



FRANCO GARDA STRETCHER  
**ANTI-GYRATION STABILISER**

Part No. PFFG013

MU-PFFG013: 2021



**USER MANUAL**  
**ANTI-GYRATION STABILISER**





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## **1/ Introduction:**

During winching phases under high power helicopters, the blast induced by the main rotor causes a rotational movement of the stretcher. This phenomenon is dangerous for the rescuers and for the patient being rescued. It is essential to be able to control it.

Working with rescuers specialized in rescue in dangerous environments, TSL RESCUE has developed an anti-gyration stabiliser to control this rotation. This system, which fits on the rear of the Franco Garda stretcher, is positioned manually by the rescuer winched with the stretcher.

The principle of operation is to use the descending air flow generated by the rotor during hovering, or the relative wind during flight. This flow is directed onto one side or the other of the stretcher by the position of the anti-gyration stabiliser. This action creates a torque around the axis of rotation formed by the winch cable, which counters unwanted movement.

The rescuer needs to control the rotation of the stretcher until it arrives under the helicopter skid. He/she can then fold the stabiliser to facilitate the stretcher's entry into the helicopter.

## **2/ Warning:**

This user manual only applies to the anti-gyration stabiliser that can be fitted to the Franco Garda stretcher. For information on the use of the Franco Garda stretcher, refer to its instructions for use.

The safety of rescuers and patients using the Franco Garda stretcher and its accessories depends on its being used correctly. **All persons using it must have read the user manual and have carried out practical exercises before setting off for an operation. During these exercises, it is essential not to install a person in the stretcher but to use a dummy.**

Misuse of the anti-gyration stabiliser can have serious consequences. It is imperative that the rescuer handling it be perfectly trained in its use. In case of doubt or uncertainty, contact a TSL RESCUE technician who will explain to you how to proceed.

To ensure the proper functioning of the Franco Garda stretcher and its accessories, observe the recommendations in the "Maintenance" paragraph carefully.

The stabiliser must never be subjected to shocks. Never force the joints. It must never be used outside the winching phases, or for any purpose other than controlling the rotation of the stretcher during these winching phases.

### **Very important instruction:**

- never set off for an operation without first checking the condition of the stabiliser and the stretcher,
- in the event of a problem seek advice from a TSL RESCUE technician or return the part concerned,
- **above all never make repairs yourself.**





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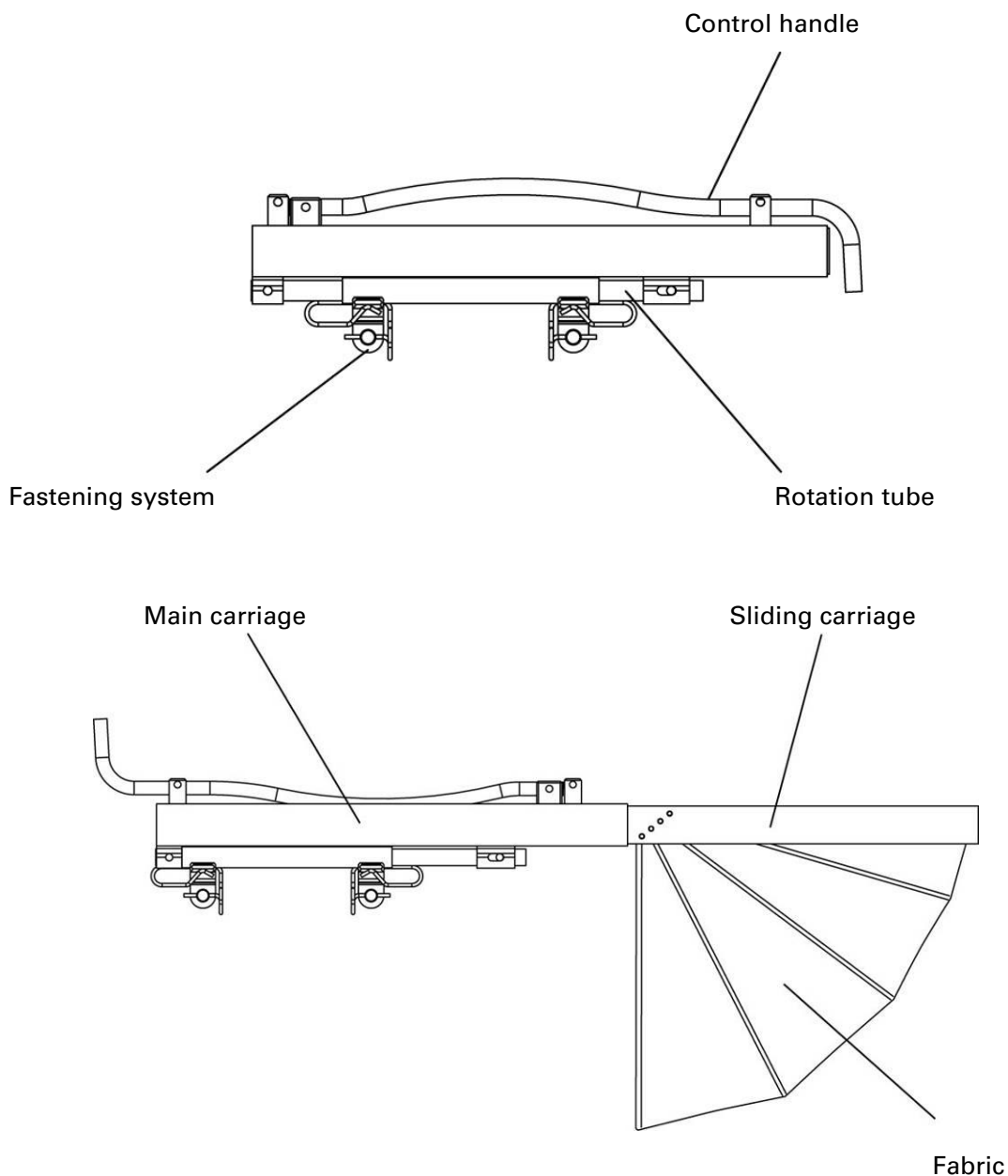
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## 3/ Presentation of the stabiliser:

The TSL RESCUE anti-gyration stabiliser consists of four main components:

- the fastening system
- the rotation tube
- the main carriage
- the sliding carriage

The control handle and the folding fabric are attached to the sliding carriage.





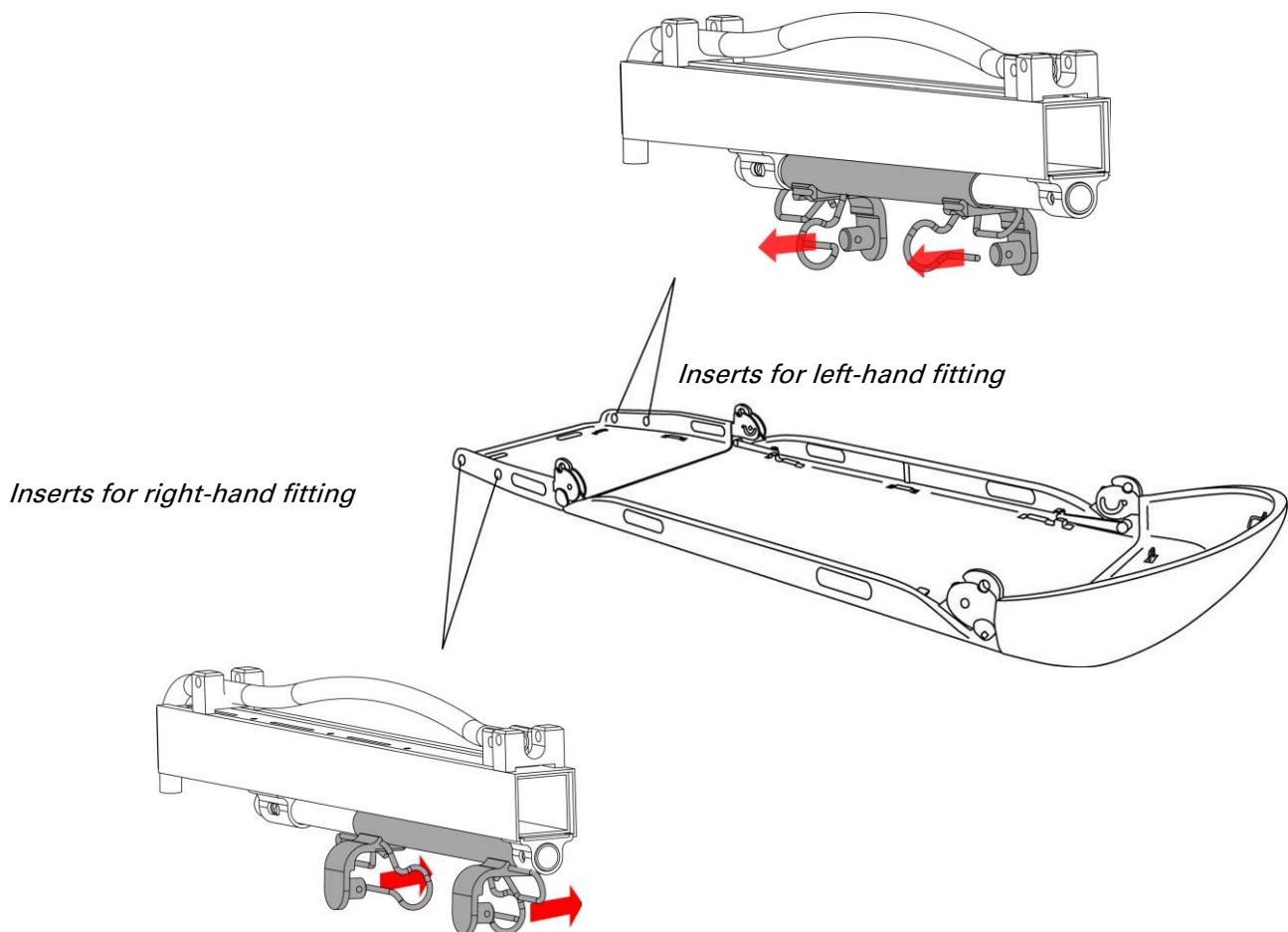
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## 4/ Fitting the stabiliser

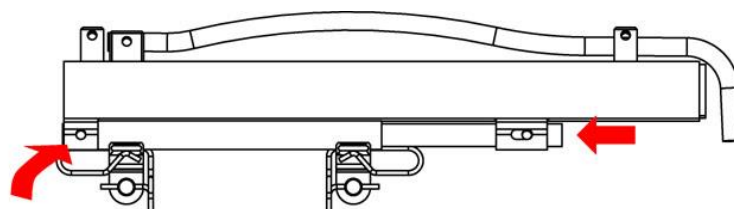
The TSL RESCUE anti-gyration stabiliser can be fitted on the right or the left of the Franco Garda stretcher.



For assembly, the fastening system must be positioned correctly, with the locking pins inside the stretcher.

To change the position of the fastening system, proceed as follows:

**1/ Unlock locking tab no. 1 and push the rotation tube in the direction shown:**



*Locking tab #1*

**2/ Unlock locking tab no. 2 and remove the rotation tube completely:**

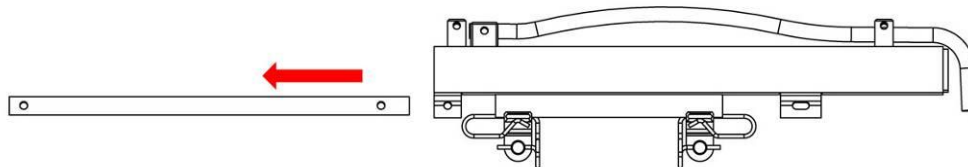
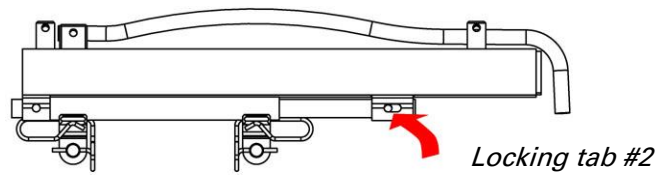




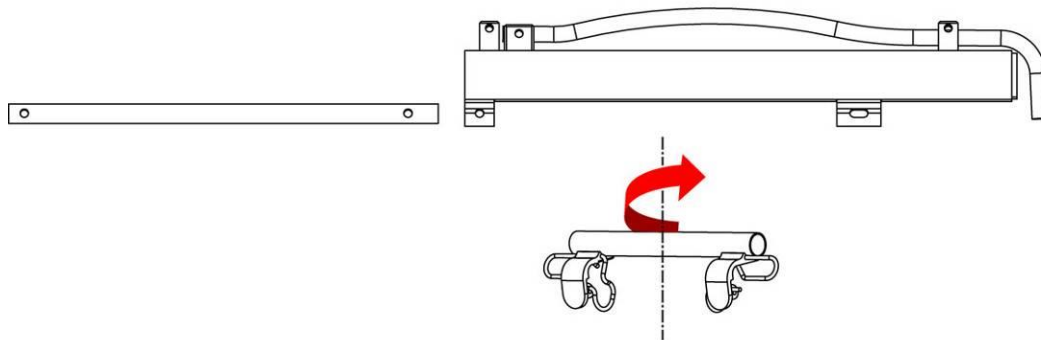
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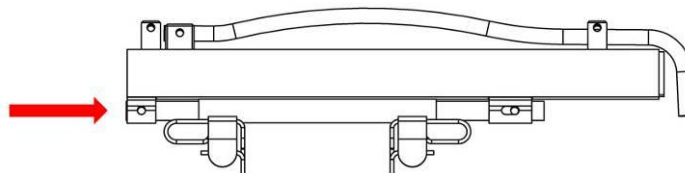
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3/ Turn the locking system round:



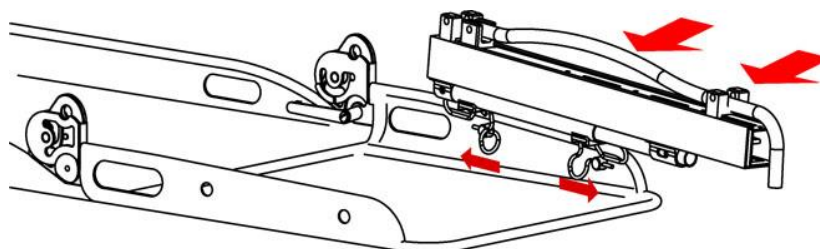
4/ Refit the rotation tube, ensuring that the 2 locking lugs are correctly in place:



Fit the stabiliser by inserting the locating tabs into the inserts on the sides of the rear shell of the stretcher.

Once the tabs are in place, lock the stabiliser using the 2 locking pins.

**Make sure that the stabiliser is properly installed before starting winching.**





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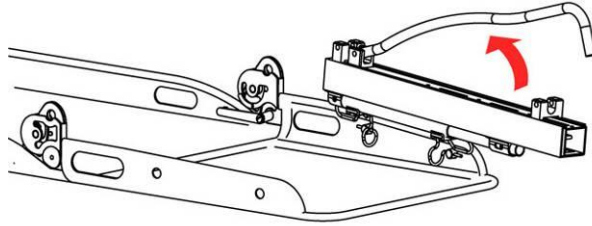
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## **5/ Use:**

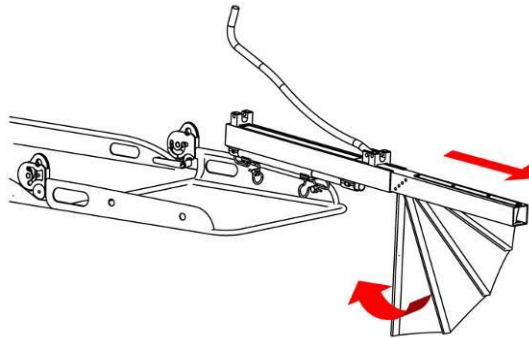
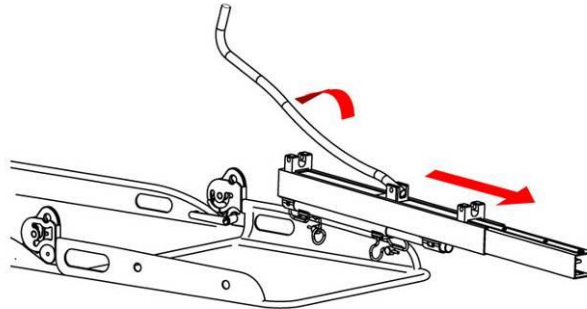
### **a) Unfolding the stabiliser:**

It is best to unfold the stabiliser after the stretcher has left the ground.

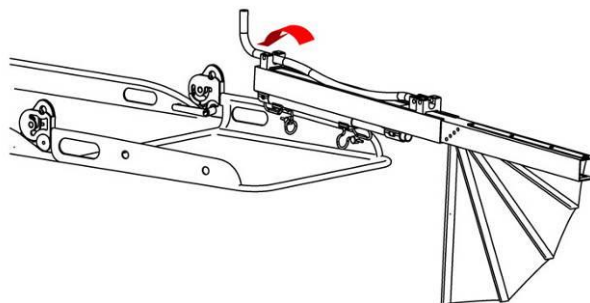
Grasp the control handle and start opening it.



Push the handle backwards until the sliding carriage reaches the stop and the canvas unfolds.



Lock the handle in its housing.



**To fold the stabiliser, repeat the operations in the reverse order.**





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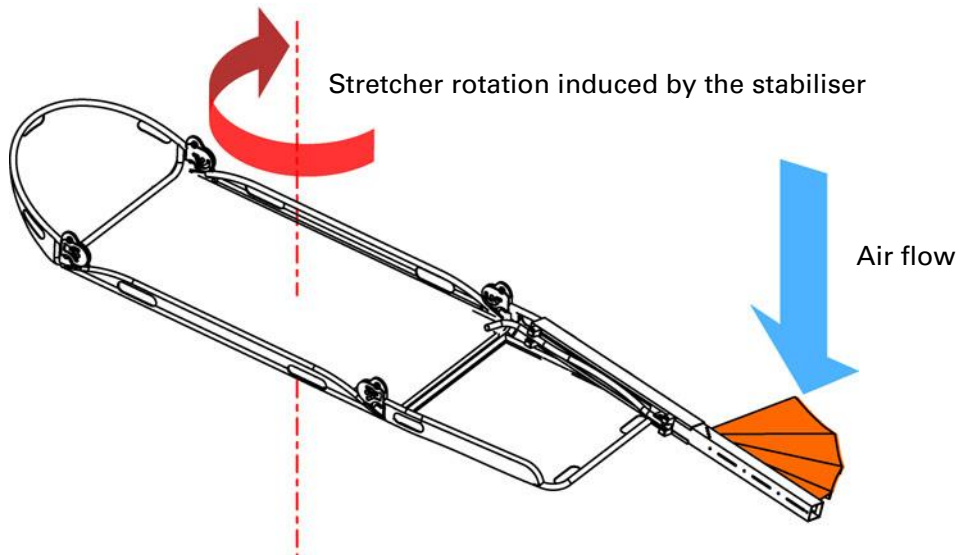
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## b) Rotation control:

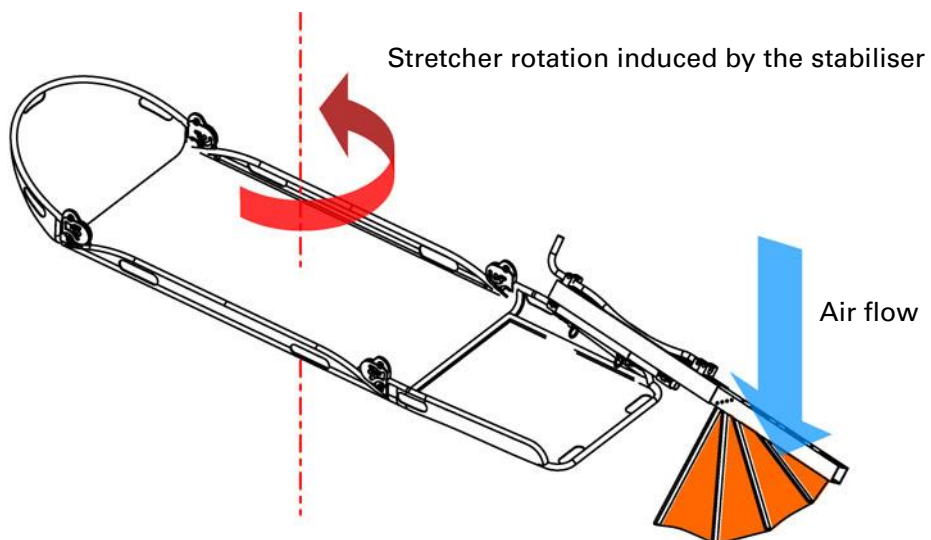
Rotation is controlled by directing the air flow descending from the helicopter rotor.

By tilting the stabiliser in one direction or the other, we generate a torque to counteract the movement induced by the blast.

### Clockwise rotation:



### Anti-clockwise rotation:





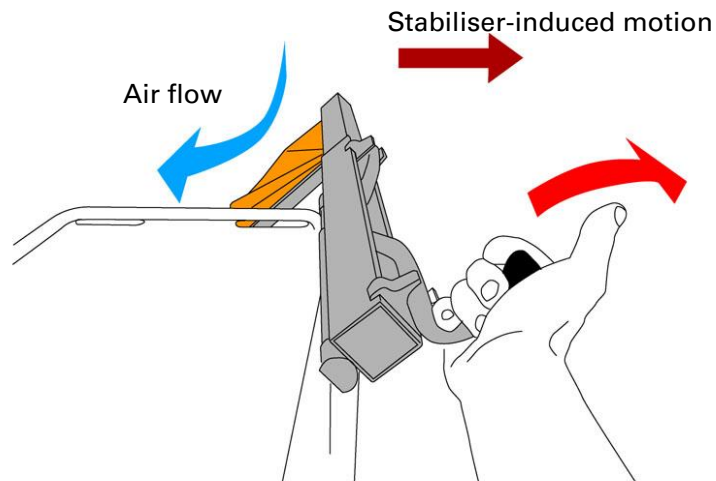
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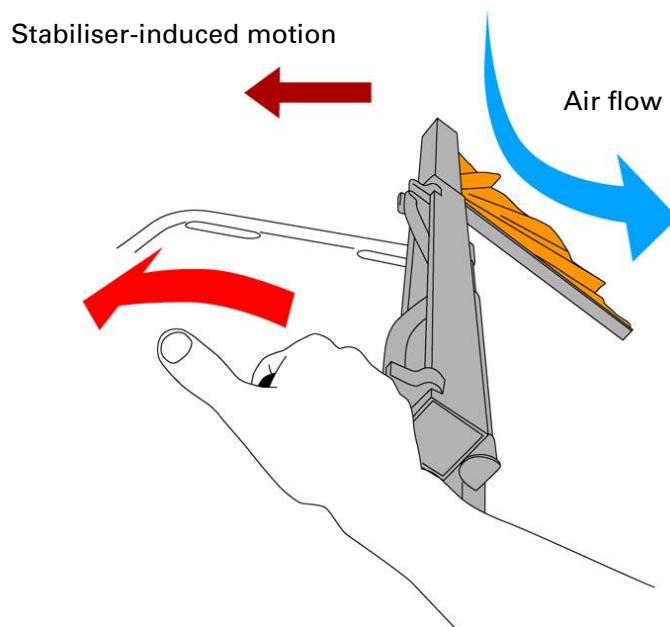
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**To be sure to place the stabiliser in the right position, tilt the handle in the direction you want to give the stretcher:**

- With the handle placed to the right, the rear of the stretcher will turn to the right.



- With the handle placed to the left, the rear of the stretcher will turn to the left.







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## **6/ Maintenance:**

The stabiliser is very strongly designed. However, it requires careful maintenance.

Check the condition of the joints before every use.

Pay special attention to the carriages which must slide perfectly.

Replace the fabric and the return elastic if they show signs of wear or fatigue. Replacement is easy and does not require the equipment to be returned to TSL RESCUE.

### **(b) Storage:**

The stabiliser should be stored in a clean, dry room, protected from direct sunlight. It must be kept clear of heat sources and contact with corrosive products.

It should not be stored when wet.

**In case of misunderstanding or doubt about the use or maintenance of the anti-gyration stabiliser, TSL RESCUE is always available to provide you with the necessary information.**

**In the event of malfunction or abnormal wear of any part, never perform repairs yourself.**

## **7/ Contact:**

For any for information or if your equipment requires repair, your only contact is:

### **TSL RESCUE**

9, rue du Pré Faucon

PAE les Glaisins

74940 ANNECY LE VIEUX (France)

Phone: +33 (0)4 50 02 80 29

Fax: +33 (0)4 50 01 28 97

E-mail: [info@tslrescue.com](mailto:info@tslrescue.com)

Web: [www.tslrescue.com](http://www.tslrescue.com)

