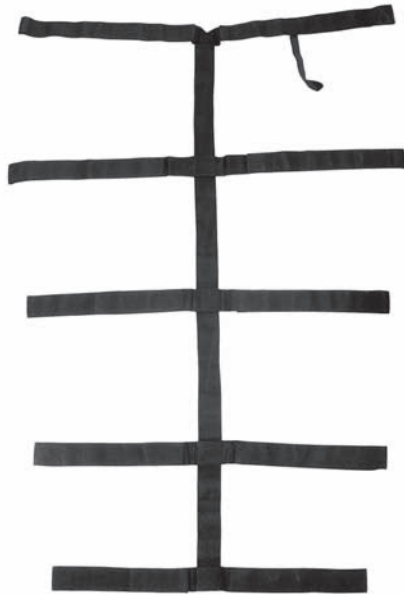


# User's Manual

## Z-Straps Immobilization system for recovery board



Guarantee of Quality system for the production and the final control of the products certified by the notifying body  
TÜV Italia S.r.l.

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# Thank you for choosing a Spencer product

## 1 GENERAL INFORMATION





### 1.1 AIM AND CONTENTS

The aim of this manual is to supply all the information necessary so that the client, will not only attain adequate use of the appliance, he will also be capable of using the instrument in the most autonomous and secure way possible. This includes information regarding technical aspects, functioning, maintenance, spare parts and safety.

### 1.2 CONSERVATION OF THE INSTRUCTION MANUAL

The instruction and maintenance manual must be kept with the product, inside the specially provided container and above all, away from any substances or liquids which could compromise perfect legibility.

### 1.3 SYMBOLS USED

SYMBOL	MEANING
	General or specific warning
	See instructions for use
	Lot number
	Product code

### 1.4 SERVICING REQUESTS

For any information regarding the use, maintenance and installation, please contact the Spencer Customer Care Service on tel. 0039 0521 541111, fax 0039 0521 541222, e-mail info@spencer.it or write to Spencer Italia S.r.l. - Strada Cavi, 7 - 43044 Collecchio (Parma) - ITALY.

### 1.5 DEMOLITION

Follow the current regulations.

### 1.6 LABELLING

The serial number as indicated below can be found on each appliance and must not be removed or covered. In order to facilitate assistance please indicate or communicate the number (LOT) on the label.

## 2 WARNINGS

### 2.1 GENERAL WARNINGS

- Before carrying out any kind of operation on the appliance, the operator must carefully read the enclosed instructions, paying particular attention to the correct safety precautions and to the procedures to be followed for installation and for correct use.
- In the case of any doubts as to the correct interpretation of the instructions, please contact Spencer Italia S.r.l. for any necessary clarifications. Regularly check the appliance.
- In the case of any abnormalities or damage to the appliance, which could jeopardize the functioning and the safety, the appliance must be immediately removed from service.
- Do not alter or modify in any way the appliance; any such interference could cause malfunctions and injury to the operator.
- The appliance must not in any way be tampered with. In such cases all responsibility will be denied for any malfunctions or injuries caused by the appliance itself.
- Those who modify or have modified, prepare or have prepared products 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.
- 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.
- Handle with care.

### 2.2 SPECIFIC WARNINGS

- The product must be used by trained personnel only.
- If any failure or incorrect functioning of the device is detected, it must be immediately substituted with a similar item so that the procedures are guaranteed without any interruption.
- The device must not be exposed or get in contact with sources of heat or inflammable substances.
- Use the straps only as described in this user's manual.
- Always check the integrity of the straps before every use.
- Substitute damaged or worn out straps immediately.
- Select accurately the fixation points of the straps.
- The Z-Straps system must be applied by at least two adequately trained operators.

### 2.3 CONTRAINDICATIONS AND SIDE EFFECTS

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

## 3 DESCRIPTION OF PRODUCT

### 3.1 INTENDED USE

The Z-Straps system represents an efficient method for the fixation of the corpse on immobilization supports. Recommended for all operations which require quick application without the risks related to metal buckles (damage to the operator's gloves, incomplete closure due to spring lock systems, etc.). Designed and adapted to the needs of versatility and adaptability to connection points, dimensions of any type of corpse.

### 3.2 MAIN COMPONENTS

1. Immobilisation strap in nylon and polyethylene
2. Velcro® male part
3. Velcro® female part

### 3.3 MODELS

ZC00101A                      Z-Straps

### 3.4 TECHNICAL DATA

Thickness: 1,5 mm  
Length: 1620 mm  
Width system: 900 mm  
Width belt: 49 mm  
Weight: 490 g  
Material: nylon and polypropylene  
Colour: black  
Floatation: yes  
Type of fixation: central strap with Velcro®  
Number of fixation straps: 10  
Use: with spine boards with at least 5 handles on each side  
Manufacturing system: heat cut, sewing, raftering

### 3.5 ENVIRONMENTAL CONDITIONS

Functioning temperature: from -20 to +60 °C  
Storage temperature: from -20 to +60 °C  
Relative humidity: from 5 to 85%

## 4 OPERATING INSTRUCTIONS

### 4.1 TRANSPORT AND STORAGE

Before transporting the appliance, make sure that it is correctly packaged ensuring also that there are no risks of shocks, bumps or falls during the transport itself.

Keep the original packaging for use in case of any further transport. Damage to the appliance caused during transport and handling is not covered by the guarantee. Repairs or replacement of the damaged parts are the responsibility of the client. The appliance must be stored in a dry place free from humidity.

For correct storage of the device, proceed as follows:

1. Place all female elements on the male Velcro® elements.
2. Fold all straps towards the central strap.
3. Fold all straps according to the central strap.
4. Fold the small holding strap around the package to fix all straps together.

### 4.2 PREPARATION

On receipt of the product:

- Remove the packaging and display the material so that all components are visible.
  - Check that all the components/pieces on the accompanying list are present.  
The appliance must be checked before every use so as to reveal any working abnormalities and/or damage caused by transport and/or storage.  
Before and after every use, perform a check as described:
  - check if the device shows any cuts, holes or damages on the surface
  - check the integrity of all components of the device
  - make sure the straps fold in an adequate way
  - make sure the connecting parts connect well
  - make sure the regulation of the device is easy
- If everything is conform, the device may be considered ready for use.

### 4.3 FUNCTIONING

1. Place the connection at the top of the Z-straps, immediately under the neck.
2. Unroll the Z-Straps towards the feet, maintaining the central position of the central strap.
3. Distribute the fixation straps according to the fixation points on the stretcher and on the corpse (shoulders, pelvis, knees, feet).
4. Fix first the thorax strap by closing simultaneously both straps in order to avoid rolling movements of the corpse and render the immobilisation perfectly symmetric.
5. Fix the pelvis strap at front/superior iliac-spine level.
6. Fix the knee strap (preferably just above).
7. Fix the terminal strap around the feet, in order to limit rotational loads on the limbs and up and down movement of the corpse against the Z-straps.

#### 4.4 TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Extreme corpse mobility	Too long straps	Check the fixation straps
	Straps out of position	Make sure the straps are positioned correctly

### 5 MAINTENANCE AND CLEANING

#### 5.1 CLEANING

The Z-Straps system may be cleaned with delicate cleaning products or water and soap (in case of presence of blood, first oxidise, then wash with water).

#### 5.2 MAINTENANCE

##### 5.2.1 Precautionary Maintenance

The device does not require programmed servicing.

##### 5.2.2 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 device, if used as indicated in the following instruction manual, has an average life span of 5 years.

The life span can be expanded only following a general revision of the product that must be carried out by the manufacturer or by a centre authorised by the manufacturer.

### 6 ACCESSORIES AND SPARE PARTS

There are no accessories or replacement parts for this item.

#### 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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