



LA MANOVRA DI AVANZAMENTO RICHIEDE COMUNQUE CAUTELA ED ATTENZIONE.
IL DISPOSITIVO INSTALLATO DEVE ESSERE CONSIDERATO UN AIUTO ALLA MANOVRA (attraverso la segnalazione) E NON UN DISPOSITIVO DI SICUREZZA

MOUNTING INSTRUCTIONS

WORKING PRINCIPLE

EPS-FRONT is a parking sensor device that uses low energy electromagnetic waves and is able to detect the approach to an obstacle.

Once activated, EPS-FRONT generates a shielded area around the front bumper.

FAST AND EASY TO FIT
(no holes to be drilled into the bumper)

The kit is composed of four elements :

- **Electronic module** with microprocessor. To be fitted either on the inside of the motor compartment or under the dashboard.
- **Antenna** (aluminium self-adhesive strip). To be fitted on the inside of the front bumper.
- **Micro-speaker** (diam. 25 mm). To be fitted inside the car compartment (front side).
- **Activation 12V push button** to be fitted onto or under the dashboard.



The system becomes operative when the control board is ON and the push button depressed. The confirmation consists of a signal of O.K. (one beep).

Starting from 50/60 cm away from the obstacle the buzzer begins emitting two types of signals :

ALARM (from 50/60 down to 15/20 cm away from the obstacle) The beep sound increases its frequency as the distance from the obstacle decreases.

DANGER (from 15/20 cm away from the obstacle) Continuous sound at low frequency.

The device is suitable only for plastic bumpers (even if painted).
Mind metallic structures : the antenna must be fitted at a distance of at least 3 cm away from longitudinal metallic elements.
The distance from ground should be 45-50 cm. The best position is in the middle of the bumper where the jutting is bigger.

If the antenna runs over a metallic structure, i.e. a vertical support, only for short lengths (2/3 cm), this will not affect the correct operation of the device.

THE FORWARD MOTION IS ALWAYS UNDER THE CONTROL OF THE DRIVER TILL THE LAST FEW CM BEFORE TOUCHING THE OBSTACLE, ENABLING TO PARK EVEN IN VERY SMALL AREAS

THE DRIVER IS JUST ASKED TO DRIVE SLOWLY TO AVOID CONFUSING THE DIFFERENT ALERTS.

FITTING THE CENTRAL UNIT

Fit the central unit either inside the motor compartment, or inside the passenger compartment (under dashboard) away from heat and from the vehicle electric devices. Use the special adhesive supplied with the kit, press down the unit very carefully and make sure it is well fastened.

Any motion will cause false alarms!

Fitting the antenna sensor on the inside surface of the front bumper

a) Clean carefully with alcohol or other solvent (no anti-adhesive detergent!) the inside surface of the front bumper onto which you will fit antenna sensor.

b) Apply the sensor by pressing down strongly to make sure of its perfect fitting to the bumper. Cover the whole bumper length and approx. 25 cm of both sides. Cut the exceeding part and fix both ends with the special mastic supplied.

In order to assure a better installation it is advisable to coat the whole zone of application of the ribbon with plastic protection primer.

ELECTRIC CONNECTIONS

- a)** Insert the connector of the cables into the central unit.
- b)** Ground the black wire (approx. 50 cm) near the central unit.

Bring the red wire and the speaker wire into the car compartment using the same way of the original car wires.

Connect the red cable (approx. 2 m) to the activation 12 V push button under ignition key; this way the device becomes operative when you ignite.

Connect the two thin black wires to the black wires of the micro-speaker. Fasten this latter so that the driver can hear its sounds clearly. We recommend the application on the front side shoulders of the vehicle, or on/under the dashboard.

c) Insert the two-way connector of the supplied black wire into central unit and connect it to the female fast-on cable terminal of the antenna. You will have previously cut the black wire to the desired length and fixed the supplied male fast-on.

The connection wire of the antenna must be as short as possible and must be fastened very carefully, as the antenna, using as much mastic as you need to avoid any oscillation causing false alarms.

FINAL TEST PROCEDURE

a) Turn on the ignition key and press the push button.

If the installation is correct the speaker emits a sound of O.K. (one beep). Once obtained this signal, the system becomes operative.

If the acoustic speaker doesn't give any signal (or gives a different signal), check all the connections, especially the one between the unit and the antenna and check that the chosen earth is really efficient (black wire).

ATTENTION: if at the insertion of the back gear the acoustic speaker gives an alarm signal (two notes for three times) it means that the **antenna connection is missing** or not correct.

b) Starting from about 1 meter of distance from the centre of the bumper, walk near slowly to simulate the forward motion of the car.

At a distance of about 70 cm the first acoustic signals are perceived; their repetition frequency will increase as the distance decreases, to become a continuous sound at about 15/20 centimetres away from the obstacle, provided you drive/walk slowly.

WARNING

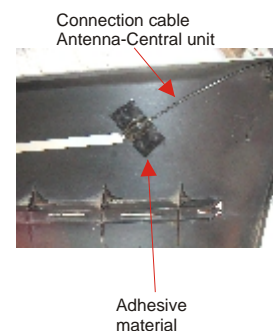
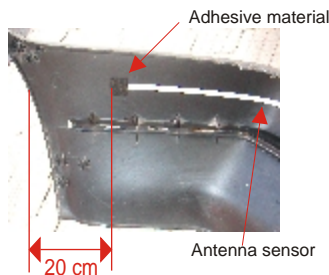
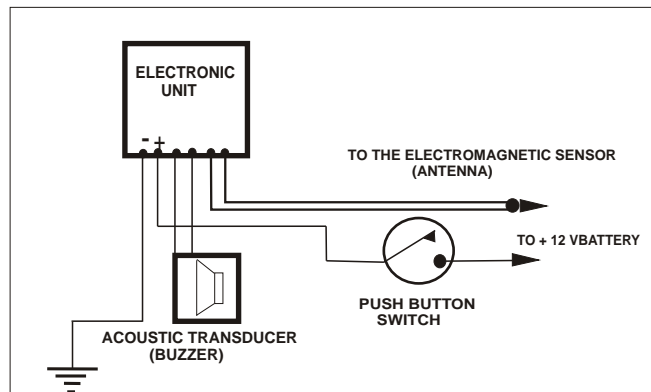
1) As soon as the system is activated an acknowledgement of the surrounding of the bumper (antenna sensor) is made.

2) Consequently **it is very important**, during testing operation, not to switch on the system while you are very close to the central unit and antenna sensor in order not to have false information on the working capability of the system.

During the test be careful that **AFTER THE FIRST APPROACH** to the bumper any **FURTHER APPROACH** without resetting the unit (switch off) can give false interpretations of the capability of the system because of a peculiar behavior of the software properly made for reducing false signals during raining conditions.

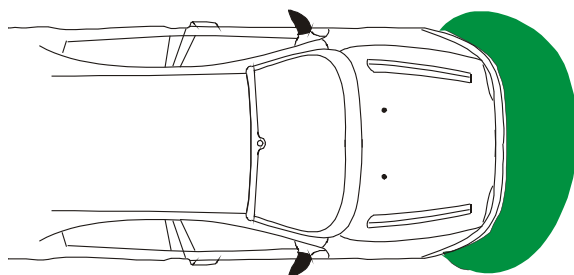
3) In presence of rain or high moisture weather, the system reduces his sensibility automatically in order to eliminate a part of false alarms that could be given by movement of water on the bumper. In this situation the system could give only the last low frequency signal (risk of contact)

4) Due to the operating principle of the EPS sensor and depending on mounting position of the antenna sensor the unit can give sound warning alert signals in error as the vehicle reverses. This is due to ground pick up and is normal.



Parking sensor with acoustic signal. It exploits the characteristics of the low energy electromagnetic waves. It shields the bumper for the whole length, with no dead points.

Thanks to the technology of the electromagnetic field, manoeuvring is under total control of the driver till the last centimetres before actually touching the obstacle. You will be able to manoeuvre even in very small areas.

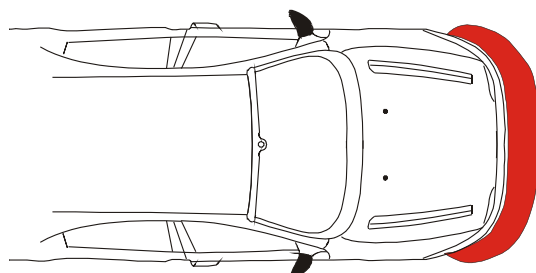


ALARM

From approx. 70/60 cm down to 15/20 cm from the obstacle.

The alert is given through a beep sound increasing even more as the front bumper approaches the obstacle.

BEEP...BEEP...BEEP...



DANGER

From 15/20 cm away from the obstacle. Low-frequency continuous beep sound.

BUUUUP...