PamMobility

PULSE Specialist Stretchers

7M009001_NP - 7M009001_NPD - 7M009002_NP

CE

INSTRUCTIONS FOR USE AND MAINTENANCE

Translation of the original instructions

REVISIONS TABLE		
Revision	**Date**	**Notes**
0.0	15/11/2016	First edition
0.1	01/12/2020	CE marking pursuant to Regulation (EU) 2017/745

CONTENTS

EU Declaration of Conformity

The manufacturer:

Company: Pam Mobility s.r.l.

Address: Via Verdi, 39 - 42043 Gattatico (RE) - Italy

Declares, under its own and exclusive responsibility, that the device(s)

Code	Model	ID BD/RDM	BASIC UDI-DI
7M009001_NP	Specialist 2-section electric stretcher	1521079/R	8055774207M009001_NPRC
7M009001_NPD	Specialist 3-section electric stretcher	2058260/R	8055774207M009001_NPD6J
7M009002_NP	Specialist 4-section electric stretcher	2058261/R	8055774207M009002_NPRK

Intended use: The device is intended to be used exclusively as a stretcher for the transportation, diagnosis, treatment and monitoring of patients under the close supervision and surveillance of medical personnel.
The device cannot be used for inpatient purposes
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

Risk class: Class I

It complies with the following European Union legislative acts:

2017/745/EU	Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) no. 178/2002 and Regulation (EC) no 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC
2006/42/EC	Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery and amending Directive 95/16/EC
2014/35/EU	Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits
2014/30/EU	Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of member States relating to electromagnetic compatibility
2011/65/EU	Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of use of certain hazardous substances in electrical and electronic equipment

It complies with the following common harmonised standards and/or specifications:

CEI EN 60601-1:2007 Medical electrical equipment
Part 1: General requirements for fundamental safety and essential performance

The device is subject to the conformity assessment procedure provided for in article 52, section 7 of Regulation 2017/745/EU

Gattatico,
22/01/2021

Managing Director
Andrea Muzzini

PAM MOBILITY SRL
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1. GENERAL PROVISIONS

1.1 Presentation of the manual

This manual is intended to provide the user with all the necessary information so that, in addition to suitable use of the device, they are able to manage it as autonomously and as safely as possible.
Read carefully the warnings and instructions contained in this manual as they provide important indications regarding SAFETY, USE AND MAINTENANCE.
Before carrying out any operation on the device, operators and qualified technicians must carefully read the instructions contained in this publication.
In the event of any uncertainty about the correct interpretation of the instructions, please contact our office to obtain the necessary clarifications.
The descriptions and illustrations provided in this publication are non-binding.
Pam Mobility reserves the right to make any changes it deems appropriate for the purpose of improvement, without undertaking to update this documentation.
The illustrations and images contained in this manual are intended only as examples and may differ from practical situations.
This manual is an integral part of the device and must be kept with the utmost care by the purchaser. It must be placed in the immediate vicinity of the device, inside a dedicated container and, above all, protected from liquids and anything else that could compromise its readability.
The manual must accompany the device if it is transferred to a new user.
The contents of this manual are in accordance with Regulation 2017/745/EU of 05.04.17 (class I), concerning medical devices.
It is forbidden for anyone to disclose, modify or use this manual for their own purposes.
The operator and patient safety and efficient operation depend on compliance with and exact observance of the instructions described here.

1.2 Customer Service

Customer Service and product support are important aspects of the Pam Mobility s.r.l. company structure.
Customer Service is available for further information on the use, maintenance and support of this product.

1.3 Conventions

The following graphic symbols have been adopted in this manual:

ATTENTION! Placed before certain procedures. Failure to do so may result in damage to the item.

WARNING! Placed before certain procedures. Failure to do so may cause damage to the operator or patient and to the item.

2. GENERAL WARNINGS

2.1 Manufacturer

The item described in this manual is manufactured by:

Pam Mobility s.r.l.
Via Verdi 39 – 42043 Gattatico (RE) - Italy
Tel. 0522 473859 - Fax 0522 1548244
Email: info@pammobility.com
http: www.pammobility.com

2.2 Intended use

The device is intended to be used exclusively as a stretcher for the transportation, diagnosis, treatment and monitoring of patients under the close supervision and surveillance of medical personnel.
The device cannot be used for inpatient purposes
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

2.3 Essential performance

The aspects of essential performance of the stretcher include:

- **Height adjustment:** by means of a button control it is possible to electrically adjust the height of the bed surface.
- **Backrest inclination adjustment:** the stretcher is equipped with a manually operated mechanism with millimetre adjustment which, once released, allows adjustment of the inclination of the backrest section.
- **Trendelenburg/Reverse Trendelenburg:** by means of a button control it is possible to electrically adjust the inclination of the bed surface until the Trendelenburg/Reverse Trendelenburg position is obtained.
- **Longitudinal translation:** the stretcher is equipped with a manually operated mechanism with millimetre adjustment which, once released, allows sliding of the bed surface in order to maximise the examination area.

2.4 Environmental limits of use

WARNING! The stretcher cannot be used in a potentially explosive or flammable atmosphere.

The environmental working conditions of the stretcher must respect these indications:

- Temperature: 0°C ÷ +40°C
- Humidity: 10% ÷ 70% (non-condensing).

The device must be placed in an absolutely dry environment.
Environmental conditions other than those indicated may cause serious damage to the stretcher.
Positioning of the stretcher in environments that do not correspond to what is indicated will invalidate the warranty.

2.5 Expected lifespan

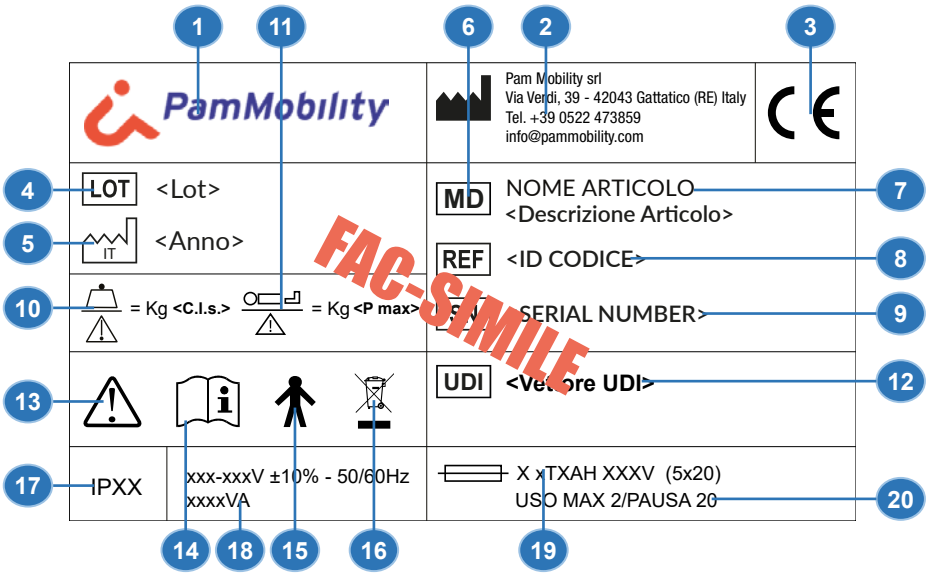
The stretcher has been designed and built to operate without risk to property and persons under the ordinary conditions of use defined in this manual for 10 years. However, this duration can only be achieved by complying with the requirements set out in this manual and by contacting Pam Mobility s.r.l. assistance whenever a malfunction occurs on the stretcher. After 10 years of use it is advisable to replace the entire stretcher.

2.6 Identification

ATTENTION! It is forbidden to remove the label from the device for any reason.

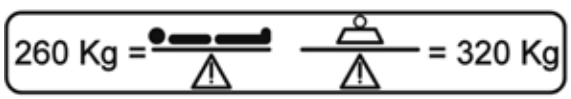
The item is identifiable by the plate on the base on which the following data are shown:

1. Company logo;
2. Name and address of the manufacturer;
3. CE marking;
4. Batch number;
5. Date and country of manufacture;
6. Medical device;
7. Item name
8. Item code;
9. Serial number;
10. Safe workload;
11. Maximum patient weight;
12. Unique device identifier (UDI);
13. Attention: be careful when using the medical device;
14. Read the user instructions;
15. Type B applied part;
16. Special waste;
17. Degree of IP protection;
18. Voltage and frequency of power supply absorbed;
19. Fuse;
20. Operation.

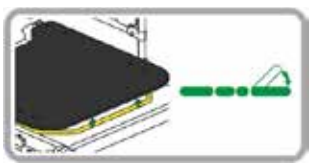


2.7 Identification of the controls

The controls and devices are identified by labels placed near or on the devices themselves.



MAXIMUM WEIGHT PATIENT **SAFE WORK LOAD**



BACKREST ADJUSTMENT

3. SAFETY

3.1 General provisions

WARNING! Improper use and maintenance can cause damage to persons and property.

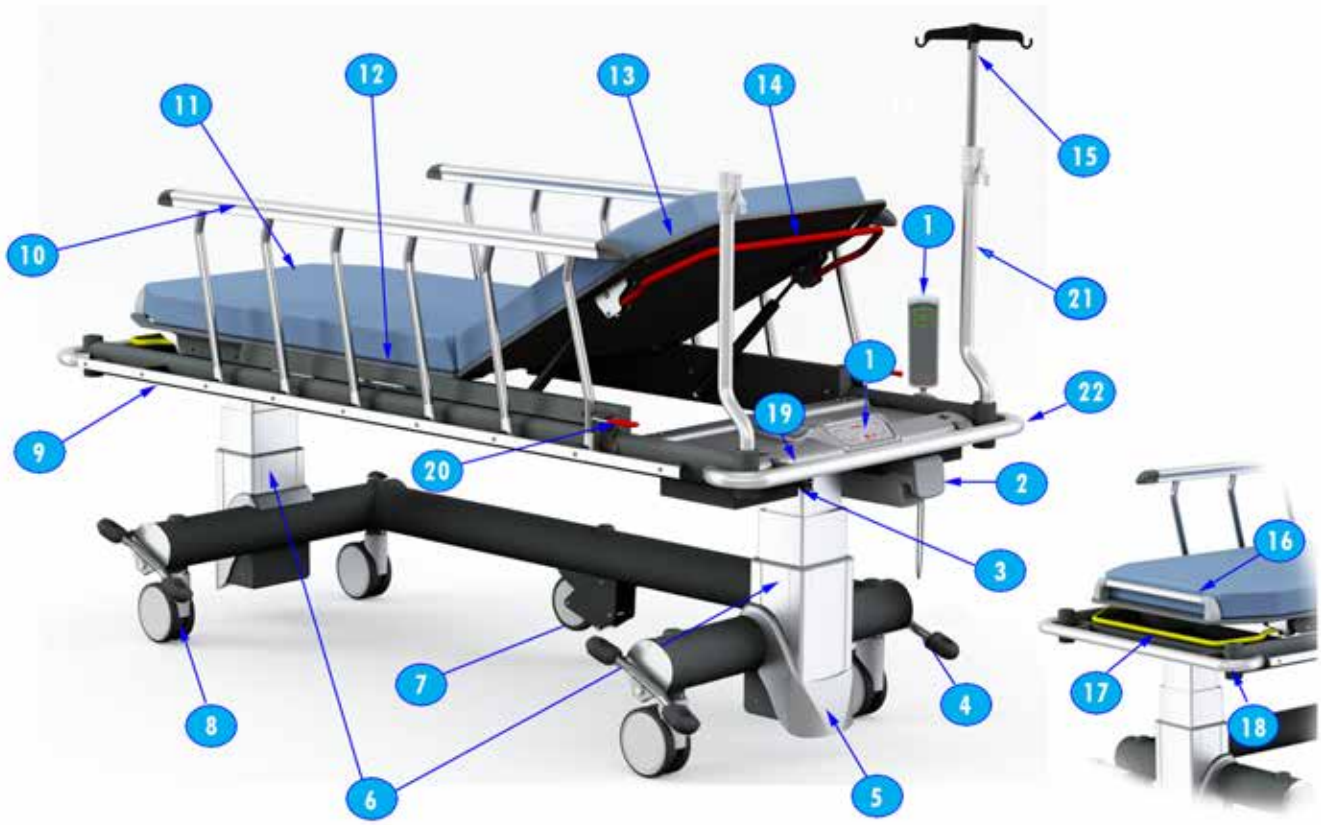
WARNING! WARNING FOR BLOOD-BORNE DISEASES: To reduce the risk of exposure during use of the stretcher, follow the maintenance instructions in this manual, in addition to the instructions on personnel safety prepared by the Emergency Medical Service Manager.

Operators must carefully read this manual, follow the instructions contained therein and familiarise themselves with the correct procedures for use and maintenance of the stretcher.
Use and perform maintenance on the item only as prescribed in this manual and use only Pam Mobility s.r.l. spare parts and assistance.
Do not use the stretcher for purposes other than those for which it was conceived and designed.
Always notify the patient before making any adjustments to the stretcher.
Always lock the stretcher with the brakes when it is not in transit.
Never leave the stretcher unattended when the patient is on it.
Keep this manual for reference and to support personnel training.
Transfer it together with the product in case of sale or transfer to new users.

4. GENERAL DESCRIPTION

4.1 Stretcher Description

The PULSE Stretcher has been designed for use in healthcare facilities. For the purposes of Regulation 2017/745/EU, it is to be understood as a non-therapeutic active device (class I).



4.1.1 Name of the main parts

1. Control console/push-button panel;
2. Battery;
3. Terminal for equipotential connection;
4. Brake pedal;
5. Column cover casing;
6. Lifting columns;
7. Fifth directional wheel control (optional);
8. Swivel castors;
9. Standard guide for attachment of accessories;
10. Collapsible sides;
11. Mattress (accessory?);
12. Support surface;
13. Backrest;
14. Backrest release lever;
15. IV pole;
16. Mattress stopper;
17. Bed surface translation lever;
18. Foot side push handle;
19. Roll-up cable;
20. Side release lever;
21. Accessory support;
22. Head side push handle.

4.2 Technical characteristics

PULSE STRETCHER		7M009001_NP	7M009001_NPD	7M009002_NP
Sections	-	2	3	**4**
Surface dimensions	mm	2050 x 740		
Overall dimensions	mm	2295 x 975		
Minimum bed surface height	mm	595		
Maximum bed surface height	mm	995		
Trendelenburg Inclination / Reverse Trendelenburg	deg	+13 / -13		
Longitudinal surface translation	mm	/	480	480
Safe work load[1]	kg	320		
Patient weight	kg	260		
Standard wheel diameter	mm	150		
Mattress dimensions	mm	2000 x 740		
Maximum mattress thickness	mm	100		
Weight	kg	112		

[1] WORK LOAD is defined as the sum of the following: patient (260 Kg), mattress (10 Kg) and accessories (50 kg).

4.3 Electrical data

PULSE STRETCHERS		
Supply Voltage	VAC	100-240
Network frequency	Hz	50-60
Operating voltage	VDC	24
Maximum power absorbed	VA	200
Sound pressure level emitted under load	dB	<60
Electrical protection class	-	I
Applied part	-	Type B
Degree of protection against dust and liquids	-	IP54
Operation /pause	min/ hour	10% or 2 minutes of operation followed by 18 minutes of pause

4.4 Battery

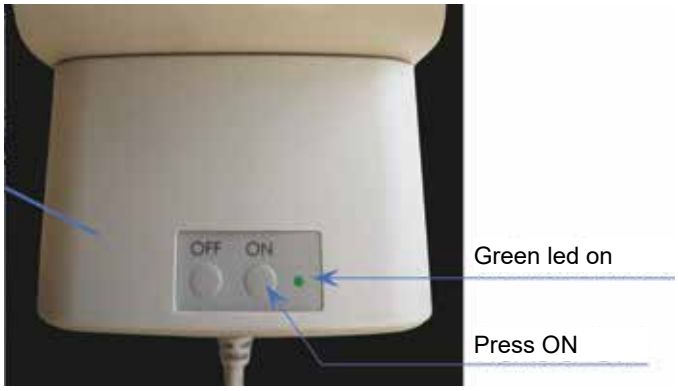
The stretcher is equipped with an acid-free buffer battery that allows height and inclination adjustments even in the absence of a connection to the mains.
The capacity of the battery guarantees an autonomy of approximately 20 complete lifting/lowering cycles.
The residual charge level is indicated by the indicator light (E).
The battery can be activated and deactivated via two buttons, ON and OFF, located on the battery housing. The LED located next to the buttons indicates the status of the battery: if **GREEN** the battery is charged, if **ORANGE** the battery is low.

NOTE: if the battery is low, it emits an audible alarm each time the sections are moved.

To charge the battery, simply connect the power cable to the mains or use the battery charger (accessory code 7M009042).

N.B.: leaving the power cable plugged in for long periods will in no way damage the battery. The control unit is equipped with software that manages the charge optimally.

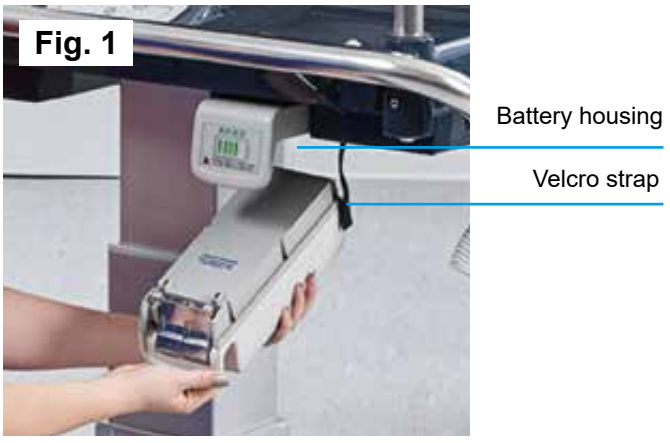
Even in the case of a completely depleted battery, it is still possible to use the stretcher. In this case it will not be possible to adjust the height of the bed surface.



4.4.1 Fitting the battery

To fit the battery proceed as follows:

- assume a position at the head side of the stretcher and open the velcro strap;
- insert the battery into the battery housing (Fig. 1);
- do not release the battery before having heard the locking "click" and having wrapped the Velcro safety strap around the battery body;
- connect the power plug of the stretcher to the power outlet: the battery will start charging and the LED of the battery and of the console (**E**) will start flashing ORANGE; when the battery has completed charging, the LED will turn GREEN.

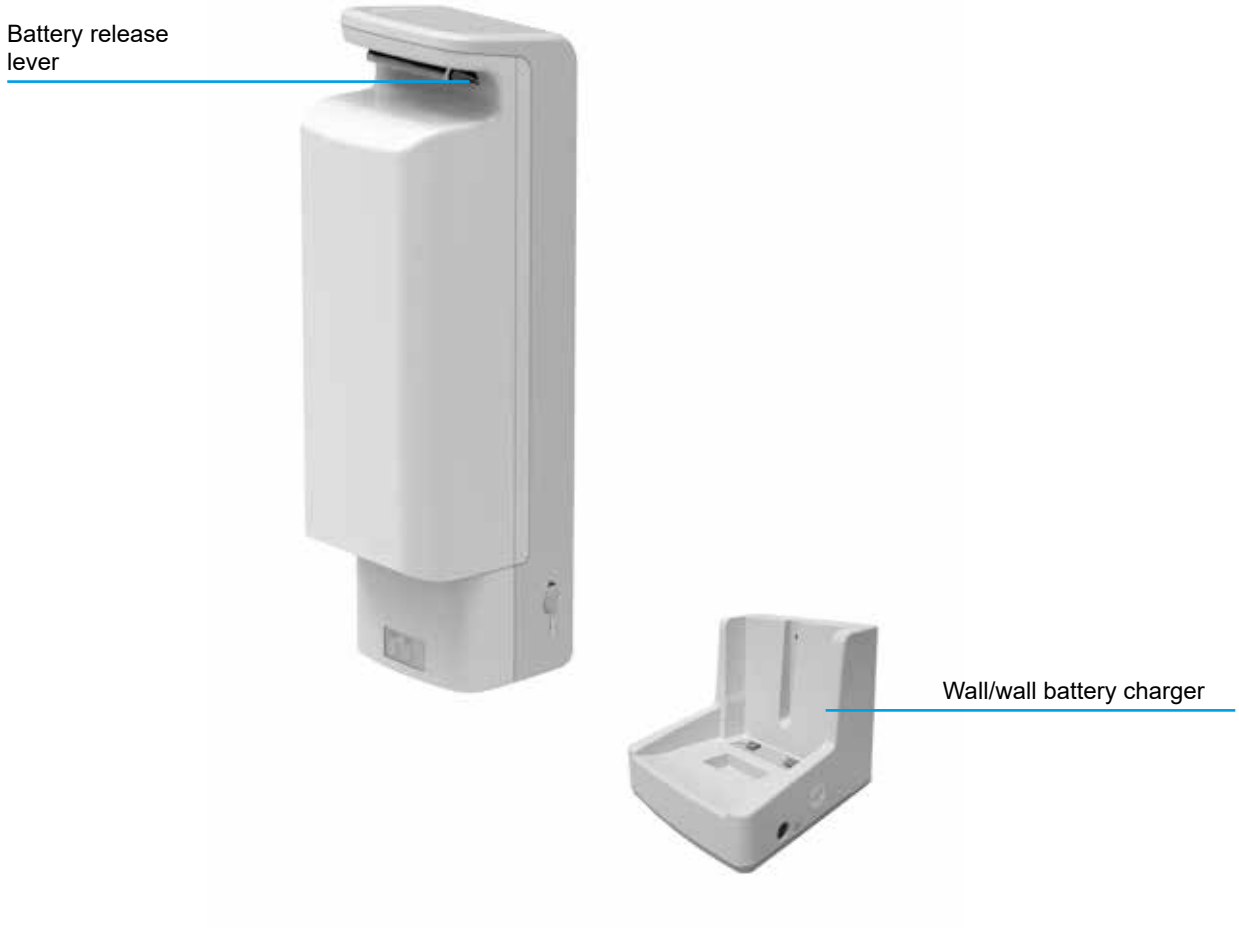


4.4.2 To disassemble/replace the battery with accessory code 7M009042 Additional battery complete with desk / wall battery charger

WARNING! Pressing the release lever, the battery immediately disengages from the support so be sure to be holding it properly.

To disassemble the battery proceed as follows:

- with one hand hold the battery and with the other open the velcro strap;
- press the battery release lever (image below) being sure to support it properly (Fig. 2);
- connect the battery charger to the power socket and connect the battery; an ORANGE LED on the battery charger transformer will light up to indicate that the battery is charging; the charging time can take from 4 to 12 hours depending on the remaining charge;
- when the battery is fully charged, the LED will light up GREEN;
- disconnect the battery from the battery charger and insert it back into the stretcher;
- turn on the battery by pressing the ON button on the battery housing on the stretcher: a GREEN LED will light up indicating that the battery is on and charging.

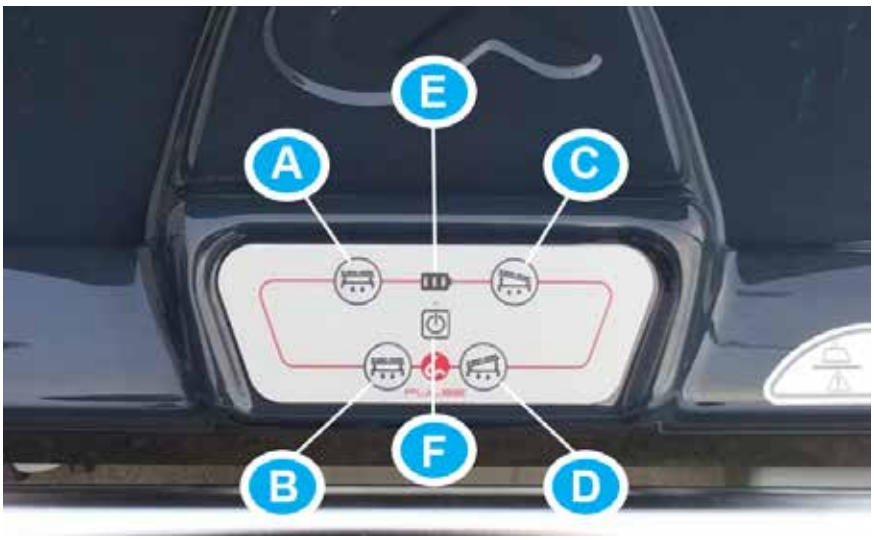


4.5 Control console

ATTENTION! Before carrying out any movement, consult the paragraph on the manoeuvre to be performed.

The stretcher is equipped with a 5-button 2-function control console.
The functions of the console buttons are as follows:

A. Raise the bed surface;
B. Lower the bed surface;
C. Reverse-trendelenburg adjustment;
D. Trendelenburg adjustment;
E. Indicator light: indicates the residual charge level of the battery;
F. Device on button: the stretcher is in fact equipped with an auto switch off system that activates after 1 minute of inactivity. This is to avoid unintentional activation and to preserve battery life when not powered by the mains cable.



4.5.1 Turning on the device

To allow the device to turn on, it is necessary to first connect and turn on the battery (see section 4.4 Battery).
Once the battery has been turned on (ON) press the button **F** and keep it pressed until the lights **E** turn on (The activation time is approximately two seconds).

The battery charge status is displayed when one of the movement keys A, B, C or D is pressed.

When the stretcher is powered by the network cable, the console always remains active and to make any movement it is not necessary to switch on using the button **F**.
As soon as the stretcher is connected to the network, the display E automatically switches to "charging" mode (see para. 4.4).

4.6 Control push-button panel

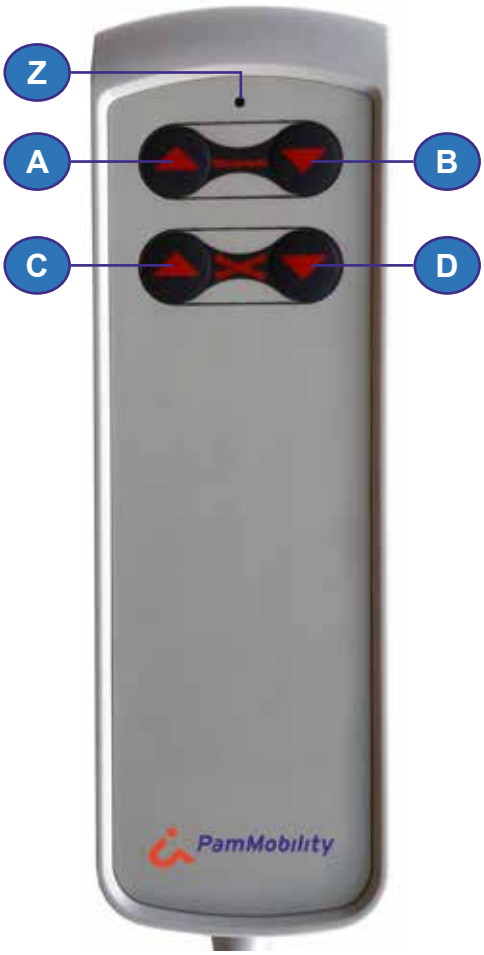
The stretcher supports a free push-button panel with 4 keys and 2 functions.

ATTENTION! Before carrying out any movement, consult the paragraph on the manoeuvre to be performed.

The movements that can be made using the push-button panel are as follows:

A. Raise the bed surface;
B. Lower the bed surface;
C. Reverse-trendelenburg adjustment:
D. Trendelenburg adjustment.

SYSTEM RESET: press buttons **A** and **C**at the same time; the stretcher reaches its maximum height, then emitting a "beep". Wait for the three flashes of the green LED **Z**: the reset has been successful.



5. INSTALLATION

The handling activities described in this chapter must be carried out exclusively by qualified personnel specially trained to perform in complete safety the operations of loading, unloading and handling of packs by means of lifting tools such as cranes or forklift trucks. Local staff should be aware of the accident-prevention rules.

5.1 Transportation and delivery

Transportation can be carried out by the following means of communication: road, rail, sea, air.
The weight of the item can be ascertained from the technical characteristics and packaging.
Movement of the individual item must be performed using means suitable for handling such as the self-propelled forklift truck or the manual forklift truck.
The precautions for safety at work remain valid.
The device is delivered assembled wrapped in a shockproof bubble wrap film.

ATTENTION! Upon receipt of the device, check with the carrier that the material is intact, that it has not been damaged during transportation or has not been opened intentionally to remove parts inside. Check that the supply corresponds to the specifications of the order and verify with the shipping documents that the delivery is complete.

If the packaging is damaged externally, open it in the presence of the carrier and check that the stretcher has not been damaged.
Note any damage on the shipping documents and immediately inform the Company Pam Mobility s.r.l.
If the packaging does not show anomalies, check the stretcher externally within 24 hours of delivery.
In case of visible damage due to transportation, immediately inform the carrier and the insurer, as well as the Company Pam Mobility s.r.l.

5.2 Lifting

WARNING! Lifting and handling operations must be carried out by specialist personnel trained in these types of manoeuvres.

ATTENTION! When lifting, slowly tension the straps and check that no components are involved that are not suitable to support the weight of the unit

In order to ensure safe handling of the stretcher, strictly follow these instructions:
- make sure that the lifting equipment is suitable for the weight of the stretcher;
- use only flat lifting straps;
- place the lifting straps near the trolley frame and not near the mesh frame;
- if forklift trucks are being used, place the stretcher on a suitable platform, locking the four wheels;
- lift the stretcher off the ground as little as possible.

ATTENTION! During the manoeuvre, check that no part of the stretcher remains compressed against the lifting equipment.

5.3 Storage

In case of prolonged storage, leave the stretcher protected from rain and wind and in a dry place.
Protect especially well all parts that are very sensitive to humidity and low temperatures.
The stretcher can be stored in dry rooms with a temperature of between -10°C and +50°C; and relative humidity 20% ÷ 90% without condensation.

5.4 Installation

Installation takes place under the direction and responsibility of a qualified technician of Pam Mobility s.r.l.

ATTENTION: it is absolutely forbidden to assemble and install the stretcher without the support of a qualified technician of Pam Mobility s.r.l. Similarly, it is absolutely forbidden to disassemble the stretcher for subsequent reinstallation without the support of a qualified technician of Pam Mobility s.r.l.

Check that the installation surface is sufficient considering the additional space necessary for assembly.
Make sure that the space left next to the stretcher is sufficient for a person to pass by.
Make sure that the specific floor capacity is sufficient to support the weight of the stretcher with the safe work load applied.

5.4.1 Preparing the installation area

The place of installation must have a rigid, horizontal, flat floor.

5.5 Checking the equipment

The packaging contains:
- PULSE stretcher (ordered model);
- additional accessories ordered;
- the user instruction manual.

5.6 Assembly

ATTENTION! The assembly area must be clean and clear; it must be at least 4x3 m to allow assembly operations.

The place of assembly must have the following characteristics:
- flat, non-yielding floor;
- 400 LUX lighting.

5.7 Electrical connection

WARNING! The electric stretcher cannot be used in a potentially explosive or flammable atmosphere (such as a hyperbaric chamber).

ATTENTION! Danger of electric shock. The cables must be positioned in such a way that they cannot be crushed, trapped, pulled taut, walked on, bent, become wet or obstructed with respect to the moving parts.

WARNING! The power cable must not cause obstruction to the operator.

WARNING! Check that the mains voltage and frequency correspond to that indicated on the identification plate.

- Prepare a SCHUKO type socket;
- connect the plug to the power supply;
- the stretcher must be charged for at least 12 hours before use.

5.8 Functional test

ATTENTION! The following check must be repeated periodically to verify the efficiency of the product.

Before putting the item into use:

- perform the "periodic check" provided for in the maintenance chapter;
- if the check is successful, the item is ready to be put into regular service, otherwise contact Pam Mobility Customer Service immediately.

6. OPERATION AND USE

6.1 Warnings

The electric stretcher cannot be used in a potentially explosive or flammable atmosphere (such as a hyperbaric chamber).

Before moving the stretcher, make sure that the power cable is disconnected and rewound.

Sanitise the stretcher as described in the SANITISATION chapter.

Notify the patient whenever stretcher adjustments are to be made.

Always lift the safety rails of the stretcher when a patient is on it. Always lock the stretcher when it is not in transit by applying the brakes.

Do not use the device for purposes other than those for which it was intended and for which it was designed.

6.2 Secure position

The stretcher is in a safe position when the mesh surface is in the horizontal position in the lowest position with the sides raised and the brake engaged.

6.3 Locking and unlocking the stretcher

The stretcher is equipped with four swivel braking wheels and one with directional function (5th wheel).
If the pedal is in the horizontal **GREEN** position, the wheels are free.
Pressing the pedal to the **RED** position inserts the brake and locks the wheels.
The directional lock (5th wheel) is activated by raising the pedal to the **BLUE**position.

BLUE

GREEN

RED

6.4 Handling the stretcher

WARNING! Always notify the patient before moving the stretcher.

WARNING! Movement must only take place on rigid flat surfaces and with the rails raised. Always lock the stretcher at the end of handling.

WARNING! Make sure before moving the stretcher that the power cable is disconnected from the mains socket and that it is rewound so that it does not obstruct movement.

To move the stretcher proceed as follows:

- release the brakes;
- make sure that the sides are raised;
- push or pull the stretcher by gripping it by the push handles;
- at the end of the journey, lock the stretcher.

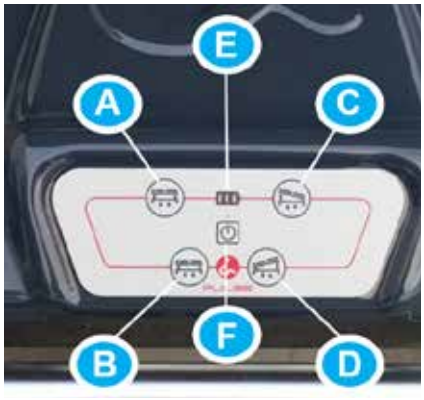
6.5 Raise and lower the stretcher

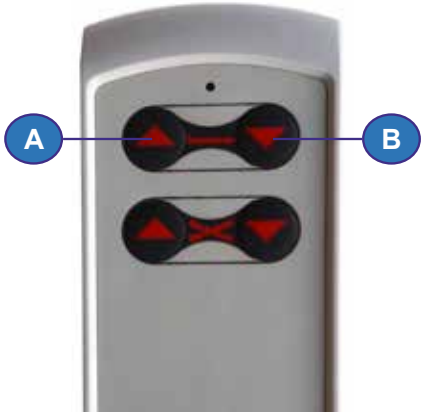
WARNING! Always notify the patient before adjusting the height of the stretcher.

Height adjustment of the stretcher is obtained by means of two electric actuators controlled via the push-button panel and the control console.

To **adjust the height** of the stretcher proceed as follows:

- press the power button **F** and keep it pressed until the lights come on;
- press button **A** to **raise** the stretcher;
- press button **B** to **lower** the stretcher.





6.6 Raise and lower the backrest section

WARNING! Always notify the patient before adjusting the stretcher backrest.

Adjustment of the back section of the stretcher is obtained by means of two gas springs controlled by a lever (9).

WARNING! Do not place hands or objects between the backrest and the frame of the mesh surface. Do not manually intervene on the moving parts and follow the instructions.

To **raise** the backrest section proceed as follows:

- grip the backrest section with one hand using the handle (14) accompanying the upward movement;
- once the desired position has been reached, release the handle (14).

To **lower** the backrest section proceed as follows:

- grip the backrest section with one hand using the handle (14);
- push the backrest section down until the desired position is reached and release the handle (14).

6.7 Raise and lower the upper section of the legs (only on mod. 7M009002_NP)

WARNING! Always notify the patient before adjusting the upper leg section.

Adjustment of the upper section of the stretcher legs is obtained by means of a hydraulic pump controlled by a bilateral lever.

WARNING! Do not place hands or objects between the leg section and the frame of the mesh surface. Do not manually intervene on the moving parts and follow the instructions.

To **raise** the upper section of the legs (23) proceed as follows:

- with one hand press the red lever (25) and with the other grip the handle (24) and pull it upwards to raise the section (see figure below) until reaching the desired position.

To **lower** the upper section of the legs (23) proceed as follows:

- with one hand press the red lever (25) and with the other grip the handle (24) and lower the leg section until it rests completely on the frame of the mesh surface.

6.8 Raise and lower the lower section of the legs (only on mod. 7M009001_NPD - 7M009002_NP)

WARNING! Always notify the patient before adjusting the leg section.

Adjustment of the leg section of the stretcher is obtained by means of a rack mechanism.

WARNING! Do not place hands or objects between the leg section and the frame of the mesh surface. Do not manually intervene on the moving parts and follow the instructions.

To **raise** the leg section proceed as follows:

- grip the leg section (**26**) with both hands and pull it upwards until the desired position is reached (see figure below).

To **lower** the leg section proceed as follows:

- assume a position at the foot of the stretcher;
- grip the leg section (**26**) with both hands and lift it completely in such a way as to unlock the rack mechanism;
- lower the leg section until it rests completely on the frame of the mesh surface.

6.9 Trendelenburg – Reverse Trendelenburg

WARNING! Always notify the patient before adjusting the leg section.

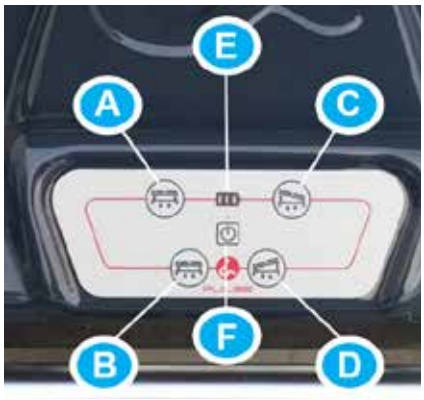
ATTENTION! Before carrying out any manoeuvre, make sure that the brake is engaged.

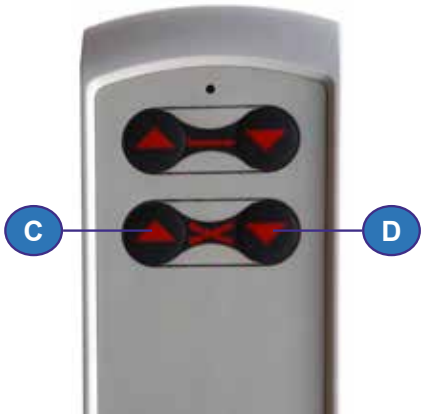
Adjustment of the position of trendelenburg and reverse-trendelenburg is obtained by means of electrical actuators operated via the buttons on the push-button panel and on the control console. The adjustment is useful both to obtain a more comfortable position for the patient and to reach the anti-shock position.

WARNING! Do not place hands or objects between the leg section and the frame of the mesh surface. Do not manually intervene on the moving parts and follow the instructions.

To make the adjustment proceed as follows:

- make sure that the stretcher brake is engaged (see page 17 of this manual);
- press the power button **F** and keep it pressed until the lights come on;
- press button **C** for Reverse Trendelenburg (max 13°);
- press button **D** for Trendelenburg (max 13°).





Trendelenburg

Reverse-Trendelenburg

6.10 Longitudinal translation

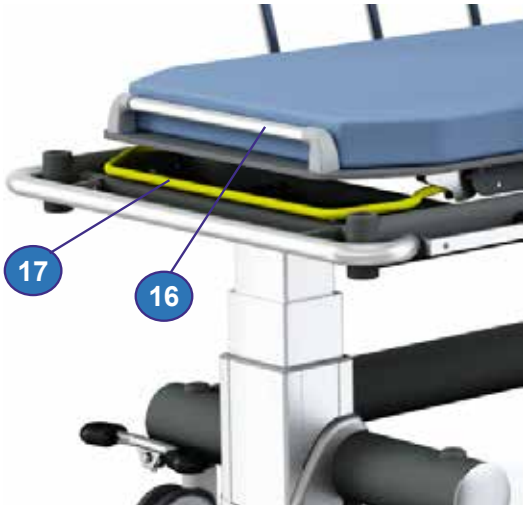
WARNING! Always notify the patient before carrying out the manoeuvre.

ATTENTION! Before carrying out any manoeuvre, make sure that the brake is engaged.

WARNING! Before moving the stretcher, return the bed surface to the initial position.

The PULSE stretcher is equipped with a mechanism that allows translation of the bed surface longitudinally in order to make it possible to examine the areas normally hidden by the structure.
To move the bed surface, proceed as follows:

- make sure that the stretcher brake is engaged (see page 17 of this manual);
- grip the top with both hands through the mattress stopper bar **16**;
- at the same time use the yellow lever **17** and pull the bed surface in the direction indicated by the arrow. Once the desired position is reached, let go of the release lever **17**.



6.11 Handling the sides

WARNING! Always notify the patient before making any adjustments.

ATTENTION! Before carrying out any manoeuvre, make sure that the brake is engaged.

The stretcher is equipped with collapsible side rails intended to restrain the patient, reducing the risk of accidental falls. The sides can be easily manoeuvred up or down to allow easy ascent onto/descent from the stretcher.

To **lower the side rails** , proceed as follows;

- make sure that the stretcher brake is engaged (see page 17 of this manual);
- move to the side of the stretcher;
- with one hand, pull the side release lever (**20**) and with the other accompany the side (**10**) as it descends;
- if necessary, repeat the operations for the other side.

To **raise the side rails** proceed as follows:

WARNING! Do not place hands or objects between the bed surface and the sides.

WARNING! Do not release the side if unsure of the perfect locking by the mechanism.

- lift the side (**10**) completely: an automatic mechanism locks the side in position.

7. SANITISATION

7.1 Sanitising products

ATTENTION! Sanitising agents are corrosive.

The best sanitizing and disinfecting agents are those most commonly used in the industrial field. Follow the manufacturer's instructions for the specific application during use. If possible, ask the manufacturer for guarantees on the degree of corrosivity of the solutions used.
Any changes to these characteristics may damage the item.
IT IS very important to follow the specifications regarding concentration, temperature and reaction times. Any change to these characteristics may damage the device.

During the sanitisation phases, only use:
- cold water;
- hot water max. 95°C;
- alkaline solutions max. 80°C;
- disinfectant solutions.

Do not use sulphuric acids or mineral acids such as HCl, H_2SO_4, HNO_3 and H_2SO_3.

7.2 Sanitisation with halogen-containing products

ATTENTION! Do not use products containing halogens during closed-loop sterilisation as they could damage the stretcher.

If used incorrectly these products can corrode steel especially if the pH is low. Perform thorough checks before using these solutions.
If the device is to be sanitised using halogen containing sanitising products (e.g. chlorine), the following requirements must be followed:
- the pH must be greater than 10;
- the temperature must not exceed 40°C;
- the solution must not remain in contact with the stretcher for more than 20 min.;
- use a concentration of max. 50 ppm of active chlorine;
- after sanitising, rinse thoroughly with water.

7.3 Sanitisation intervals

The sanitisation intervals are defined by the user, according to requirements, taking into account the indications reported in this manual and those stated on the sanitising products being used.

7.4 Automatic sanitisation

The automatic sanitisation (autoclave) is defined by the customer, according to requirements, taking into account the indications reported in this manual and those reported by the sanitising products being used.

7.5 Manual sanitisation

Manual sanitisation will be defined by the customer, based on requirements, taking into account the indications given in this manual, and those reported by the sanitising products being used.

ATTENTION! Always check the safety data sheets of the materials being used for sanitisation. In case of contact/inhalation and/or ingestion, follow the instructions provided in the prescribed sheets.

8. MAINTENANCE

8.1 Periodic check

ATTENTION! If damage is found, immediately take the product out of service until it has been repaired or replaced.

ATTENTION! Cleaning and maintenance operations must be carried out with the device disconnected from the power supply network.

The user personnel must inspect the item at least once a year; the inspection must include a visual search for any damage that could compromise the integrity and correct functioning of the item. This inspection could include:

- integrity of power cables and plugs;
- correct connection of the power cable;
- tightening screws;
- correct insertion and fixing of any accessories;
- general cleaning of the product.

8.2 Technical support

ATTENTION! all assistance interventions must be strictly carried out by Pam Mobility personnel. Assistance interventions carried out by unauthorised persons may compromise the operation of the stretcher and could cause damage to property or persons. Pam Mobility s.r.l. assumes no responsibility for damage to property or persons resulting from assistance interventions carried out by unauthorised personnel.

Requests for customer service assistance should be sent by fax or e-mail to the following address:

PamMobility

Pam Mobility s.r.l.
Via Verdi 39 – 42043 Gattatico (RE) - Italy
Tel. 0522 473859 - Fax 0522 1548244
Email: info@pammobility.com
http: www.pammobility.com

Specifying:

- product code, serial number, production code, year of installation;
- defects found;
- exact address of the place where the stretcher is installed.

8.3 Long term storage

If the product is set aside for a long period, it is necessary to:

- turn off and/or disconnect the battery;
- position it in a place that is dry and protected from the sun;
- protect it from dust by covering it with a nylon sheet;
- grease the parts that could be oxidised or damaged in the event of drying.

8.4 Demolition and disposal

The component materials of the stretcher essentially consist of:

- painted or galvanised steel;
- plastic abs material;
- elastomers.

Disassemble the stretcher, separating the individual pieces according to the component material.

It is mandatory to dispose of the different materials in accordance with the regulations of the country in which the product is to be disposed of.

8.5 Sanitisation products

- Products used for sanitisation must not be discharged into urban pipes.
- Enquire about the provisions in force on disposal procedures with local authorities.

9. WARRANTY

IMPORTANT! Keep a copy of the delivery note or purchase receipt. The date shown on the document is valid for the start of the warranty period.

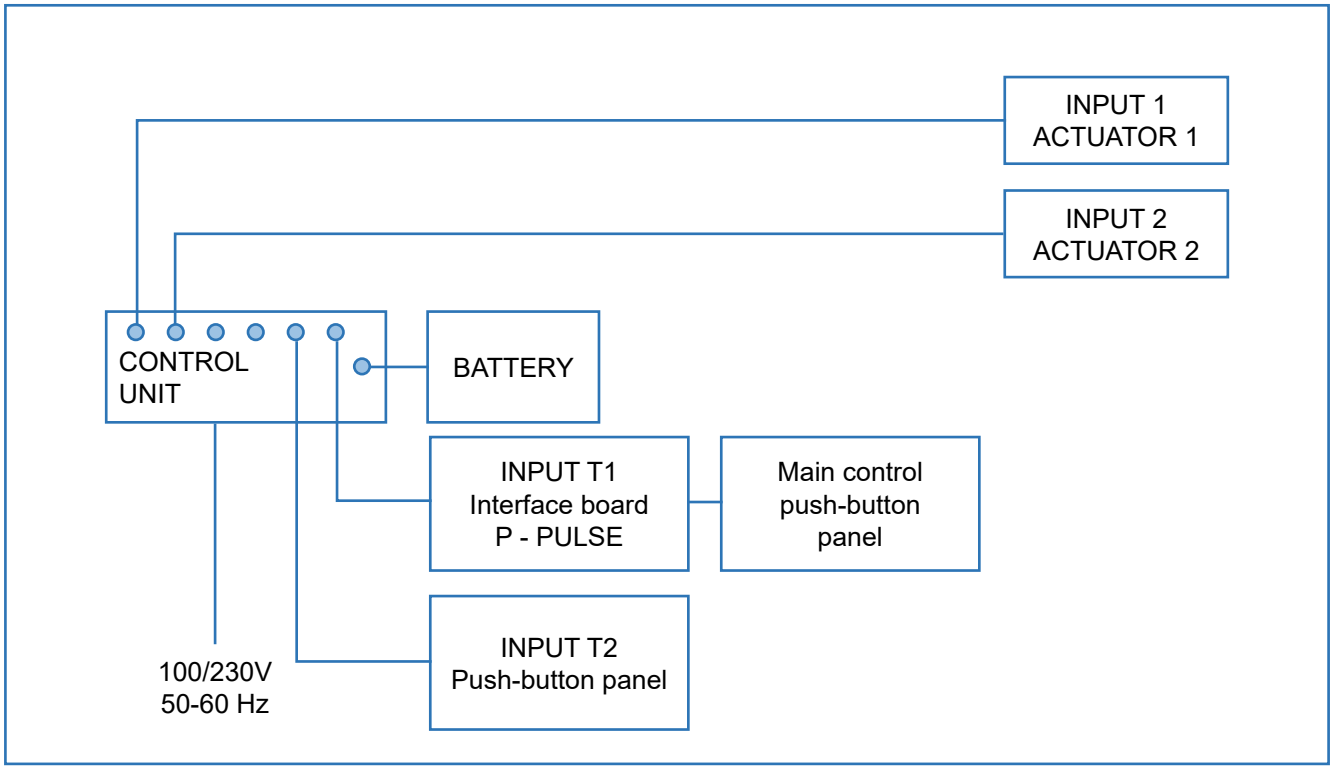
The device is covered by warranty for a period of 24 months.

For the entire duration of the warranty period, the manufacturer undertakes to eliminate any faults and/or defects of the device provided that it has been used correctly in compliance with the indications provided in the use and maintenance manual.

For interventions under warranty, contact the support service.

The replacement of parts with others that do not comply with the specifications of Pam Mobility srl if commercial, or not provided by Pam Mobility srl if designed, will void the warranty, as will improper use of the device.

10. ELECTRICAL SYSTEM WIRING DIAGRAM



DESCRIPTION	CODE
CONTROL UNIT	3MK00157
ACTUATOR 1	3MK00156
ACTUATOR 2	3MK00156
BATTERY	3MK00163
P - PULSE interface	3MK00162
Control console	3MK00160
Push-button panel	7M009030

11. ACCESSORIES

11.1 Additional push bar code 2MK00545 and IV pole-holder bar with clamp code 4MK00073

11.1.1 Technical presentation

Additional push bar code 2MK00545: consisting of a chrome-plated and curved steel pipe, it is fixed to the stretcher by means of a screw.

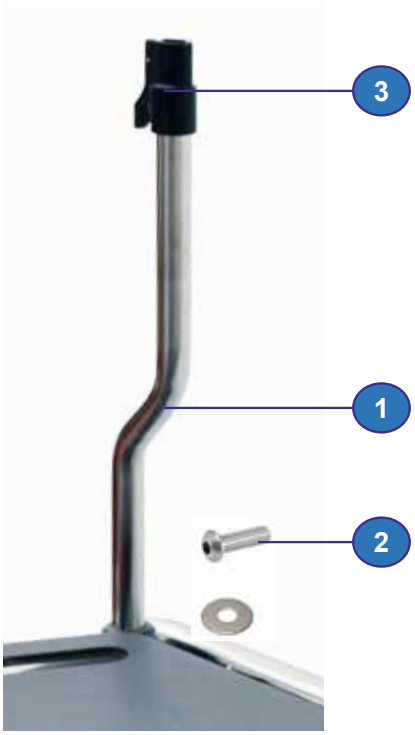
IV pole-holder bar with clamp (code 4MK00073): similar to the push bar code 2MK00545, but with accessory-holder clamp attached to the end.

11.1.2 Intended use

The device is intended to be installed on Pam Mobility stretchers to facilitate their movement and to allow the attachment of accessories (only 4MK00073).
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

11.1.3 Name of the parts

1. Bar;
2. Fastening screw with washer;
3. Accessory fixing clamp (only on 4MK00073).



11.1.4 Identification

ATTENTION! It is forbidden to remove the label from the item for any reason.

The following label is affixed to the item:

PamMobility	Pam Mobility srl Via Verdi, 39 - 42043 Gattatico (RE) Italy Tel. +39 0522 473858 info@pammobility.com CE
LOT <Lot> <Anno>	MD NOME ARTICOLO <Descrizione Articolo> REF <ID CODICE>
= Kg <C.I.s.>	SN <SERIAL NUMBER>
	UDI <Vettore UDI>

FAC-SIMILE

11.1.5 Preparing the installation area

The bars are installed on the accessory-holder supports located at the 4 corners of the Pam Mobility stretchers and are fixed by means of a screw. It is advisable to install the accessory before commissioning the stretcher.

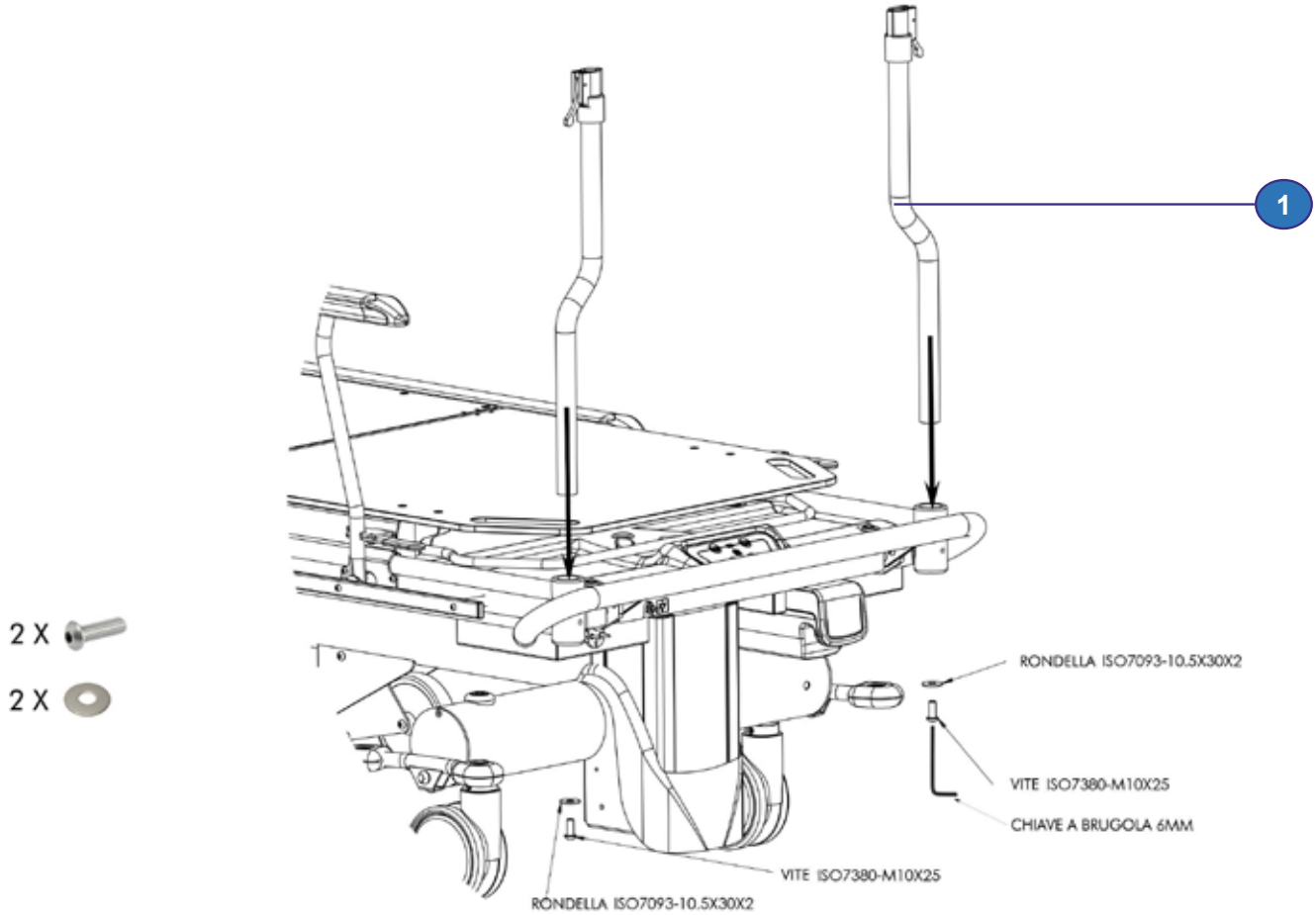
11.1.6 Installing the bar

WARNING! This item must be installed by qualified personnel.

WARNING! Always check that the bar is installed correctly before use.

To install the bar proceed as follows:

- insert the bar (1) into one of the 4 holes for the insertion of accessories on the head or foot side and secure it by tightening the screw, as shown in the photo.



11.1.7 Functional test

ATTENTION! The following check must be repeated periodically to verify the efficiency of the product.

Before putting the item into use:

- check if it works correctly by referring to the paragraph "Operation and use" of this accessory;
- if the check is successful, the item is ready to be put into regular service, otherwise contact Customer Service immediately.

11.2 4 hook drip pole code 7M009011

11.2.1 Technical presentation

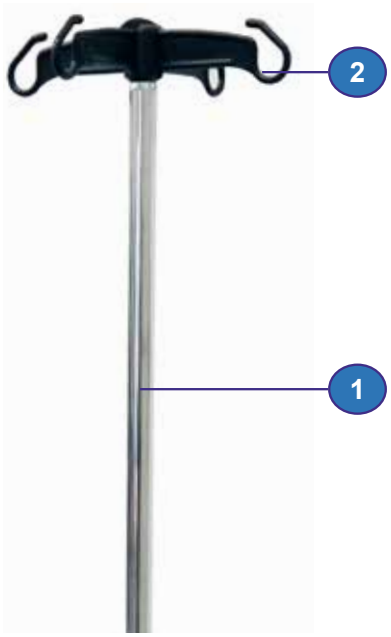
The IV pole consists of a chromed steel pipe, at the end of which there is a support with 4 hooks in resistant plastic material. The pole must be fixed to the bed by means of the IV pole-holder bar with clamp (code 4MK00073).

11.2.2 Intended use

The device is intended to be installed on Pam Mobility stretchers to support IV bags or bottles.
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

11.2.3 Name of the parts

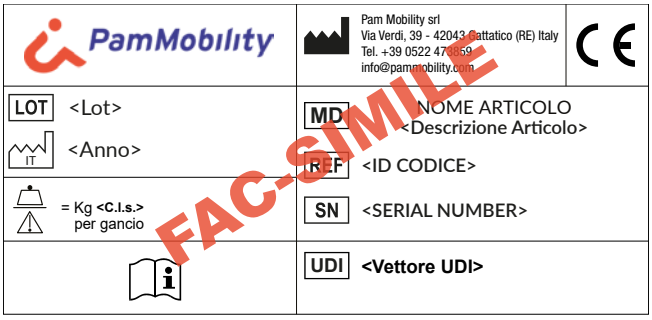
1. Pole;
2. Shaped hooks.



11.2.4 Identification

ATTENTION! It is forbidden to remove the label from the item for any reason.

The following label is affixed to the item:



11.2.5 Preparing the installation area

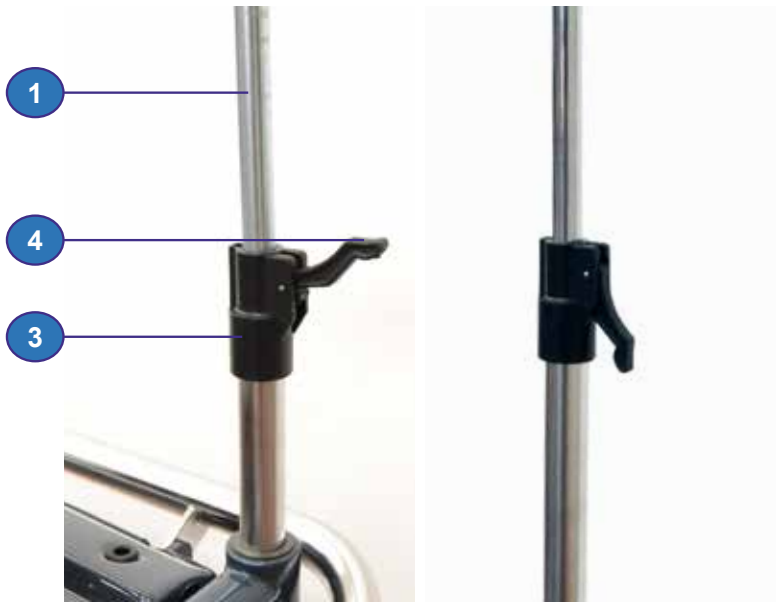
The IV support pole is installed on the Pam Mobility stretchers by means of the IV pole-holder bar with clamp (code 4MK00073).

11.2.6 Installing the IV support pole

WARNING! This item must be installed by qualified personnel.

WARNING! Orient the IV support hooks according to the longitudinal axis of the stretcher.

To install the IV pole, proceed as follows:
- lift the pole fixing lever (4) in the clamp (3) of the IV pole-holder bar in the stretcher;
- insert the pole (1) into the clamp (3);
- adjust the height and secure the position by lowering the lever (4).



11.2.7 Functional test

ATTENTION! The following check must be repeated periodically to verify the efficiency of the product.

Before putting the item into use:
- check if it works correctly by referring to the paragraph "Operation and use" of this accessory;
- if the check is successful, the item is ready to be put into regular service, otherwise contact Customer Service immediately.

11.2.8 Operation and use

ATTENTION! Do not use the IV support pole for any other purpose.

WARNING! Always check that the IV support pole is installed correctly before use.

WARNING! Do not exceed the safe work load of the IV support pole.

Hang the IV with its holder on the pole hook (2).

11.3 DIN bar monitor-holder system code 7M009044

11.3.1 Technical presentation

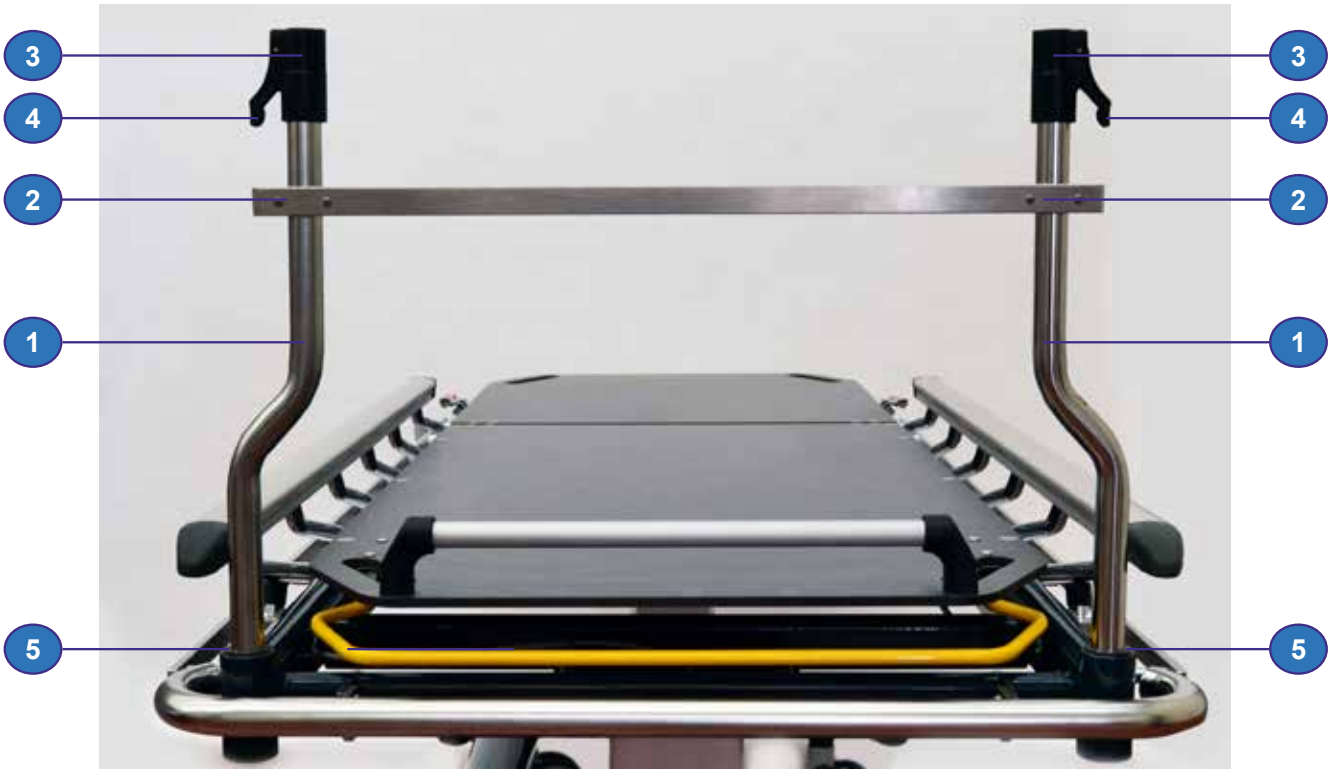
The DIN bar monitor system consists of two curved chrome steel pipes, at the end of which there is a clamp for the securing of any accessories. The system is completed by a horizontal bar in chromed steel fixed to the two pipes for attachment of the monitor-holder. The monitor-holder system is installed at the foot of the stretcher by means of the two holes for accessory insertion. The accessory can also be used as an additional double push handle for handling of the stretcher.

11.3.2 Intended use

The device is intended to be installed on Pam Mobility stretchers to support a monitor and as an additional handle for pushing of the stretcher.
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

11.3.3 Name of the parts

1. Pole;
2. Monitor-holder bar;
3. Fixing clamp;
4. Pole fixing/height adjustment lever;
5. Nylon bushing for insertion of the pole on the stretcher mesh surface.



11.3.4 Preparing the installation area

The DIN bar monitor system must be installed on Pam Mobility stretchers. It is advisable to install the accessory before commissioning the stretcher.

11.3.5 Identification

ATTENTION! It is forbidden to remove the label from the item for any reason.

The following label is affixed to the item:

PamMobility	Pam Mobility srl Via Verdi, 39 - 42043 Gattatico (RE) Italy Tel. +39 0522 473858 info@pammobility.com	CE
LOT <Lot> <Anno>	MD NOME ARTICOLO <Descrizione Articolo>	
= Kg <C.I.s.>	REF <ID CODICE> SN <SERIAL NUMBER>	
	UDI <Vettore UDI>	

11.3.6 Installing the monitor-holder system

WARNING! This item must be installed by a nurse.

To install the monitor-holder system proceed as follows:

- insert the two rods (1) into the two holes for the insertion of foot side accessories by means of the nylon bushings (5), as shown in the photo;
- attach the monitor to the horizontal bar.

11.3.7 Functional test

ATTENTION! The following check must be repeated periodically to verify the efficiency of the product.

Before putting the item into use:

- check if it works correctly by referring to the paragraph "Operation and use" of this accessory;
- if the check is successful, the item is ready to be put into regular service, otherwise contact Customer Service immediately.

11.3.8 Operation and use

ATTENTION! Do not use the item for any purpose other than the following.

WARNING! Never exceed the safe work load of the accessory.

WARNING! Always make sure the item is securely attached to the stretcher before putting it into use.

WARNING! The tools must not in any way protrude from the configuration of the stretcher, as they could hinder the movements of the stretcher, could be in the way and therefore cause injuries to the operator and patient resulting from a possible fall, and cause damage to the stretcher itself.

To use the monitor-holder system, proceed as follows:

- make sure that the support is well installed to the stretcher and attach the tools to the horizontal bar.

11.4 Monitor/tablet-holder with variable height code 7M009017

11.4.1 Technical presentation

The variable height monitor/tablet-holder consists of a curved chrome-plated steel pipe, at the end of which there is a preformed plexiglass surface with two nylon straps for securing of the monitor. The pole is equipped with a clamp for height adjustment.

11.4.2 Intended use

The device is intended to be installed on Pam Mobility stretchers to support a monitor/tablet.
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

11.4.3 Name of the parts

1. Pole;
2. Monitor-holder surface;
3. Fastening straps;
4. Rod fixing/height adjustment lever;
5. Nylon bushing for accessory insertion on stretcher mesh surface.

11.4.4 Preparing the installation area

The variable height monitor/tablet-holder must be installed on Pam Mobility stretchers. It is advisable to install the accessory before commissioning the stretcher.

11.4.5 Identification

ATTENTION! It is forbidden to remove the label from the item for any reason.

The following label is affixed to the item:

PamMobility	Pam Mobility srl Via Verdi, 39 - 42043 Gattatico (RE) Italy Tel. +39 0522 473825 info@pammobility.com CE
LOT <Lot> <Anno>	MD NOME ARTICOLO <Descrizione Articolo> REF <ID CODICE>
= Kg <C.I.s.>	SN <SERIAL NUMBER>
	UDI <Vettore UDI>

FAC-SIMILE

11.4.6 Installing the variable-height monitor/tablet-holder

WARNING! This item must be installed by a nurse.

To install the monitor/tablet-holder at variable height proceed as follows:
- insert the pole (1) into the support by means of the nylon bushing (5) as shown below;
- if necessary, adjust the height: with one hand support the pole (1) and with the other raise the fixing lever (4), adjust the height and lock the position by lowering the lever (4);
- check its stability.

11.4.7 Functional test

ATTENTION! The following check must be repeated periodically to verify the efficiency of the product.

Before putting the item into use:
- check if it works correctly by referring to the paragraph "Operation and use" of this accessory;
- if the check is successful, the item is ready to be put into regular service, otherwise contact Customer Service immediately.

11.4.8 Operation and use

ATTENTION! Do not use the item for any purpose other than the following.

WARNING! Never exceed the safe work load of the accessory.

WARNING! Always make sure the item is securely attached to the stretcher before putting it into use.

WARNING! The tools must not in any way protrude from the configuration of the stretcher, as they could hinder the movements of the stretcher, could be in the way and therefore cause injuries to the operator and patient resulting from a possible fall, and cause damage to the stretcher itself.

To use the variable-height monitor/tablet-holder proceed as follows:
- ensure its stability, place the monitor/tablet on it and secure it by means of the straps (**3**).

11.5 Roll-holder for Pulse code 7M009015

11.5.1 Technical presentation

Roll-holder applied to the lower frame of the stretcher, with chrome-plated steel bar.

11.5.2 Intended use

The device is intended to be installed on Pam Mobility stretchers to hold a roll of sheet.
Environment of use: within healthcare and health facilities.
The device cannot be used in a potentially explosive or flammable atmosphere.
Personnel intended for use of the product: specialist operators and doctors.

11.5.3 Materials used

Made with two chromed steel supports fixed by two screws and stainless steel pipe with plastic caps at the ends.

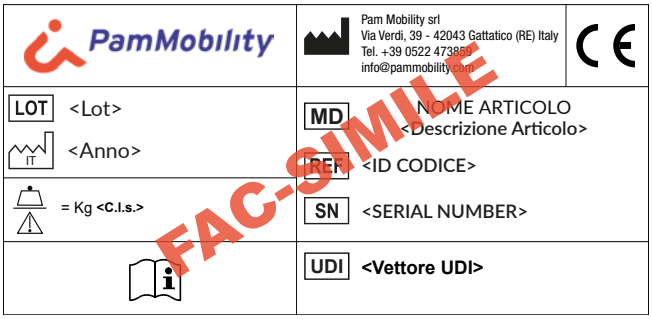
11.5.4 Name of the parts

1. Support;
2. Pole housing;
3. Sheet-holder pole;
4. Screw and washer (x2).

11.5.5 Identification

ATTENTION! it is forbidden to remove the label from the item for any reason.

The following label is affixed to the item:



11.5.6 Preparing the installation area

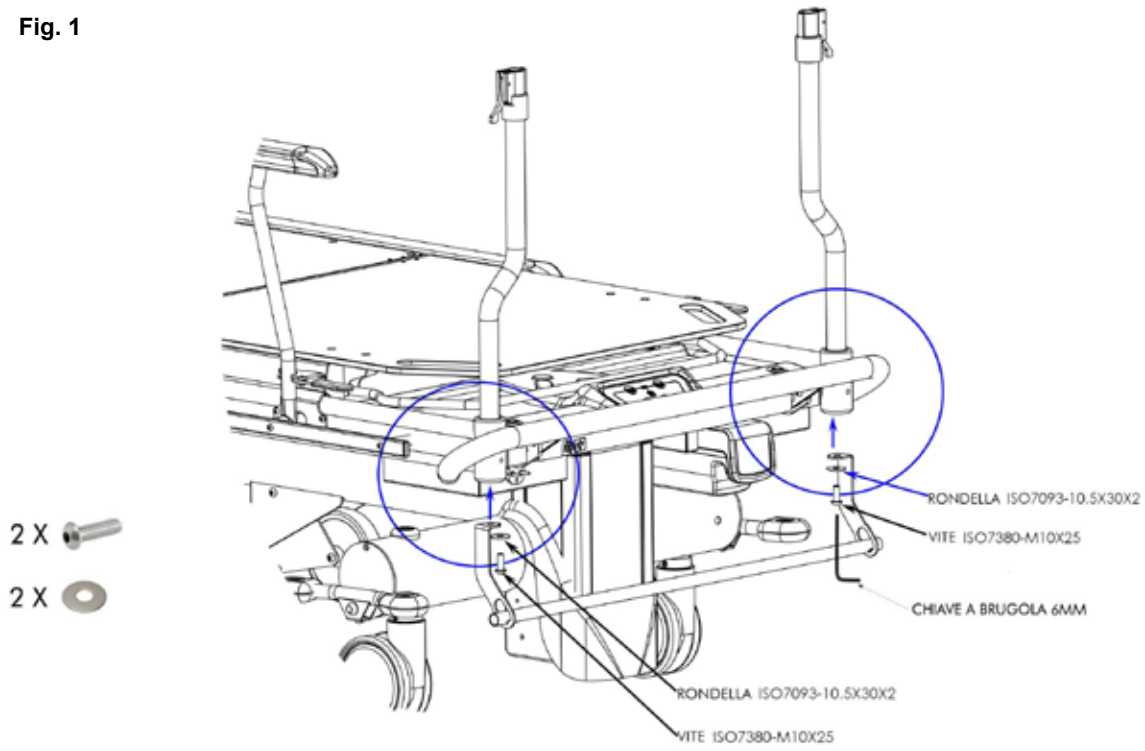
The Pulse roll-holder must be installed on Pam Mobility stretchers. It is advisable to install the accessory before commissioning the stretcher.

11.5.7 Installing the roll-holder

WARNING! This item must be installed by qualified personnel.

- secure the two supports to the stretcher as shown in the figure below (Fig. 1);

Fig. 1



- assemble the pole with the sheet roll (Fig. 2) making sure that the pin (4) in the pole housing is inserted into the appropriate hole in the pole (Fig. 3).

Fig. 2

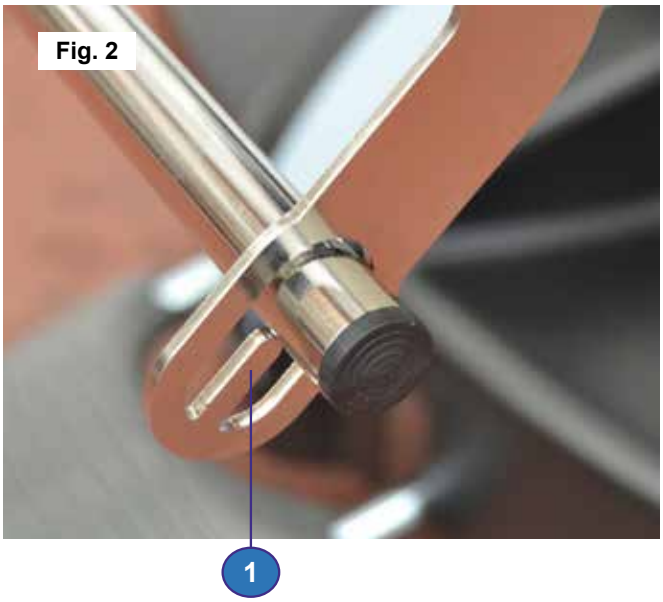
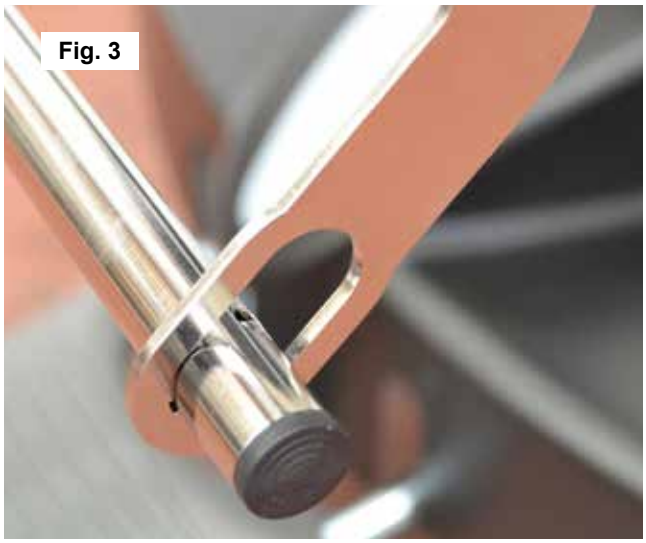


Fig. 3



11.5.8 Functional test

ATTENTION! The following check must be repeated periodically to verify the efficiency of the product.

Before putting the item into use:

- check if the accessory is correctly fixed to the stretcher structure by referring to the paragraph "Roll-holder installation";
- if the check is successful, the item is ready to be put into regular service, otherwise contact Customer Service immediately.

PamMobility

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Tel. +39 0522 473859 - Fax +39 0522 1548244
info@pammobility.com - www.pammobility.com