INSTALLATION MANUAL

TX80 URBA ONE

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1. INTRODUCTION

The focus of this document is the description of the TAXITRONIC TX80 URBA ONE right installation. the order in which the equipment installation and programming must be carried out is established.

2. INSTALLATION

2.1. TX80 URBA ONE LOCATION AND INSTALLATION

The equipment is supplied with the connector window opened. It is not necessary to open it to proceed with the connection. All the connectors of the TX80 URBA ONE are inside the equipment. The connector window is located at the rear of the equipment, which will be covered and sealed at the end of the installation.

The rest of the devices in the installation are interconnected with the TX80 URBA ONE, so that the installation of the TX80 URBA ONE cannot be sealed until the rest of the installation process is finished.

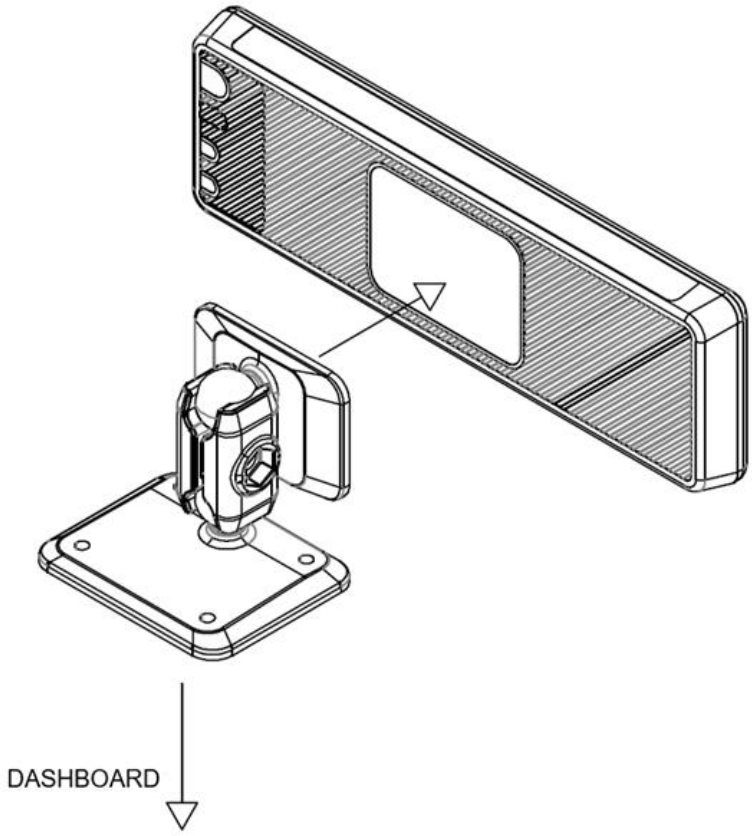
TX80 URBA ONE is fixed to the dashboard with an adhesive bracket. If the surface is rough, so adhesive is not possible, the bracket base can also be fixed to the dashboard with screws

1. Remove the adhesive backing from the bracket and attach it to the smooth back of the TX80 URBA ONE evenly.

2. The adhesive resistance increases as it dries.

After 20 min	50%
After 24 hours	90%
After 3 days	100%

3. Adhere the bracket and the taximeter to the dashboard and adjust the height and orientation.



4. Once located and oriented, the lateral screw of the bracket must be tightened until the equipment is fixed.

3. ELECTRICAL INSTALLATION

The TX80 URBA ONE Has the following connectors:

- **(1) Power supply**

Contact number	Colour	Function
1	-	-
2	Green/White	Distance pulses
3	-	L4
4	-	L3
5	-	L2
6*	Brown	Emergency signal
7	Violet	Passenger sensor
8	Blue	Contact key
9	Yellow	Position lights
10	Green	Rooflight (L1)
11	Red	+ 12V
12	Red	+ 12V
13	Black	Ground
14	Black	Ground

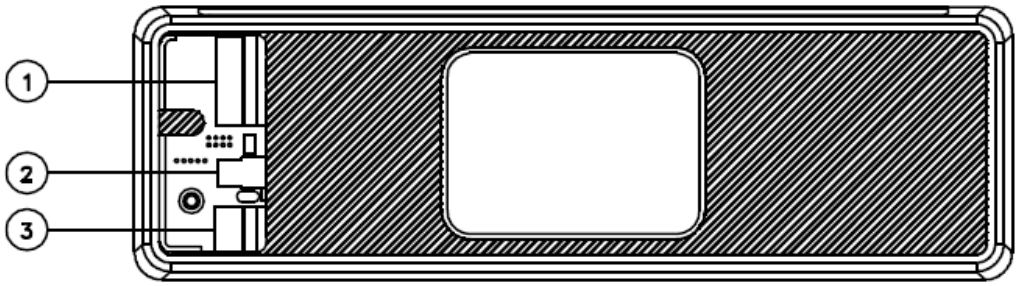
- **(2) Serial Rooflight**

  The connector on the cable has a white mark, which must be visible from the connectors cover.

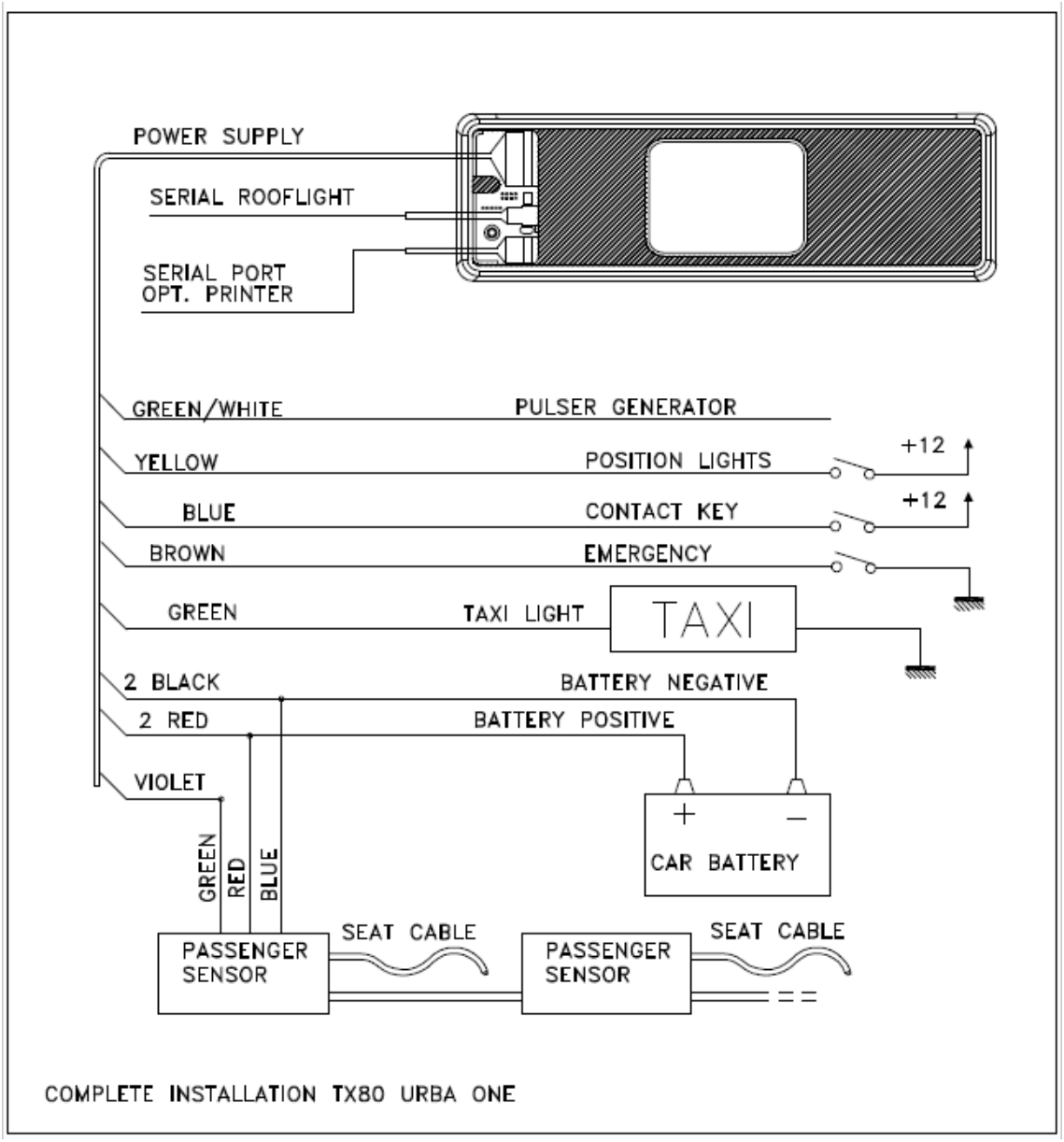
Contact number	Function	
1	GND	
2	+ 12V	
3	TXD	TTL 0 – 5 V
4	RXD	TTL 0-5 V

- **(3) Serial Port (IR80)**

Contact number	Function	
1	+ 12 V	
2	+ 5 V	
4	TXD	TTTL Levels 0 - 5 V
5	RXD	
6	GND	



- **COMPLETE INSTALLATION**



RECOMMENDATIONS FOR THE ELECTRICAL INSTALLATION

- Disconnect the positive terminal on the battery until the whole electrical installation is completed.

- Any manipulation of the taximeter or of the external lights must be done while the taximeter is disconnected from the power supply

- Always take the positive and negative directly from the battery in order to avoid false contacts and to obtain a more filtered power supply.

- Always connect the cables to the battery by means of a terminal, never by winding the wires onto the contact.

- If the cables cross a plate to reach the taximeter, they should go through a protective rubber casing.

- If the cables are too long, they should be cut to the required length and not rolled up under any circumstances.

- If the vehicle has a radio transmitter, separate its installation from that of the taximeter as far as this is possible.

- If it is possible no element that is connected to the taximeter should be fixed to the same support as the aerial of the radio.

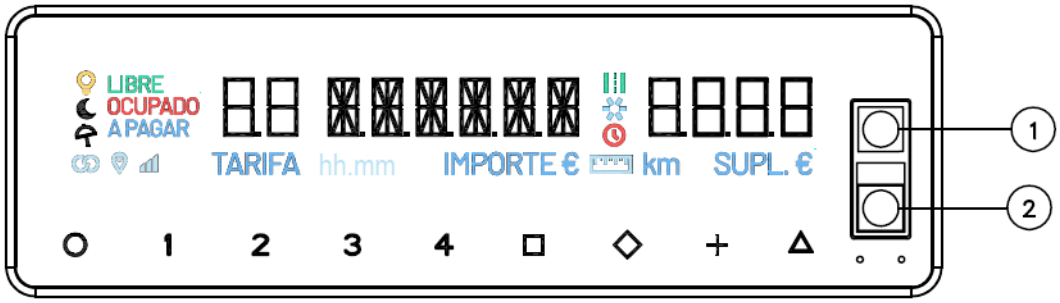
- Close the connectors cover before setting the taximeter to the bracket

- To set up the device and the charge of the tariff, the tariff screw has to be loosened. It is enough and advisable not to take out totally the screw

4. SEALING

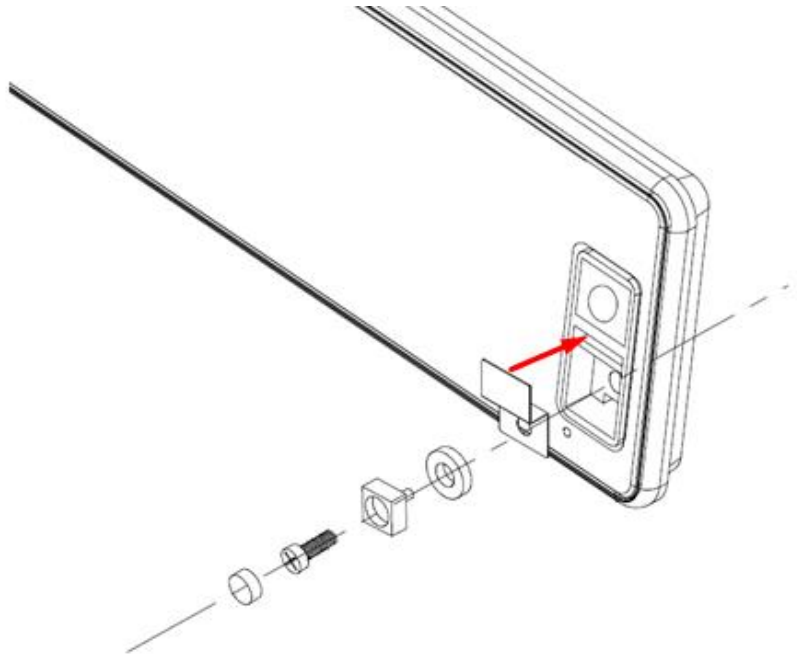
- Seal Nº 1: Seals the taximeter box, preventing access to the electronic board.

- Seal Nº 2: Seals the connectors cover, so it seals the electrical installation and the tariff connector.



To load the tariff and modify its parameters, the tariff cover must be loosened. In this way, the pushbuttons located in the hole of the seal will not be pressed.

To finish the sealing, the tab of the tariff cover must be inserted inside the equipment (below the rib marked in the image) in this way the connector is hidden and the pushbuttons pressed.



The taximeter is prepared to be sealed with the plastic seal that has been supplied to you. In some localities, a cable seal is necessary: If this type of seal is required, a square and a screw with a drilled head are included in the equipment kit.

5. TECHNICAL CHARACTERISTICS

The general technical characteristics of TX80 URBA ONE are as follows:

- Supply voltage:

- Nominal = 12 V
- Max = 30 V
- Min = 8 V

- Maximum consumption without external lights = 300 mA
- Maximum consumption taximeter off = 6 mA
- Maximum consumption inside battery = 5 μA

- Maximum power 36 W for each external light of 60 W in case that 3 outputs are connected in parallel.

- Impulse generator power supply = 5 V

- Impulse generator input signal:

- Level 0 = -1 to 2,5 V
- Level 1 = From 4 to 25 V

- Maintenance of the information disconnected from the vehicle's battery = 5 years
- 40 V surges of 10 ms.
- Resistance to electrostatic shocks of 6 kv (Contact), 8 kV (Air).

- Protection against inverse connection.
- Internal connector protective fuse of 1,85 A.
- External fuse of 4 A.

- Operating Temperature: -25 a +70 °C

- Storage temperature for keeping the information - 40 to + 85º C

	Wide	High	Deep
TX80 URBA ONE	155	49	16

- "K" constant of the device from 500 until 80000 pulses per Km/ml.

- Mechanical environment M3

- Climatic environment E3

6. IMPULSE GENERATOR

6.1. INTRODUCTION

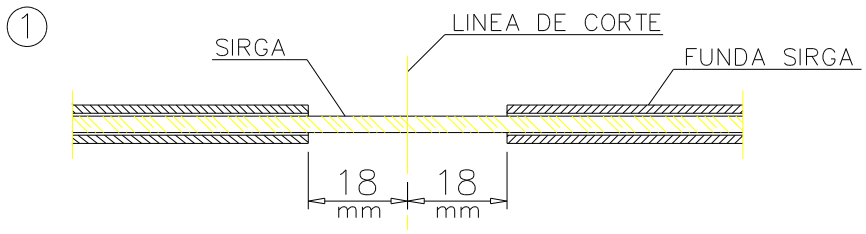
- For the vehicles with mechanical speedometer, you have to use a pulse generator that is managed by the taximeter.

- The pulse generator is inserted in the cable of the speedometer and converts the mechanical movement of this cable in an electrical signal, which is amplified and filtered by the taximeter.

6.2. INSTALLATION

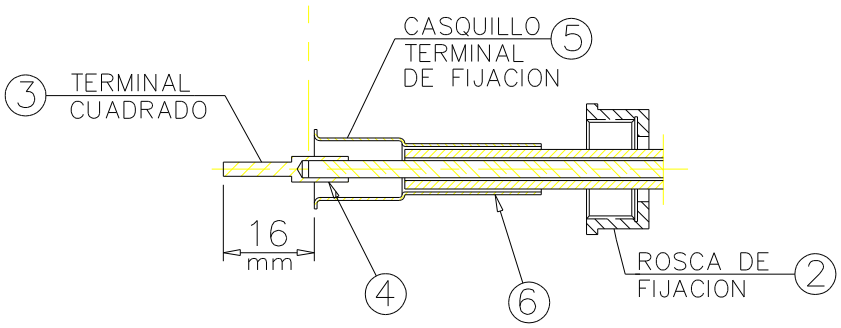
6.2.1. ASSEMBLY OF THE SPEEDOMETER CABLE AND PULSE GENERATOR

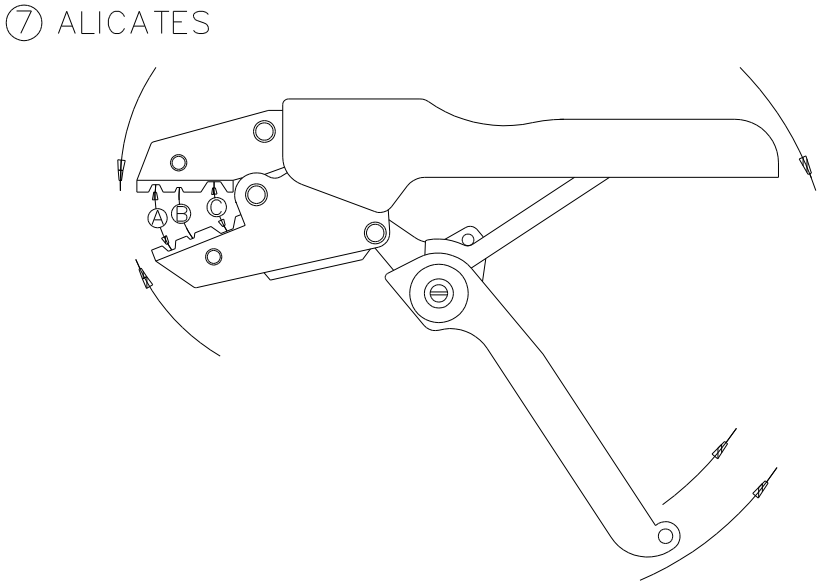
- First of all, part of the protecting cover of this cable must be removed and the cable must be cut (item 1)



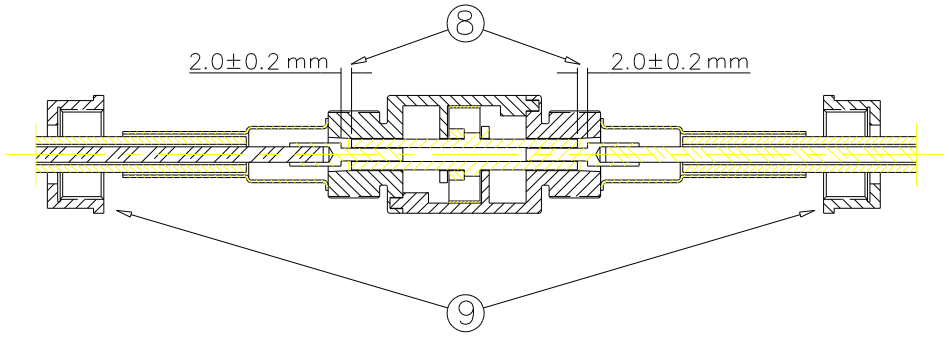
- A fixing ring (item 2) must be put in each of the two edges of the cable. The square terminals (item3) are placed on the cable and are fixed by pressing on the zone indicated with (4). This is done in position “A” or “B” of the pliers depending on the diameter of the square terminal.

- Afterwards put the cover ends (item 5) and press them on the part indicated in item 6 in the position “C” of the pliers.



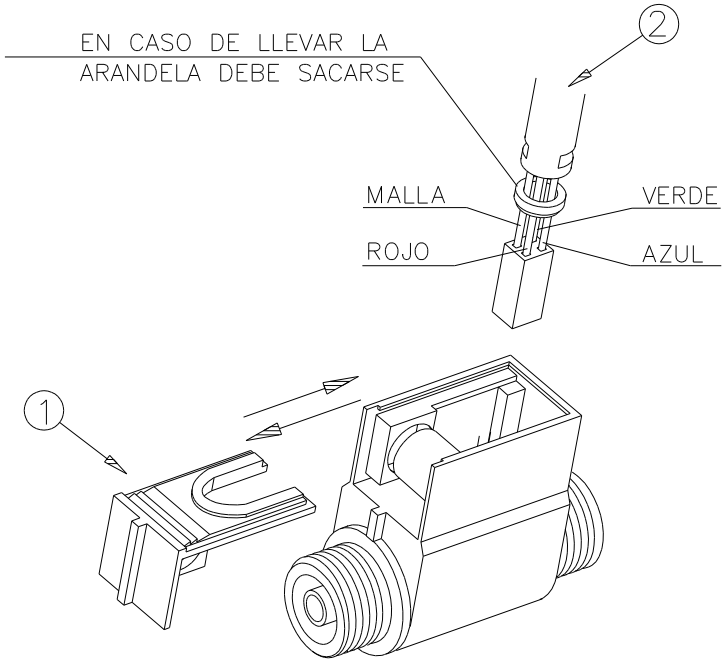


– Finally, all pieces are assembled by screwing together the two fixing rings taking into account that the separating space indicated by (8) must be sufficient.

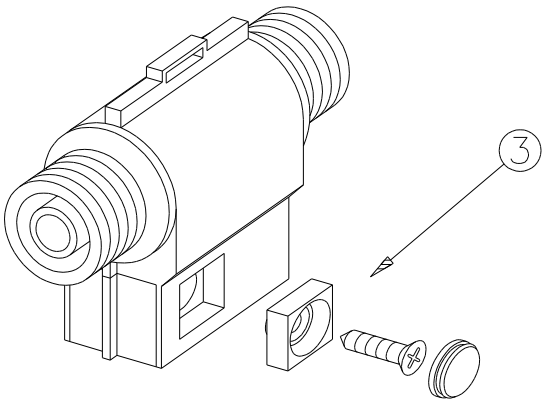


6.2.2. CABLE CONNECTION, COVER CLOSING AND PULSE GENERATOR SUPPORT

- To connect the pulse generator cable, it is necessary to open the pulse generator cover (item 1) after taking the closing screw out and moving the cover in the right direction indicated by the arrow. Connect the cable as indicated on item 2 taking into account the polarity of the connector.

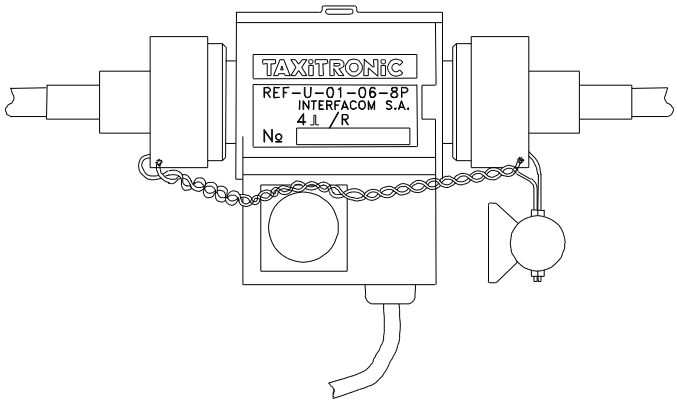


- Finally put the pulse generator cover back, fix it or seal it, if it is necessary (item 3) and place the pulse generator in the corresponding holder.



6.3. SEALING

– The pulse generator installation can also be sealed, as shown in the image.



6.4. TECHNICAL CHARACTERISTICS

– The main technical characteristics of the pulse generator are:

– Sensor type:	Hall effect cell
– Number of pulses / revolution:	4 with double impulses train
– Feeding voltage:	4 to 18 V
– Consumption at 5 V:	10 mA

7. VEHICLES WITH ELECTRONIC IMPULSE SIGNAL

- The distance signal supplied by the car can be connected in two possible ways:

  - By connecting this signal to the Red/White wire on the Power Supply cable.

  - By using the dedicated impulse generator connector, with a shielded cable, or even mechanical shield, according to local regulations.

- The adaptation of the signals of the different vehicles is done by an internal electronic circuit with the following characteristics:

  - Hysteresis of the input is configurable
  - It adapts to different levels
  - Optional Pull–up
  - Optional Pull–down
  - Constant K is adjustable between 500 and 80000 km-1.

- All these adjustments are done from the tariff changer. It is necessary to unseal the device.

8. ERROR MESSAGES

– The possible error messages that may appear on the display are listed below.

- E-2 Roof lights failure: The roof lights are not correctly connected or some of its bulb lights doesn't work. This error is shown if it is enabled in the tariff.

- E-5 The taximeter is out of the configured revision period: This message is shown when the taximeter is out of the configured revision period. It is resolved by setting a new stop date or disabling it.

- E-6 Excess speeding. This error is shown if it is enabled in the tariff.

- E-7 Working time max exceeded: This error is shown when the hours of the shift have finished. The error automatically disappears when you restart the day.

- E-8 Error in the tariff parameters: The taximeter has not the tariff loaded, or the tariff loaded is wrong. The error is solved by charging tariff.

- E-10 Printer failure: The printer is not working, is incorrectly connected or has no paper. This error is shown if it is enabled in the tariff.

- E-11 Serial number error: This error is displayed if the serial numbers are not linked. The error is solved by charging tariff.

- E-12 RAM memory loss: This error is displayed if the device has a depleted battery or there is a malfunction. The error is solved by replacing the internal battery of the equipment.

- E-Z Anti Zapper error: A distance pulse error detected. This error is shown if it is enabled in the tariff. The error is solved by charging tariff.

- E-NS Serial Number Pairing Error: This error is displayed when a TX80 is connected to a device to which it is not paired. This pairing is done when charging tariff.