



Read the instruction manual and store it for future reference

*USER GUIDE*

**ELECTRICAL STEP PE-55**

**Review 09/19**



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# 01 INTRODUCTION

## 01.1 Using this manual

This manual provides using and maintenance instructions of the product, as well as the way of fixing minor faults that could appear.

It is recommended before the operation of the product to read carefully this manual in order to avoid damages caused by a misuse.

Do not lose this document, it should be accessible to any doubt that could appear by medical personnel.

Remember that a good use and maintenance are necessary for the proper operation of the product.

Each product incorporates an identification sticker with the serial number and the model. Keep these numbers so that they can be indicated to the dealer if necessary.



# 01 INTRODUCTION

## 01.2 Meaning of Symbols



General warning of possible injuries



Read the user manual



Certificate of Quality Management System



IQNet Certificate



This product is compliant with the specifications of the Directive 93/42/CEE



QR Code (Access Online Web)



Unlocked Locked

## 01.3 Serving request

For information of the correct interpretation of the instruction manual, the use, maintenance, installation and restoration of the product, please contact Promeba customer service T. 93 837 12 00, Fax 93082061008, email [promeba@promeba.com](mailto:promeba@promeba.com) or write to PROMEBBA, S.L. - Ctra C-16 Km 59.5 · 08650 Sallent (Barcelona) · SPAIN.

## 01.4 Demolition

When the devices are no longer suitable for use, if they have not been contaminated by any particular agent, they can be disposed of as normal solid waste, otherwise, follow the current demolition regulations.



**WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2012/19/EU WEEE:**

At the end of his life, the product must not be disposed as household waste. Can be taken to special recycling centers provided by local government, or return it to the dealer on purchase of a new device of the same type and used for the same functions. Dispose of the product separately avoids possible negative consequences for the environment and human health resulting from inappropriate disposal and allows to recover the materials in order to obtain significant savings in energy and resources. The symbol on the label indicates separate collection of electrical and electronic equipment.

**Warning:** One incorrect disposal of electrical and electronic equipment could result in sanctions.





# 01 INTRODUCTION

## MEASURES AND CHARACTERISTICS // ELECTRICAL STEP PE-55

OPEN-UP DIMENSIONS	555x530x200 mm
FOLDED DIMENSIONS	555x360x180 mm
TENSION	12 V
WEIGHT	7,5 Kg
MAX. LOAD	250 Kg



## 02 WARNINGS

### 02.1 General warnings

- The product has to be used by trained personnel only, who must have specific training for the use of this product and not for similar products.
- Training routines must be registered on a special register in which the names of the persons trained, their trainers, the place and the date of the training are indicated. This registry, which will certify the eligibility of the operators to use the Promeba product, must be retained for a period of 10 years after the elimination of the product. This record will be made available to the competent authorities and/or the manufacturer if requested.
- **Promeba, S.L.** is always at your disposal to plan the product formations.
- Before carrying out any type of operation on the product (training, installation, use), the operator must carefully read the attached instructions, paying special attention to the correct safety precautions and the procedures that must be followed for the installation and for the correct use.
- If you have any questions regarding the interpretation of these instructions, please contact **Promeba, S.L.** for any kind of clarification.
- If the instructions belong to another device and not to the purchased device, inform the manufacturer immediately and avoid the use of this device.
- Before each use of the device, the perfect functioning of the device must be verified, as specified in the instruction manual. In case of detecting damages or anomalies that could influence in some way the correct functioning or safety of the device, the patient or the operator; the device must be immediately removed from service and you must contact the manufacturer.
- In case of detecting any failure or incorrect functioning of the device, it must be replaced immediately by a similar device in order to be able to guarantee the rescue procedures without any interruption.
- Regularly check the product, carry out the prescribed maintenance and respect the service life, as indicated by the manufacturer in this manual.
- Do not allow people without training to help during the use of the device, because they could cause damage to the patient or to themselves.
- It is totally forbidden to use the device in any other way than the one described in this manual.
- Do not alter or modify this device in any way; any modification of this device could cause malfunctions and injuries to the patient and/or rescue personnel.
- Handle with care.
- The device must not be manipulated in any way (modification, adjustment, replacement). In such cases all responsibility will be denied for any malfunctions or injuries caused by this device. In addition, CE certification and product warranty will be considered void.

## 02 WARNINGS

- All those who modify or have modified, prepared or have prepared medical devices in such way that they no longer serve the purpose for which they were designed, or no longer provide the desired service, must satisfy the valid conditions for the introduction of these in the market.
- Register and store with these instructions: lot number, place and date of purchase, first date of use, date of checks, name of operators and any other comments.
- Be sure to take all necessary precautions to avoid the dangers that may arise as a result of contact with blood or body fluids.
- Do not store the device under heavy objects that could cause structural damage.
- Store in a cool, dry, dark place and do not expose the device directly to the sun.
- Store and transport the product in its original packaging.
- The product must not be exposed or come into contact with any source of combustion or flammable agents.
- Position and adjust the device being careful not to cause any obstruction to rescuers and/or any other rescue equipment.
- When the product is being used, the assistance of qualified personnel must be guaranteed
- Attention: laboratory tests, post-production tests, instruction manuals cannot always consider all possible scenarios of use. This means that, in some cases, the performance of the product could have significantly different from results to date obtained. Instructions are continually updated and are under the strict supervision of fully qualified personnel with the appropriate technical formation.
- In addition, both public and private services are obliged to inform the manufacturer of any measures that should be adopted in order to take the necessary steps to guarantee the safety and health of patients and users of any medical device.
- As a distributor or end users of products manufactured and/or marketed by **Promebea, S.L.**, it is strictly required that you have a basic knowledge of any legal requirement that applies to the supplied devices, for the countries in which they will end up (including laws and norms regarding technical specifications and/or safety requirements) and, therefore, it is also strictly required to have the necessary knowledge to guarantee all aspects related to the total conformity of the products to the regulations in the corresponding territory.
- Promptly notify **Promebea, S.L.** with respect to any revision that the manufacturer must carry out in order to guarantee the conformity of the product to the legal specifications of the territory (including those resulting from rules and/or norms of other nature).
- Act, with due care and diligence, and help ensure compliance to general security requirements of all devices marketed in the territory, providing end users with all the information necessary to perform periodic checks of their devices, as specified in the instruction manual.

## 02 WARNINGS

- Actively contribute to the security controls of the products sold, communicating any relevant risk analysis information both the manufacturer and to competent authorities so that the necessary measures can be taken promptly.
- You are aware that, in case of it does not comply with the above mentioned requirements, you will be considered totally responsible for all damages that may occur. Therefore we expressly disclaim any responsibility and/or liability for your non-compliance with the present regulatory provisions.

## 02 WARNINGS

### 02.2 Specific warnings

- Establish a maintenance program and periodic tests, identifying a reference employee. The person entrusted with the ordinary maintenance of the device must guarantee the basic requirements foreseen by the manufacturer in the user manual.
- Use only accessories/spare parts original or approved by **Promeba, S.L.**, in order to carry out any operation without altering or modifying the device; otherwise we assume no responsibility for the correct operation or damage resulting from the device to the patient or the operator and the warranty will be considered void, in accordance with the compliance of the Medical Device Directive 93/42/EEC.
- Always respect the maximum load capacity of the device, as indicated in this manual. The maximum load capacity means the total weight distributed according to the human anatomy. When determining the load of the total weight on the product, the operator should consider the patient's weight, equipment and accessories. In addition, the operator must consider that the overall dimensions of the patient do not reduce the functionality of the device.
- Never leave the patient without any assistance in the device, because he could be injured.
- The device and all its components, after being washed, should be allowed to dry completely before storage.
- Lubrication must be carried out after cleaning and complete drying.
- Follow the procedures approved by the Emergency Medical Services for the immobilization and transportation of the patient.
- Follow the procedures approved by the Emergency Medical Services for the positioning and transportation of the patient.
- Avoid contact with sharp objects.
- Do not use the device if it is pierced, torn or frayed.
- The maximum weight sustained by each rescuer must comply with the requirements prescribed by the law of the country, related to health and safety at work.
- Make sure the product is well anchored at its corresponding anchor points.
- Always use the switch supplied by **Promeba, S.L.**, otherwise, the manufacturer is not responsible for possible breakdowns.
- Do not use the pedal to climb, if it is not fully extended, since the engine could be seriously damaged.
- The step must be folded whenever the vehicle is moving.



## 02 WARNINGS

### 02.3 Contradictions and side effects

The use of this device, if used as described in this manual, does not present any contradiction or collateral effect.

### 02.4 Physical requirements of the operators

This product is intended only for use by specialized operators. The rescue team must have, at least, the following requirements:

- Physical capacity to be able to operate the device.
- Being able to grasp the device firmly with both hands
- Strong back, arms and legs to lift, push and pull the device.
- Have a good muscular coordination.



The operators must be trained to be able to transport efficiently, efficiently and safely.

For extremely heavy patient loading procedures, operations on difficult terrain and, in particular situations more operators may be needed (not only 2 as in normal conditions).



The capabilities of the various operators must be considered before determining the function they will have in the operation of the device.

## 03 INSTALLATION

### 03.1 Transport and unpacking

#### 1. Transport

Before transporting the product, make sure it is properly packed, making sure there are no risks of crashes, bumps or falls during transport.

Keep the original packaging for use in case of any other transport and storage. Damage to the product caused during transportation and handling is not covered by the warranty. Repairs or replacement of damaged parts are the responsibility of the customer. The device should be stored in a dry and cool place, away from direct sunlight. It must not come into contact with chemical substances or agents that may cause damage and reduce safety features.

Durante el almacenamiento, no coloque materiales pesados sobre el dispositivo. El producto no debe considerarse ni utilizarse como estante para ningún tipo de material.

During storage, do not place heavy materials on the device. The product must not be considered or used as a shelf for any type of material.

- Always fix the load, if it is necessary stack. you should follow the diagram shown.
- Transport the level load and following all the precepts and regulations regarding the transport of loads.

#### 2. Unpacking

- Put the box on a flat and stable surface, open the seal carefully not to damage inside.
- Remove the product from the inside of the case.

Each product has been thoroughly inspected when leaving the factory. To ensure that the transport has not deteriorated it, please inspect the exterior and interior carefully, and in the event of any damage, contact the installer immediately.



# 03 INSTALATION

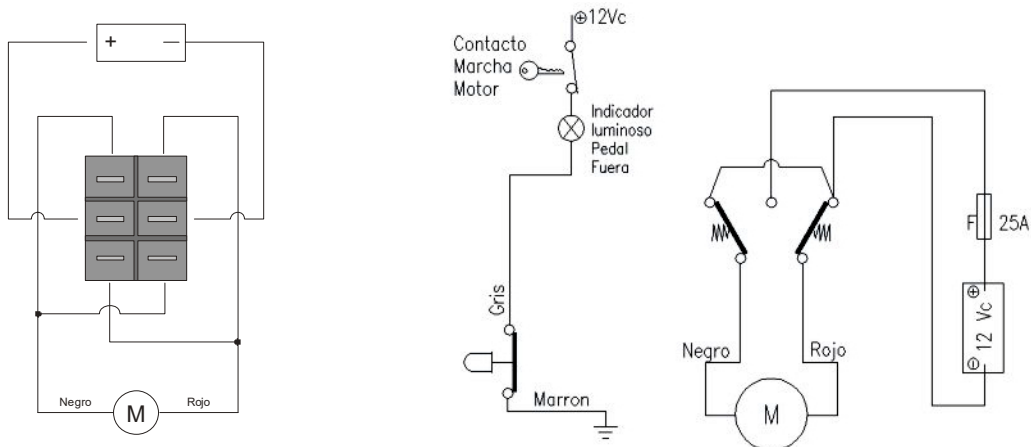
## 03.2 Installing the device

### 03.2.1 Mounting Kit Contents

	<u>UNITS</u>
• Switch	1
• Inverter fixing plate	1
• Screw DIN 7981 2,9x9,5	4
• Connector	6

### 03.2.2 Mounting

1. **Fix** the PE-55 on the bottom of the chassis in a solid way through collisions or holes of 9 trying to maintain the parallelism between the two supports to achieve a good operation.
2. **Electrical connection** of the inverter (fuse F 20 A).

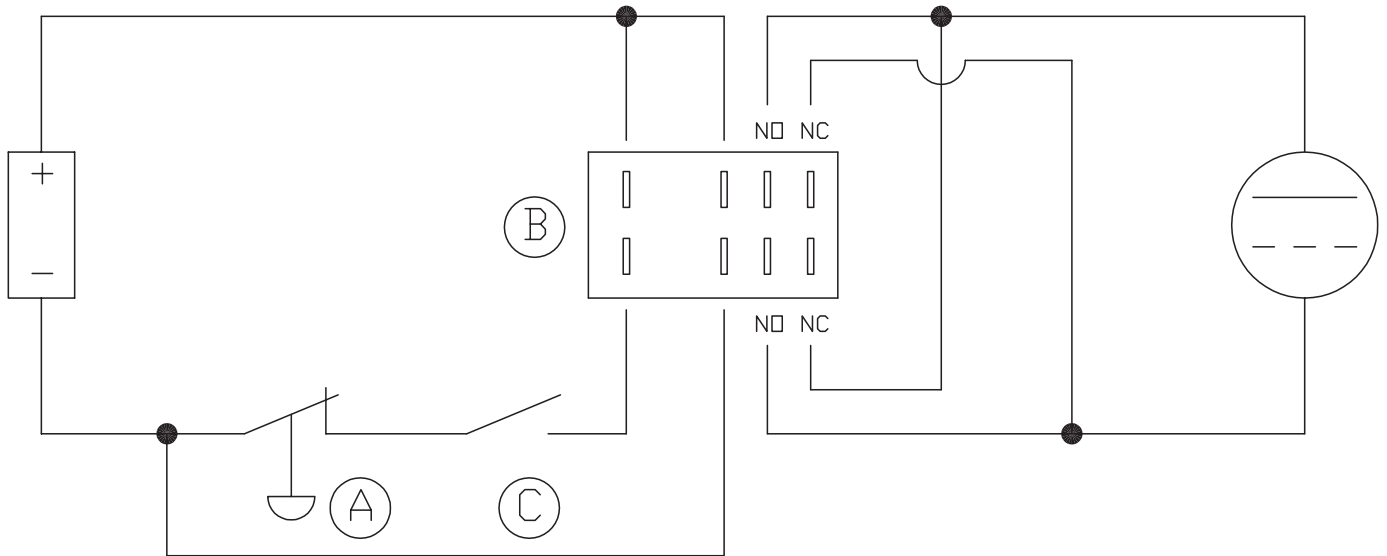


3. **Install the indicator light**, which indicates that the pedal is extended, at the moment we give the motor contact, to avoid accidents with the pedal out and the vehicle running.
4. **How to use**

The electric step works once installed through the switch, disconnecting automatically when it reaches its position.

## 04 ELECTRICAL CIRCUIT DIAGRAM

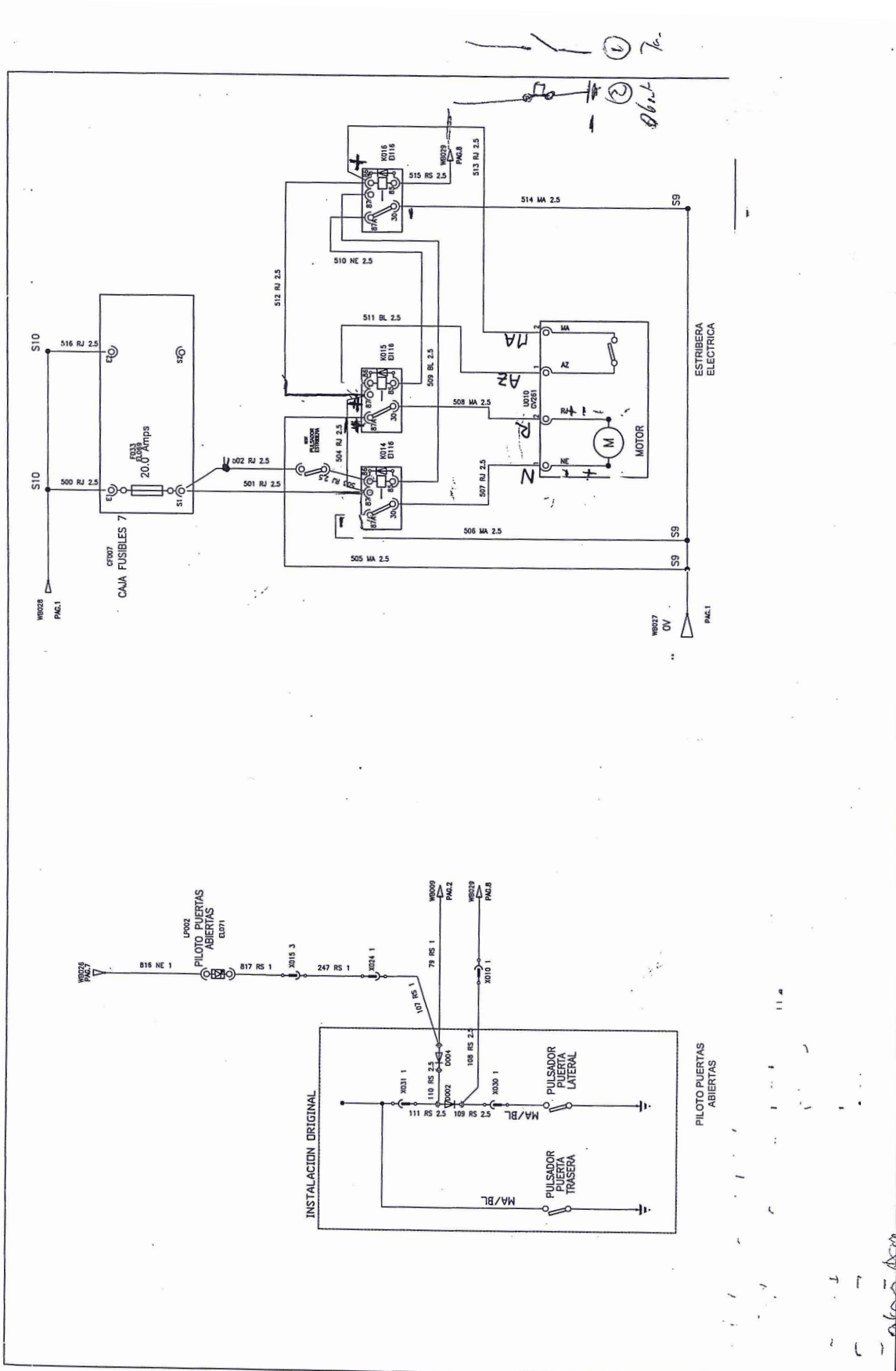
### 04.1 Electrical diagram of the automatic pedal



- A:** Micro or push button placed on the door  
if when the door is closed the microphone is pressed, it must be NC for the relay coil to be at rest
- B:** 12V DC 16A double contact relay
- C:** Switch. In case you want to hide the step while the door is open.

# 04 ELECTRICAL CIRCUIT DIAGRAM

## 04.2 Electrical diagram of the automatic opening



# 05 OPERATING

## 05.1 General elements of **ELECTRICAL STEP PE-55**

1. Motor
2. Electrical step

1



2


# 05 OPERATING

## 05.2 Elements of the ELECTRICAL STEP PE-55



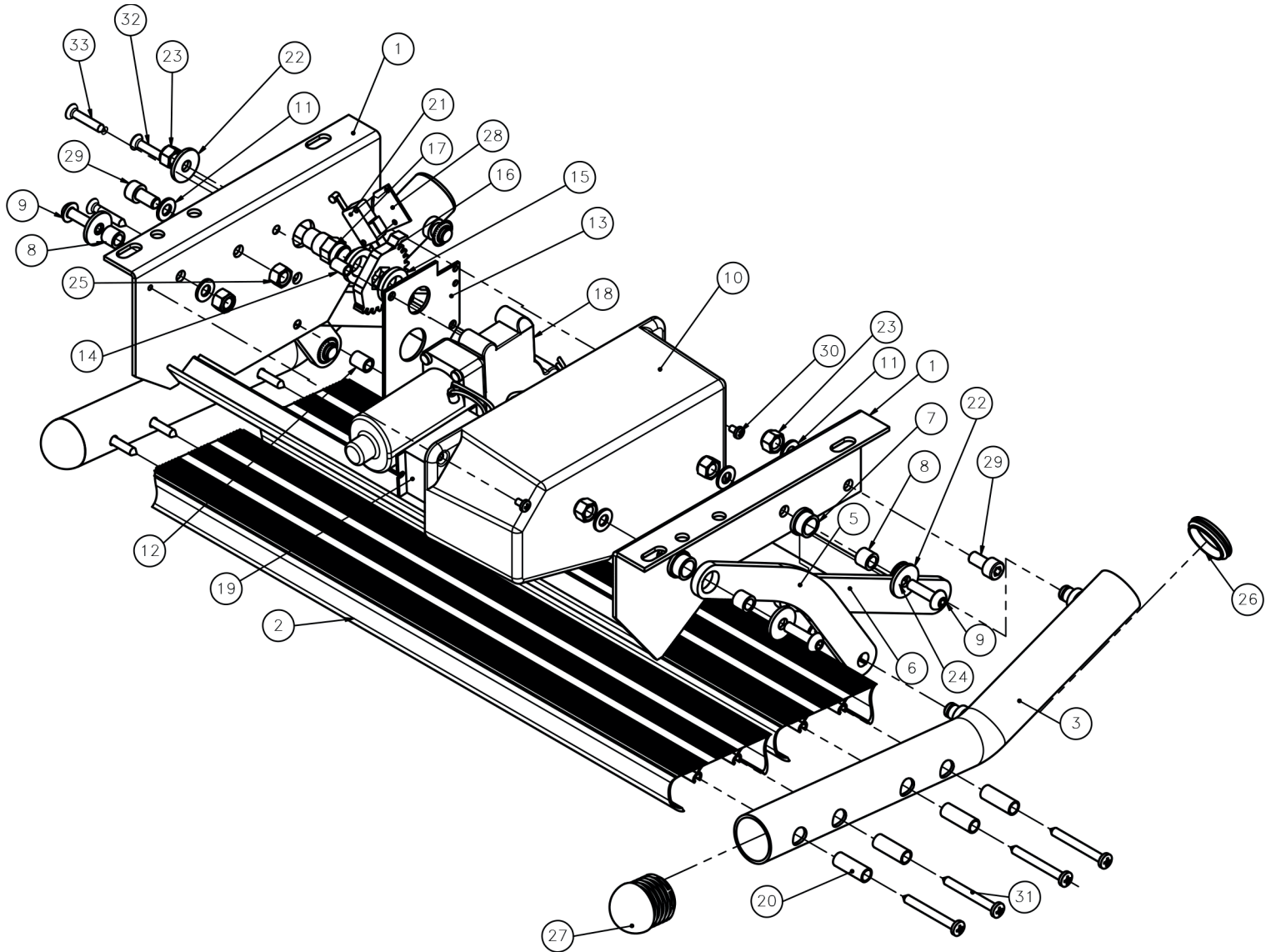
Electrical step open 



Electrical step folded 

# 06 MOUNTING AND COMPONENTS

## 06.1 Main exploded view ELECTRICAL STEP PE-55





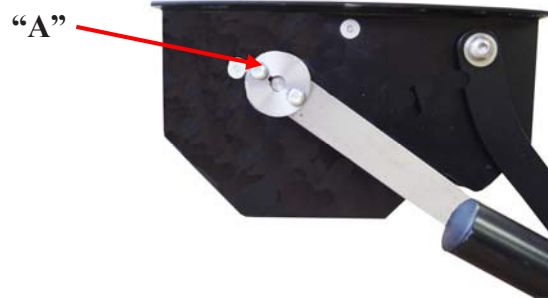




## 07 TROUBLESHOOTING



In case of an electrical breakdown, in order to remove the protruding part of the vehicle, which can be seen in the following image, disengage the motor platform by removing 2 "A" screws.





## 08 GENERAL MAINTENANCE

### CLEANING

Keeping the equipment clean is essential to ensure good use and durability of the assembly. It is necessary to perform a thorough cleaning periodically, especially in areas exposed to dirt that can suffer damage such as gears, connectors, buttons, etc. Do not use high pressure washers, they may damage the electrical elements.

### CONTROLS AND SELECTORS

Due to the intense and continuous use of the movable elements, as the controls and selectors, periodically check the proper functioning of the same. There may be faults in the micro-breakers and wiring, check the fixings and electrical or mechanical connections that may exist.

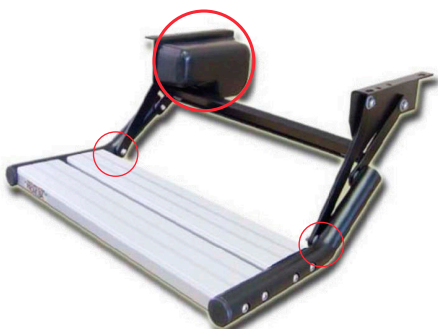
### OIL

In general, any moving part must be oiled. Our products come from the factory completely oiled and lubricated, however, it is possible that with the time and use of the product the elements are decreased, either by loss of lubrication or by dirt. Clean and grease periodically affected areas, according to manufacturer's specifications.

Check for loose, missing, or worn parts. Periodically inspect all moving parts to make sure components are tight.

Due to its dry slip system, do not grease the platform guide.

**ATTENTION:** Do not lubricate the rail and / or stretcher when connected to the mains.



### WEARING AREAS

Inspecting regularly to see if there is wear on the system components is a preventive measure that can reduce breakdowns. Check for possible lubricant leaks, grooves or bearings in poor condition.

### MECHANICAL FASTENING ELEMENTS

In general, we call mechanical fastening elements for the components that are used to fix the whole of the product, mainly fasteners and derivatives.

In some conditions of use, due to vibrations and impacts, certain elements can lose their tightening torque or fixing properties.

Check periodically that there are no loose elements, especially in moving parts of the assembly. Always observe the recommended tightening torques.

### REPLACEMENT OF COMPONENTS

This instruction manual does not include procedures for all parts. Typically, qualified service personnel replace wires, switches and certain mechanical parts without the need for step-by-step procedures.

Qualified service personnel should contact our sales department for information on ordering parts and installing them.



BE SURE TO KEEP THESE ZONES FREE OF DIRT.  
HAVE SPECIAL CARE IN THE CLEANING TO ENSURE A GOOD FUNCTIONING OF THE SET

## 09 LEGAL NOTICES

This document may contain technical inaccuracies or typographical errors.

Periodic changes are made to the information contained herein; These changes will be incorporated in new editions of the publication.

**Promeba, S.L.** Reserves the right to make any changes or improvements to the products described in this publication, if deemed appropriate.

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# 10 PRODUCT WARRANTY

**Promeba, S.L.** ensures that your products have passed satisfactorily all the established quality controls, both functional and material. The duration of the warranty is 2 years from the date of purchase of the product.

This warranty is valid only when it is presented with the original invoice or proof of purchase (indicating the date of purchase, model and dealer name) together with the defective product during the period covered by the warranty. **Promeba, S.L.** reserves the right not to offer the free warranty service if the indicated documents are not presented or if the information they contain is incomplete or illegible.

1. *This warranty does not apply if the model name or serial number of the product has been altered, deleted, disappeared or is unreadable.*

2. *This warranty does not cover transport costs or the risks associated with transporting your product to and from **Promeba, S.L.***

3. *This warranty does not cover any of the following:*

a) *Periodic maintenance and repair or replacement of parts derived from normal wear and tear.*

b) *Periodic maintenance and repair or replacement of consumables (components that are expected to require periodic replacement during the life of the product, such as non-rechargeable batteries, bulbs, etc.). Parts from normal wear and tear....*

c) *Damage or defects arising from improper use, operation or treatment of the product and not from normal use of the product.*

d) *Damage arising from:*

i. Misuse, including:

- Treatment resulting in damage or changes in the physical, surface or appearance of the product.

- Installation, use or storage of the product in a manner that does not comply with the instructions described by **Promeba, S.L.**

- Maintenance of the product in a manner that does not comply with the instructions of **Promeba, S.L.** for proper maintenance.

- Installation or use of the product in a manner that does not respect the technical or safety standards of the country where it is used or installed.

ii. Use of components not provided with the product or improper installation of accessory parts not previously tested.

iii. States or defects of the system in which the product is used or incorporated with the exception of other products **Promeba, S.L.** designed for use with the product.

iv. Use of the product with accessories, peripheral units and other products of a type, condition or standards not established by **Promeba, S.L.**

v. The manufacturer or distributor will be solely responsible for deciding the shipment of the parts for repair, or replacement of the product in its entirety. In no case will workers be sent for such repair or replacement of the product.

Except in the cases mentioned above, **Promeba, S.L.** shall not give any warranties with respect to the product, performance, accuracy, reliability or adaptability to a purpose of the logical or other equipment. If this exception is not lawful or contemplated by the current law, **Promeba, S.L.** limit or exclude its warranties only to the extent permitted by law.

The only obligation on the part of **Promeba, S.L.** in connection with this warranty is to repair or replace the parts subject to the terms and conditions of this warranty.

**Promeba, S.L.** is not responsible for the loss or damage of products, this warranty or others, including economic loss or non-evaluable damages; The price paid for the product; Loss of profits, income, information, usufruct or use of the product or associated products or indirect, accidental or critical loss or damage.

This clause refers to whether the loss or damage is due to deterioration or inoperability of the associated product due to defects or unavailability of **Promeba, S.L.**, which has caused a downtime, loss of user time or a business interruption.

In cases where the law prohibits or limits these exclusions of liability, **Promeba, S.L.** exclude or limit its liability only to the extent permitted by applicable law. For example, there are countries that prohibit the exclusion or limitation of damages caused by negligence, reckless negligence, willful misconduct, fraud, and similar acts. The responsibility of **Promeba, S.L.** in this warranty will not exceed, in any case, the price paid for the product, but if the current law allows only limitations of greater responsibilities, these will apply.







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PROMEBA, S.L.

Ctra C-16 Km 59,5 · 08650 Sallent (Barcelona) · SPAIN  
T. 93 837 12 00 · Fax 93 820 61 08  
promeba@promeba.com · www.promeba.com