



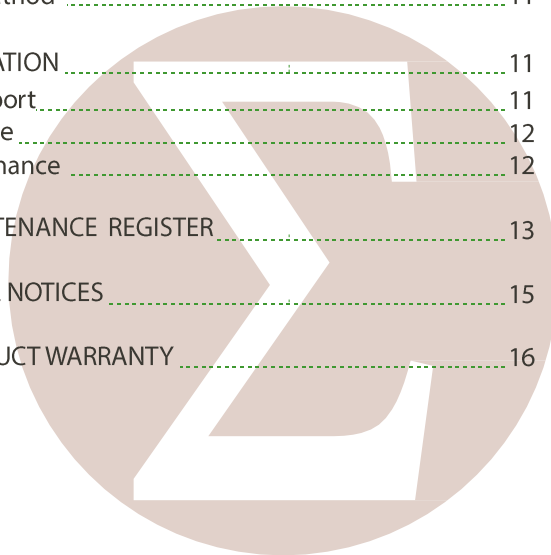
USER GUIDE

VACUUM SPLINTS SET WITH PUMP PA-49

Review 2022/02



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01 INTRODUCTION

01.1 Using of manual












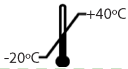
The manual provides using and maintenance instructions of the product as well as technical aspects, functioning, spare parts and safety.

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.

01.2 Legend of Symbols

SYMBOL	EXPLANATION / DESCRIPTION
	MANUFACTURER symbol. This symbol is accompanied by the name and address of the manufacturer, adjacent to the symbol (PRODUCTOS METÁLICOS DEL BAGÉS S.L., Ctra. C-16 Km 59.5, 08650 - Sallent (Barcelona) - Spain).
	Indicates the manufacturer's reference number to identify the medical device. PROMEBA, S.L. uses this symbol to set each internal reference for each configuration and business variant.
	Indicates the manufacturer's serial number to identify a specific medical device.
	Indicates the manufacturing date. The symbol must be accompanied by a manufacturing Date (yyyy-mm), adjacent to the symbol.
	It is placed to inform that the product is a "Medical Device".
	CE symbol without the intervention of a Notified Organism, as a Medical Device classified as Class I according to the EU Regulation 2017/745 on Medical Devices.
	Symbol for the Unique Device Identifier.
	Symbol "See instructions for use or operating instructions".
	Symbol "caution". This symbol is placed to warn of the need for the user to refer to important precautionary information in the operating instructions, such as warnings and cautions not otherwise found on the label.
	Symbol "Caution". For a general warning.
	Warning, crushing of hands
	Indicates the temperature limits. The upper and lower temperature limits should be indicated adjacent to the horizontal lines.

01.3 Servicing 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, email promeba@promeba.com or write to PROMEBA, 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.

01.5 Labelling

Each product incorporates an identification label, placed on the device itself and/or on the box. It must never be removed or covered. This label includes the serial number and the product code. Please keep these numbers so you can inform the dealer if necessary.



1.6 Contraindications and adverse effects

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

01.7 Physical requirements of the operators

Promebeba Vacuum splint is destined to professional use only.

The operators must be trained in efficient, effective and safe patient transport

01.8 Intended purpose

Vacuum splints are used for immobilizing the upper and lower fractures in a fast, easy and secure way in order to provide transferring of the patient and avoid patient's body heat loss.

Vacuum splints are also used for;

- Big size Vacuum splint is used as adults long feet or vacuum mattress for children.
- Middle size Vacuum splint is used as adults long arm or short leg splint, or child's long leg splint or vacuum mattress for babies.
- Small size Vacuum splint is used as adults short arm, ankles or vacuum neck splint, child's long arm or short feet splint or baby's long leg or body splint.

The manufacturer does not accept any responsibility for the use of the vacuum mattress under inappropriate conditions such as:

- Use by unqualified personnel
- Use for the patients who should not be used for according to medical staff
- Lack of compliance with health and safety regulations and measures by the users.
- Inflation of vacuum splints (the vacuum splint should not be crumpled inside when the handler pushes his/her finger in.)
- Modifications or repairs which would possibly obstruct its functions
- Vacuum splints should be kept away from cutter or pricker objects in order to avoid damage.
- Unauthorized modifications and repairs
- Non-compliance with the instructions contained in this

01.9 General warnings

1. The product must be used by trained personnel only, having attended specific training for this device and not for similar products.
2. At least every 6 months, is important to verify if updated User Manuals are available or there is any change involving your product. This information is freely available on the website <http://www.promeba.com>
3. Before carrying out any kind of operation on the appliance (training, installation, use), the operator must carefully read the enclosed instructions, paying particular attention to the correct safety precautions and to the procedures to be followed for installation and for correct use.
4. In the case of any doubts as to the correct interpretation of the instructions, please contact Promeba, S.L. for any necessary clarifications.
5. Do not allow untrained persons to help during the use of the device, because they could cause damage to the patient or to themselves.
6. Periodically check the device, carry out the prescribed maintenance and respect the life span indicated by the manufacturer in this user manual.
7. Before each use of device the perfect operating state of the device must be checked as specified in the instruction manual. If any damage or abnormalities which could in any way influence the correct functioning and the safety of the device, of the patient and/or of the user are detected, the device must be immediately removed from service and the manufacturer must be contacted.
8. If any failure or incorrect functioning of the device is detected, it must be immediately substituted with a similar item so that the rescue procedures are guaranteed without any interruption.
9. Use of the device in anyway other than described in this manual is forbidden.
10. Do not alter or modify in any way the device; any such interference could cause malfunctions and injury to the patient and/or rescuer.
11. The device must not in any way be tampered with (modification, adjustment, addition, replacement). In such cases all responsibility will be denied for any malfunctions or injuries caused by the appliance itself; moreover CE certification and product warranty will be considered void.
12. Handle with care.
13. Ensure that all the necessary precautions are taken in order to avoid the hazards that can arise as the result of contact with blood or body fluids.
14. Register and store with these instructions: lot number, place and date of purchase, first date of use, date of checks, name of users, any comments.
15. When the device is being used, the assistance of qualified staff must be guaranteed.
16. Do not store the device underneath any heavy objects which could cause structural damage.
17. Store in a cool, dry, dark place and do not expose to direct sun.
18. Store and transport device in its original packaging.

19. The device must not be exposed or come into contact with any source of combustion or inflammable agents.
20. Position and adjust the device taking care not to cause any obstruction to rescuers and or any other rescue equipment.
21. Attention: laboratory testing, post production tests and instruction manuals cannot always consider every possible scenario for use. This means that in some cases the performance of the product could be notable different from results to date obtained. Instructions are continually being updated and are under tight surveillance of fully qualified staffs with adequate technical formation.
22. Both public and private operators are obliged to report any accident involving any medical device to the Ministry of Health and the manufacturer as specified and within the time given by European regulations.
23. Both public and private operators are obliged to inform the manufacturer of the measures to be taken to guarantee the safety and health of patients and users of any medical device.
24. As a distributor or end user of the products manufactured and/or distributed by Promeba, S.L., you are strictly obliged to know the legal provisions in force in the country of destination of the goods, applicable to the devices to be supplied (including the regulations relating to technical specifications and/or safety requirements) and, therefore, understand the necessary requirements to ensure compliance of the products themselves with all the legal requirements of the territory.
25. Promptly notify PROMEBA regarding any revisions to be made by manufacturer in order to guarantee the conformity of the product to the territory's legal specifications (including those resulting from rules and/or norms of other nature).
26. Act with all due care and diligence, and contribute to ensure conformity to general safety requirements of all devices marketed in the territory, by providing final users with all necessary information for carrying out periodical checks on their devices, as specified in the relevant user manual.
27. Actively contribute to product safety checks on products sold, by communicating any relevant risk analysis information both to the manufacturer and to any competent authorities so that the necessary actions can be promptly taken.
28. Be aware that in the event of any failure to conform to the above mentioned requirements you will be deemed fully responsible for all damages that might occur. Therefore we expressly disclaim any responsibility and/or liability for your non-compliance with the present "Regulatory provisions".

01.10 Specific warnings

1. Establish a maintenance program and periodic testing, identifying a reference employee. The person to whom the ordinary maintenance of the device is entrusted must ensure the basic requirements foreseen by the manufacturer in the user's manual.
2. Use only accessories/spare parts that are original or approved by Promeba, S.L. , when carrying out any operation, to avoid causing any alteration or modification to the device, otherwise we assume no responsibility for the proper functioning or damage resulting from device to the patient or the operator and warranty will be considered void.
3. Never leave the patient unassisted on the device, because he may be injured.
4. Do not use bleach to disinfect the product. Use a hydroalcoholic based disinfectant and wash with water.
5. The device and all its components, after washing, should be allowed to dry completely before storing.
6. Keep clean as routine (incl. disinfect).
7. Follow procedures approved by Emergency Medical Services for immobilization and transportation of the patient.
8. Follow procedures approved by Emergency Medical Services.
9. Avoid contact with sharp objects.
10. Use the vacuum splint only as described in this user's manual.

01.11 Residual risks

The residual risks listed below have been identified only with reference to the intended use of the device:

1. Use by untrained personnel may result in injury to patient, operator, or third parties.
2. Inappropriate disinfection procedures can create a risk of cross infection.
3. Failure to comply with the warnings for operators can create risks.
4. Failure to read and understand the product instructions can result in injury to the patient and operators.

01.12 Reference standards

REFERENCE	TITLE OF DOCUMENT
(UE) 2017/745	Reglamento UE del 05 de Abril del 2017 sobre productos sanitarios



As a distributor or end user of the products manufactured and/or distributed by Promeba, S.L., you are strictly obliged to know the legal provisions in force in the country of destination of the goods, applicable to the devices to be supplied (including the regulations relating to technical specifications and/or safety requirements) and, therefore, understand the necessary requirements to ensure compliance of the products themselves with all the legal requirements of the territory.

01.13 Life span

If used as described in the following instructions, this device has a useful life of 10 years from the date of purchase.

This useful life can be extended with annual reviews carried out by the manufacturer, which uses specialized and authorized internal and external technicians.

In case these annual checks are not carried out, the device must be disposed of according to the information in paragraph 01.4 and the manufacturer must be notified.

Only the manufacturer or an authorized center can extend the life of the device, if it meets the safety requirements.

Promeba, S.L. will not accept any responsibility for malfunction or damage caused by the use of devices that have not been checked by the manufacturer or authorized center, or that have exceeded the maximum allowed useful life.

02 PRODUCT DESCRIPTION

02.1 Product Features

Vacuum splint set is designed especially for immobilizing the upper and lower extremity fractures and immobilizing children to transfer them in an easy way.

02.2 Technical explanations

PA-49 splints are completely X-ray transparent. PA-49 are manufactured from PVC material that is friction and tear resistant providing the maximum service life. There are tiny (diameter 1-2mm) microgranules inside the vacuum splints. Vacuum splints are packed with their double way plastic pumps that can both evacuate and pump air inside the vacuum splints.

Vacuum splint set has 3 different splints at different dimensions.

- Big size Vacuum Splint (For adult long feet, child mattress): Length: 108cm, Width Top: 67cm, Width bottom:37cm
- Middle size vacuum splint (For adult long arm-short leg,child long leg-baby mattress): Length: 74cm, Width Top:61cm, Width bottom:47cm.
- Small size vacuum splint (For adult short arm- for ankles and neck- child long arm-short leg-baby long leg): Length 54cm, width: 33cm

02.3. Use Method

First aid procedures and techniques must be applied whilst wrapping of the injured body part of the patient to the vacuum splint. For ensuring maximum safety of the patient at least 2 experienced and qualified handlers should take care of patient and these handlers should have necessary knowledge of first aid procedures.

Before using the vacuum splints the injured body part of patient should be laid on a flat surface. The appropriate vacuum splint must be chosen according to patient's injured body part.

The injured part of the patient should be placed onto the vacuum splint according to the first aid procedures and the feet of the patient should be placed carefully at the side of vacuum splint's valve according to his/her extremity fracture (ankles or wrists).

After placing the tip of inflation pump into the valve the inflation pump should be pumped quickly. As the air flows inside the vacuum splint the vacuum splint will swell up and the splint will be hardened so the injured body part will be immobilized completely.

After the vacuum splint inflated appropriately (the vacuum splint should not be crumpled inside when the handler pushes his/her finger in) pumping should be stopped ,the inflation pump should be removed from the valve and the the cover of the valve should be closed.

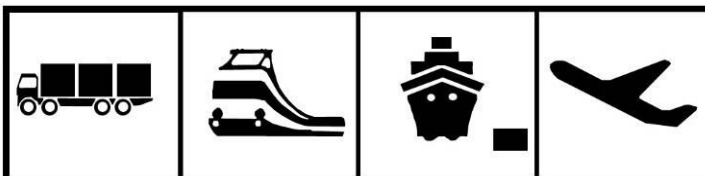
Whilst the transfer of the patient the altitude and the air pressure might change. At the decrease of atmosphere pressure and the increase of altitude the air pressure inside the vacuum splint might be increased. At that situation the air pressure of the splint might be lowered in order to provide blood circulation .

According to decreasing altitude and increasing atmosphere pressure, the air pressure inside the vacuum splint might be decreased. At that situation the air pressure of the splint might be increased so the vacuum splint might be inflated appropriately.

03. OPERATION

03.1. Transport

1. Be transferred by common transporting tools: plane, ship or road.
2. Vacuum splint can be manually handling
3. A whole carton packaging
4. Attachments: certificate, user's manual.



03.2. Storage

The air inside the vacuum splints must be evacuated after use (simply remove the valve cover hold the valve with your fingers and push). It is recommended that you store each vacuum splint inside its specific pocket which can be seen from the prints on the pockets.

During handling, transport and storage vacuum splints should be kept away from cutter or pricker objects in order to avoid damage.

03.3. Maintenance

If failure occurs in the vacuum splint set, the possible causes and solutions are listed below. Except these indicated failures which are detected, Customer support should be contacted.

Defect: Vacuum splint does not inflate appropriately although it is pumped up.

Possible cause: Vacuum splint is punctuated or damaged.

Solution: Vacuum splint must not be used/should be taken out of use.

Defect: Vacuum splint does not inflate although it is pumped up.

Possible cause: There is problem at the valve or at the pump

Solution: The pump or the vacuum splint must be replaced with a new one.

Warning: Use only original spare parts. Replacement of original parts with another manufacturer's parts may affect the functions of the product and warranty of the product ends.

05. LEGAL NOTICE

This document may contain technical inaccuracies or typographical errors.

Changes are periodically added to the information herein; these changes will be incorporated in new editions of the publication.

Promeba, S.L. reserves the right to make any modification or improvement in the products described in this publication if it is appropriate.

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06. PRODUCT WARRANTY

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

This guarantee will be valid only when it is presented with the original invoice or proof of purchase (indicating the date of purchase, model and the name of the distributor) together with the defective product during the period covered by the guarantee. 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 will not apply if the model name or serial number of the product has been altered, erased, disappeared or becomes illegible.

2. This guarantee does not cover transportation costs or risks derived from the transportation of 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) Expendable material (components that are expected to need periodic replacement during the life of the product, such as non-rechargeable batteries, light bulbs, etc.).
- c) Damages or defects derived from the improper use, operation or treatment of the product and not due to normal use of the product.
- d) Damages derived from:

i. Misuse, including:

- Treatment that results in damages or physical, superficial or appearance changes of the product.
- Installation, use or storage of the product in a way that does not respect the instructions described by Promeba, S.L.
- Maintenance of the product in a way that does not respect the instructions of Promeba, S.L. for proper maintenance.
- Installation or use of the product in a way that does not respect the technical or safety regulations of the country where it is used or installed.

iii. Use of components not provided with the product or incorrect installation of accessory parts not previously tested.

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 whether to send the parts for repair, or to replace the product in its entirety. In no case will operators be sent to repair or replacement of the product.

Except in the cases mentioned above, Promeba, S.L. will make no warranties in relation to product, performance, accuracy, reliability, or fitness for logic purpose of the equipment or other type. If this exception is not legal or contemplated by current law, Promeba, S.L. will limit or exclude your warranties only to the extent permitted by applicable law.

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

Promeba, S.L. is not responsible for loss or damage to products, this warranty or others, including economic loss or non-assessable damage; 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 downtime, loss of user time or business interruption.

In cases where the law prohibits or limits these liability exclusions, Promeba, S.L. will exclude or limit his 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 actions. The responsibility of Promeba, S.L. in this guarantee 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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