



RETTBOX® RETTBOX®-air

N°23e - Rev. : 1



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A manufacturer of products using the **Marechal** technology.

GENERAL

In order to supply on-board equipments when they are parked, fire brigade and rescue vehicles often need to be supplied with electric power and sometimes, compressed air. In an emergency, these supplies must be separated from the vehicle as quickly as possible. With the Rettbox®/Rettbox®-air, this operation is performed automatically when the engine is started: the sliding lid then closes and the vehicle can drive away in complete safety.

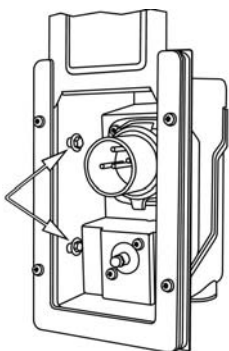
The Rettbox®-air also contains a compressed air supply, built in the connector.

INSTALLATION

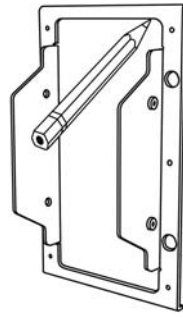
Products must be installed by a qualified electrician.

Assembly

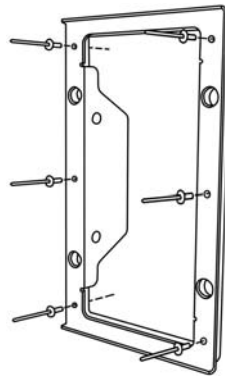
- Disassemble the installation frame by removing the 4 hexagonal screws,



- This frame is used as a template: place the frame with the flat side against the surface of the vehicle and mark the interior contour and the six fixing holes,



- Cut out an area approximately 1 to 2 mm outside the marked area. The 6 fixing holes must be drilled at 3,3 mm,
- Assemble the gasket and the installation frame and on the vehicle by means of the six 3.2 x 8 mm blind rivets supplied.

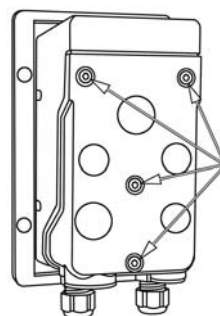


CAUTION

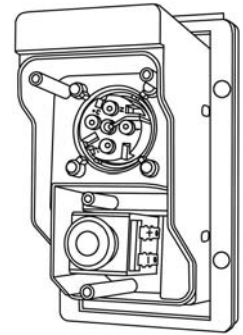
- The Rettbox®/Rettbox®-air has to be installed on a vertical surface of the vehicle,
- Check that the battery voltage corresponds to that of the lifting magnet coil. Coils are available for 12 or 24 V. Respect the polarity (+/-),
- To avoid any malfunction of the vehicle electronics, install a free wheeling diode in parallel with the lifting magnet coil,
- The magnet coil must be wired with at least 1.5 mm² conductors to the vehicle starter (terminal 50). It must not be connected to a permanent source or be energised for more than 1 second when the engine is started,
- Rettbox®-air: The compressed air supply must not exceed 13 bar.

Wiring

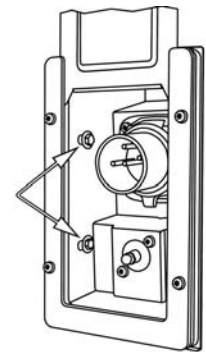
- Remove the rear cover by removing the four Torx screws,



- Introduce the cables for the on-board power supply and the lifting magnet supply through the cable glands,
- For the Rettbox®-air, introduce the compressed air pipe,



- Disassemble the appliance inlet, wire the conductors to their respective terminals. Reassemble the appliance inlet in its original orientation,
- Connect the compressed air and the lifting magnet (1.5 mm²). Respect the polarity (+/-),
- Close the cover and tighten manually the cable glands,
- Insert the box with the gasket into the installation frame, push it firmly in and screw it to the frame from the inside, using the four hexagonal screws, through the longitudinal screw holes.



Screws

The recommended tightening torques are:

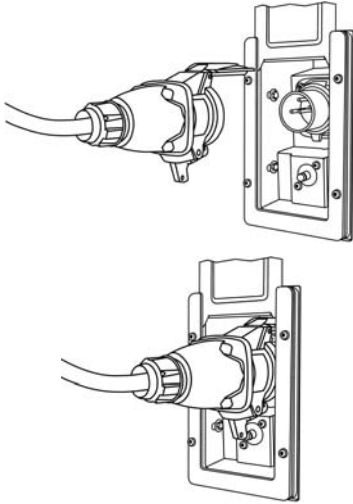
	Torque	Tool
Terminal screws	1,5 Nm	3 x 0.75 mm Screwdriver
Torx screws	0,4 Nm	T20 Torx wrench

OPERATION

To ensure a safe and reliable operation, the Rettbox®/Rettbox®-air has to be used according to its designed destination, and in particular its assigned ratings, in terms of current, voltage, IP and endurance.

To be connected together, the plug and socket-outlet of the Rettbox®/Rettbox®-air must have identical rated voltage and current and compatible pin configurations.

- Lift the sliding cover and keep it up,
- Open the hinged cover of the connector (hinge at the top) and insert it over the appliance inlet inside the Rettbox®/Rettbox®-air. Push the connector fully in, until it latches. The system is ready to operate,




- Adjust the length of the supply flexible cord to prevent the connector from falling on the floor when ejected,
- When the engine of the vehicle is started, the connector is ejected and the sliding lid closes automatically. The vehicle can drive away in complete safety.

MAINTENANCE

From time to time, the fastening screws should be checked for tightness.

Care should be taken that the weight of the cable is taken by the glanding arrangement and not the terminals themselves.

Contact surfaces may be checked for cleanliness. Any deposit of dust can be rubbed off with a clean cloth. Under no circumstances should the contact surfaces be filed as this will remove the silver-nickel tip and reduce the effectiveness of the contact. Sprays should not be used as they tend to collect dirt.

 **Any repair or service must be achieved with genuine Marechal parts only.**

RESPONSIBILITY

A Marechal product must be used with a Marechal complementary accessory only.

MARECHAL ELECTRIC S.A.'s responsibility cannot be engaged in case Marechal products would be associated with socket-outlets, inlets or spare parts other than from Marechal.

MARECHAL ELECTRIC S.A.'s responsibility is strictly limited to the obligations expressly agreed in its general sales conditions.

Any penalty or indemnity provided herein will be considered as lump damages, redeeming from any other sanctions.

DECLARATION OF CONFORMITY

The Rettbox®/Rettbox®-air uses the Marechal technology.

It has been designed, manufactured and controlled in a strict respect of the relevant international and European standards, laws and directives, and particularly of the European Low Voltage Directive 2006/95/CE. It bears the CE marking whenever applicable.

Note : The CE marking does not apply to spare parts and components supplied separately.

For the Rettbox®/Rettbox®-air and whenever it is in the scope of the 2006/95/CE Directive:

We,
MARECHAL ELECTRIC S.A.,
5 avenue de Presles - F-94417 Saint-Maurice Cedex - France

Declare that the Rettbox®/Rettbox®-air satisfies the measures set in the European Low Voltage Directive 2006/95/CE and in the application decrees of Member States.

Saint Maurice
Quality Manager
MARECHAL ELECTRIC S.A.

MARECHAL ELECTRIC S.A. is a member of the international association, BECMA: the Butt-contact Electrical Connectors Manufacturers' Association.



www.becma.ch