Class I Medical Device, compliant with the Medical device directive 93/42/EEC

Warning
The information contained in this manual is subject to change without notice.
The Diagrams are inserted only for reference and may vary slightly from the actual device.
Spencer Italia S.r.l. assumes no responsibility for any errors contained herein or for damage, accidents or consequences connected with the supply, performance or use of this manual.

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**Warning**

The information contained in this document could be modified without any warning and is not to be intended as a commitment on behalf of Spencer Italia S.r.l. Spencer products are exported to many countries and the same identical regulations are not always valid. For this reason there could be differences between the description here described and the product actually delivered. Spencer continually strives to reach the perfection of all items sold. We therefore hope you will understand if we reserve the right, at any time, to modify the shape, equipment, lay-out or technical aspects that are herein described.

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1. MODELS

The standard following models can undergo change, revision and implementation without any notice.
- CROSS CHAIR – STRETCHER/CHAIR

2. INTENDED USE

CROSS CHAIR is a device for transport of patients, use in rescue operations on road or in sanitary vehicles. Two configurations are possible which in this manual will be called “chair mode” and “stretcher mode”.

The device can be used in the following ways:
- Chair mode and stretcher mode – for the transport of the patient from the place of rescue to the sanitary vehicle.
- Stretcher mode – during the transfer on the sanitary vehicle, only if used with the specific Cross Chair trolley

The patient should not intervene on the device.

3. REFERENCE STANDARDS

As a distributor or end user of products manufactured and/or marketed by Spencer Italia S.r.l. you are strictly required to have basic knowledge of any legal requirements applying to the devices contained in this supply that are in power in the goods final destination Country (including laws and norms regarding technical specifications and/or safety requirements) and therefore you are strictly required to have the necessary knowledge to guarantee all aspects regarding the total conformity of the products to the regulations in the relevant territory.

<table>
<thead>
<tr>
<th>REFERENCE</th>
<th>TITLE OF DOCUMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNI EN ISO 1865-1</td>
<td>Patient handling equipment used in road ambulances - Part 1: Specification for general stretcher systems and patient handling equipment</td>
</tr>
</tbody>
</table>

4. INTRODUCTION

4.1 USE OF THE MANUAL

This manual is intended to provide the health care operator with all the necessary information for its safe and appropriate use as well as adequate maintenance of the device.

**Note:** The manual is an integral part of the device. It must be kept for the duration of the device and must accompany the device in case of change of ownership or destination. If the operating instructions received relate to products not received, you must immediately contact the manufacturer before use.

The Spencer product manuals can be downloaded from the website or can be requested by http://support.spencer.it or by contacting the manufacturer. Exceptions are items whose essentiality for reasonable and predictable use is such as to make it unnecessary to prepare instructions in addition to the following warnings and directions on the label.

Regardless of the level of experience gained in the past with similar devices, it is recommended that you carefully read this manual before installing, operating or using the product or any maintenance.

4.2 LABELLING AND TRACKING CONTROL OF THE DEVICE

Each device has got an identification label positioned on the device itself and/or on its box, which includes identification data about the manufacturer, the product, the CE mark, the serial number (SN) or lot number (LOT).

It must never be removed or covered.

In case of damage or loss, request a duplicate from the manufacturer. Failure to do so will interrupt the validity of the guarantee as the device can no longer be traced.

The Directive 93/42/EEC requires manufacturers and distributors of medical devices to keep track of the device location. If the device was in a different location to the address where it was sent or to where it had been sold, donated, lost, stolen, exported, or destroyed, permanently removed from use, or if the device had not been delivered directly from Spencer Italia S.r.l., register your device at http://service.spencer.it or inform the customer (see § 4.4).
### 4.3 SYMBOLS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>General or specific warnings</td>
</tr>
<tr>
<td></td>
<td>Lubricate</td>
</tr>
<tr>
<td></td>
<td>See instructions for use</td>
</tr>
<tr>
<td>LOT</td>
<td>Lot number</td>
</tr>
<tr>
<td>REF</td>
<td>Product code</td>
</tr>
<tr>
<td>SN</td>
<td>Serial Number</td>
</tr>
<tr>
<td></td>
<td>The product is compliant with the requirements of Directive 93/42/EEC</td>
</tr>
</tbody>
</table>

### 4.4 WARRANTY AND SUPPORT

Spencer Italia S.r.l. guarantees that products are without defects for a period of **one year from the date of purchase.**

For any information regarding the correct interpretation of the instruction manual, the use, maintenance, installation and restore of the product, contact the Spencer customer care service ph. +39.0521.541111, fax +39.0521.541222 or e-mail service@spencer.it.

In order to facilitate the assistance service, please always indicate the lot number (LOT) or serial number (SN) shown on the label applied on the box or on the device.

Conditions for warranty and assistance can be viewed on [http://support.spencer.it](http://support.spencer.it).

**Note:** Record and store; these instructions, lot (LOT) or serial number (SN) if any, date and place of purchase, date of first use, date servicing, user names and comments.

### 5. WARNINGS

The warnings, notes and other important safety information are indicated in this section and are clearly visible throughout the entire manual.

At least every 6 months, it 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://support.spencer.it](http://support.spencer.it) in the section “User manuals” and “Product Updates”.

**User training**

**Note:** Laboratory testing, post production tests, instruction manuals cannot always consider every possible scenario for use. This means that in some cases the performance of the product could be notably different from results to date obtained. **Instructions are continually being updated and are under tight surveillance of fully qualified staff with adequate technical formation.**

- Regardless of the level of experience gained previously with similar devices, it is recommended that you carefully read this manual before installing, operating or using the product or carrying out any maintenance. If in doubt, contact Spencer Italia S.r.l. to obtain the necessary clarifications.
- The product must be used by trained personnel only, having attended specific training for this device and not for similar products.
- The suitability of the user to use the product may be attested by the records of training, where the names of those trained, of the trainers, dates and place are indicated. This register which certifies the eligibility of the operators to use the Spencer device must be kept for a period of 10 years after the disposal of the device itself. This register will be made available to the competent Authorities and/or manufacturer if required. In the absence of such documentation, sanctions will be applied.
- Do not allow any untrained person to help during the use of the device, because they could cause damage to the patient or to themselves.
- The product should be operated only by personnel trained in the use of this product and not in others similar.

**Note:** Spencer Italia S.r.l. is always at your disposal to organise product training.

**Installers training**

The installation of the device must be carried out only by qualified and trained staff authorized by Spencer Italia S.r.l. Timing and procedures for conducting training courses shall be agreed between the customer and our Commercial offices.
Product functionality

Use of the device in anyway other than described in this manual is forbidden.

- 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 are detected, the device must be immediately removed from service and the manufacturer must be contacted.
- 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.
- The appliance 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.
- Those who modify or have modified, prepare or have prepared medical appliances in such a way that they no longer serve the purpose for which they were intended, or no longer supply the intended service, must satisfy the valid conditions for the introduction onto the market.
- During use, position and adjust the device taking care not to cause any obstruction to rescuers and or any other rescue equipment.
- 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, when applicable.
- For devices intended for the transport of patients, always respect the maximum load capacity of the device, as indicated in this user’s manual. Maximum load capacity means the total weight distributed according to the human anatomy. In determining the total loading weight of the product, the operator must consider the weight of the patient, the equipment and the accessories. Moreover, the operator must consider that the overall dimensions of the patient do not reduce the functionality of the device.
- For devices intended for the transport of patients, make sure, before lifting, that operators have appropriate physical conditions, as indicated in the manual.
- The maximum weight supported by each rescuer must comply with the requirements prescribed by the law of the land, in the field of Health and Safety at Work.
- The warranty seals, where present, must not be removed; in such case, the manufacturer will no longer recognize the product warranty and will accept no responsibility in case of incorrect operation or damage caused by the product itself.
- Avoid contact with sharp objects.
- The installation of the device must be carried out only by qualified and trained staff authorized by Spencer Italia S.r.l. Timing and procedures for conducting training courses shall be agreed between the customer and our Commercial offices.
- Operating temperature: from -10°C to + 50°C

Storage

- The device should not be exposed to or come into contact with any source of combustion or inflammable agents. Store in a cool, dry, dark place and do not expose to direct sun.
- Do not store the device underneath any heavy objects which could cause structural damage.
- Store and transport the device in its original packaging. Failure to do so makes the warranty void.
- Storage temperature: from -20°C to +60°C

Maintenance/cleaning

Spencer Italia S.r.l. disclaims any liability for any damage, direct or indirect, which is a result of improper use of the product and replacement parts and/or otherwise of any repairs made by an entity other than the authorized Spencer service centres; this will also invalidate the warranty.

- The operator must always wear adequate personal protection such as gloves and mask etc. during all checking, maintenance and cleaning procedures.
- Establish a maintenance program and periodic testing, identifying an employee responsible for overseeing. 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.
- The frequency of inspection is determined by factors such as legal requirements, the type of use, frequency of use, environmental conditions during use and storage.
- Spencer Italia S.r.l. disclaims any liability for any damage, direct or indirect, that is the result of incorrect repairs or use of products made by Spencer Italia S.r.l. Repairs must necessarily be carried out by an authorized Spencer Italia service centre, which in using original spare parts will provide a quality repair service in strict accordance with the technical specifications given by the manufacturer. Spencer Italia S.r.l. disclaims any liability for any damage, direct or indirect, which is a result of improper use of spare parts and/or otherwise of any repairs made by an entity other than the Spencer service centres authorized to repair or make substitutions on this product and parts and/or otherwise of any repairs made by an entity other than the Spencer service centres authorized to do so; the warranty will also be invalidated.
- Use only original components, spare parts and or accessories, approved by Spencer Italia S.r.I., in order to carry out any operation without causing any alteration or modification to the device.
- For any operations that are not carried out directly by the manufacturer but by an authorised centre, we have to underline that a report regarding all operations carried out must be requested. This will permit both Spencer Italia S.r.l. and the end user to keep a log book regarding the operations carried out on the device.
All maintenance and revision must be recorded and documented with the corresponding report for technical assistance; documentation shall be maintained for at least 10 years from the end of life and must be made available to the competent authorities and/or the manufacturer if requested.

The cleaning schedule for reusable products must be performed in accordance with the directions provided by the manufacturer in the user manual, in order to avoid the risk of cross-infection due to the presence of secretions and/or residuals.

The device and all its components, after washing, should be allowed to dry completely before storing.

If required, lubrication must be carried out after cleaning and complete drying.

**Regulatory requirements**

As a distributor or end user of products manufactured and/or marketed by Spencer Italia S.r.l., you are strictly required to have a basic knowledge of any legal requirements applying to the devices contained in this supply that are in power in the final destination Country (including laws and norms regarding technical specifications and/or safety requirements) of the goods and therefore you are also strictly required to have the necessary knowledge to guarantee all aspects regarding the total conformity of the products to the regulations in the relevant territory.

- Promptly notify Spencer Italia S.r.l. (already during the first product enquiry) when requesting in details regarding any revisions to be made by manufacturer in order to guarantee the conformity of the products to the territory’s legal specifications (including those resulting from rules and/or norms of other kind).

- 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, exactly as specified in the relevant user’s manual.

- Actively contribute to safety checks on product sold, by communicating any relevant risk analysis information both to the manufacturer and to any competent authorities so that the necessary action can be promptly taken.

- The distributor or final user is 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 Spencer Italia S.r.l. expressly disclaims any responsibility and/or liability for your non-compliance with the present regulatory provisions.

**General warnings for medical devices**

When in possession of a medical device, the user must carefully read not only these general warnings, but also those listed below.

- It is not foreseen that the use of the device is prolonged beyond the time necessary for the first responders to the complete their operation and the subsequent stages of transport to the nearest rescue point.

- When the device is being used, the assistance of qualified staff must be guaranteed and at least one operator must be present.

- Follow the procedures and protocols approved by the internal organization.

- The activities of disinfection and sterilization should be carried out in accordance with the parameters given in the validated cycle as specified in the technical standards.

- With reference to the D. Lgs. 24th February 1997, n. 46 emended by D. Lgs. 25/01/2010, n. 37 – Acknowledgement of Directive 93/42/CEE and 2007/47/CE concerning Medical Devices, we remind both public and private operators, , That in the exercise of their activity detect an accident involving a medical product are required to notify the Ministry of Health, under the terms and in the manner established by the relative ministerial decrees and also to the manufacturer. Health care providers whether public or private are required to communicate to the manufacturer, any other inconvenience that may allow for the adoption of measures to ensure the protection and health of patients and users

6. **SPECIFIC WARNINGS**

- Follow the procedures approved by the Emergency Medical Service for the immobilization and transport of patients.

- Follow the procedures approved by the Emergency Medical Service for the positioning and transport of patients.

- Do not use if the device or its parts are pierced, torn, frayed or excessively worn out.

- Make sure, before lifting, that the operators have a firm grip on the device.

- Do not lift the device in stretcher mode, if posterior handles are opened.

- Avoid pulling the device on rough surfaces.

- Do not lift by crane or other mechanical lifters.

- Do not use drying machines.

- The device is intended for the transport of patients and cannot be used as a parking device.

- Have practice with an empty stretcher/chair, in order to make sure you become familiar with the manoeuvres.

- For loading techniques of the patient, for particularly heavy patients, for working on uneven ground or in special and unusual circumstances, the presence of more operators is recommended (not only 2 as expected under standard conditions).

- Before each use, check the integrity of the belts and their hooks, as specified in the user’s manual. In case of malfunction or damage that may compromise the functioning and safety of the device, patient or operator, it is necessary to replace the belts.

- Make sure the belts are properly fastened to the frame of the stretcher.

- Always immobilize the patient using the straps; lack of immobilization may cause serious damage.

- Make sure the mattress is properly secured/anchored to the frame/patient board of a stretcher.

- Make sure the sheet does not interfere with the footrest or with the movement of handles and sidebars.

- Do not operate in case the weight has not been distributed correctly.

- The sidebars may be damaged due to improper use. Always keep the sidebars raised during patient transport.

- Always grasp the handles or knobs to carry the stretcher and not the sidebars or polyethylene boards.
• Avoid extreme force during the loading of the stretcher on the trolley. Too much force may have negative effect on the coupling system.
• Avoid extreme force during the loading of the assembly trolley + stretcher. Too much force may have negative effect and can adversely affect the functionality of the trolley.
• Hold the stretcher firmly still if the patient is on it.
• Hold the stretcher/chair when in stretcher mode. In this configuration there are no parking brakes.
• Pay a lot of attention to possible obstacles (water, ice, debris, etc.) on the route of the stretcher/chair, because they could cause loss of balance of the operator and compromise the proper functioning of the device. If the path free cannot be made free of obstacles, choose an alternative path.
• Water, ice or debris on the stairs can cause loss of balance for the operator and jeopardize the proper functioning of the device. In order to avoid injury, clear the way of obstacles or choose an alternative route.
• Do not alter or modify the stretcher arbitrarily to make it fit into the emergency vehicle: the modification may cause unforeseeable functioning and damage to the patient or operators. In any case the warranty will be void, relieving the manufacturer from any liability.
• CROSS CHAIR, depending on model (verify the model in your possession), can be compliant with the standard EN 1789 if used with the CROSS CHAIR TROLLEY and the Spencer fastening system both compliant with the standard. Therefore, is not permitted the use of fastening systems not approved by the manufacturer. Fastening systems that have not been approved may alter the structural and functional characteristics of the stretchers/chairs.
• Improper installation of the loading platform may cause undesired operation of the device and cause harm to the patient and to the operator.
• When in chair mode and if not properly locked, the device may open causing injury to patient or operators. In any case the warranty will be void, relieving the manufacturer from any liability.
• To avoid injury, before lifting the chair, always check that the lifting handles are securely locked.
• It is preferable not to use the device in chair mode in the event of suspected cervical or spinal trauma, or fractures.
• To avoid any risk to the safety of the patient and rescuer, during transport on the stairs, the presence of at least two operators is necessary.
• In order to meet the requirements of the standard UNI EN 1789, use only belts that have as anchor point the frame of the stretcher.
• To optimize patient’s immobilization, is necessary to use a thorax belt secured to the frame of the stretcher in addition to the supplied ones.

6.1 PHYSICAL REQUIREMENTS OF OPERATORS

CROSS CHAIR is a device intended for professional use only. Each operator must be trained to transport patients safely and efficiently. Do not allow untrained persons to help operators during use of the product, as this may cause injury to themselves or to other people.

The operators that use the device must have the physical ability to use it and good muscle coordination, as well as presenting strong back, arms and legs to raise and support and be able to grasp firmly the device with both hands.

Operators must be able to provide the necessary assistance to the patient.

Users should be able to lift and handle safely the weight of the stretcher/chair, the patient and any other equipment used with the device.

During patient loading procedures for extremely heavy patients, operations on rough terrains and in particular situations, more operators may be needed (not only 2 as expected in normal conditions).

The abilities of all operators must be considered before determining their role in the employment of the stretcher.

7. RESIDUAL RISK

The residual risks listed below have been identified exclusively in reference to the intended use of the device.

• The use by untrained personnel may result in injury to the patient, rescuer or others.
• Inadequate disinfection procedures may involve cross-infection risks.
• Partial extraction of rear handles in stretcher mode or an undesired actuation of their release button, can cause the sudden closure of CROSS CHAIR if lifted in stretcher mode. When lifting, always make sure that the handles are fully inserted.
• An improper lock of the device in chair mode, can result in injury to the patient and operator. Always check the correct insertion of the locking system.
• An incorrect positioning of the stretcher/chair on the Cross Chair Trolley, may result in injury to the patient and operators. Always check for proper coupling.
• Incorrect closure of rear handles, may cause obstruction in the movement of the device. Ensure that handles are securely repositioned when changing the device configuration and when loading it on the trolley.
• Failure to comply with warnings for operators, may cause danger of crushing cause by handling mechanisms.
Note: Spencer Italia S.r.l. reserves the right to make changes to specifications without prior notice.

### TECHNICAL DATA AND COMPONENTS

<table>
<thead>
<tr>
<th>N°</th>
<th>Description</th>
<th>Material</th>
<th>N°</th>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anterior handles</td>
<td>Steel/PVC/PE</td>
<td>11</td>
<td>Chair configuration unlocking lever</td>
<td>Nylon</td>
</tr>
<tr>
<td>2</td>
<td>Backrest</td>
<td>PE</td>
<td>12</td>
<td>Rear wheels ø 150</td>
<td>PU</td>
</tr>
<tr>
<td>3</td>
<td>Frame</td>
<td>Al/Steel</td>
<td>13</td>
<td>Trolley fixation bar</td>
<td>Steel</td>
</tr>
<tr>
<td>4</td>
<td>Sidebar</td>
<td>Al/Steel/PE</td>
<td>14</td>
<td>Seat frame</td>
<td>Al</td>
</tr>
<tr>
<td>5</td>
<td>Seat frame</td>
<td>Aluminum</td>
<td>15</td>
<td>Rear handles</td>
<td>Steel/PVC</td>
</tr>
<tr>
<td>6</td>
<td>Movement drive piston</td>
<td>Steel</td>
<td>16</td>
<td>Levers for sidebars opening</td>
<td>Nylon</td>
</tr>
<tr>
<td>7</td>
<td>Piston command rod</td>
<td>Steel</td>
<td>17</td>
<td>Front wheels</td>
<td>PU</td>
</tr>
<tr>
<td>8</td>
<td>Posterior handles</td>
<td>Al/PVC/PE</td>
<td>18</td>
<td>Rod for backrest piston</td>
<td>PE</td>
</tr>
<tr>
<td>9</td>
<td>Pivoting wheels with brake</td>
<td>PA/Rubber</td>
<td>19</td>
<td>Mattress</td>
<td>PVC/PE/Nylon</td>
</tr>
<tr>
<td>10</td>
<td>Trendelenburg operating system</td>
<td>Steel</td>
<td></td>
<td>Note: The seat of the device is made of elements integrated in the mattress which is always to be used with the device</td>
<td></td>
</tr>
</tbody>
</table>

### CHAIR MODE
<table>
<thead>
<tr>
<th>Size</th>
<th>STRETCHER MODE</th>
<th>Size</th>
<th>GENERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (mm)</td>
<td>Length with handles closed (mm)</td>
<td>Weight (kg)</td>
<td>26</td>
</tr>
<tr>
<td>1430</td>
<td>1970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width (mm)</td>
<td>Length with handles opened (mm)</td>
<td>Sidebars length (mm)</td>
<td>600</td>
</tr>
<tr>
<td>600</td>
<td>2235</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth with all handles closed (mm)</td>
<td>1000</td>
<td>Sidebars height (mm)</td>
<td>200</td>
</tr>
<tr>
<td>1365</td>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lying part height (from floor) (mm)</td>
<td>250</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Loading capacity:** The stretcher alone is able to support a maximum load of 250kg distributed according to human anatomy. If the device is used with the dedicated trolley, the loading capacity of the trolley shall be considered. The trolley is available in versions having a loading capacity of 170kg and 250kg.
9. INSTALLATION AND START-UP

Before the first use verify that:

- The packaging is intact and has protected the device during transport
- Check that are present all the components included in the accompanying list.
- Functionality of the device
- The sanitary vehicle is equipped with a Spencer fastening system dedicated to the stretcher.
- The patient board of the stretcher is flat.
- The loading floor of the stretcher wide and long enough to accommodate the stretcher and its accessories without becoming an obstacle.
- Do not modify for any reason the stretcher in the structural, leverage and traction parts. This type of intervention could cause damage to patient and/or rescuers.

If conditions mentioned above are not satisfied, the device cannot be considered secure, compromising its safe use and making it a possible cause of injury for patient, operators and damage to the device. To facilitate the loading of the stretcher on the ambulance, it is recommended to eliminate sharp edges on the edge of the loading floor. The stretcher must be secured with Spencer fastening systems to prevent any kind of movement during transport on the sanitary vehicle.

Practice with a stretcher without patient before the regular start-up.

For instruction about use after start-up, follow the operations described on paragraph 12.

If the above conditions are met, the device may be considered ready for use; otherwise you must immediately remove the device from service and contact the manufacturer.

Do not alter or modify in any way the appliance; any such interference could cause malfunctions and injury to the patient and/or rescuer. Moreover the manufacturer will no longer recognize the product warranty and will accept no responsibility.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Sidebar</td>
<td>Allows containment of patient both in chair and stretcher mode</td>
</tr>
<tr>
<td>B</td>
<td>Telescopic handles</td>
<td>The rear ones allow the unlocking of the mechanism for configuration change and make the transport on stairs easier. The front ones allow the transport on flat surfaces when in chair mode and make the transport easier when in stretcher mode.</td>
</tr>
<tr>
<td>C</td>
<td>Wheels support</td>
<td>In addition to being a structural element, they are necessary for the fastening of the Cross Chair Trolley.</td>
</tr>
<tr>
<td>D</td>
<td>Rear handles</td>
<td>They are foldable, self-positioning in closed mode and facilitate the transport on chairs.</td>
</tr>
<tr>
<td>E</td>
<td>Adjustable backrest</td>
<td>Acts as back support for the patient and is adjustable in 5 positions in addition to the horizontal.</td>
</tr>
</tbody>
</table>
11. INSTRUCTIONS FOR USE

Before transferring, lifting or transporting the patient, primary medical evaluations have to be performed. Once the diagnosis has been assured, it is preferable (if possible) to suggest to the patient that he actively collaborates during transfer onto the stretcher, and to make sure the patient is fully aware of all risks. Before loading the patient, place the device near the patient; always maintain the safety belts fastened during the manoeuvres.

11.1 Telescopic handles

- To extract the telescopic handles, push the red button on the top and pull the handles. After an extraction of about 2cm, release the buttons and pull the handles out until the next locking position is being reached and automatically locked.
- When the locked position is reached, make sure it is safe to push and pull the handles without pressing the release buttons.
- The posterior handles have 3 possible positions, each with a different function:

  Position 1: This position allow to maintain the stretcher mode configuration. It is the only one which is permitted to use in stretcher mode.

  Position 2: This is the position that unlocks the mechanism for the configuration change and can be used for the transport of the device in chair mode on flat surfaces.

  Position 3: This position should be used during transport on stairs with the device in chair mode.

11.2 Lifting the stretcher with patient

- Secure the patient to the stretcher with the supplied belts adjusting properly the tension according to the patient’s clinical status. The operators should be at least two, one at the head side and the other one at the foot side.
- Using the appropriate lifting technique to minimize the effort for the operator, grab the handles on each side and raise the stretcher keeping it horizontal.
- For easier lifting, is possible to extract the handles as described in the previous paragraph.
- For lifting operations in stretcher mode, is strictly forbidden to extract the posterior handles. It’s essential to ensure that these are fully inserted and locked.

11.3 Loading Cross Chair on Cross Chair trolley

For handling Cross Chair and its loading and transport un sanitary vehicles, the use of the dedicate trolley is recommended. Before loading Cross Chair on Cross Chair trolley, is necessary to:

- Place the posterior telescopic handles in Position 1.
- Fold the rear handles and ensure that they are precisely parallel to the stretcher frame.

Load Cross Chair on the trolley according to the instruction manual of Cross Chair Trolley.

11.4 Configuration change (Stretcher mode -> Chair mode)

Changing configuration from stretcher mode to chair mode requires 3 steps:

1. With Cross Chair on the floor in stretcher mode, extract the posterior telescopic handles and place them in Position 2. In this position the configuration change mechanism is unlocked.
2. Lift the patient foot part until the locking mechanism is activated. The activation of the locking system occurs when the foot part reaches approximately 90° of the sitting part of the stretcher.
3. Now is possible to raise the anterior part of Cross Chair using the telescopic handles and place the chair in vertical position.

The support frame for the seating area is now resting on the ground. The friction between this part and the ground partially fulfils the function of a parking brake.
11.5 Transport Cross Chair on stairs or narrow spaces

To carry the device on stairs or confined spaces several operators are required. One should be positioned in the front of the device and at least one more at the back. For this type of transport, in order to facilitate the operators during manoeuvres, we recommended using the device in chair mode.

- Place the posterior telescopic handles in Position 3.
- Extract the rear handles.
- The sidebars should be in closed position for better containment of the patient.
- Rescuers should coordinate in order to start lifting at the same time.
- Once on a flat surface, the rescuer should consider whether to continue the transport in chair mode or switch the device in stretcher mode. To continue the transport in chair mode on a flat surface, return the telescopic handles back to Position 2 and to save space, close the rear handles making sure they reach the position parallel to the frame. Tilt Cross Chair and slide it on the rear wheels. If the rescuer prefers to transport in stretcher mode, change configuration as described in the next paragraph.

11.6 Configuration change (Chair mode -> Stretcher mode)

- Position Cross Chair so that all the wheels are resting on the ground.
- Pull the red levers to unlock chair mode rotating them about 45° as shown in the diagram. Pull the release lever of the chair and turn it 45° as shown in the diagram. Doing this the locking mechanism has been unlocked.
- Support the frame and lower towards the ground.
- Attention – Danger for fingers. Make sure that your own hands or those of other operators or objects are not in proximity of the connection zone between the moving frame and the fixed part of the frame as indicated in the diagram with the warning symbol.
- Place the posterior telescopic handles in Position 1. Only after you have verified that they are fully inserted and locked and that the moving frame is fixed to the main frame of Cross Chair, it is possible to proceed with the lifting of the patient.

11.7 Opening and closing of the sidebars

Sidebars are essential for the containment of the patient. During all phases of transport, make sure that they are in closed position and nothing obstructs their proper functioning.

- In order to avoid accidental functioning, the sidebars are designed to be used with two hands.
- To release the sidebars from closed position, use both hands on the levers at the bottom of the frame and pull them outwards as shown in the diagram. The sidebar will automatically drop rotating approximately 180°.
- To close the sidebars, bring them back in vertical position pressing with both hands on the profiles as shown in the diagram until you feel the locking system insert. Make sure the sidebars are locked properly by repeatedly pulling and pushing against them.
11.8 Use of the adjustable backrest

Cross Chair is equipped with a backrest adjustable to 5 positions in addition to the horizontal position.
To increase step by step the inclination of the backrest proceed as follows:

- Pull out the backrest piston rod.
- Lift the backrest about 2 cm.
- Release the piston rod.
- Continue to lift until the next locking position is reached.
- Follow the same steps to place the backrest in the other positions.

To return in horizontal position pull the rod and accompany the descent of the backrest keeping the rod pulled. It’s important, especially in chair mode, to verify the proper locking of the backrest also in horizontal position.

11.9 Brakes

Parking brakes, place on the front pivoting wheels, allow to lock the rotation of front wheels and offer a pivoting partial braking. Brakes can be operated for short stays and during patient transfer if needed. Never leave the patient unattended, even if the parking brakes have been actuated.

11.10 Trendelenburg position

The device has a mechanism that allows to place the patient surface in Trendelenburg position if the device is used in stretcher mode. To reach this position, lift the terminal part of the patient surface grabbing the two rings at its end. Make sure that the retaining screw is properly inserted in its seat before releasing of the rings.

To switch from Trendelenburg to standard position, slightly raise the patient plane by grabbing the terminal part of the seat frame, check that the retaining screw is off the seat, then accompany down the frame until it reaches the horizontal position.
12. CLEANING AND MAINTENANCE

12.1 CLEANING

Failure to carry out the correct cleaning routine could increase the risk of cross infection, due to presence of body fluids and/or residuals. The operator must always wear adequate personal protection such as gloves and mask, etc. during all checking and cleaning procedures.

The exposed metal parts are usually treated and/or painted in order to increase their resistance to external agents. Clean the exposed parts with water and delicate soap; never use solvents or stain removers. Rinse thoroughly with warm water making sure that you have removed all traces of detergent, which could degrade or compromise the integrity and durability of the device. The use of high pressure water should be avoided because water penetrates the joints and removes the lubricant, creating the risk of corrosion of components. Allow the device to dry thoroughly before storing. Drying after washing or after use in wet environments must be natural and not forced; do not use flames or other sources of direct heat.

If you need to carry out disinfection, use products that do not have corrosive or solvent action on the materials constituting the device. Be sure to take every precaution to ensure that there is no risk of cross-infection or contamination for patients and/or operators.

To maintain the polished appearance of the frame parts we recommend the use of polish cleaner Spencer STX 99 or in alternative creams or waxes used for polishing car bodywork.

12.2 PRECAUTIONARY MAINTENANCE

Establish a maintenance program and periodic testing routine, identifying an employee responsible for this. The person to whom the ordinary maintenance of the device is entrusted must ensure the basic requirements foreseen by the manufacturer in following paragraphs are inspected. All maintenance and periodic servicing activities must be registered and kept together with the servicing reports. These documents have to be kept for a period of 10 years after the disposal of the device itself. This register will be made available to the competent authorities and/or manufacturer if requested.

Routine maintenance of the device must be carried out by operators in possession of specific qualifications, trained and experienced in the use and maintenance of the device.

The operator must always wear adequate personal protection such as gloves and mask, etc. during all checking and cleaning procedures.

Checks to be carried out before and after each use and at deadline indicated above, are as follows:

- General functionality of the device
- Cleanliness of the device (remember that the failure of cleaning may cause the risk of cross infections)
- Correct fixation of all nuts, bolts and screws
- Absence of cuts, holes, tears on the structure, including the straps
- None of the tubes or metal sheets present bends or cracks
- The seat or the backrest has no structural damage or cracks
- Welded areas are intact, without any cracks or breaks
- The seat belts, sheets, moving parts, wheels and handles are intact and functioning properly.
- Lubrication of moving parts
- State of use of wheels and breaking system
- The wheels are correctly fixed, they are stable and turn properly
- The wheels are free from debris.
- The device opens and locks properly
- The device opens and closes properly
- Functioning of springs
- There are belts for the immobilization of the patient and they are intact and functioning.
- Posterior telescopic handles can be positioned, folded and locked properly in all positions as described in this manual.
- Front telescopic handles can be opened, closed and locked properly in all positions described in this manual.
- Backrest works and locks properly
- Sidebars are raised and lowered properly
- The stretcher easily enters the ambulance
- The emergency vehicle is equipped with a Spencer fastening system intended for the stretcher
The inspection frequency is determined by factors such as legal requirements, the type of use, frequency of use, environmental conditions during use and storage.

The parts to be lubricated if necessary and at least once a month are:

- The terminal part of the unlocking mechanism of the movement drive piston (placed on the rod).
- Posterior telescopic handles.

Before lubricating anywhere, be sure to remove any dust or dirt in the areas.

Please note that you must do the cleaning as described in this manual and verify functionality before and after each use. Spencer Italia S.r.l. declines any responsibility for the improper functioning or damages caused to the patient or user by the use of devices not subject to routine maintenance and will void the warranty and the compliance to the Medical Device Directive 93/42/CEE.

Use only accessories/original spare parts approved by Spencer Italia S.r.l., otherwise we will accept no responsibility for the incorrect functioning and/or damage caused by the use of any device which has not been repaired, or certified on expiry date by the manufacturer or by one of the manufacturer’s authorised service centres. Warranty will be considered void in compliance with the Medical Device Directive 93/42/EEC.

12.3 PERIODIC MAINTENANCE

The device must be serviced by the manufacturer or by an authorised centre, every year.

If the correct revision is not carried out, the device MUST BE PUT OUT OF SERVICE, because the CE branding will no longer be considered valid and consequently it is no longer compliant with the safety standards declared by the manufacturer at time of purchase. Spencer Italia S.r.l. will take no responsibility for the incorrect functioning or any damage caused by a device that has not undergone regular revision.

Mattress and belts shall be replaced every two years

For any operations that are not carried out directly by the manufacturer but by an authorised centre, we have to underline that a report regarding all operations carried out must be requested. This will permit both Spencer Italia S.r.l. and the end user to keep a log book regarding the operations carried out on the device.

12.4 SPECIAL SERVICING

Only the manufacturer or centres with written authorisation are authorised to complete any special servicing operations.

For any operations that are not carried out directly by the manufacturer but by an authorised centre, we have to underline that a report regarding all operations carried out must be requested. This will permit both Spencer Italia S.r.l. and the end user to keep a log book regarding the operations carried out on the device.

The end user is authorised to replace only the spare parts indicated in the paragraph 15.

12.5 LIFE SPAN

The device, if used as indicated in the following instruction manual, has a life span of 5 years starting from the purchase date. The life span can be extended following the annual revision.

General revisions must be carried out by the manufacturer or by a centre authorized by the manufacture. If such annual revisions are not carried out, the device MUST BE DISPOSED ACCORDING TO THE PROCEDURES SPECIFIED IN PARAGRAPH 16 AND THIS EVENT MUST BE NOTIFIED TO THE MANUFACTURER.

The life span can be extended, by unquestionable judgment of Spencer or authorized service center, if the safety requirements of the device are still guaranteed.

Spencer Italia S.r.l. will accept no responsibility for the incorrect functioning and/or damage caused by the use of any device which has not been serviced by the manufacturer or authorised centre, or of any device for which the life span is expired.
### 13. TROUBLESHOOTING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The system for configuration change doesn’t work or is difficult to operate.</td>
<td>The moving mechanisms have been damaged</td>
<td>Put the stretcher immediately out of service and contact the service centre</td>
</tr>
<tr>
<td></td>
<td>Parts are not lubricated</td>
<td>Clean and lubricate following the instructions given in this manual</td>
</tr>
<tr>
<td></td>
<td>Locking system of the posterior telescopic handles is damaged.</td>
<td>Put the stretcher immediately out of service and contact the service centre</td>
</tr>
<tr>
<td>The coupling with the Cross Chair Trolley isn’t safe.</td>
<td>Wear or damage to the components that constitute the locking mechanisms.</td>
<td>Put the stretcher immediately out of service and contact the service centre</td>
</tr>
<tr>
<td>Damage to the structure</td>
<td>Improper use</td>
<td>Put the stretcher immediately out of service and contact the service centre</td>
</tr>
<tr>
<td>When in chair mode, the backrest does not remain in vertical position.</td>
<td>The locking mechanism is not inserted</td>
<td>Acting on the rod, make sure the locking mechanism is inserted in the correct position.</td>
</tr>
<tr>
<td></td>
<td>The locking systems are worn out</td>
<td>Put the stretcher immediately out of service and contact the service centre</td>
</tr>
<tr>
<td>The device can’t be lifted in stretcher mode because the moving frame folds</td>
<td>The configuration lock is not working properly.</td>
<td>Verify that the telescopic handles are in Position 1. If the problem persists, contact the service centre.</td>
</tr>
<tr>
<td>It’s impossible to change configuration from chair mode to stretcher mode.</td>
<td>The posterior telescopic handles have been placed in Position 1 while operating in chair mode.</td>
<td>Place the posterior telescopic handles in Position 2 and change configuration.</td>
</tr>
</tbody>
</table>

### 14. ACCESSORIES

#### 14.1 Standard equipment
- **ST70002A** STX 702 Black two piece belt, metal buckle, Reflex webbing.
- **ST43014C** CROSS CHAIR MATTRESS

#### 14.2 Accessories
- **IF01043B** IV-POLE TRACK 4
- **CR00081C** CROSS CHAIR TROLLEY
- **ST00497B** DNA STRAP BELT W/INTEGRATED RE-WINDING SYSTEM **
- **ST00498B** DNA STRAP THORACIC BELT W/RE-WINDING SYSTEM **
- **ST00499B** UNIVERSAL ADJUSTABLE THORAX BELT
- **CB09028C** SUPPORT SAFEBAR FIXATION FOR TANKER

**Warning:** Doesn’t meet the requirements of EN 1789 – Not suitable for use with 10G Certified Stretchers

### 15. SPARE PARTS
- **RIST001A** BLACK WHEEL ø150mm W/BEARING
- **ST43014C** CROSS CHAIR MATTRESS
- **ST70002A** STX 702 Black two piece belt, metal buckle, Reflex webbing.

### 16. DEMOLITION

When the device is no longer suitable for use, if they haven’t been contaminated by any particular agents, they can be disposed of as normal solid waste, otherwise follow the current regulations for demolition.