FRANCO GARDA STRETCHER
USER GUIDE

USER GUIDE FOR THE FRANCO GARDA STRETCHER

TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

FRANCO GARDA STRETCHER
USER GUIDE

FRANCO GARDA STRETCHER
USER GUIDE

1/ Introduction:

The Franco Garda rescue stretcher was designed by the French and Italian mountain rescue specialists to be helicopter winched. It is a reliable, easy-to-use. It is a multifunction tool for rescue operations in the high mountains, on cliff faces, in water, as well as on snow.
Featuring a lightweight, high-resistant structure, a new swivel design and a high-performance medicalisation system, we developed this stretcher with its users to meet their expectations.
The Franco Garda stretcher also offers innovative on-snow transport and helicopter-winching capabilities.

The shell consisting of a structure made of stainless steel coated with Twintex, a fibre glass/polypropylene composite, is lightweight and highly resistant. The swivel/separation system, which allows either folding up or separating the three parts of the shell, does not have any losable parts and is easy to manipulate even under extreme conditions.
The medical cover is equipped with a high-performance patient immobilisation device, as well as a fast access pocket to the patient's upper and lower limbs.
Its fastening system allows rapidly installing/removing the shell's cover.
The standard cover and the marine cover adapt in a similar way to the shell for a greater versatility.

2/ Warning:

When the Franco Garda stretcher is used, the safety of the rescuers and the patient depends on the appropriate usage of the stretcher. Any person before using the stretcher must be fully acquainted with its user manual and have performed "hands on" exercises before undertaking a rescue operation.

Usage conditions:

The Franco Garda stretcher is intended to transport people. The maximum payload is 150 kg.
It does not protect the injured person from the consequences of a violent shock. Therefore, it is important to carefully handle it during the transport of a patient.
IMPORTANT: Never slide the Franco Garda stretcher on snow or any kind of ground without a security system restraining and controlling the stretcher.
The tow slings must be used exclusively with the Franco Garda stretcher. They must never be dismounted or must be used only according to the indications given in the user manual. They must never be used:

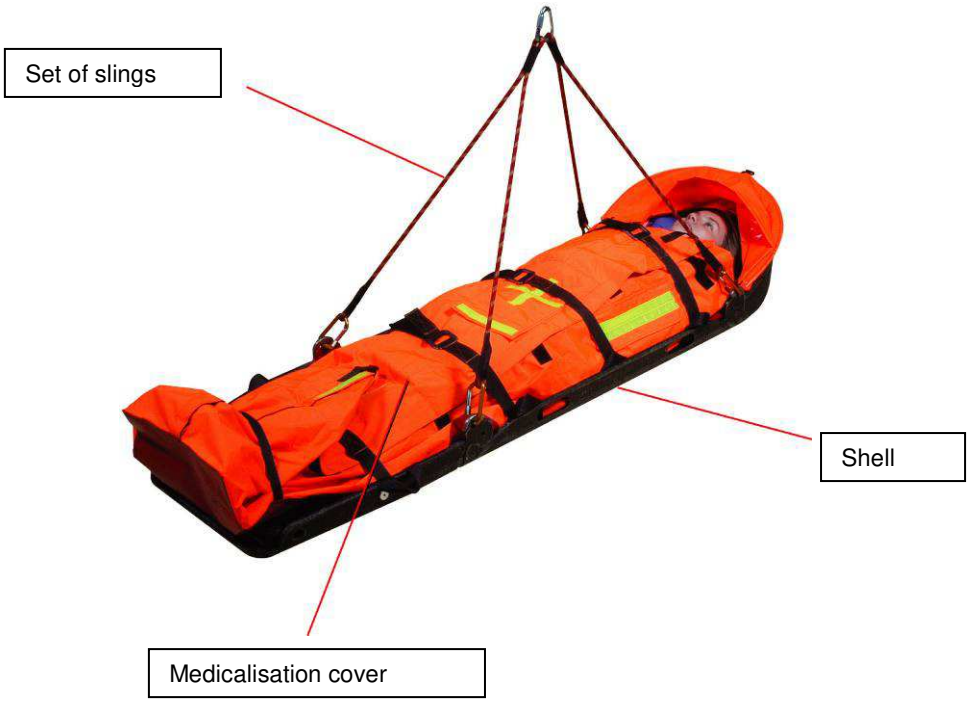
- To secure people ;
- To transport loads ;
- With stretchers or litters other than the Franco Garda stretcher.

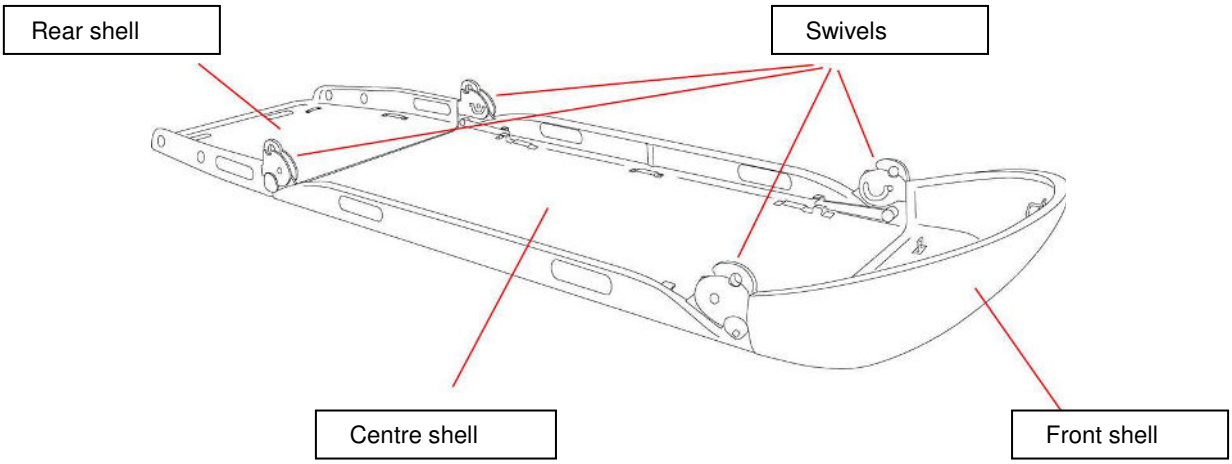
To guarantee a correct operation of the Franco Garda stretcher and its accessories, carefully follow the recommendations given in the subsection "Maintenance".

The Franco Garda stretcher and all its accessories were studied to guarantee the maximum safety. The usage of the stretcher and its accessories includes certain critical phases, such as winching or descent by ski. The stretcher and its accessories must be carefully used to prevent accidents. It is extremely important:
- To never undertake a rescue operation before checking the condition of the stretcher and its accessories;
- To seek advice from a TSL RESCUE technician or return a part in case it is defective;
- To absolutely never make repairs yourself.

FRANCO GARDA STRETCHER
USER GUIDE

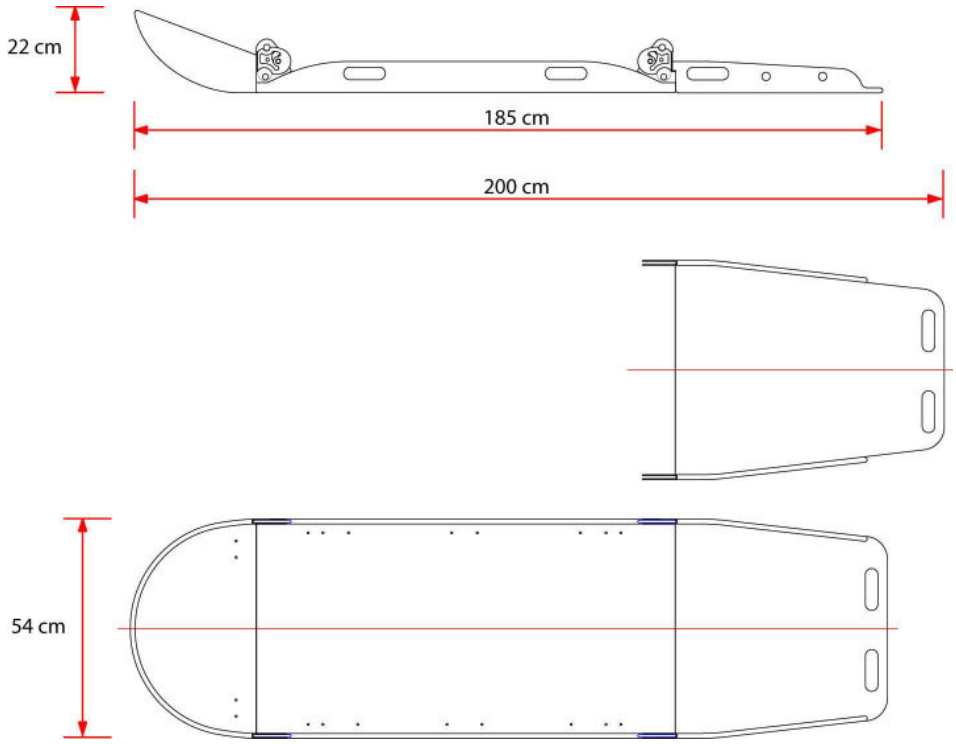
3/ Stretcher presentation:





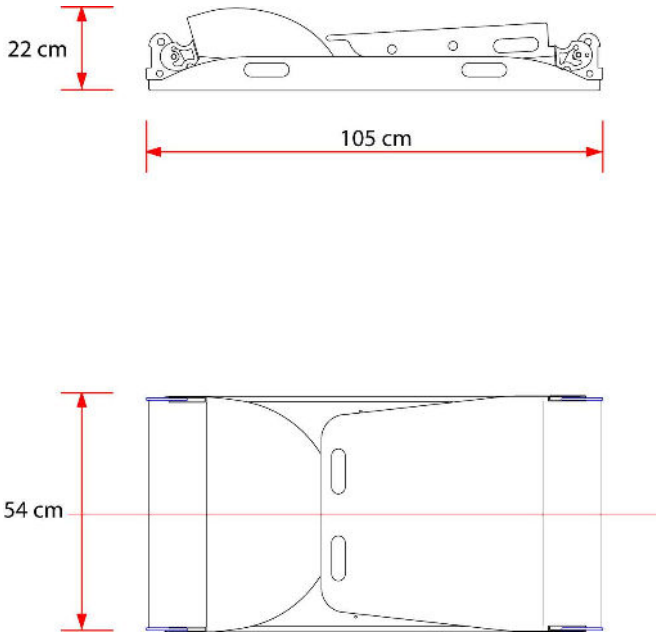
FRANCO GARDA STRETCHER
USER GUIDE

Whole shell (standard version):



The complete shell consists of 3 parts. The swivels, which do not have any losable parts, allow quick installation/removal, as well as the folding up of the front and rear parts on the centre part.
The shell weighs 10 kg. The stretcher with cover weighs 13 kg.

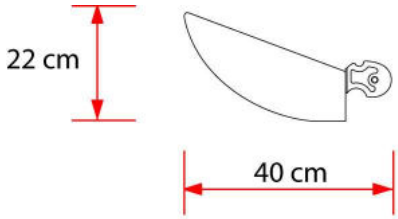
The only difference between the Standard version and the Long version is the rear part. The rear part length changes from 185 cm (Standard version) to 200 cm (Long version). Since the swivels are exactly the same, the Long rear part can be adapted to a Standard version stretcher.

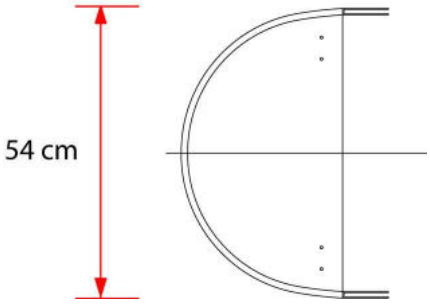


TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

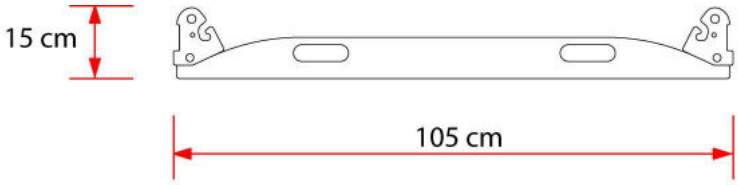
FRANCO GARDA STRETCHER
USER GUIDE

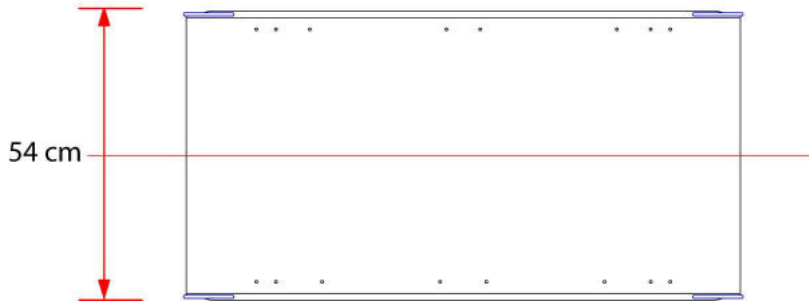
Front shell: weight: 1.9 kg





Centre shell: weight: 5.8 kg

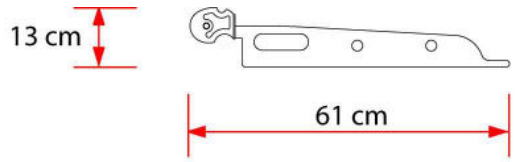


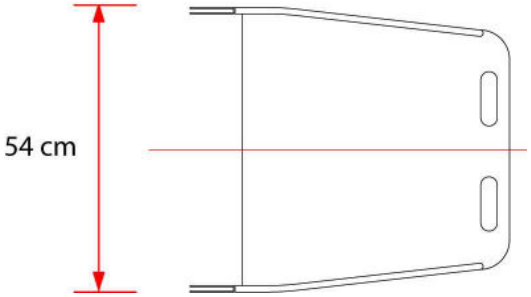


TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

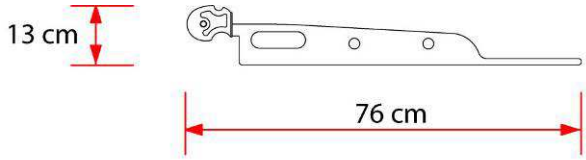
FRANCO GARDA STRETCHER
USER GUIDE

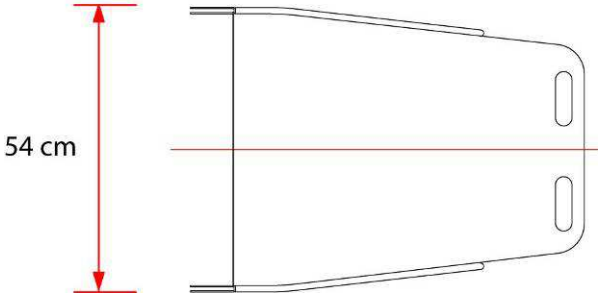
Rear shell: weight: 2.3 kg





Long version rear shell: weight: 2.7 kg

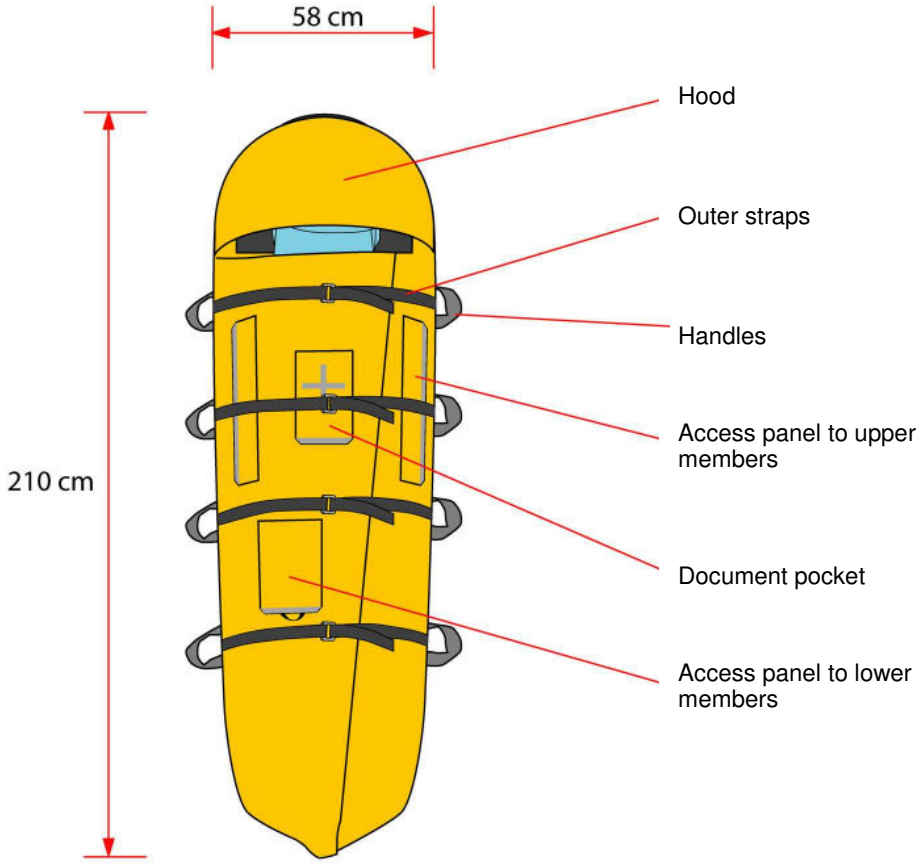




FRANCO GARDA STRETCHER
USER GUIDE

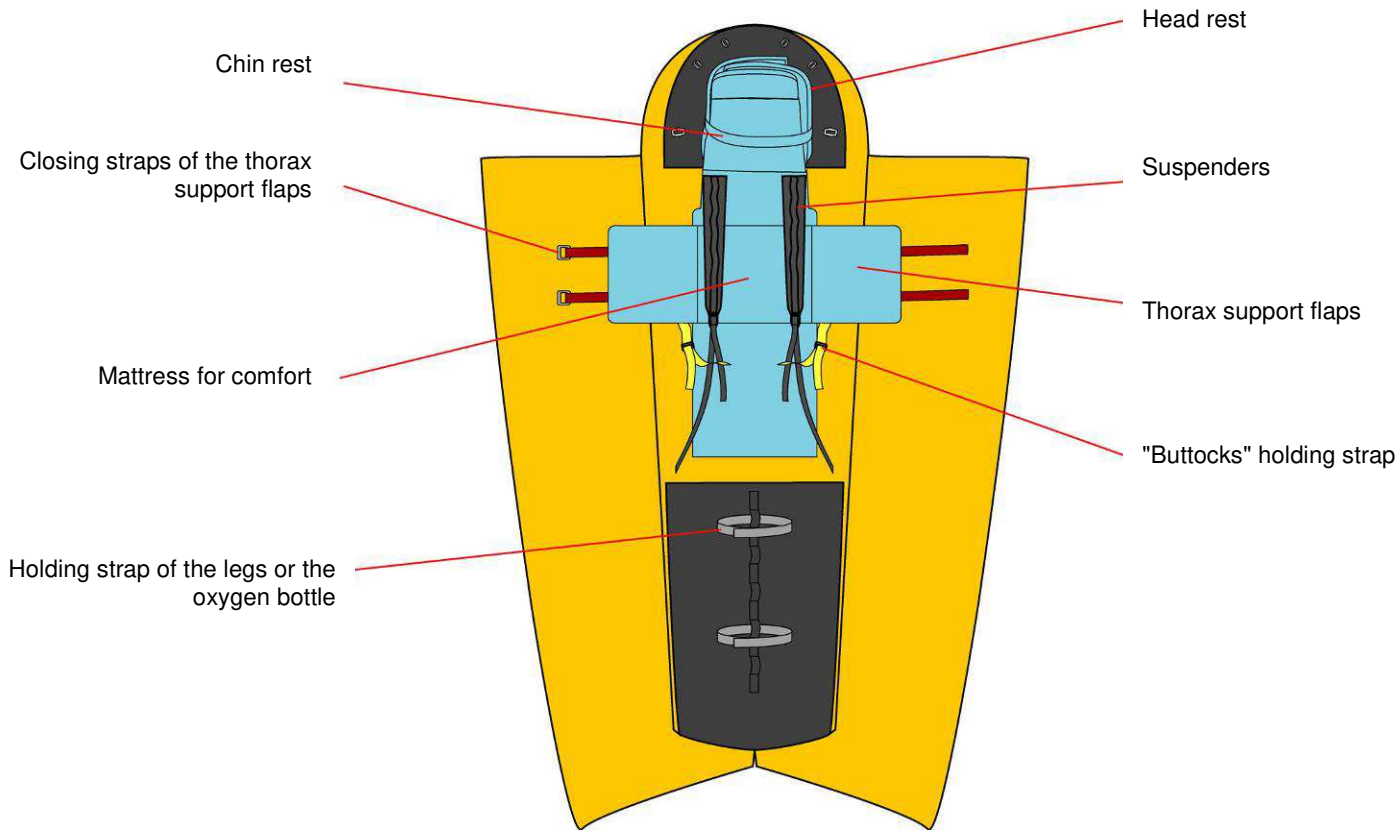
Medicalisation cover:

The medicalisation cover perfectly immobilises the patient in all positions.
It is secured to the stretcher shell by 4 outer straps passed through metal guards welded to the metal structure.
On the other hand, 6 “locking” metal guards allow holding the upper part of the cover on the front shell and 2 straps to stretch it from the rear shell.
The outer flaps have direct access panels to the upper and lower members of the injured person’s body.
The lower access panel allows a direct opening to an oxygen bottle, if necessary, placed between the patient’s legs.



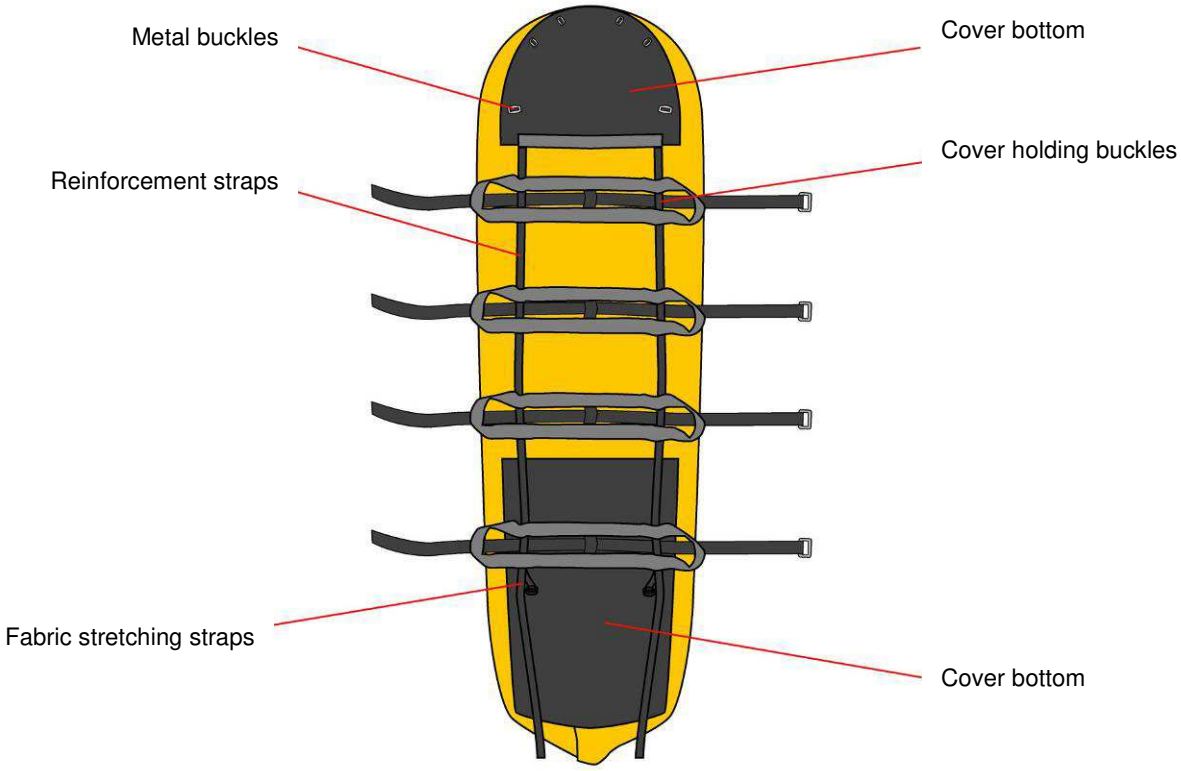
The inner immobilisation system is complete. It allows the use of an inflatable mattress or a hard flat surface.

FRANCO GARDA STRETCHER
USER GUIDE



TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

FRANCO GARDA STRETCHER
USER GUIDE

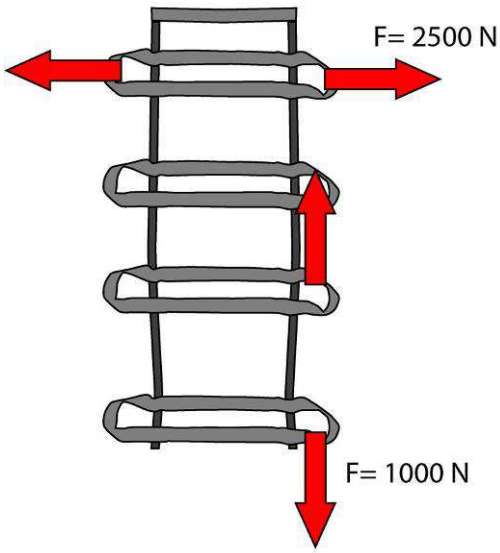


TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

FRANCO GARDA STRETCHER
USER GUIDE

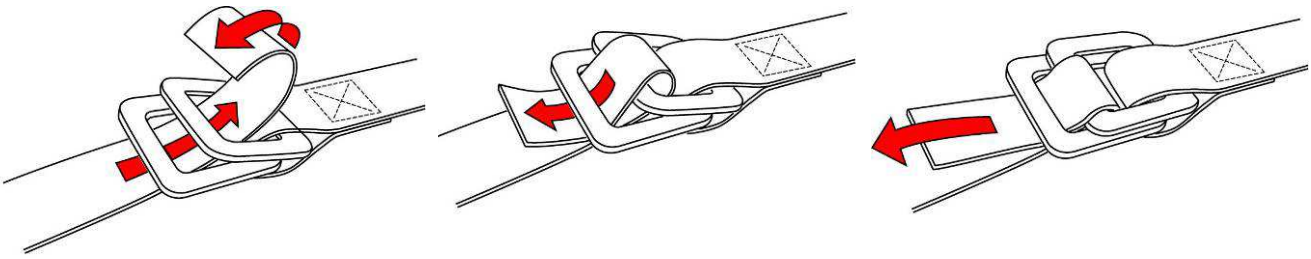
The entire patient immobilisation system as well as the handles is supported by a high-resistance strap network. All the suspenders and straps holding the patient are stitched to this network. This arrangement ensures that the casualty will be held in all positions even in the case of a strong shock. An accidental tearing of the cover's bottom or one of its sides will not alter performances.

The assembly's resistance in all directions allows the transport of a patient if his/her condition allows it and by means of the 8 handles of the cover in an appropriate no-shell configuration (hard flat surface).



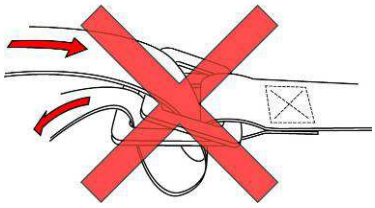
Strap tightening:

The straps must be tightened by passing them into their metal buckles as shown in the following figures:



step 1 step 2 step 3

WARNING: Do NOT pass the strap inside out.

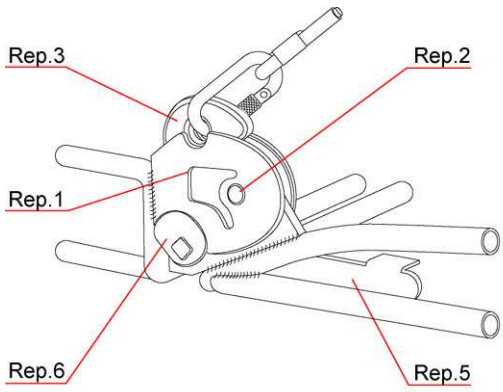


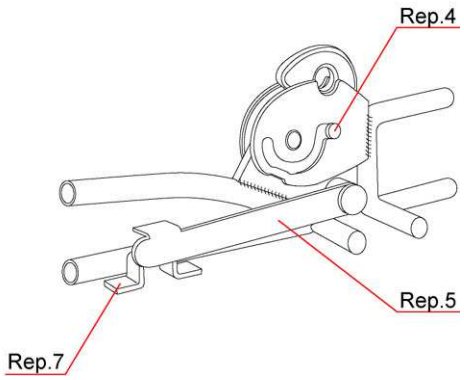
TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

4/ Stretcher installation

a) Presentation of the swivel/separation system:

The swivel/separation system allows folding up either the front part or the rear part or both on the centre part or separating them from the centre part.
Each of the 4 swivel points, consists in side plates (1) guided by a pin (2) rotating and translating around a swivel plate (3). A positioning stop (4) limits the rotation of the side plates. Once the assembly is in position, it is locked in by a locking system actuated by a lever (5) moving a cam (6). The lock-in takes place by lowering the lever and securing it with the guard (7).





b) Installing the shell:

Put the centre part of the shell on a flat surface. Vertically position the rear part of the shell above the centre part so the side plates and the unpainted swivels are opposite each other as shown in Figure 1.

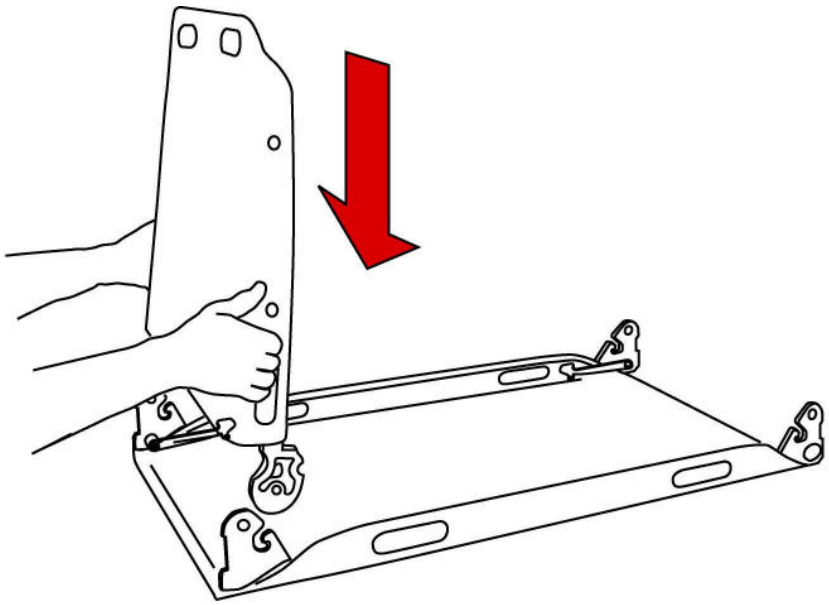


Figure 1

Insert the pin of the side plates from the head inside the swivel plate (Figure 2).

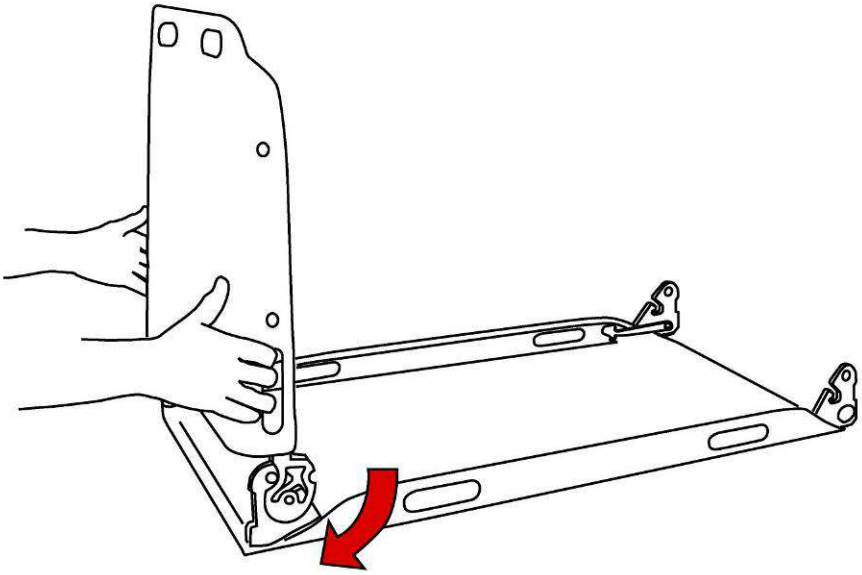


Figure 2

Turn the rear part of the shell holding it pressed in until it is in place in the axis of the stretcher (Figure 3). Raise the lock-in levers upward.

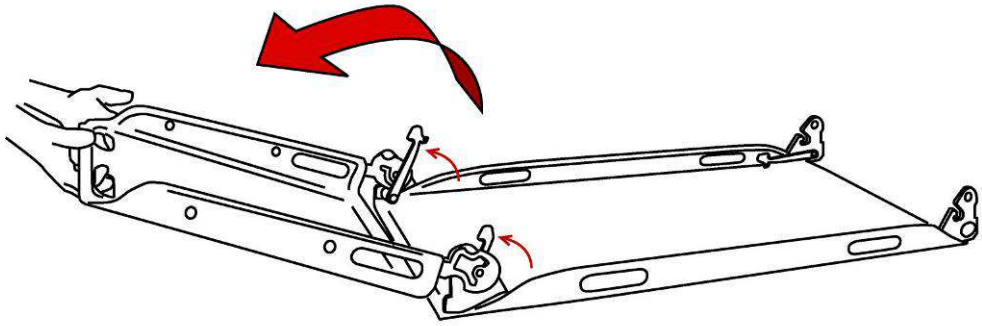


Figure 3

Place the rear part of the shell flush against the centre part so the positioning stop fits correctly into its recess (Figure 4).

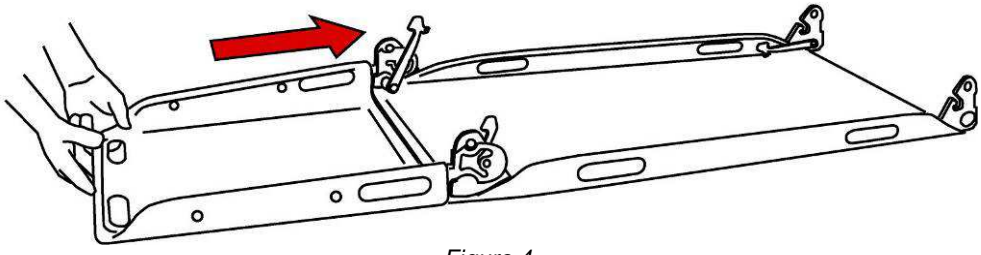
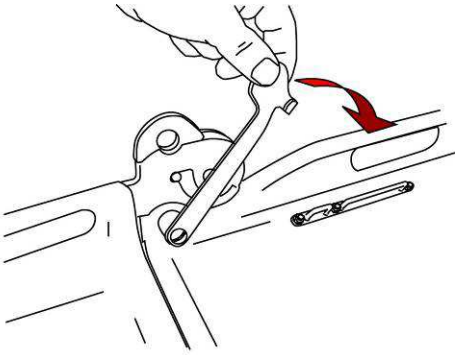


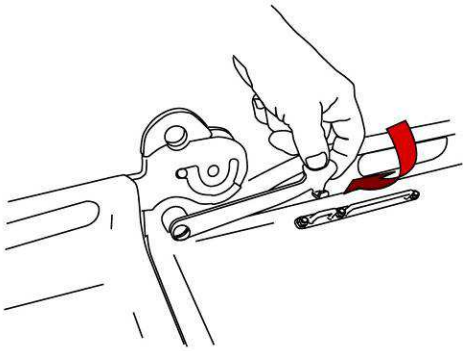
Figure 4

Lower and secure the lock-in lever following the steps 1 to 4 below:

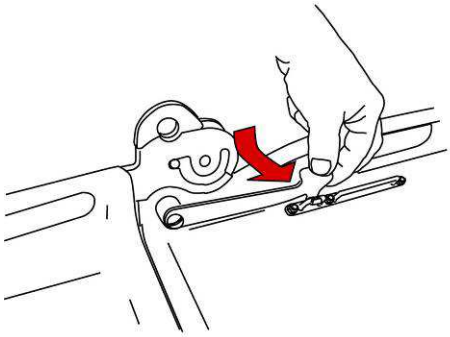
FRANCO GARDA STRETCHER
USER GUIDE



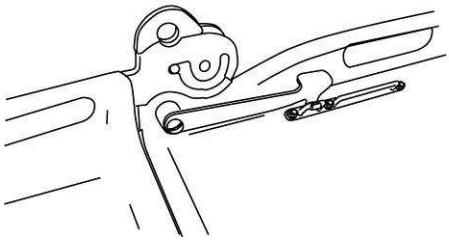
1



2



3



4

Repeat the operation to install the front part.

c) Folding up the front and rear parts on the centre part:

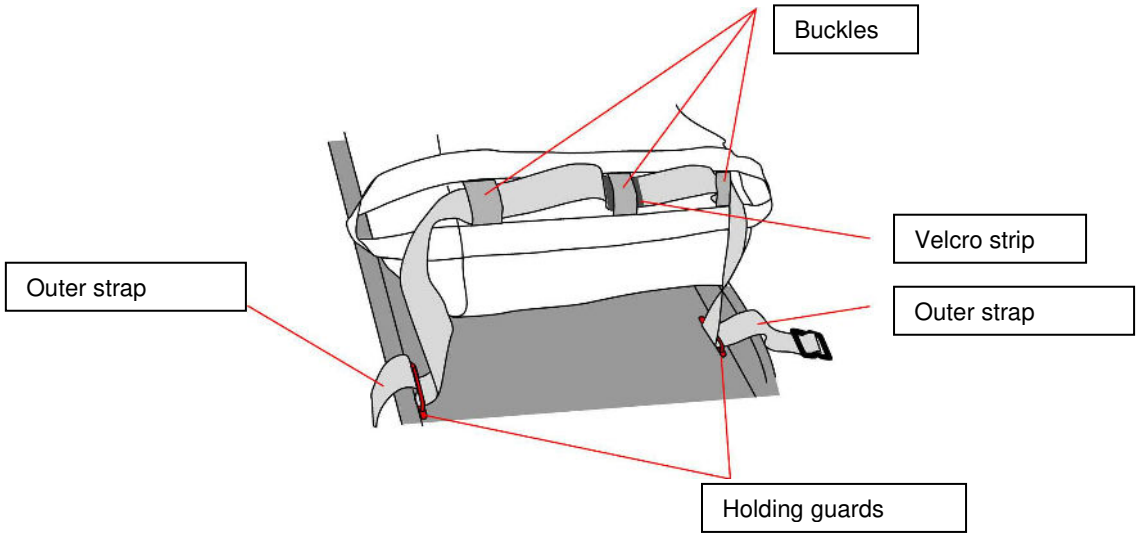
Release the lock-in levers and turn them to the vertical position. Position yourself behind the stretcher and pull the rear part toward you. Swing it forward until it is against the centre part.
Repeat the operation for the front part by positioning yourself in front of the stretcher.

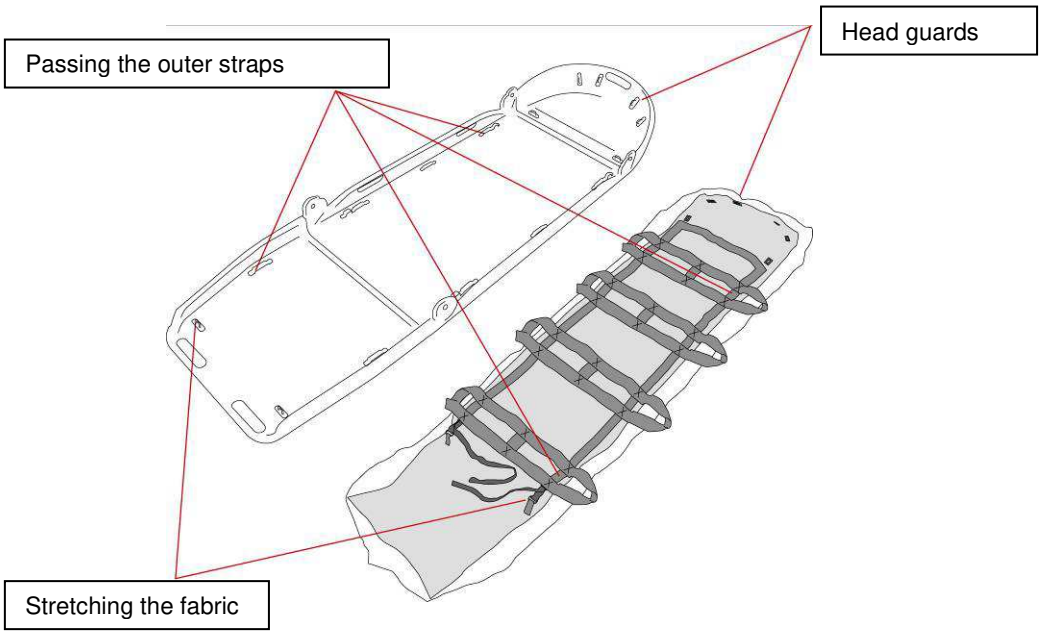
d) Removing the shell:

Release the lock-in levers and turn them to the vertical position. Position yourself behind the stretcher and pull the rear part toward you. Swing it forward until vertical and then pull it upward until it separates from the centre part.
Repeat the operation for the front part by positioning yourself in front of the stretcher.

e) Installing the cover:

The medicalisation cover is held to the shell by 4 outer fastening straps. They must be necessarily passed into their respective holding guards located left and right along the stretcher.
When the patient is enclosed in the stretcher, these 4 holding straps must be closed on him/her.



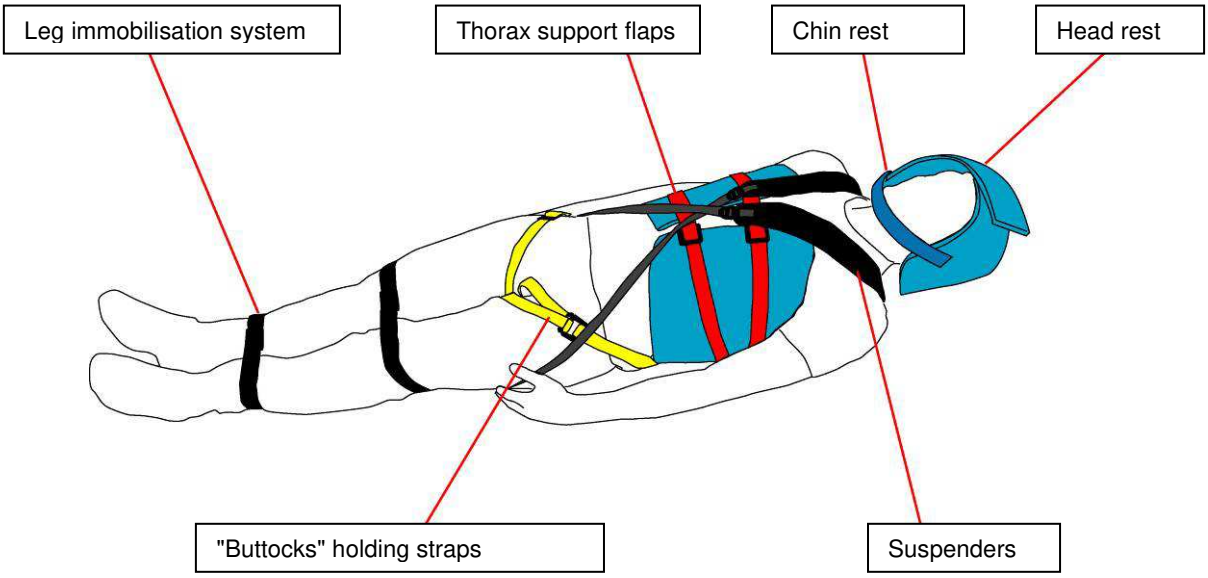


Put the centre part of the shell on a flat surface. Position the fabric on the shell. Begin by installing the head guards. Pass the outer holding straps into their respective guards starting with the one located on the top of the cover. It is easier to pass these straps by inserting the metal loops flat. These straps are equipped with a Velcro strip to facilitate their positioning under the cover and prevent them from turning during the tightening of the buckles. An additional Velcro strip is located in the centre buckle. The strap must therefore be positioned so these two Velcro strips come in contact.
Once the 4 outer straps are installed, pass the stretching straps positioned behind the cover in their respective guards and tighten them.

FRANCO GARDA STRETCHER
USER GUIDE

5/ Use:

a) Immobilisation system:



Place the casualty as high as possible in the cover. Adjust the head rest to perfectly hold his/her head. If necessary, install the chin rest. Position and close the thorax support flaps. Close the "buttocks" holding straps. Install and close the suspenders and then adjust the tension so the injured person is firmly held. If necessary, secure the legs with the lower holding straps.

Adjusting the cover's length:

If the patient is a child or a small person, use the foot strap (See photo) to adjust the cover's length.

The hood can be held open or closed by straps for helicopter winching.

"closed" position

"open" position

The last part of the hood can be folded inside. It is held by a Velcro strip.

The cover is equipped with direct access panels to the top or bottom of the patient's body. The lower pocket allows you to view an oxygen bottle or any devices placed between the patient's legs.

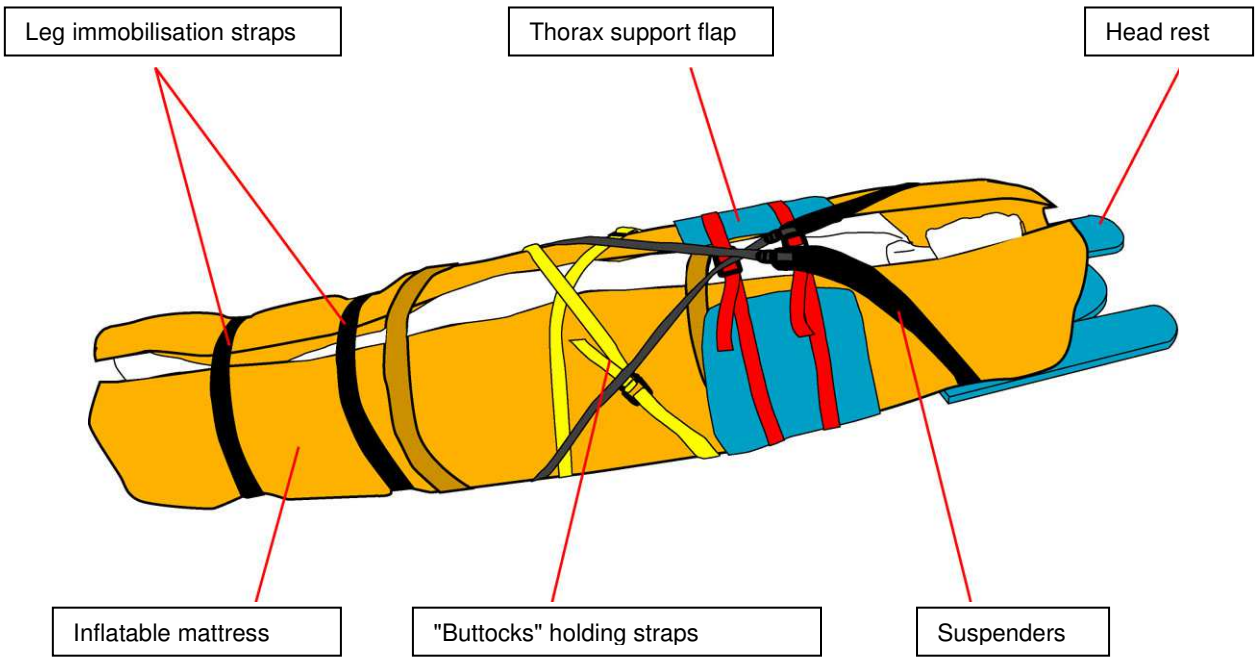
A pocket on the cover's top is used to transport documents.

b) Immobilising a patient on an inflatable mattress:

A patient already placed on an inflatable mattress can be immobilised in the medicalisation cover.

- Immobilisation inside the cover:

It is necessary to flatten the head rest. Then place the patient and the inflatable mattress in the cover as previously explained.
Immobilisation is accomplished in the same way except for the "buttocks" holding straps, which can no longer be passed between the patient's legs. Therefore, wrap them around the mattress and close by crossing them over. You can then place the leg immobilization straps over the mattress.



- Closing the cover:

It is important to correctly close the outer flaps of the cover.
The 4 outer straps have to be closed by adjusting their tension to immobilize the patient without tightening them too tight on him/her.

In order to use any patient restraint system with the Franco Garda stretcher or for more information, contact a TSL RESCUE technician to obtain the required information or an appropriate special device.

c) Slinging method:

Lifting with a set of Standard slings:

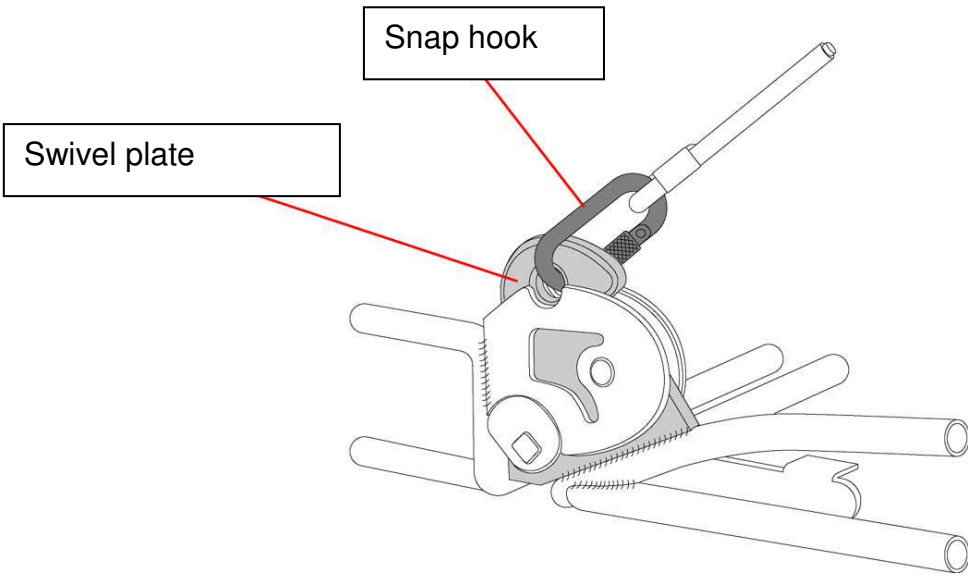
The Franco Garda stretcher is supplied with a set of slings for cliff rescue or helicopter winching. The slings are made of a dynamic cord to ensure an excellent absorption of shocks. They have the following characteristics (diameter, length, stitching, angle) derived from a development and tests performed specifically for this usage.
Only slings supplied by TSL RESCUE must be used.
In addition, these slings must only be used for this specific utilization with the Franco Garda stretcher. Never use them to secure a person, transport a load or convey with a stretcher other than that of Franco Garda.

These slings have a 3-year operational service life. They can no longer be used after 5 years of storage even if they are not used during this period. The manufacture date is indicated on each sling on the protection fabric of the centre stitching.

These slings must be carefully handled and stored in an area away from any chemical, mechanical or other aggressive actions. They must be checked before usage to ensure they are in good condition. If you observe wear, contact a TSL RESCUE technician for advice or return the part in question. **Never try to make repairs yourself.**

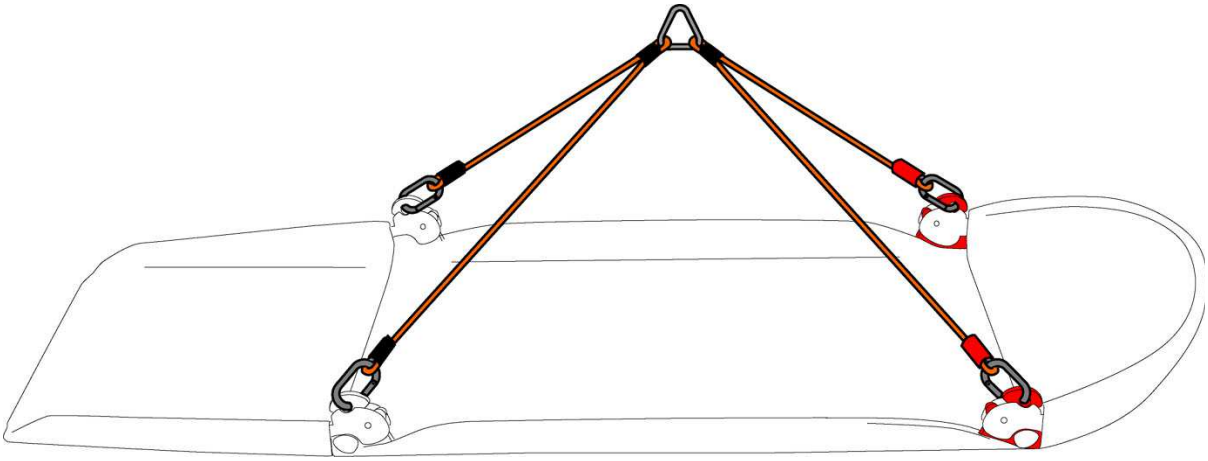
The slings are equipped with 4 automatic locking snap hooks. Make sure these snap hooks are present on the sling before undertaking a rescue operation. In case one of these snap hooks receives a large shock or the locking mechanism jams, contact a TSL RESCUE technician to replace this element. Never replace the snap hooks or a quick centre link before being advised by a TSL RESCUE technician.

For a lifting phase, each snap hook of the set of slings must be passed through one of the 4 swivel plates.

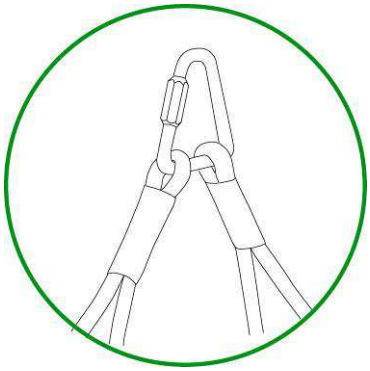


The sling strand with red stitch caps must be clipped in on the red painted swivel plates.
The sling strand with black stitch caps must be clipped in on the unpainted swivel plates.

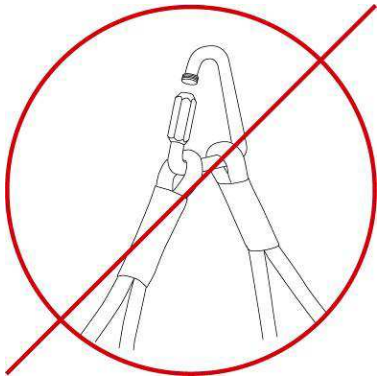
FRANCO GARDA STRETCHER
USER GUIDE



The set of slings must be connected to the hoist's cable by a central triangular quick link. **Make sure this quick link is correctly closed before undertaking the towing phase.**



The link is closed correctly.



DANGER !

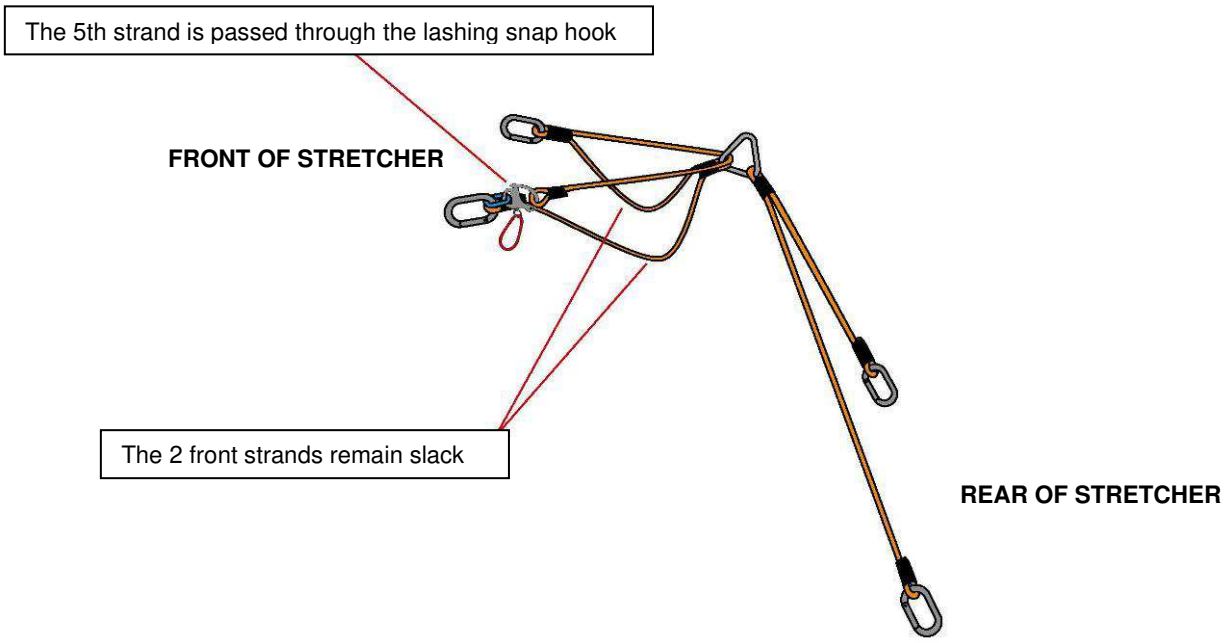
TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

FRANCO GARDA STRETCHER
USER GUIDE

Oblique winching:

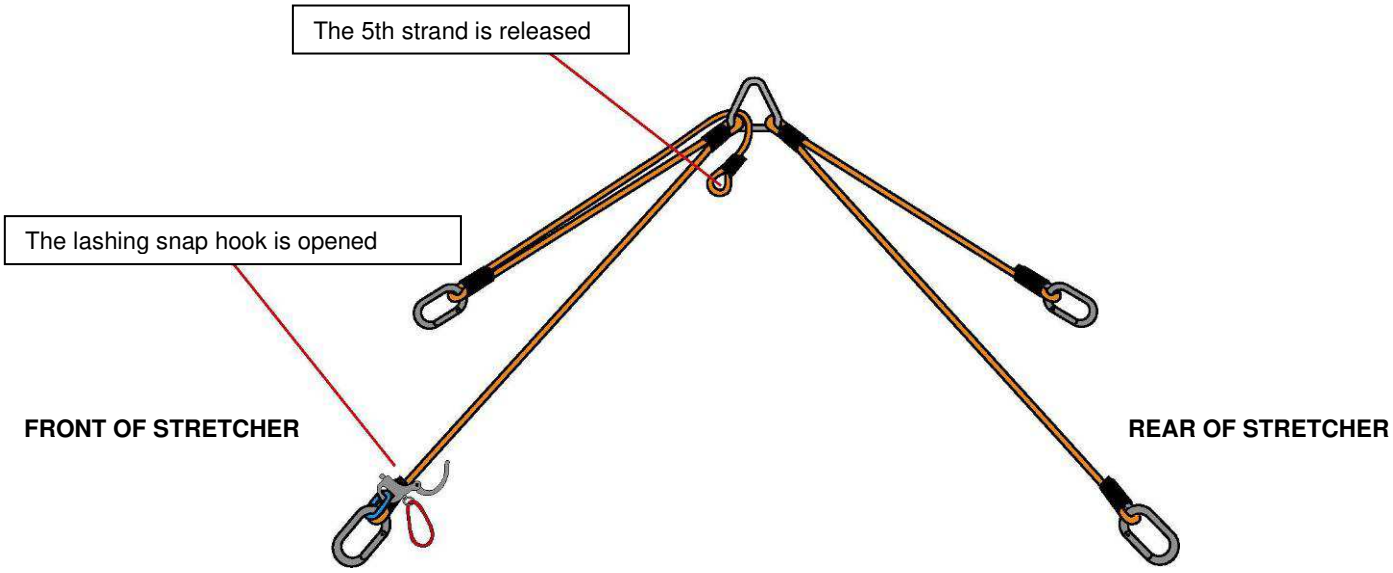
The set of slings at 45° (ref.: PFFG012) allows going from an oblique position to a flat position during the winching of the Franco Garda stretcher. It is equipped with a 5th strand and a lashing snap hook to allow opening under load. For oblique towing, the 5th strand must be passed through the quick link and attached to the lashing snap hook.

Winching with the stretcher in an oblique position:



Passing of the stretcher to a flat position:

To pass into a flat position, pull on the opening buckle of the lashing snap hook.



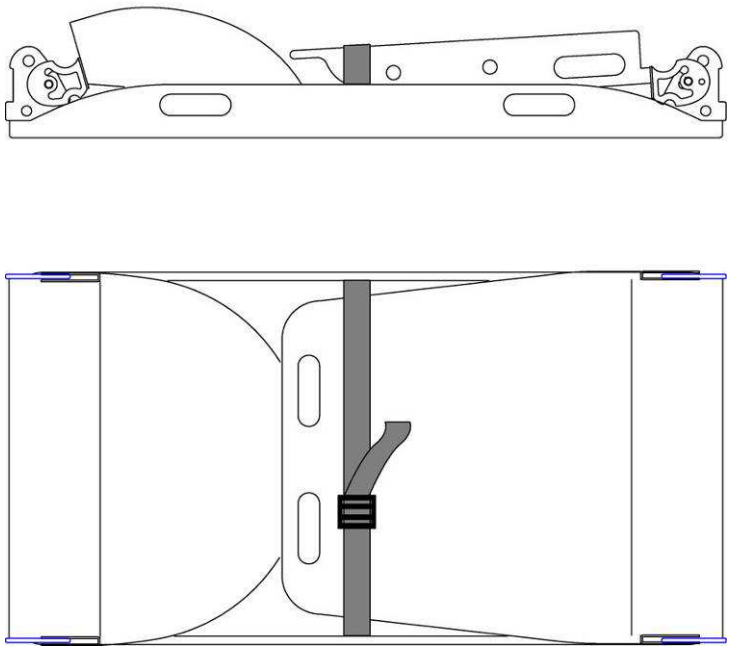
To avoid shocks, accompany the stretcher's movement during the passing of the stretcher to a flat position.

TSL RESCUE – 9, rue du Pré Faucon - PAE les Glaisins - 74940 ANNECY LE VIEUX (France)
Tél :+33(0)4 50 02 80 29 - Fax :+33(0)4 50 01 28 97 - Mail : info@tslrescue.com – www tsl rescue .com

FRANCO GARDA STRETCHER
USER GUIDE

Towing the stretcher in the closed position:

To keep the stretcher in the closed position, use the second outer strap from the front shell. Pass it as shown on the following:



When winching the stretcher in the closed position, you can anchor to the front swivels.

d) Anti-rotation stabiliser:

During winching with a high-power helicopter, the stretcher's rotation caused by the downwash can be countered by the use of an anti-rotation stabiliser device (ref.: PFFG013). This device can be installed left or right of the stretcher depending on the position of the hoist on the helicopter. It must be orientated by the rescuer escorting the stretcher. By varying the inclination of the stabiliser, the rescuer maintains the stretcher in the appropriate direction.
For more information about the anti-rotation stabiliser device, refer to the special manual delivered with it.

e) Ergonomic carrying system:

The Franco Garda stretcher is transported by hand using the ergonomic carrying system (ref. PFFG014). It consists of transport arms which are attached to the stretcher's swivels and an ergonomic transport harness. The arrangement ensures an excellent distribution of strains.
For more information about the ergonomic carrying system, refer to the special manual delivered with it.

f) Ski guidance system:

The Franco Garda stretcher can be guided by a skier for descents on snow. To do this, it must be equipped with runners (ref. PFFG015). Guidance is then accomplished by the ski guidance system (ref. PFFG016), which is adapted to the stretcher's front swivels. The ski guidance system is equipped with flexible links to reduce the strains on the stretcher's structure and a cord brake system to allow controlling the stretcher's speed even on a steep slope and hard snows.
For more information about the ski guidance system, refer to the special manual delivered with it.

6/ Maintenance:

The Franco Garda stretcher and all its accessories were designed to be very robust. However, they do require a careful maintenance.
Periodically lubricate the swivels with Teflon or silicone grease.

a) Cleaning:

We recommend separating the medicalisation cover from the shell before cleaning.
The shell can be cleaned with sprayed fresh water or water with a soft detergent added to it (neutral pH).
The medicalisation cover can be cleaned with a sponge moistened in warm water and an appropriate disinfectant, where applicable.
We recommend rinsing the cover and the shell after utilisation in a salty environment.

b) Storage:

The Franco Garda stretcher must be stored in a dry clean area protected from direct sunlight. It must be kept away from heat sources and must not come in contact with corrosive products.
It should NOT be stored while still wet.

c) Slings:

Special attention must be given to the slings. If they are wet, they must be dried without coming in direct contact with a heat source and be protected from direct sunlight.
Inspect them before each usage. A sling should be discarded if damaged or worn, that is:

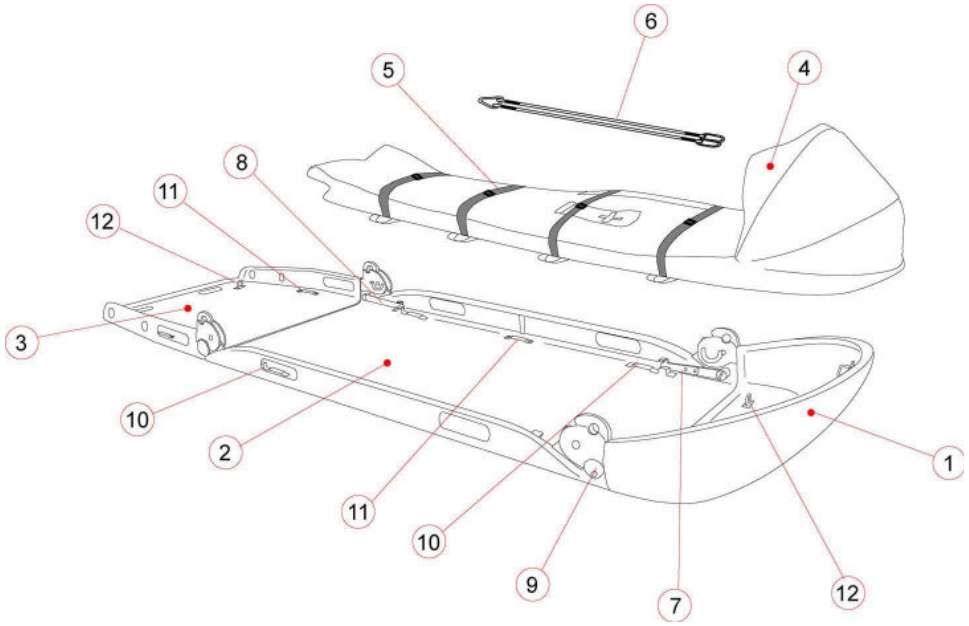
- presence of cuts on the cord
- presence of burns on the cord
- a part of the cord core is visible
- protection fabric stitching torn after a shock
- frayed stitching
- cord partially rigidified

Should you have any questions or a doubt about how to use or service the Franco Garda stretcher, please contact TSL RESCUE who will provide you with all required information.

The Franco Garda stretcher uses new state-of-the-art materials whose implementation requires very precise competences. In case of a malfunction or abnormal wear of the stretcher, never make repairs yourself.

FRANCO GARDA STRETCHER
USER GUIDE

7/ Spare Parts:



1	Front shell (PFFG007)
2	Centre shell (PFFG008)
3	Standard Rear shell (PFFG009) or long version Rear shell (PFFG010)
4	Medicalisation cover (PFFG005)
5	Outer strap (MPFG032)
6	Set of slings (PFFG011)
7	Left Lever (PFFG017)
8	Right Lever (PFFG018)
9	Set of cam (PFFG019)
10	Double Holding guards (MPFG002)
11	Simple Holding guards (MPFG004)
12	Small Holding guards (MPFG001)

8/ Contact:

For any request for information or if your equipment needs to be repaired, please contact exclusively:

TSL RESCUE
9, rue du Pré Faucon
PAE Les Glaisins
74940 ANNECY LE VIEUX (France)

Tél: +33 (0)4 50 02 80 29
Fax: +33 (0)4 50 01 28 97

E-mail: info@tslrescue.com