

For additional TECHNICAL INFORMATION on alarm unit operation, connections and other med products, please call med TECHNICAL SERVICE on the following numbers:

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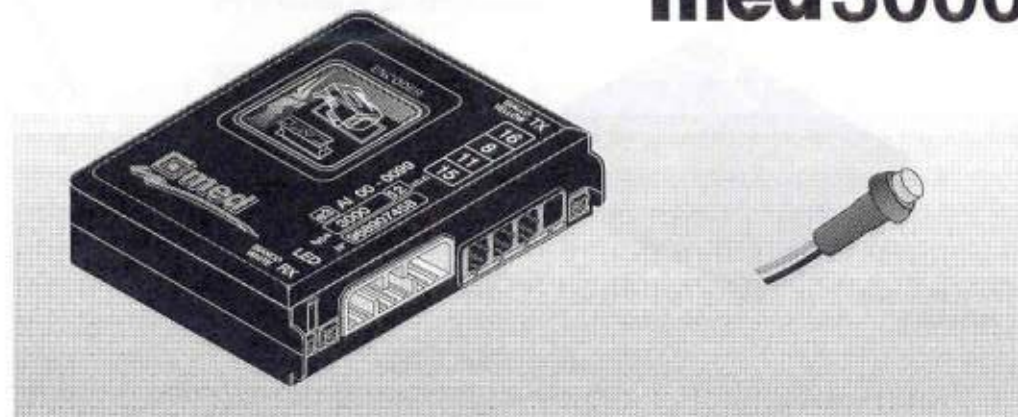


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INSTALLER ASSEMBLY INSTRUCTIONS - CONNECTIONS

med3000



PROGRAMMABLE ALARM UNIT/IMMOBILIZER
FOR VEHICLES WITH ORIGINAL DOOR UNLOCKING/
LOCKING REMOTE CONTROL



054316302

PRECAUTIONS

1. Disconnect the battery negative before making the electrical connections.
2. Avoid "tapping" to make connections.
3. OBSERVE THE MAXIMUM LOADS INDICATED for the service outputs and fuse value.
4. Position the alarm unit inside the vehicle, NEVER IN THE ENGINE BAY, taking care that the cables come from below so as not to carry water or condensation, securing it with the Velcro provided in the package. Make sure you position the alarm unit in an area where there can be NO infiltration of liquids.
5. Position the other system components in the vehicle and then, following the main and specific diagrams, lay out the standard wiring supplied.
6. ALL push-buttons of doors, bonnet and boot MUST BE CONNECTED adding ones missing. CAUTION: On some vehicles, some of the push-buttons are automatically monitored by the alarm unit, with no need for additional connections; see the specific diagrams.
7. Power up the system only after completing the electrical connections.
8. For vehicles with 24-volt systems, use the specific med power supply, de-coupling the line of the indicators with a suitable relay as shown.

WARNING

The instructions refer to a system that has been FULLY wired and installed.

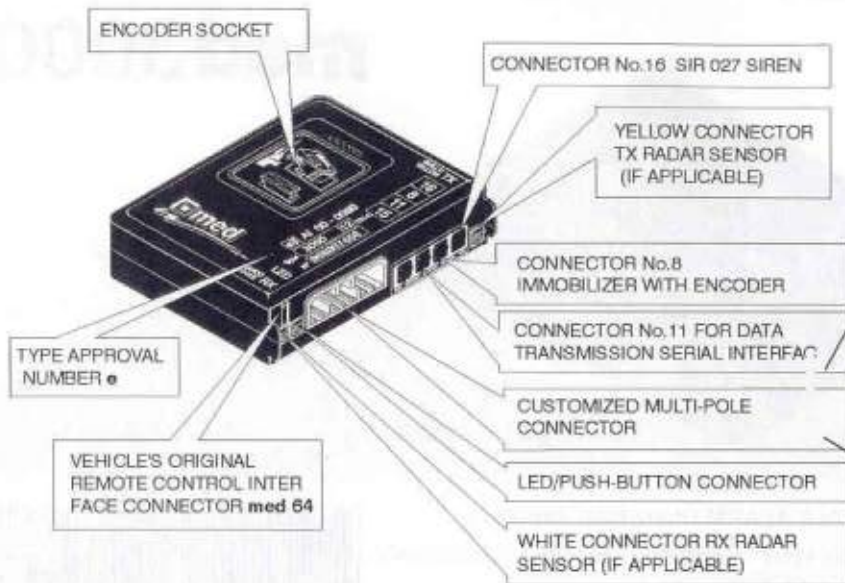
1. If some parts have NOT been connected, OPERATION will be REDUCED.
2. The PIN - CARD must be handed over to the user in a SEALED BAG.
3. Installation MUST BE CARRIED OUT by QUALIFIED PERSONNEL.
4. All push-buttons of doors, bonnet and boot must be connected.
5. The installer must issue an **installation certificate** duly compiled and signed.

med s.p.a. disclaims all liability and suspends WARRANTY in the case of improper use of the product or part of it, tampering with it or combining it with devices for which NO provision has been made.

CAUTION med 3000.B WITHOUT RADAR SENSOR

med s.p.a. reserves the right to make any changes or technical modifications to the product at any time, WITHOUT prior notice thereof.

med 3000 CAR ALARM ASSEMBLY DIAGRAM



Connector No. 15 IS NOT USED.

MOUNTING LED/PUSH-BUTTON

On the dashboard, in a clearly VISIBLE and accessible position, make a hole \varnothing 8.25 mm. in the wall from approximately 1 to 4 mm thick. to fit the LED/PUSH-BUTTON.

Connect this cable to the connector marked LED on the alarm unit.



COLOUR	MARKED	FUNCTION	CURRENT
BLACK	GND	POWER SUPPLY - EARTH	20 A
RED	[+30]	POWER SUPPLY - LIVE	20 A
ORANGE	[+15]	[+15] PERMANENT DURING STARTING	-
DARK BLUE	MUX	CONTROL FOR DIGITAL CAR ALARM "MUX"	-
LIGHT BLUE	NA	INSTANTANEOUS N/O INPUT FOR DOOR BUTTONS	-
LIGHT BLUE	NAR	TIME-LAGGED N/O/L INPUT FOR DOOR BUTTONS	-
GREY	1	COMMON CONTACT - FIRST BREAK	10 A
GREY	2	N/C CONTACT - FIRST BREAK	10 A
GREY	3	N/O CONTACT - FIRST BREAK	10 A
GREY	4	COMMON CONTACT - SECOND BREAK	10 A
GREY	5	N/C CONTACT - SECOND BREAK	10 A
GREY	6	N/O CONTACT - SECOND BREAK	10 A
GREY	7	ALARM OUTPUT TO EARTH	700 mA
GREY	8	SIGNAL OF STATUS TO EARTH	700 mA
GREEN	9	LIVE OUTPUT - FOR RIGHT-HAND INDICATOR	10 A
GREEN	10	LIVE OUTPUT - FOR LEFT-HAND INDICATOR	10 A
WHITE	11	COMMON CONTACT - THIRD BREAK	10 A
WHITE	12	N/C CONTACT - THIRD BREAK	10 A

The breaking relays withstand currents of approximately 10 A continuous, 30 A peaks for 10 seconds.

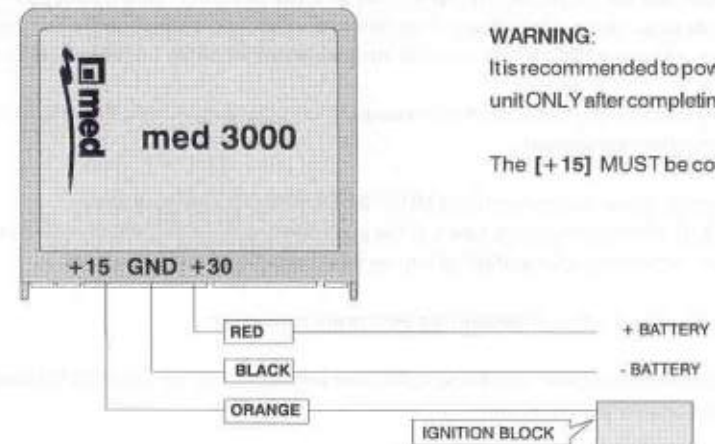
POWER SUPPLY

- **POSITIVE** power supply: **RED** wire marked [+30], to be connected to a reliable point capable of delivering 20 A (e.g. fuse box or battery). This power supply is also used for the INDICATORS.
- **NEGATIVE** power supply: **BLACK** wire marked GND, to be connected to the negative terminal of the battery or to a grounding point on the chassis frame made by the vehicle manufacturer.
- **POSITIVE** ignition key: **ORANGE** wire marked [+15] permanent when starting.

WARNING:

It is recommended to power the alarm unit ONLY after completing assembly.

The [+15] MUST be connected.



PUSH-BUTTON CONNECTIONS

On some vehicles, such as BMW cars with "K-BUS", MERCEDES or VOLKSWAGEN with "CAN", the med 3000 car alarm directly receives the signals of the push-buttons originally connected to these systems as well. To connect the other push-buttons, or on other vehicles, the alarm unit has 2 different inputs NORMALLY OPEN to EARTH that differ only on ACTIVATING THE SYSTEM:

N/O - INSTANTANEOUS: the input is immediately MONITORED by the alarm unit upon activation.

N/O/L - TIME-LAGGED: the input is MONITORED by the alarm unit after approximately 30 seconds.

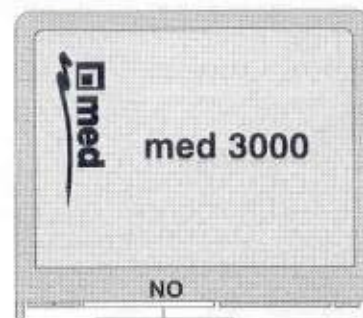
IT IS RECOMMENDED to ALWAYS use the N/O input that provides the rejection signal on activating the system with a door open (see OPERATING INSTRUCTIONS).

The N/O/L input should ONLY be used in the case of a time-lagged courtesy light with earth return if an appropriate diode is not inserted (Fig. C), or with special systems, such as ALFA ROMEO 164 that has normally closed push-buttons on the doors (Fig. E), for the anti-lifting SENSOR SEN 077-02 or in combination with med 64 for the push-button of the driver's door.

N.B. Push-buttons of doors, bonnet and boot must ALWAYS ALL BE CONNECTED.

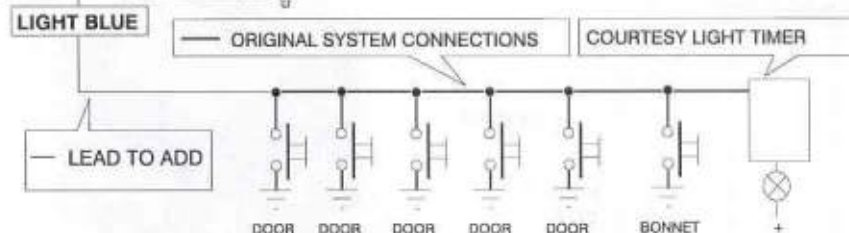
IF COMBINED WITH THE "CAN" or "K-BUS" LINE DO NOT CONNECT SEE INSTRUCTIONS FOR AUXILIARY CONNECTION

A

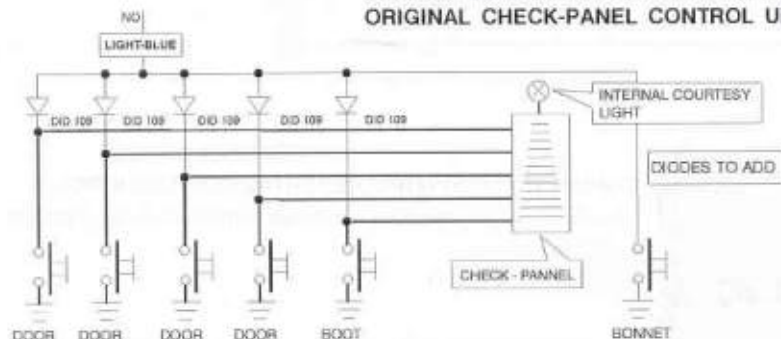


IN COMBINATION WITH med 64 WITH AUXILIARY KEY SOCKET PCA 600 USE THE N/O/L (TIME-LAGGED) INPUT FOR THE DRIVER'S DOOR.

CAR WITHOUT CHECK-PANEL AND COURTESY LIGHT WITHOUT EARTH RETURN

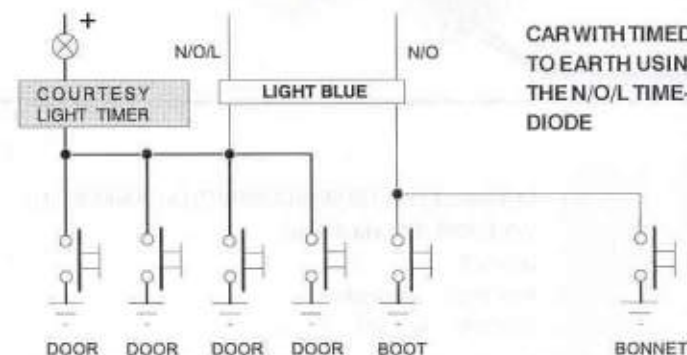


VEHICLE WITH COURTESY LIGHT CONTROLLED BY THE ORIGINAL CHECK-PANEL CONTROL UNIT



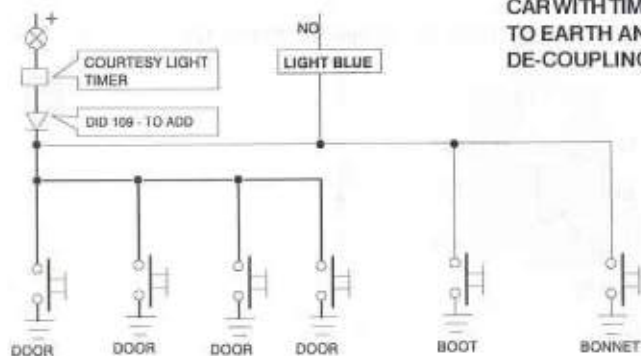
B

CAR WITH TIMED COURTESY LIGHT, WITH RETURN TO EARTH USING THE N/O/L TIME-LAGGED INPUT INSTEAD OF THE DIODE



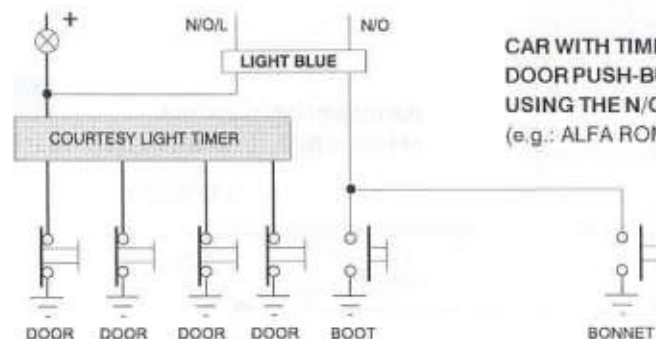
D

CAR WITH TIMED COURTESY LIGHT, WITH RETURN TO EARTH AND DIODE FOR DE-COUPLING



C

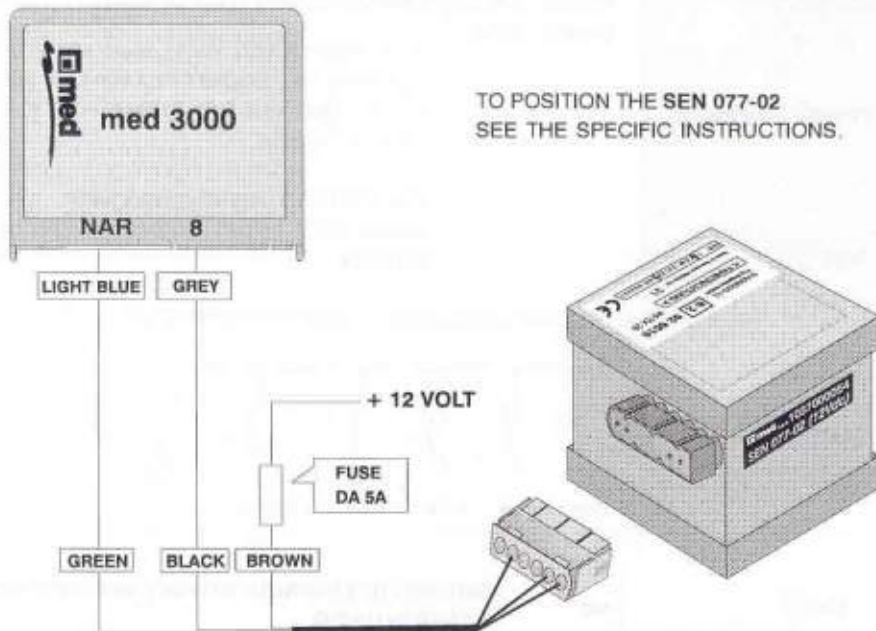
CAR WITH TIMED COURTESY LIGHT AND DOOR PUSH-BUTTONS WITH N/C CONTACTS USING THE N/O/L TIME-LAGGED INPUT (e.g.: ALFA ROMEO 164).



E

CONNECTION TO ANTI-LIFTING SENSOR SEN 077-02

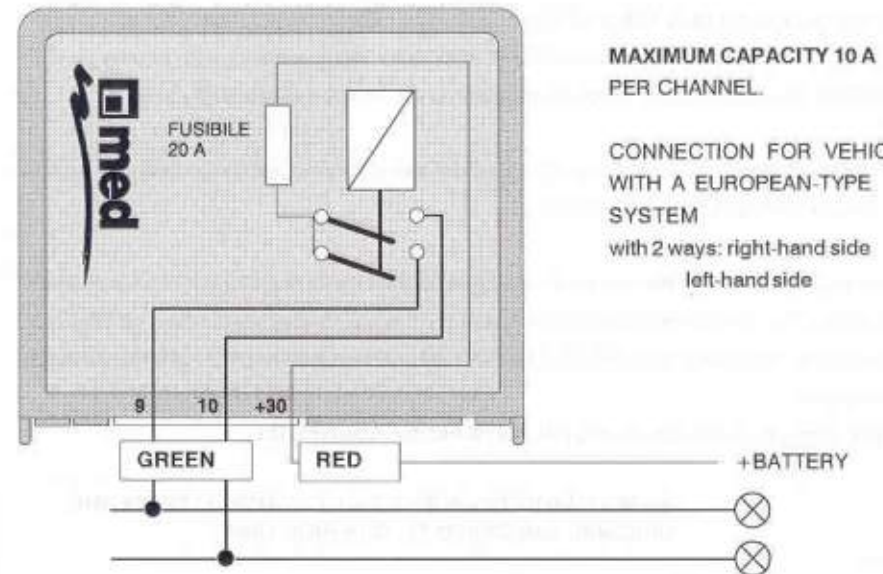
The SEN 077-02 has to be positioned horizontally, in an area protected against infiltration of liquids or condensation, following the diagram shown:



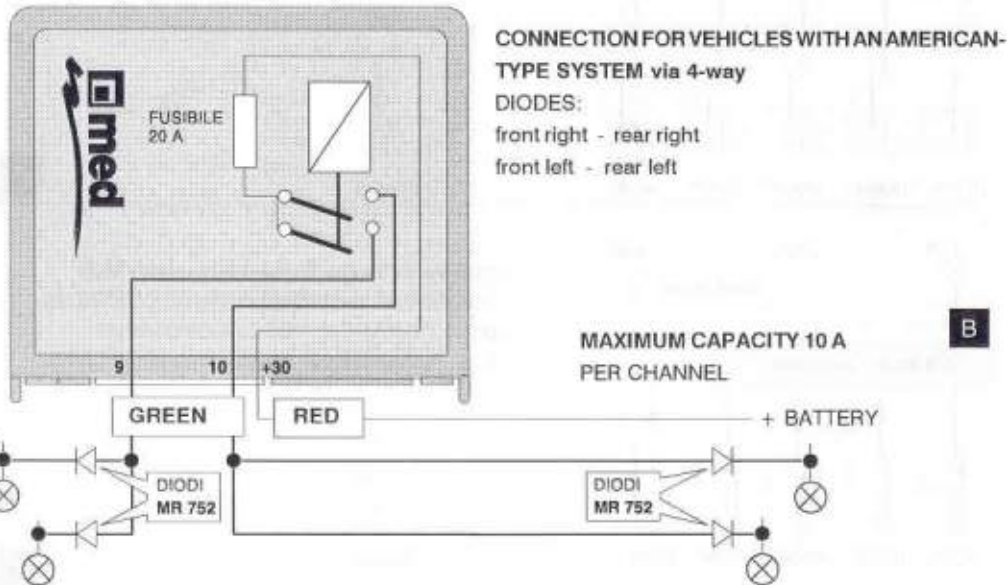
INDICATOR CONTROL

The GREEN wires marked no. 9 and no. 10 supply a POSITIVE control directly (max. 10A per channel) to control the INDICATORS.

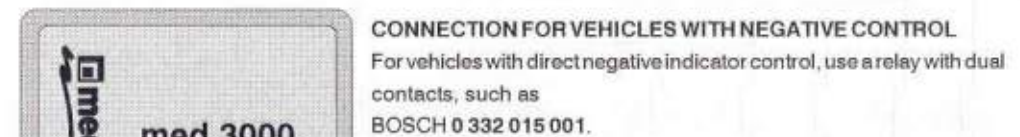
The RED [+30] wire is the same one as for the alarm unit supply.



A

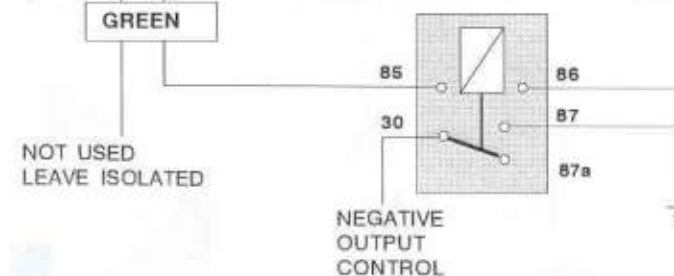


B



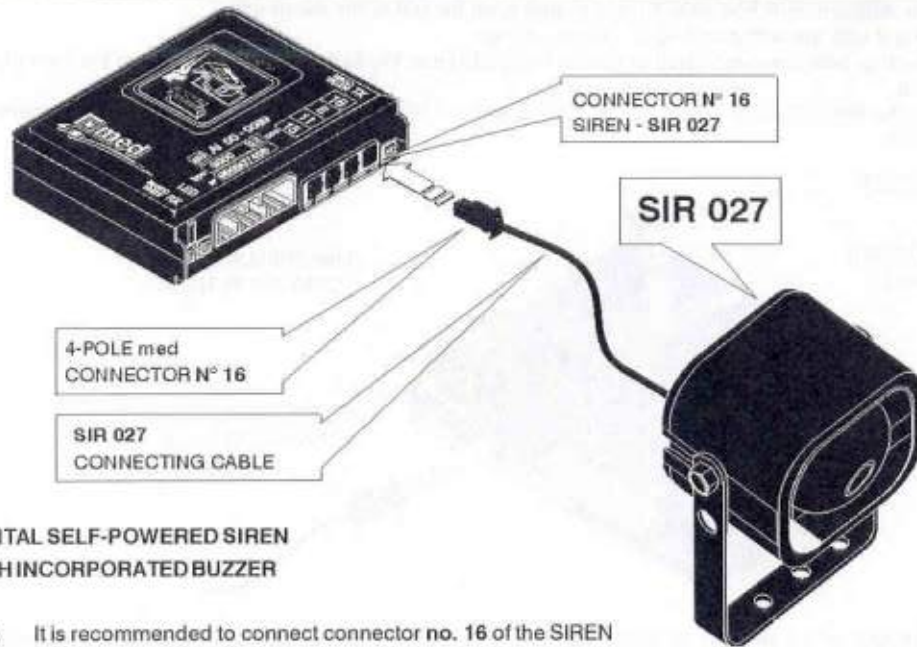
Example for vehicles with negative control on a single wire, such as MERCEDES class A or class E.

Use a BOSCH relay, for example: 0 332 204 125



C

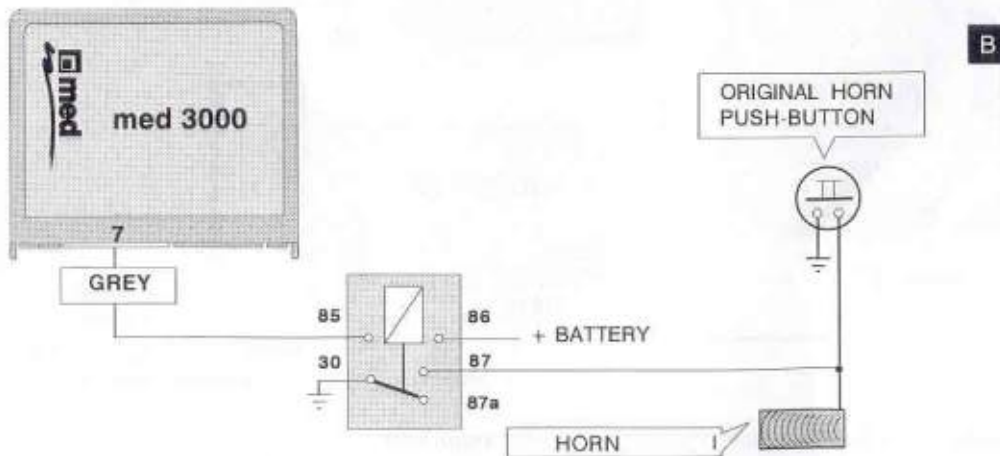
CONNECTION TO THE SIREN SIR 027



DIGITAL SELF-POWERED SIREN
WITH INCORPORATED BUZZER

N.B. It is recommended to connect connector no. 16 of the SIREN to the alarm unit only AFTER first TESTING the system.

CONNECTION TO THE VEHICLE'S HORN WITH NEGATIVE CONTROL
INTERMITTENT OUTPUT WITH MAXIMUM CAPACITY OF 700 mA.
PLACE IN BETWEEN AN OPTIONAL RELAY OF 30 A WITH N/O CONTACT AS SHOWN, FOR EXAMPLE BOSCH 0 332 204 125.

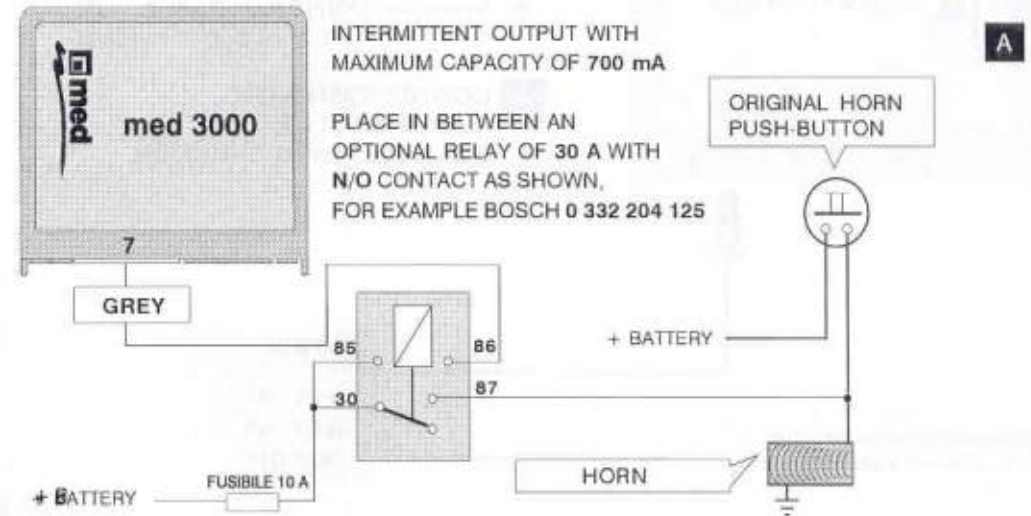


B

ALARM OUTPUT

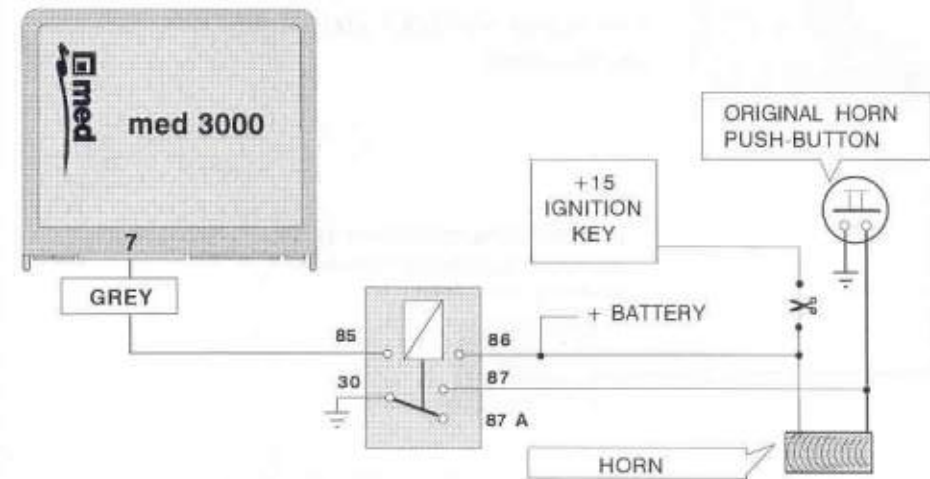
The negative alarm OUTPUT, electronically protected with a maximum current of 700 mA, programmable between **intermittent** (standard) or **fixed**, makes it possible via an optional relay with N/O (Normally Open) contact to control the vehicle's horn (INTERMITTENT for the duration of the alarm cycle) or one or more additional sirens (INTERMITTENT or FIXED). Apply the right diagram from the following:

CONNECTION TO THE VEHICLE'S HORN WITH POSITIVE CONTROL



A

CONNECTION TO THE VEHICLE'S HORN WITH NEGATIVE CONTROL AND KEY POSITIVE [+15].
INTERMITTENT OUTPUT WITH MAXIMUM CAPACITY OF 700 mA.
PLACE IN BETWEEN AN OPTIONAL RELAY OF 30 A WITH N/O CONTACT AS SHOWN, FOR EXAMPLE BOSCH 0 332 204 125.



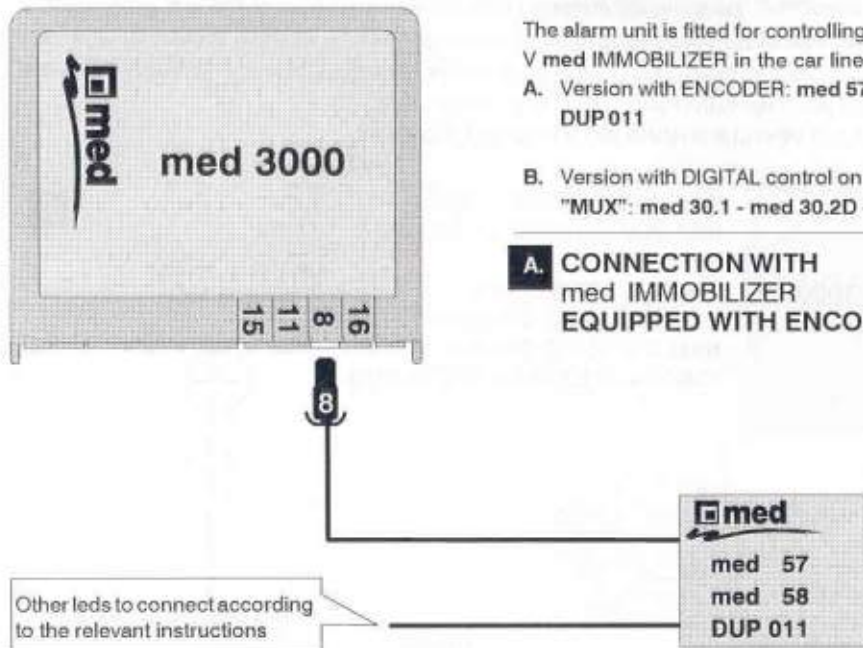
C

IMMOBILIZER PRIMARY PROTECTION

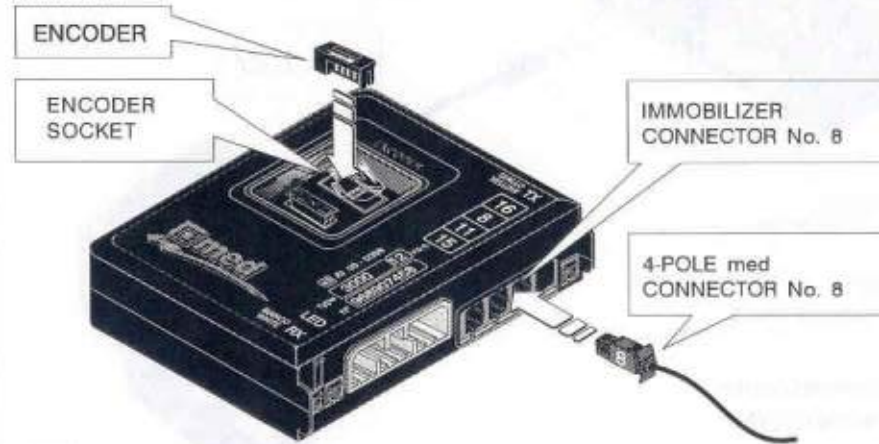
The alarm unit is fitted for controlling all types of 12 V med IMMOBILIZER in the car line:

- A. Version with ENCODER: med 57 - med 58 or DUP 011
- B. Version with DIGITAL control on line "MUX": med 30.1 - med 30.2D - med 58.XD

A. CONNECTION WITH med IMMOBILIZER EQUIPPED WITH ENCODER.



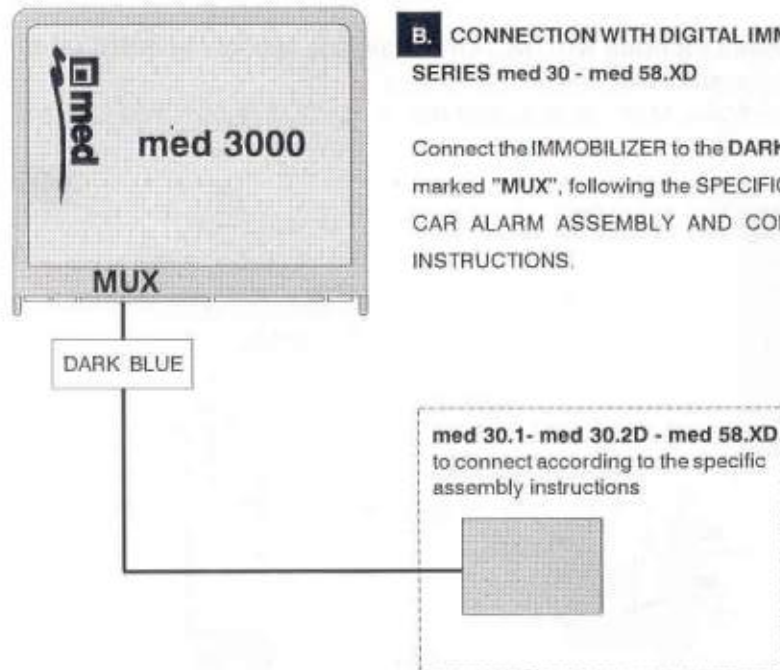
1. Insert the IMMOBILIZER ENCODER into the socket on the top of the alarm unit, protecting it with the adhesive LABEL already affixed.
2. Insert the four-pole connector no.8 of the IMMOBILIZER into the SOCKET marked no.8 on the front of the alarm unit.
3. Connect the IMMOBILIZER power supply cables and the GREEN wire following the specific car alarm instructions.



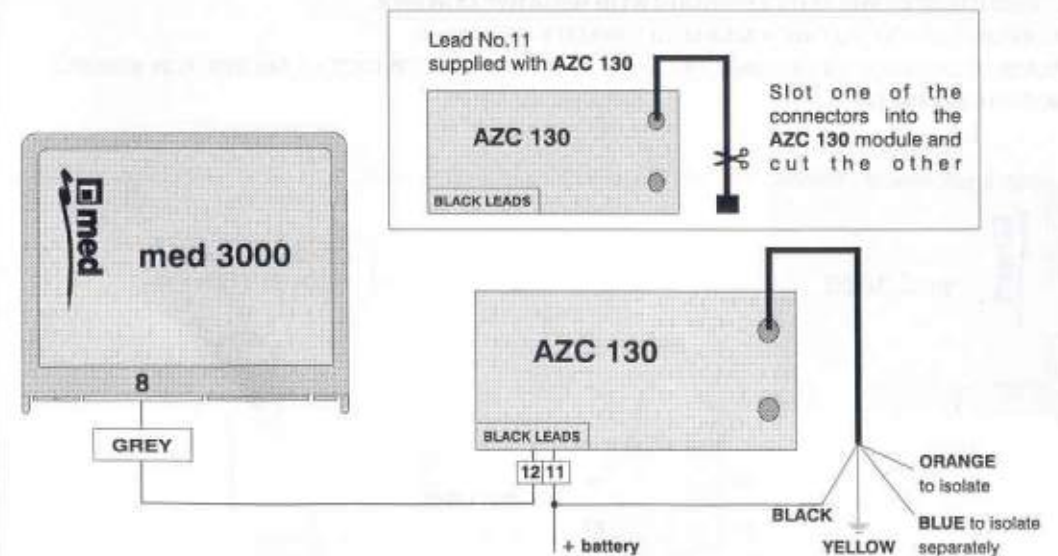
WARNING:
The ELECTRONIC KEYS and KEY SOCKET that may be supplied with the IMMOBILIZER will not be used.

B. CONNECTION WITH DIGITAL IMMOBILIZER SERIES med 30 - med 58.XD

Connect the IMMOBILIZER to the DARK BLUE wire marked "MUX", following the SPECIFIC CAR ALARM ASSEMBLY AND CONNECTION INSTRUCTIONS.



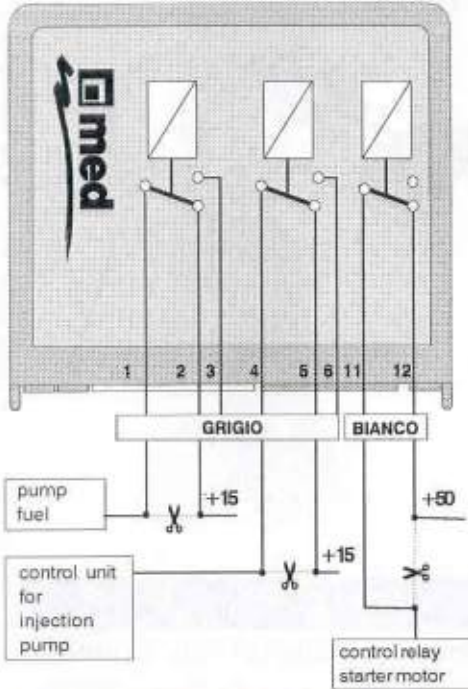
CONNECTION TO THE WINDOW WINDER MODULE AZC 130



Complete connections of the AZC 130 as per the relevant instructions.

ELECTRICAL BREAKS - IMMOBILIZER

The med 3000 car alarm is fitted for making 3 electrical breaks on 3 separate circuits, as shown, irrespective of using the med immobilizer:



RATED CURRENT FOR BREAKING
 10 A continuous
 30 A for 10 seconds

The breaks are controlled only during starting (+15 ON) with the system activated.

Isolate the wires no. 3 and no. 6 that are not used.

Example of circuits that can be broken:

- electric fuel pump
- +15 injection pump control unit
- starter motor relay control

To break loads with currents higher than 10 A rated and 30 A

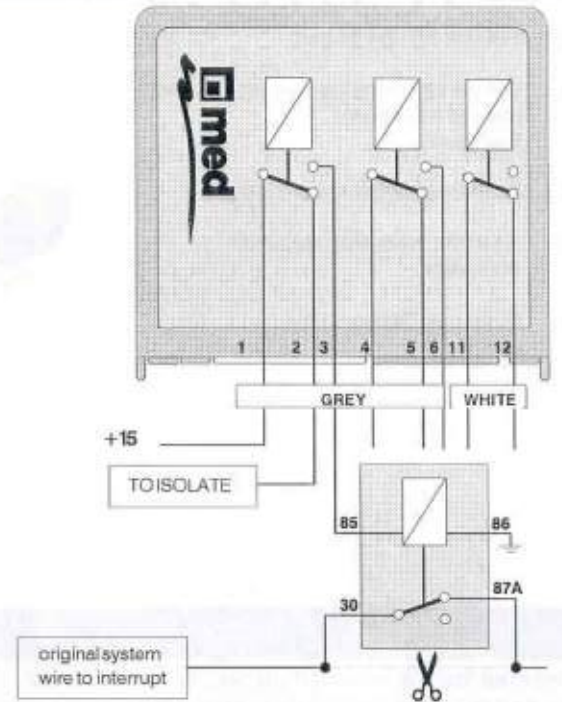
maximum for 10 seconds, with wires no. 1 and 3 or no. 4 and 6 it is possible to control an optional relay with a N/C contact

(Normally Closed) such as BOSCH 0 332 204 125.

Isolate wires not used.

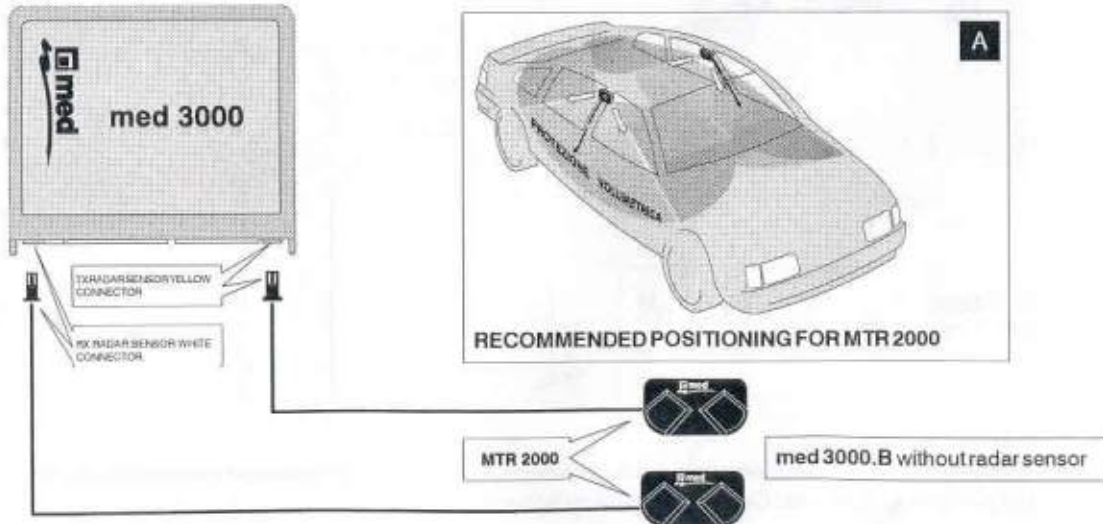
N.B.

We always recommend breaking off at least the control to the starter motor relay + 50.

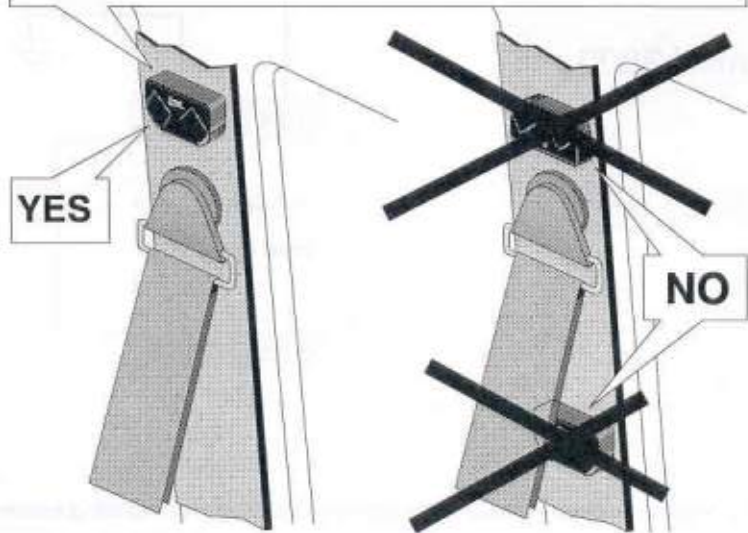


CONNECTING THE RADAR SENSORS MTR 2000

N.B. If the RADAR is activated with the ANTI-BLINDING and ANTI-MASKING functions, it is ABSOLUTELY necessary to combine it with the RADAR SENSORS.



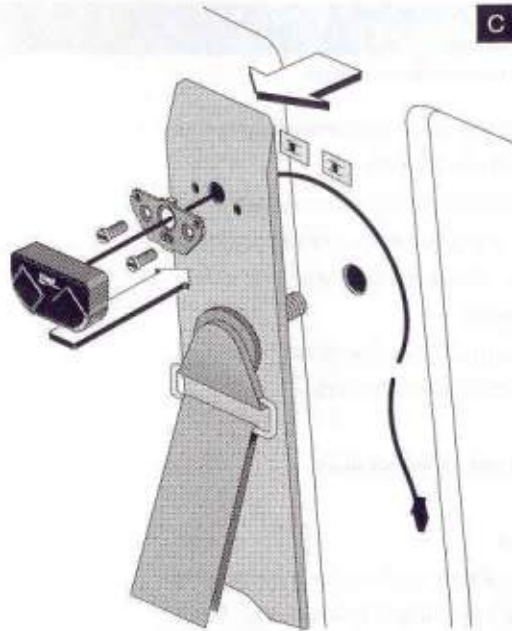
RECOMMENDED POSITION FOR CORRECT ASSEMBLY



B

MOUNTING ON UPRIGHT TRIM

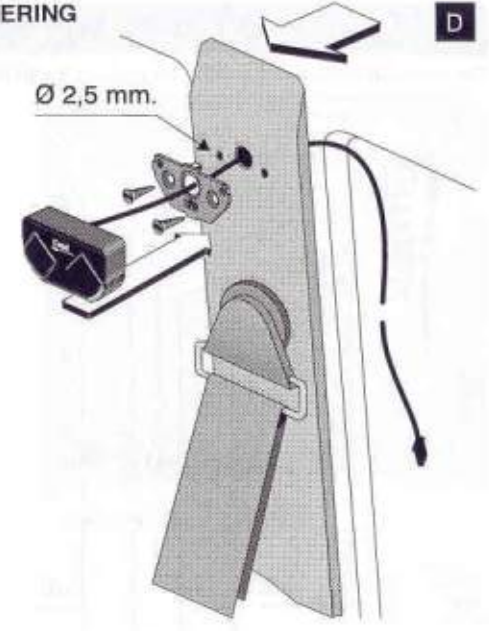
1. Take off the upright trim.
2. Drill the trim using the supporting metal plate as a template: See figure.
3. Secure the supporting metal plate.
4. Insert the cable and snap shut the sensor.
5. Fit the trim back onto the upright.



C

MOUNTING ON THE UPRIGHT WITH TRIM ADHERING TO THE SHEET METAL

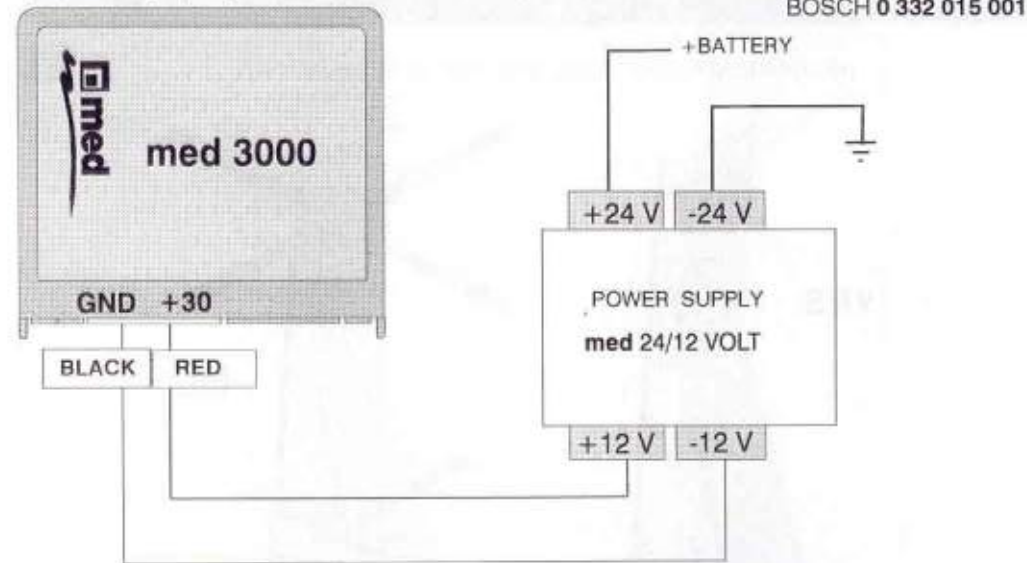
1. Drill the upright using the supporting metal plate as a template: see figure. For the two self-tapping fixing screws, supplied in the package, a hole of $\varnothing 2.5$ mm is suitable.
2. Secure the supporting metal plate.
3. Insert the cable and snap shut.



D

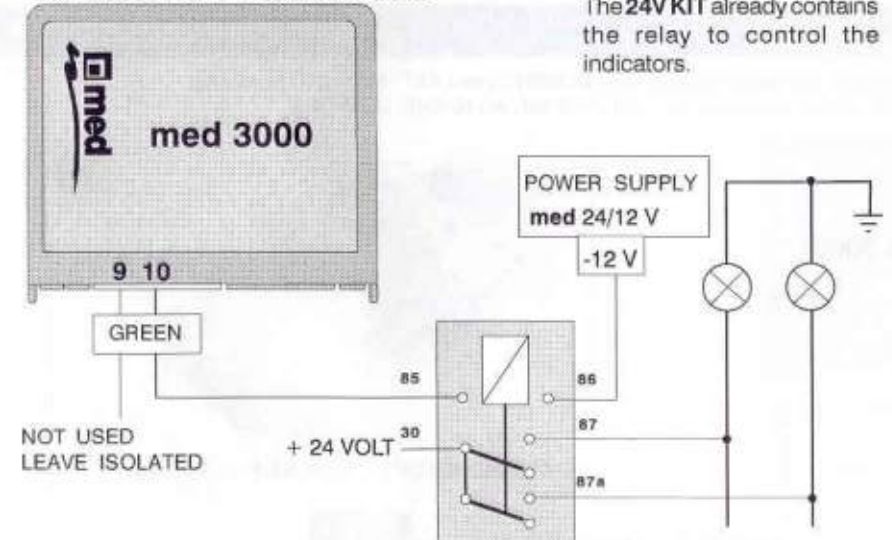
24 VOLT VEHICLE CONNECTION

The med 3000 alarm unit must be powered at 12 volts with a suitable med power supply, such as the 24 V KIT. The indicators need to be decoupled, using a suitable relay with a 12 Volt coil and dual N/O (Normally Open) contacts, such as:



CAUTION: It is recommended to power the alarm unit **ONLY** after completing assembly

The other inputs/outputs of the med 3000 alarm unit can operate at 24 Volts, for instance +15, N/O, N/O/L, electrical breaks.



The 24V KIT already contains the relay to control the indicators.

CAUTION:

On "ADR" vehicles (suitable for transporting hazardous goods) the system must be made according to specific requirements. Call med Technical Service.