

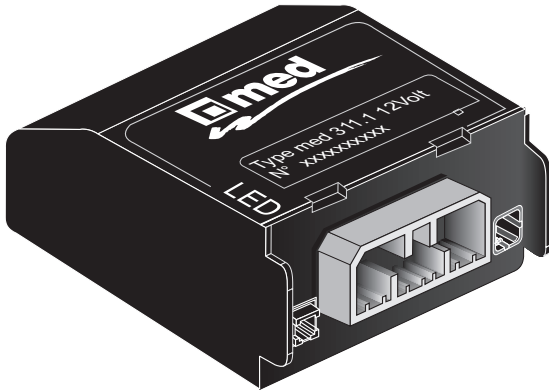


AUTOMOTIVE SOLUTIONS

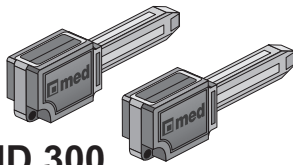


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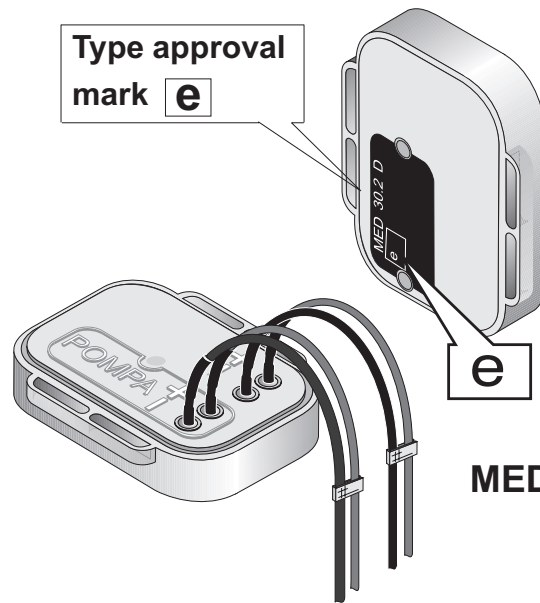
# MED 330.2 R IMMOBILIZER



**MED 311.1**  
KIT 30 INCLUDED



**CHD 300**



**MED 30.2**

## USER'S GUIDE FITTING GUIDE INSTALLATION CERTIFICATE - ENGLISH -

With immobilizer for in-tank fuel pump application,  
for petrol and diesel vehicles.

- With MED sealed, anti-scanner, rolling-code, digital keys.
- PIN card for emergency release and lost key cut out.
- Direct starter cut-off.
- Programmable automatic engine cut arming.
- Management of 8 digital electronic keys.
- Signaling LED.

Landi Renzo S.p.A. - Sede legale: Via Nobel, 2/4 - 42025 - Corte Tegge - Cavriago (RE) - Italia

**med** è un marchio **LANDI RENZO S.p.A.**

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ISO/TS 16949  
BUREAU VERITAS  
Certification

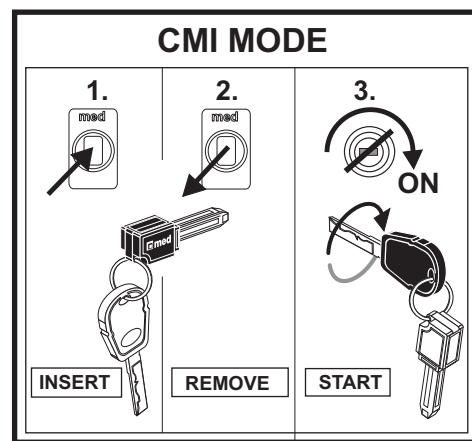


# USER'S GUIDE

To start up the engine it is necessary to insert the **med** electronic key, take it out and start up the engine within the selected time (**30 seconds** default).

After this time it is necessary to repeat the procedure.

On turning the ignition key off, the immobilizer is activated within the selected time (**30 seconds** default).



## OPERATING INSTRUCTIONS

- The blinking LED indicates the **MED 311.1** system is active.
- On inserting the **med** electronic key, the LED comes on with a steady light to indicate the code has been recognized.
- On taking out the electronic key and turning the ignition key **[+15] ON** (instrument panel ON) within the selected time, the LED goes out and the engine can be started up.
- On switching off the engine, after the selected time, without turning the ignition key ON, the LED goes back to blinking slowly, indicating that the immobilizer has been activated.
- To start up the engine, it is necessary to repeat this procedure.

**WARNING: With the electronic key inserted the engine will not start.**

- **IT IS RECOMMENDED TO ATTACH THE med ELECTRONIC KEY TO THE IGNITION KEY.**

## DISABLING KEYS THAT HAVE BEEN LOST OR STOLEN

With the following procedure it is possible to disable or to rehabilitate keys lost to disconnected immobilizer (led OFF):

1. Turn the ignition key round to position **ON** (instrument panel on) and **OFF** (instrument panel OFF ) **14** times altogether finishing with the key **OFF**.
2. Insert and then extract, all the keys to be enabled (in sequence).
3. When you have finished turn the ignition key **ON/OFF** once more.

**WARNING:**

- LED lights up and flashes for short intervals if a wrong key is plugged in.
- The **DUPLICATE** keys you ask **med** for, through its sales network, are already enabled.

## IMMOBILIZER ACTIVATION TIME

The activation time can be selected from **4** different valves between **30 seconds** and **5 minutes**.

The default setting is **30 seconds**.

## PROGRAMMING

With the ignition key **[+15] OFF**, insert and extract the **med** electronic key once (system on stand-by).

Start the following procedure within **30 seconds**:

- Turn the ignition key **[+15] ON** and **OFF** consecutively for a total of **20 times**, ending with the key **[+15]** turned **OFF**.
- After the LED confirmation signals, insert and extract one of the **med** electronic keys for the indicated number of times:

Number of times	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Selected time	<b>30 seconds</b>	<b>90 seconds</b>	<b>3 minutes</b>	<b>5 minutes</b>

- Turn the ignition key **[+15] ON** and **OFF** one more time to confirm.

## DUPLICATE CHD 300 KEYS

Duplicates can be requested through our sales network.

## MAINTENANCE

The **MED 330.2** immobilizer is MAINTENANCE FREE.

## IMPORTANT

- Installation must be carried out by qualified staff.
- The **MED 311.1** electronic unit and the key socket must be positioned so as to prevent any infiltration of fluid or condensation.
- The INSTALLER has to provide the vehicle owner with the attached INSTALLATION CERTIFICATE properly filled in and undersigned, which are also valid for the warranty, as well as with these operating instructions.
- Landi Renzo S.p.A. disclaims all liability and suspends WARRANTY in the event of improper use to the product or any part of it, tampering or combination with any devices that are not envisaged herein.
- The device is assembled with particular procedures that guarantee a perfect seal. It is therefore to open the device.

## HOMOLOGATIONS

The immobilizer is homologated in compliance with the **European Directive 95/56/EC** concerning the immobilizers working and security under the following approval

N.  I-00 0114

## TERMS OF WARRANTY

Technical warranty has a duration of 24 months from installation date, ex works, for parts considered defective at the incontestable opinion of Landi Renzo S.p.A.

This form of cover excludes external labour costs and all other charges for whatever reason.

## SPECIFIC WARNINGS:

1. Disconnect the battery negative before making the electrical connections.
2. Do not use a “power tap” for the connections.
3. OBSERVE THE MAXIMUM LOADS INDICATED for the outputs.
4. Position the **MED 311.1** electronic unit inside the vehicle, NEVER IN THE ENGINE BAY, taking care that the cables come from the bottom so as not to carry any water or condensation.
5. **Position the system components in an area where there can be NO infiltration of liquids.**
6. Position the other system components in the vehicle and then, following the main and specific diagrams, lay out the standard wiring supplied. Do NOT position cables or connectors close to sources of heat, or next to “sharp” or “abrasive” places.
7. Power up the system only after completing the electrical connections.
8. Complete the connections of the **med** immobilizer according to the specific instructions.
9. Give the operating instructions and the certificate of correct installation to the user, which are also valid for the warranty.

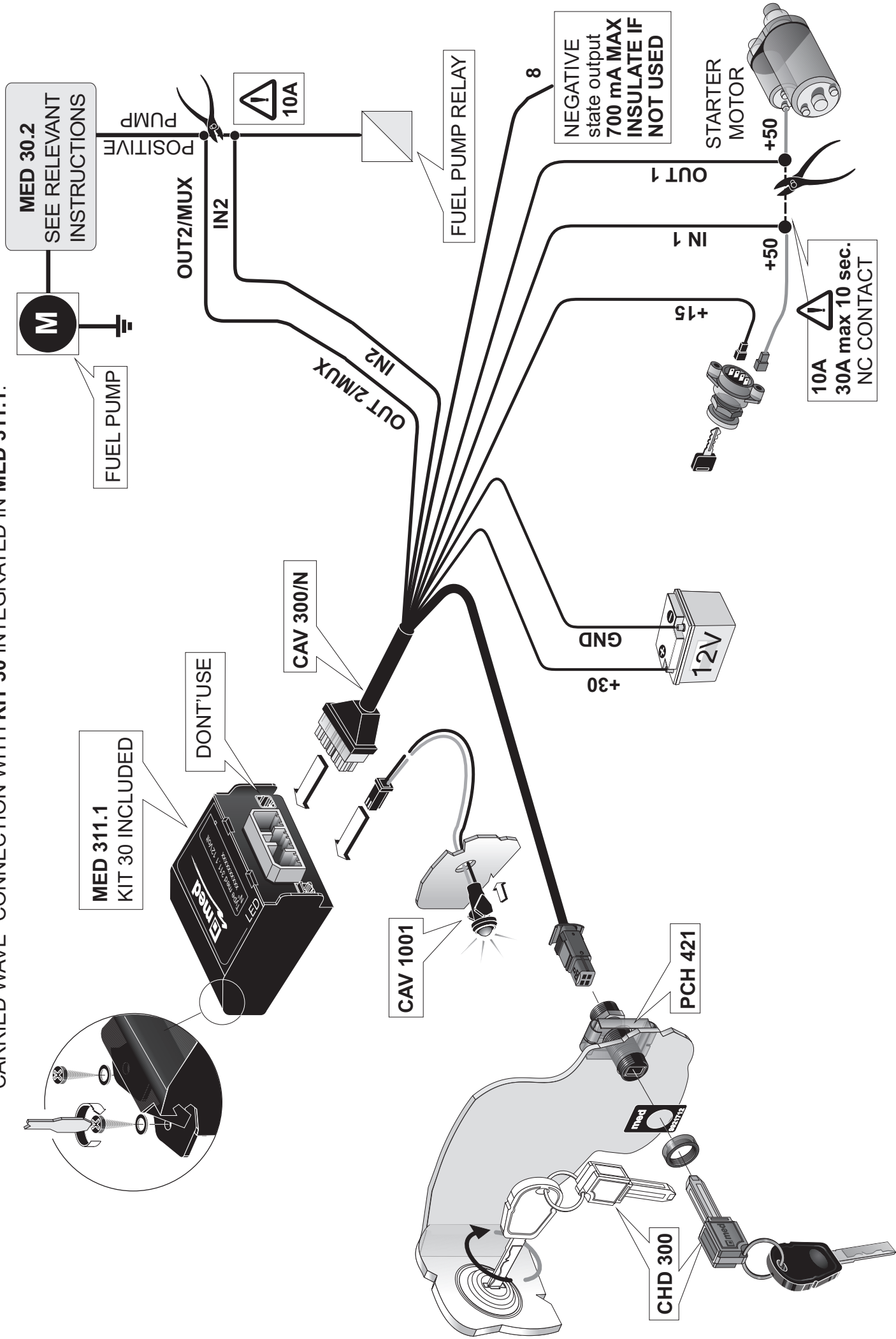
## MED 311.1: CONNECTIONS

- **+ 30: Positive fixed** always present direct from the positive battery terminal or a reliable point.
- **+ 15: Positive** ignition key present also during starting.  
**WARNING:** On switching off the ignition key, the output must cut off immediately.
- **GND: Negative** (earth) always present, direct from the battery negative terminal or a point on the chassis frame made by the vehicle manufacturer together with other connections for grounding.
- **IN1-OUT1:** Normally **Closed** contact of the relay in the module suitable for one additional powerbreak in the vehicle system (**10 A** continuous, **30 A** peaks for **10 seconds**).
- **IN2:** The **positive power wire of the fuel pump from the original relay**.  
A **KIT 30** is contained between the **IN2** and **OUT2/MUX** wires. **Capacity 10 A**.
- **OUT2/MUX:** The positive power wire of the fuel pump directed to the pump.
- **8:** State negative output **700 mA** with immobilizer activated.

Landi Renzo S.p.A. reserves the right to make any changes or technical modifications to the product at any time, without prior notice thereof.

The technical specifications and operation are given in the “OPERATING INSTRUCTIONS”.

"CARRIED WAVE" CONNECTION WITH KIT 30 INTEGRATED IN MED 311.1.



## ATTENTION



The device must only be installed by qualified personnel.

Strictly comply with the enclosed instructions when **INSTALLING** the device.  
Comply with **ALL** the **RECOMMANDATIONS** and use an **ANTISTATIC BRACELET**.

Failure to take all the necessary precautions may result in **DANGER OF EXPLOSION**.



## RECOMMENDATIONS FOR ASSEMBLY



**WARNING! DANGER OF EXPLOSION! Take all the necessary precautions.**

**In particular:**

- **WEAR AN ANTISTATIC BRACELET** WHEN OPENING THE FUEL TANK (to REMOVE the FUEL PUMP UNIT).
- **DO NOT SMOKE - KEEP AWAY FROM LAMPS OR ELECTRICAL DEVICES.**
- **DO NOT WORK NEAR NAKED FLAMES, SPARKS OR GLOWING PARTS.**
- **MAKE SURE THAT THE FUEL LEVEL DOES NOT EXCEED THE HEIGHT OF THE PUMP BEING REMOVED** ( $\frac{1}{2}$  the level of the tank is advisable).
- **IT IS ABSOLUTELY FORBIDDEN TO OPERATE THE ELECTRIC PUMP OUTSIDE THE TANK.**

### Legenda

- |                                           |                                                 |
|-------------------------------------------|-------------------------------------------------|
| 1. Fuel pump unit                         | 11. <b>MED 30.2D</b> immobilizer                |
| 2. Fuel tank                              | 12. Pump seal                                   |
| 3. Vehicle panel                          | 13. Clamps                                      |
| 4. Original connector of pump unit        | 14. <b>MED 311.1 - KIT 30 included</b>          |
| 5. Fuel pump retaining ring nut           | 15. <b>KIT 30</b> module                        |
| 6. Compensating spring                    | 16. Original relay of fuel pump                 |
| 7. Float                                  | 17. Electric pump <b>positive</b> power harness |
| 8. Electric pump                          | 18. <b>MED 311.1 - IN 2</b> wire                |
| 9. Fuel level                             | 19. <b>MED 311.1 - OUT2/MUX</b> wire            |
| 10. Original wires powering electric pump | 20. Electric pump <b>negative</b> power harness |

## MED 30.2 - ASSEMBLY INSTRUCTIONS

1. Disconnect both the battery terminals and move the relative cable lugs well away.
2. Slacken off the fuel tank plug until it vents.
3. Identify the submersed fuel pump unit **1**: figure **a**.
  - through the relative inspection trap under the rear seats or in the luggage compartment;
  - if there is no inspection trap, slacken off the fuel tank after having lifted the vehicle in a safe way (comply with the instructions supplied by the manufacturer).
4. Disconnect the original power connector **4** of the fuel pump unit: figure **b**.

5. **WARNING: Wear an antistatic bracelet and make sure that its terminal is connected to an effective grounding point on the chassis of the vehicle to prevent the formation of sparks due to electrostatic charges.**
6. Detach the fuel pipes from the pump unit, remembering to mark them (to prevent them from being reversed).
7. Mark the angular position of the pump unit on a fixed part (because it may turn afterwards).
8. Unscrew the ring nut **5** used to retain the pump unit, using the relative tool indicated by the vehicle Manufacturer.
9. Remove the pump unit and empty out all the fuel, **PREVENTING** the float **7** and seal **12** from being damaged: figure **c**.
10. Mount the immobilizer **MED 30.2D**: With the pump unit on the work bench, detach wires **10** that connect the original connector **4** and the electric pump **8**, substituting them for the wires of **MED 30.2D**, and complying with the polarity and direction: figure **b - c**.

**WARNING: DO NOT DAMAGE THE OUTPUT OF THE WIRES FROM MED 30.2D.**

11. Fix the immobilizer **11** to a suitable point on the pump unit **1** using the supplied clamps **15**: figure **d**.

**WARNING:** the immobilizer **11** must be enbloc with the pump unit **1** in the fuel tank. It must not obstruct the regular movement of float **7** or compensation spring **6**.

12. Remove the seal **12** of the pump unit **1**, taking care to prevent it from being damaged. Now fit it back on tank **2**. Carefully place the pump unit **1** back into tank **2**.
13. Position the pump unit **1** in its original angular direction.
14. Make sure that pump unit **1** is unable to turn by tightening the ring nut **5** to the indicated driving torque with the relative tool.
15. Re-connect the original fuel pipes in the right direction and screw on the tank plug.
16. Re-connect the original powering connector **4**.

**WARNING:**

The pump unit can **ONLY** be powered if it is enclosed in the tank and immersed in the fuel.

**IT IS ABSOLUTELY FORBIDDEN** to operate the electric pump when it is out of the tank - in this case, there would be a **REAL DANGER OF EXPLOSION** due to the presence of air.

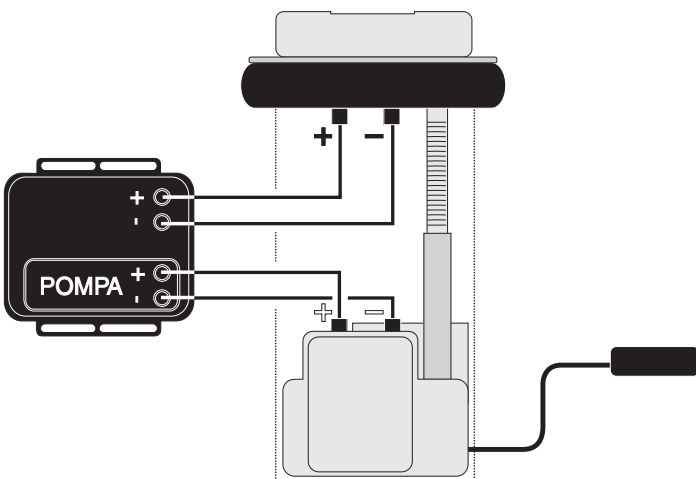
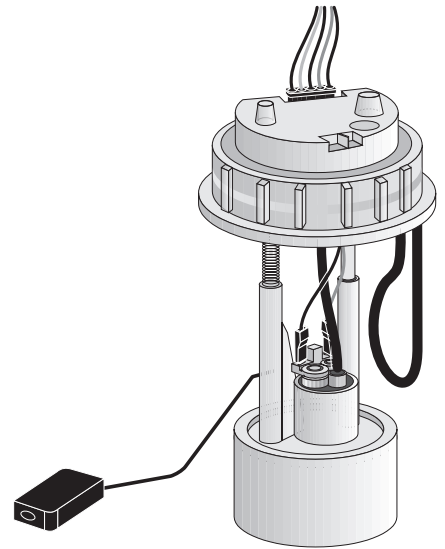
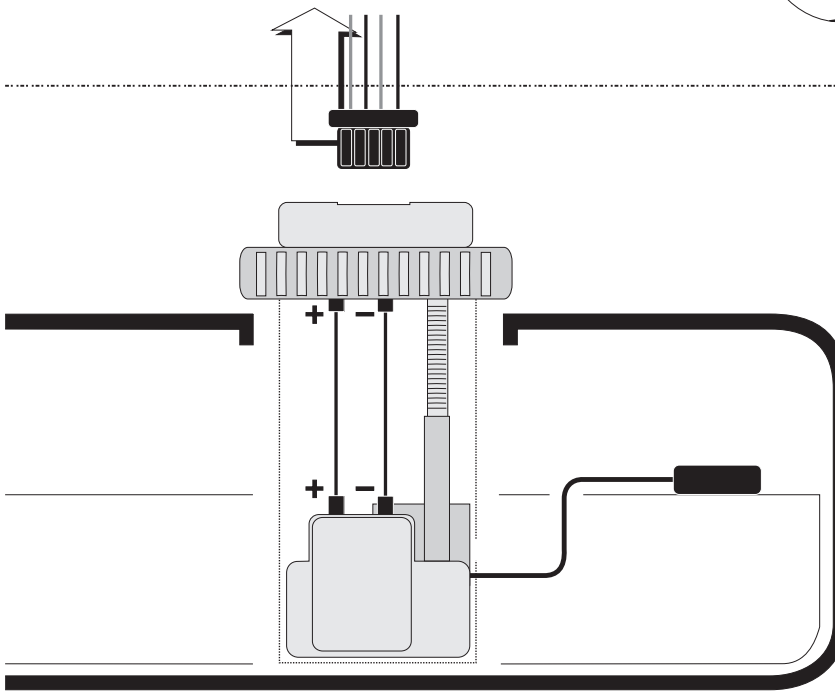
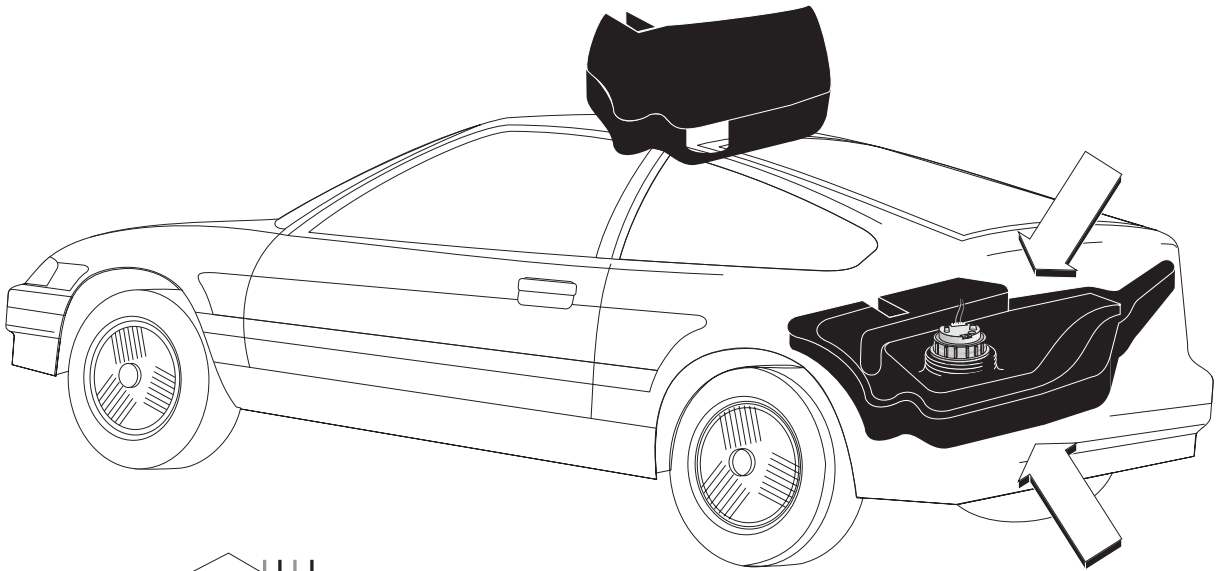
17. Identify the **positive** wire **17** that powers the pump unit under the dashboard, near to the **MED 311.1** central unit **14** : figure **e**.

Cut this wire and connect **KIT 30** in series with it. **MED 311.1 - KIT 30 INCLUDED**

**NOTE: KIT 30** is an **IMMOBILIZER** that allows the control code of the immobilizer to be transmitted via the original positive live wire of the pump unit.

This device **PREVENTS** the code from being transmitted to the entire electrical system of the vehicle.

18. Finish assembling the **MED 311.1** as indicated in the relative instructions.
19. Connect both the battery terminals and conduct a preliminary test to make sure that the system operates correctly (see **TESTING** and **INSTRUCTIONS FOR USE**).
20. Having obtained a positive result to the previous test, close the relative inspection trap or definitively remount the fuel tank. Restore the system to its original conditions.



ERROR: rangecheck  
OFFENDING COMMAND: setdash

STACK:

0  
[ 0 0 0 0 0 0 ]