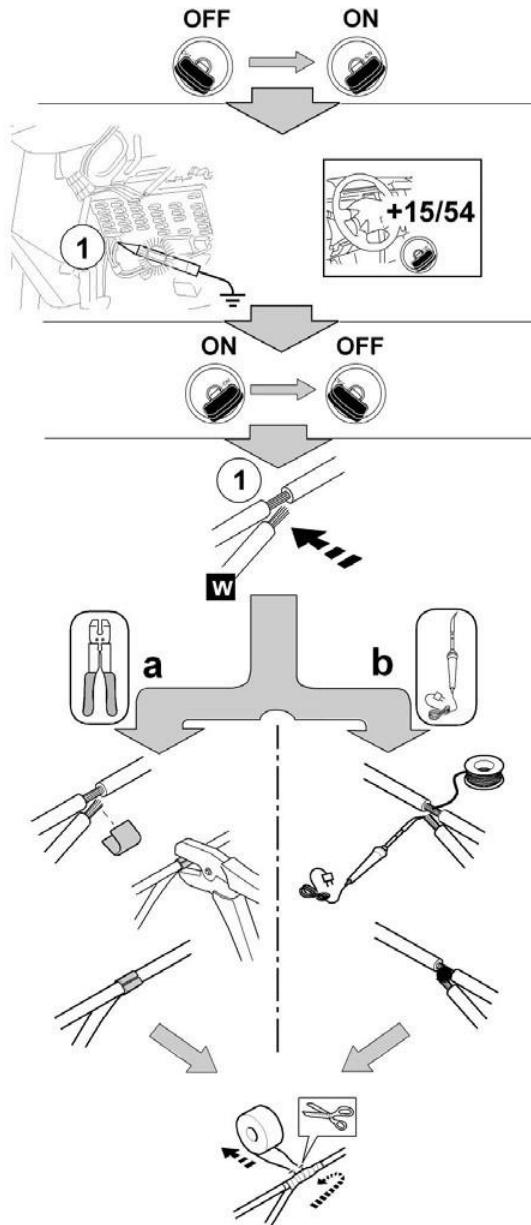
VEHICLE ECU

M

Place there control unit as shown in the figure superior For avoid interference.

Identification row +15/54 And connection diet

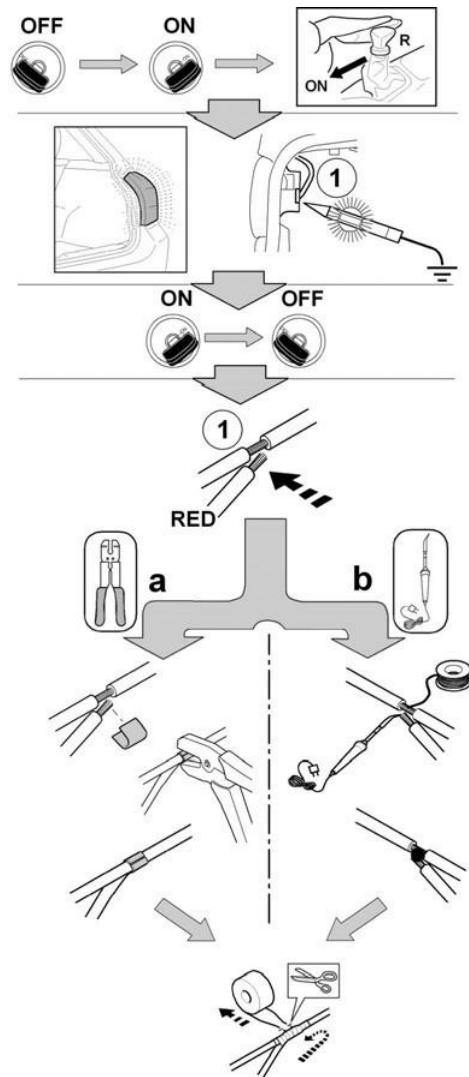
16



For individuate The row of the under lock and key, it is necessary turn on The Square And check with there lamp spy to led That is a positive command, turn off the ignition and check that the positive is not present, turn the ignition back on Square For to check That The row That we are checking And correct. After have it identified, turn off The Square, to peel The row And connect The row Red/Green (W) of the wiring main control unit wire to the ignition wire, using a crimping joint , alternatively you can to weld The row. Isolate there junction with of the tape insulating.

Identification row reverse gear

17



For individuate The row from the reverse gear, it is necessary turn on The Square, insert there reverse gear And check withthere lamp spy to led That is a signal positive.

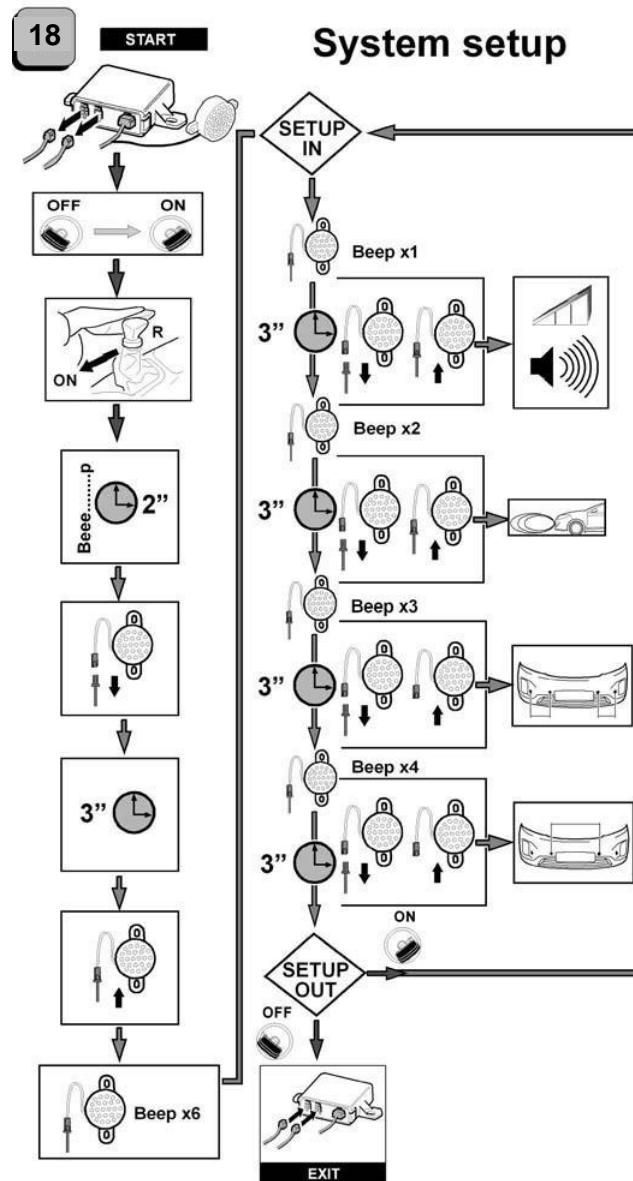
After have it identified, turn off The Square, connect The row RED, using a joint from crimp , inalternative you can weld The row.

Isolate there junction with of the tape insulating.

Performing This connection, the sensors front they will be active Also upon insertion from the reverse gear.

If After The disarming from the reverse gear the sensors Not they detect any obstacle, within 10 s Yes deactivate.

Procedure Of configuration



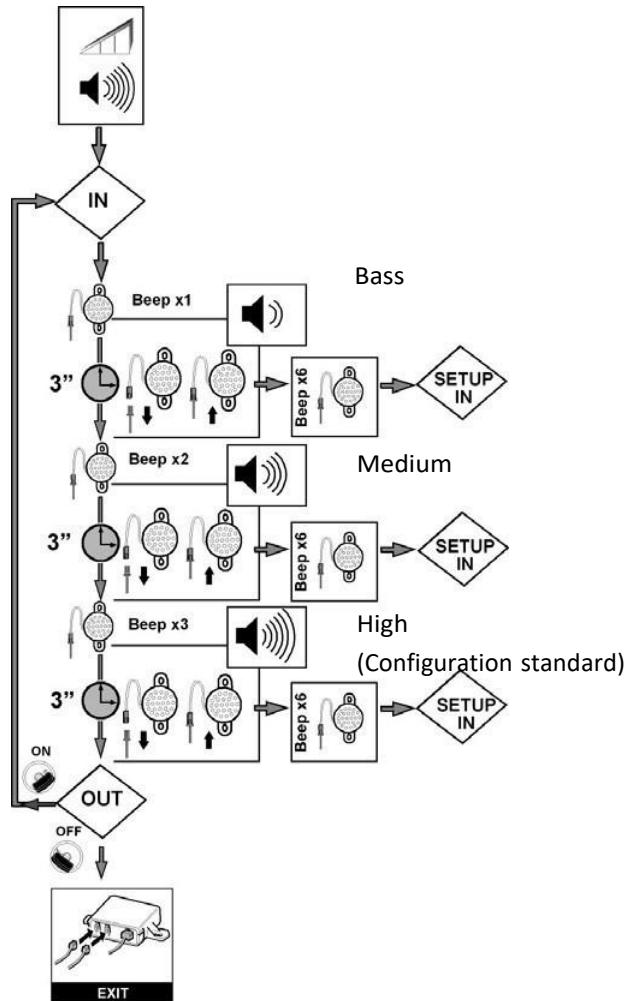
Disconnect the connectors J2 And J3 of the sensors, turn on The Square And insert there reverse gear., The system emits a long sound for 2 seconds, unplug and replug the speaker connector to enter the procedure Of configuration, The system confirms the entrance emitting 6 beep . If the speaker is not unplugged and replugged after the 2 s long beep the system will perform self-diagnosis, in This case repeat the procedure, turning off and I'm turning it back on The Square. After the 6 beep The system emits a series Of beep from 1 to 4 That they indicate the four functionality That they can be regulated.

1 beep - Speaker volume (3 levels - standard level 3 - high)
 2 beep - Sensitivity sensors (3 levels - standard level 2 - medium)
 3 beep - Distances sensors exteriors (3 levels - standard level 3- 450-540 mm)
 4 beep - Distance sensors interiors (4 levels - standard level 4 - 650-740 mm)

Disconnect The connector After have sense The number of the beep chosen, to the reconnection of the connector of the speaker, the system enter In the under menu from the functionality chosen

Regulation volume speaker

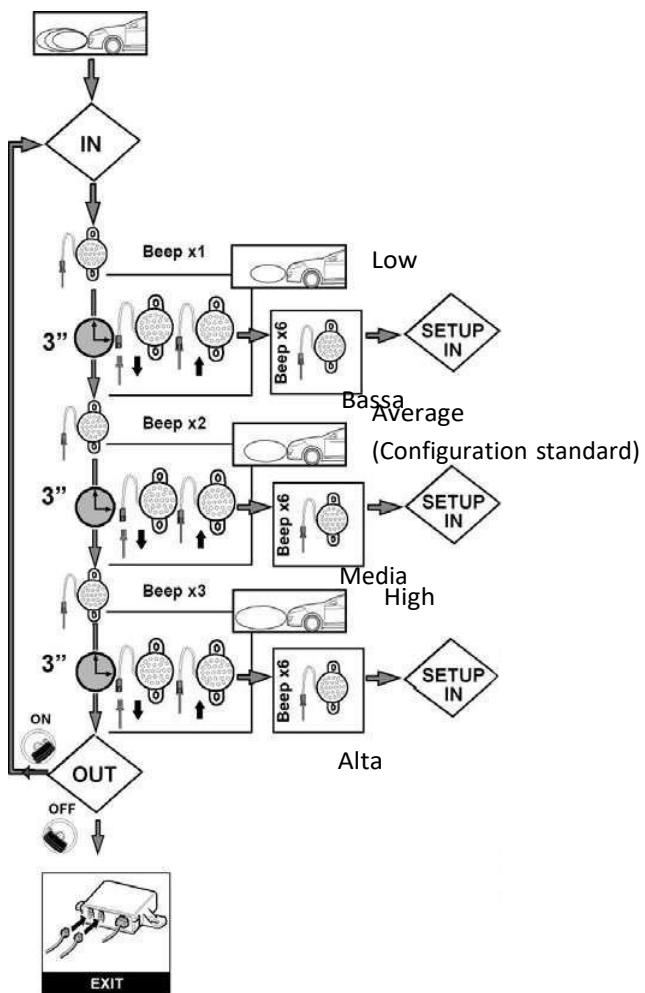
18.1



The system emits 1 beep indicating low volume, after 2 seconds it emits 2 beeps which indicate the average volume, after 2 seconds it emits 3 beeps indicating high volume, to choose the desired volume value disconnect and reconnect the connector after hearing the chosen number of beeps, upon reconnecting the connector of the speaker the system memorizes the choice of the volume desired and returns to the main menu emitting 6 beeps.

Regulation sensitivity sensors

18.2



The system emits 1 beep indicating low sensitivity, after 2 s it emits 2 beeps indicating high sensitivity, after 2 seconds it emits 3 beeps indicating high sensitivity, to choose the sensitivity value desired, disconnect and reconnect the connector after hearing the chosen number of beeps , at reconnection of the connector of the speaker The system memorize there choice from the sensitivity of the sensorsdesired And returns to the menu main emitting 6 beep .

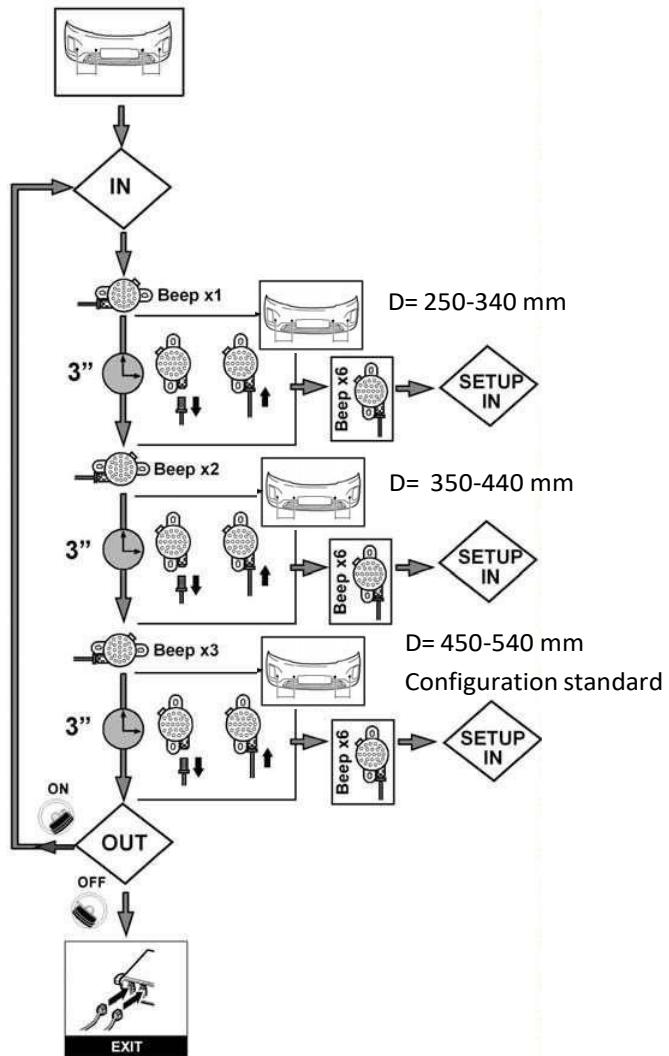
Low sensitivity: suitable for sensor heights between 400-450 mm.

Medium sensitivity: suitable for sensor heights between 450-550 mm

Sensitivity high: suitable For height sensors superior to 550 mm

Regulation distance of the sensors lateral

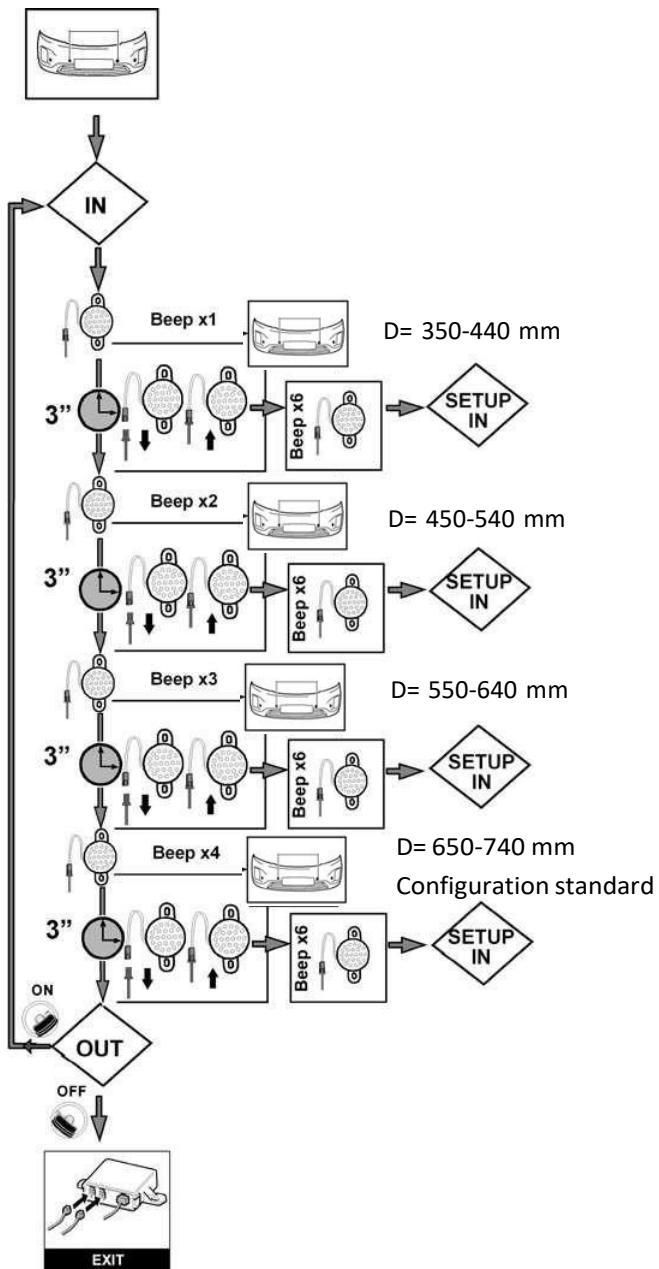
18.3



The system emits 1 beep That indicates there distance of the sensors Of 250-340 mm, After 2 s emits 2 beep That they indicatethe sensor distance of 350-440 mm, after 2 s emits 3 beeps which indicate the distance of the sensors of 450-540 mm, to choose the desired distance, disconnect and reconnect the connector after heard the number some beeps selected, when the speaker connector is reconnected the system memorises the choice of distance chosen and returns to the menu principal emitting 6 beeps .

Distance adjustment of the sensors power plants

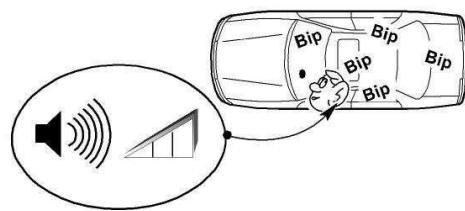
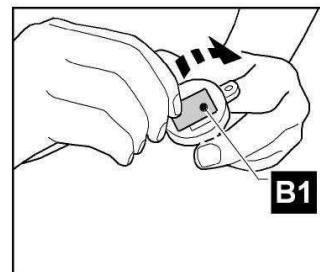
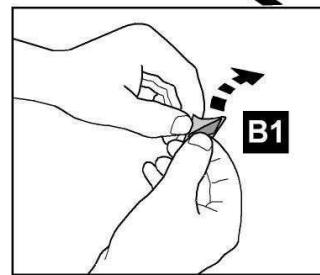
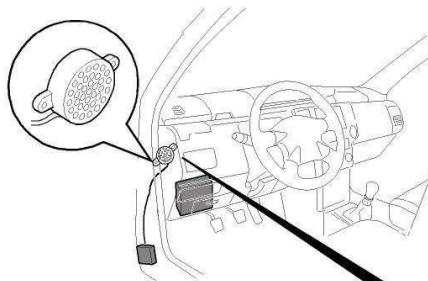
18.4



The system emits 1 beep That indicates there distance of the sensors Of 350-440 mm, After 2 s emits 2 beeps That they indicate the sensor distance of 450-540 mm, after 2 s emits 3 beeps which indicate the distance of the sensors of 550-640 mm, after 2 s it emits 4 beeps indicating the distance of 650-740 mm, to choose the desired distance, disconnect and reconnect the connector after hearing the chosen number of beeps , when reconnecting the connector of the speaker The system memorize there choice from the distance chosen And returns to the menu principalemitting 6 beeps .

Connection And positioning speaker

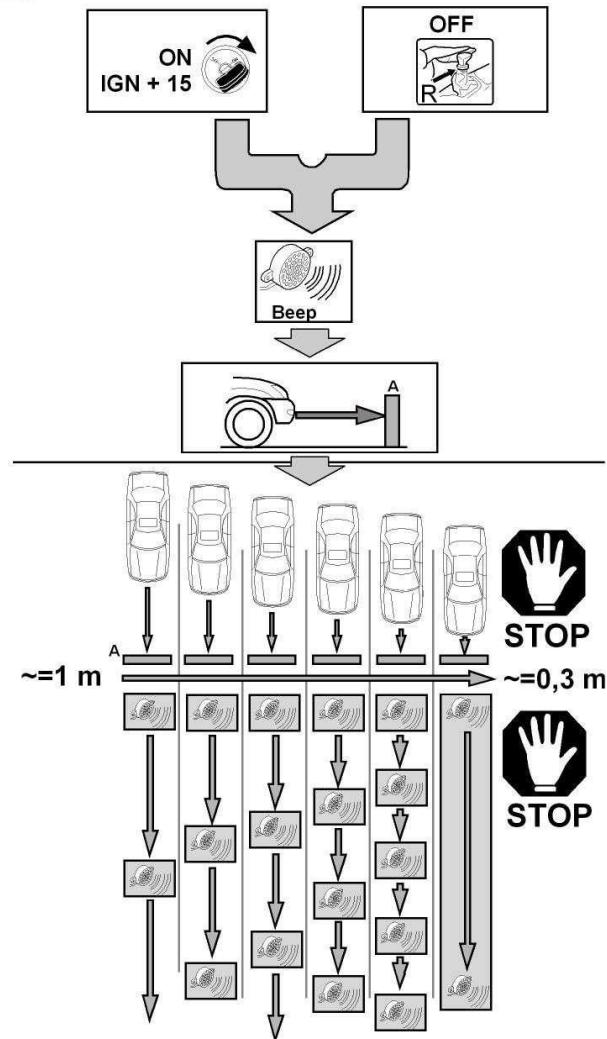
19



Before Of to place the speaker using The double-sided tape B1 And necessary test The sound. Place an obstacle in front of the bumper, turn on the ignition, the speaker emits a series of sounds, to check That The sound is audible distinctly from the driver (with motor turned on), if The sound is toolow or too high you can adjust it by performing the procedure. After having carried out the check, remove the film protective of the double-sided tape B1 And positioned the speaker.

Check functionality of the system

20 System functionality



Position the car with the sensors facing a wall at a distance of approximately 1 m, turn on the ignition or insert there reverse gear, The system he confirms there its activation with a beep , move the car towards The wall to low speed, the system emits a series of increasingly closer beeps as the distance decreases, When the car arrives at 30 cm from the wall The sound becomes continuous.

Report breakdowns

The system report The possible breakdowns of the sensors or from the control unit, with a sound long followed come on beeprelated to the broken down detected. The system report the breakdowns when turning on And Also during The operation.

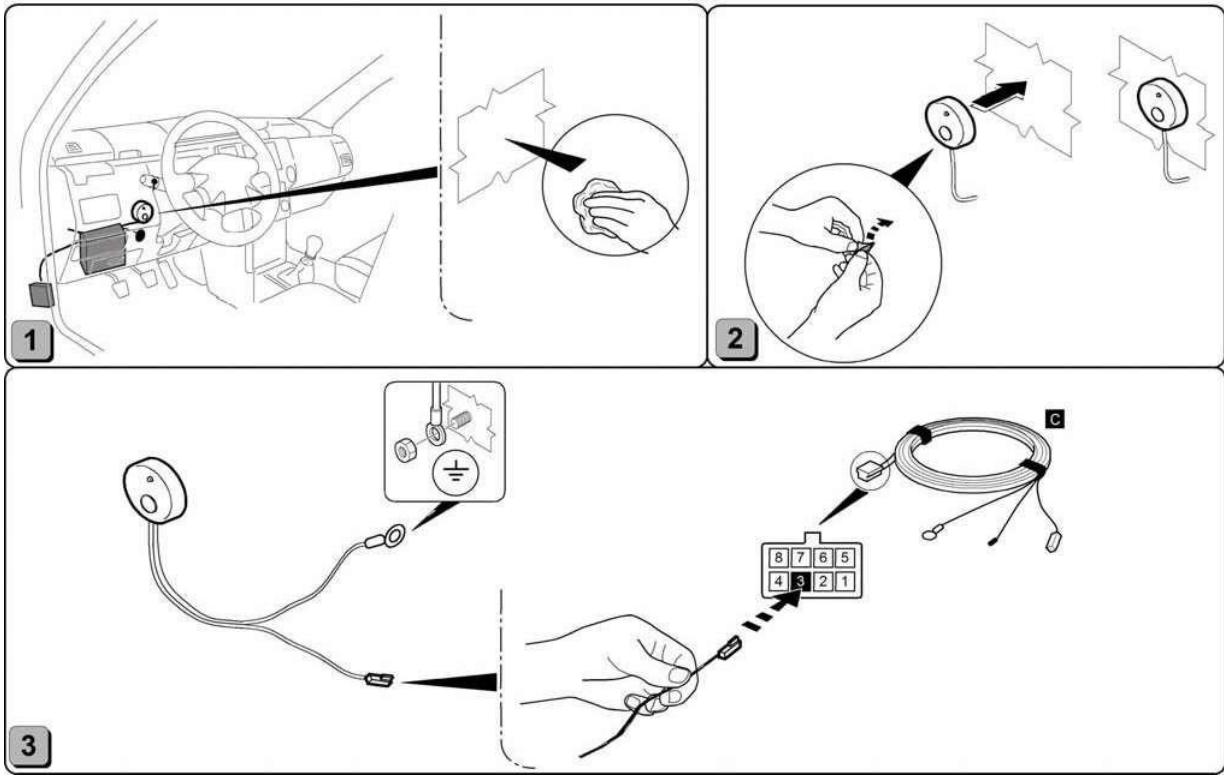
Broken down sensor 1	1 beep long followed from 1 beep	Contact us to the installer
Broken down sensor 2	1 beep long followed from 2 beep	Contact us to the installer
Broken down sensor 3	1 beep long followed from 3 beep	Contact us to the installer
Broken down sensor 4	1 beep long followed from 4 beep	Contact us to the installer
Broken down	1 beep long followed from 5	Contact us to the

control unit	beep	installer

Installation buttons For activation And deactivation system RV3608EUSAA

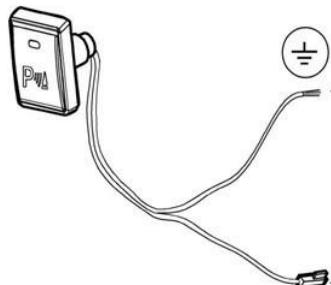
21

Optional



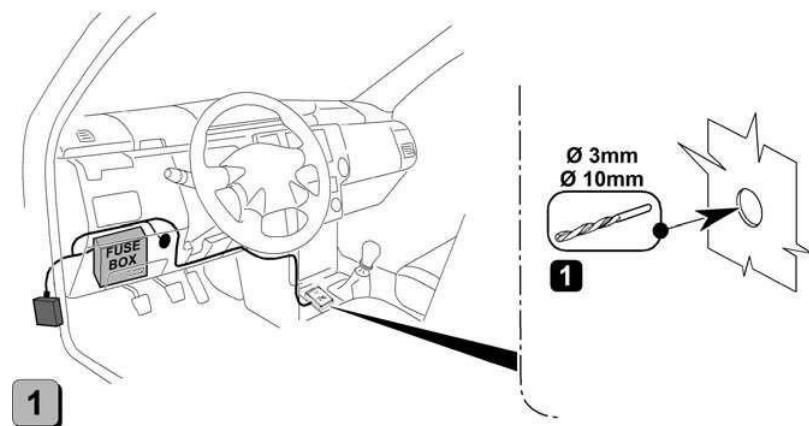
Clean there position chosen For the installation of the button, to detach The double-sided tape And attack The button. Connect the wire with the eyelet terminal to ground, insert the faston into position no. 3 of the connector power supply to 8 streets.

RV3637EUSAA

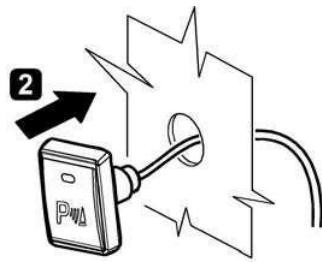


OPTIONAL

Activation / Deactivation
push button.

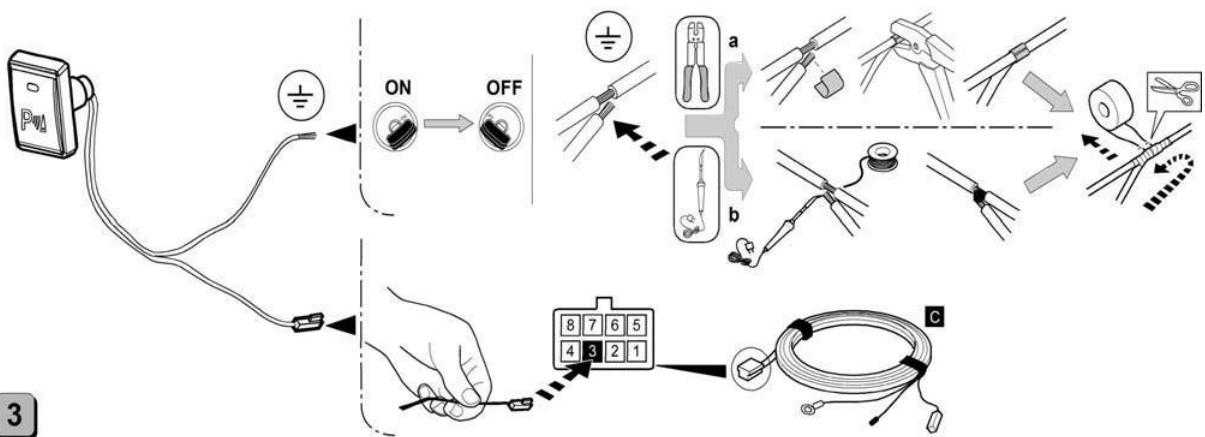


Perform a hole from 3 mm And Then from 10 mm in the position chosen For the installation of the button.



2

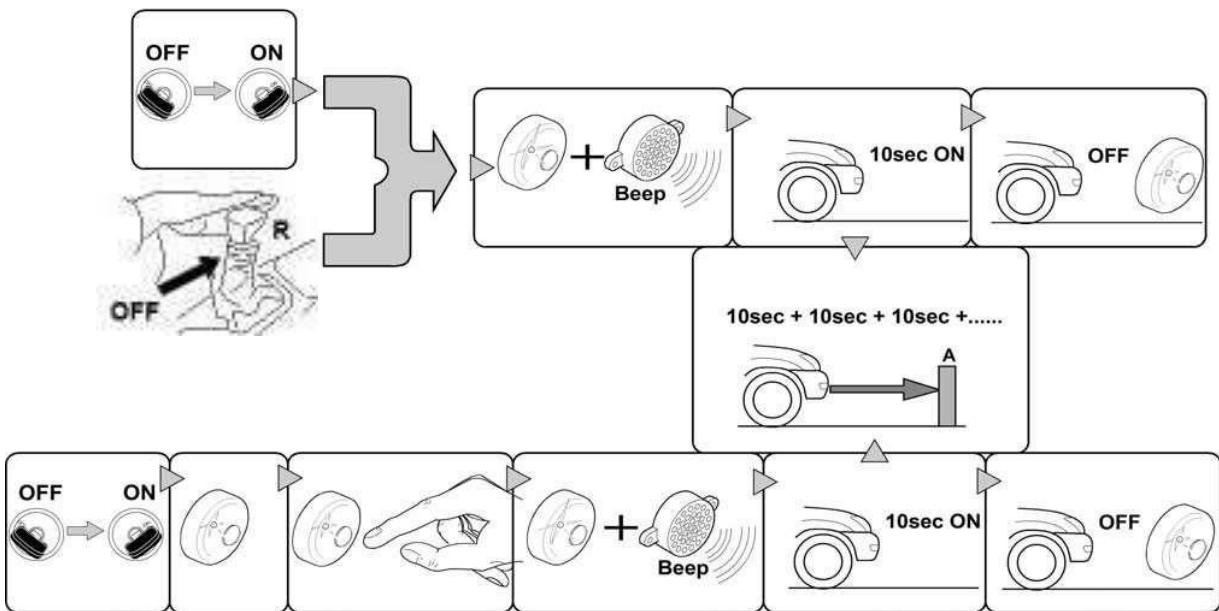
Insert The cable And install The button.



Connect The row without terminal to mass, insert The row with The terminal in the position n. 3 of the connector power supply to 8 streets

Activation And deactivation system RV3608EUSAA

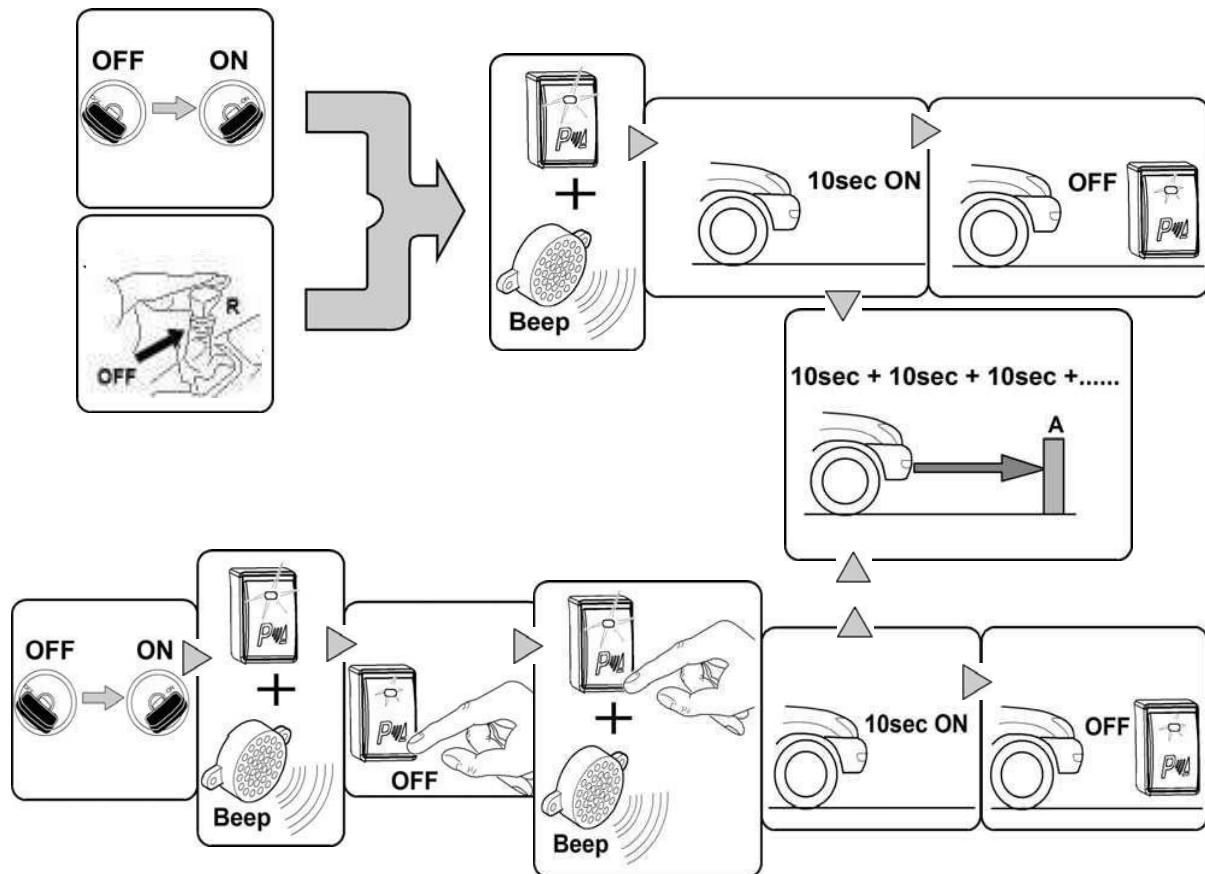
System activation/deactivation with push button



The system Yes active when turning on of the Square, if Not detects obstacles within 10 s Yes deactivate.
The system Yes active Also upon insertion from the reverse gear And remains active until to That there reverse gear Not he comesoff.

When there reverse gear he comes disconnected, if Not detects obstacles within 10 s Yes deactivate. The system can to be activated/deactivated through The button.

RV3637EUSAA



The system Yes active when turning on of the Square, if Not detects obstacles within 10 s Yes deactivate.
 The system Yes active Also upon insertion from the reverse gear And remains active until to That there reverse gear Not he comesoff.

When there reverse gear he comes disconnected, if Not detects obstacles within 10 s Yes deactivate. The system can to be activated/deactivated through The button.

23

Functions specials

23.1 Procedure learning from the thresholds Of speed

The button RV3608EUSAA or RV3637EUSAA And essential For to execute there procedure of the signals Ofspeed.

Press And hold pressed The button of the panel led, turn on The motor of the car.

Hold Always pressed The button of the panel, Yes they will warn 3 sounds of the speaker, hold Stillpressed until to the 6 sounds of the speaker.

Release The button of the panel For enter in the procedure Of learning from the thresholds Of speed. March with The vehicle at the speed That Yes he wishes use For the activation of the system, (Speed recommended 10 Km/h), press For 1 s The button For store there speed, The system he confirms there memorization with 2 sounds of the speaker.

Drive the vehicle at the speed you wish to use to deactivate the system, (Recommended speed 20 km/h), press the LED button for 1 second to memorise the speed, the system he confirms there memorization with 4 sounds of the speaker, turn off The Square For confirm the thresholdschosen ones.

After have performed there procedure The system active automatically there function Of deactivation of the systemfrom speed signal. To activate the system activation function from speed signal, follow the procedure enable/disable functionality.

23.2 Procedure Of programming functions

The button RV3608EUSAA or RV3637EUSAA And essential For to execute there procedure.

Press And hold pressed The button of the panel led, turn on The Square.

Hold Always pressed The button of the panel until to That The system he confirms with 3 sounds of the speaker.

Release The button of the panel For enter in the procedure Of programming functions.

The system repeats cyclically the beep from 1 to 6 (you see table Of programming functions).

To choose a function, press the button during the beeps or within 3 seconds of the end of the beeps . they indicate there function That Yes he wishes program, The system he confirms there programming from the functionwith 6 speaker sounds, and it goes back to repeating the i beeps from 1 to 6 to allow you to program other functions, if Not you have to program other functions turn off The Square.

23.3 Table Of programming functions

1 Beep	Activation system from signal Of speed	Active
2 Beep	Activation system from signal Of speed	Deactivate (Configuration standard)
3 Beep	Time Of shutdown of the system After activation ifNot they come detected obstacles	10 s (Configuration standard)
4 Beep	Time Of shutdown of the system After activation ifNot they come detected obstacles	20 s
5 Beep	Activation system when turning on of the Square	Active (Configuration standard)
6 Beep	Activation system when turning on of the Square	Deactivate

23.4 Deactivation of the system from signal Of speed

The system Yes deactivate automatically When The vehicle overcomes there threshold Of speed memorized (you see Procedure learning from the thresholds Of speed). The led of the panel Yes turn off For to report to you That Thesystem And deactivated.

23.5 Activation of the system from signal of speed

The system And activated automatically When The vehicle slow down And reaches there threshold Of speed memorized(see Speed threshold learning procedure). The panel LED lights up to inform you that the system And activated.

23.6 Shutdown of the system After activation if Not they come detected obstacles

If the system does not detect any obstacle after switching on, within 10 s or 20 s, depending on the function chosen Yes deactivate. Yes reactivate upon insertion from the reverse gear, when turning on of the Square or from the button of thepanel led if present.

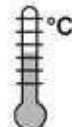
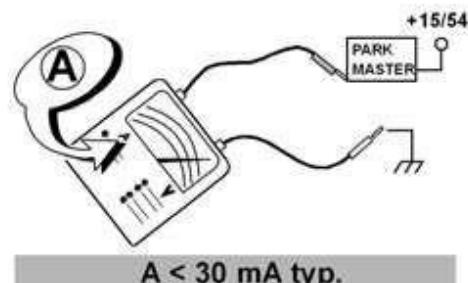
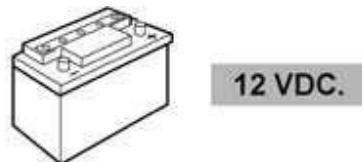
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Tools For there cutting or drilling PHONOCAR 09499 FLUSH-MOUNT SENSOR CUTTER



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Features techniques of the product



-40° C + 85° C

ELECTRICAL/ELECTRONIC SUB-ASSEMBLY WAS APPROVED
WITH REGARD TO:
ECE/324-E/ECE/TRANS/505 Add.9/Rev.3 Regulation No. 10
UNIFORM PROVISIONS CONCERNING THE APPROVAL
OF VEHICLES WITH REGARD TO ELECTROMAGNETIC
COMPATIBILITY