

# **User Manual**

## **Saver Safe Evacuation Chair**





## Disclaimer

This manual contains general instructions for the use, operation and care of the Ferno Saver Safe evacuation chair. The instructions are not all-inclusive. Safe and proper use of this chair is solely at the discretion of the user. Safety information is included as a service and recommendation to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations. It is recommended that training on the proper use of this chair be provided before using this chair in an actual situation. Retain this manual for future reference. Include it with the chair in the event of transfer to new users. Additional copies are available upon request from Ferno (UK) Ltd.

**Maximum Load Capacity - 180 Kg**

### 1. Intended Use of Chair

The Ferno Saver Safe Chair is a patient handling device designed to transport a patient/person in a seated position down stairs and also on level ground. It can also be used as a carry chair for moving occupant upstairs.

The Chair is intended to be used by fully trained and competent attendants, paramedics or other such staff as an aid to provide safe and secure evacuation of persons from a building during an emergency.

## 2. Safety Information



### **WARNINGS & SAFETY INFORMATION**



- Never exceed the maximum load capacity of 180 kg
- Only qualified personnel trained in the use of the Chair should use it
- For safety purposes, it is essential that occupants should always be secured with the supplied restraints
- Never leave an occupied Chair unattended
- Avoid rapid Chair re-positioning – this may cause injury to the occupant and/or operators
- Always support the Chair whilst adjusting handles
- In cases of cervical, spinal or some fracture injuries, use of the Chair for patient transfer is not recommended
- Improper maintenance can cause injury and unpredictable operation
- Establish regular inspection procedures and responsibilities to ensure proper maintenance of the Chair
- Maintain the Chair only as described in this manual
- Improper parts and service can cause injury and damage. Use only Ferno-approved parts and servicing
- Bleach, phenols and iodine can cause damage; do not apply products containing these chemicals to the Chair
- Improper lubricants can cause damage; use light oil to lubricate the specified parts of Chair
- Blood-borne Disease Notice - To reduce the risk of exposure to blood borne diseases (such as HIV-1 and hepatitis), when using the Chair follow the maintenance instructions in this manual

## 2a. Responsibility

- A suitably qualified person should carry out a risk assessment in relation to the emergency evacuation of all personnel and visitors, including the mobility-impaired
- Consider the mobility of existing employees and visitors as well as potential limitations of anyone accessing the site in future. This must take into account their physical, mental (including learning) and age-related health and mobility restrictions
- Consider numbers and location of employees and others likely to be on site at various times during and outside normal working hours
- Consider the number, location and suitability of evacuation routes. Remember to include corridors, staircases, exits, and the suitability of the designated assembly points
- Devise and implement an appropriate emergency evacuation plan, making everyone aware of the procedure and system
- Consider the type of alarm systems currently in use. Do they take into account the range of disabilities of those who may be present?
- Select and train suitable individuals to carry out specified duties during the evacuation; i.e. first aiders, fire wardens, dedicated escorts and Chair operators. NB: Fire Wardens should not be selected to carry out the role of the evacuation Chair operators/dedicated escorts as they will have their own duties in the event of an emergency
- Carry out regular fire drill procedures to ensure familiarity and efficiency of premises evacuation. Consider the time taken to evacuate the premises. Test the fire alarms weekly
- Review the risk assessment at regular intervals (from two to four years, depending on the degree of risk), also reviewing when a new employee with mobility impairment is employed, when there is reason to doubt the existing measures or when a significant change has occurred

**2b. People who may be at risk in an emergency**

- Older People who have mobility, visual, hearing or other impairment
- Anyone who becomes injured or suffers an illness before or during the evacuation
- Anyone with a temporary problem including visitors and staff, confusion, anxiety or distress as a result of the situation
- Pregnant women
- A parent with one or more young children
- A person with a physical disability
- A person who has a learning disability
- A person with an unseen condition e.g.: asthma, heart complaint, unstable epileptic or diabetic conditions - their condition may affect their ability to get out unaided in an emergency

**2c. Operator Skills:**

Trained operators must be able to:

- Respond calmly in an emergency
- Make the Chair ready for use during an emergency
- Reassure and provide assistance to the mobility impaired person in their care
- Evacuate the area swiftly and safely
- Remain with their charge until he/she is in the care of emergency services or other responsible persons

### 3. Operator Training

#### Important Safety Information

- A training plan approved by an EMS training officer (or equivalent) is recommended
- It is strongly recommended that the following procedures be practiced with a chair loaded with dummy weights such as bagged builder's sand or gravel
- The chair must be checked as per instructions (see section 3a, "Preparing the Chair for use")
- It is recommended that the Chair should always be used whenever possible with a minimum of 2 operators and to use additional help as and when needed to control the Chair
- Ensure the route down the stairs is clear of obstructions that could affect the safety of the operators or the function of the tracks
- Ensure that the stairs are of suitable condition for the transportation of person on the Chair, accompanied by the Chair operators
- All operators must read and understand the instructions in this manual
- Trainees should be tested to verify their understanding of the Chair operation
- Training records for all trained operators should be kept, an annual refresher training for all Chair operators is recommended
- Never lubricate track belts - lubricated track belts can perform unpredictably, resulting in injury to the patient and/or operators
- Always check the tension of the belt to ensure they are not loose. Instructions on how to check the belts is included in this manual
- Moisture, water, snow, ice or debris on or between the track and belts can cause irregular track-belt performance that results in sudden changes in the weight operators must support; make sure the track and track belts are clean and dry before using the Chair on stairs
- Always clear stairs of debris etc. which could interfere with the operation of the Chair or impede the operators
- When moving patients always inform them of what you are going to do
- Always use restraints provided and check patient and restraints are secure

### 3a. Preparing the Chair for use

1. Remove the dust cover from the Chair and then remove the Chair from the wall bracket



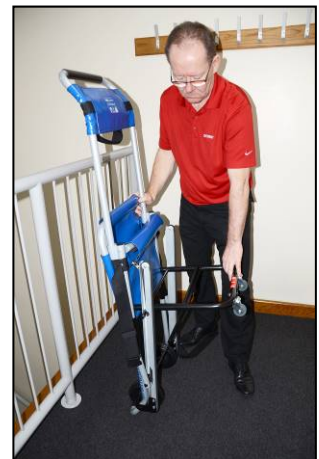
2. Unbuckle the restraint strap whilst holding the chair in a folded position
3. Holding the Chair on the floor with one hand and keeping it folded, with the other hand raise the rear handle to its highest position, ensuring that it is locks into position with the locking pins located on each side of the handle tubing



N.B. The Handle is lowered by pressing in the two locking pins located on the inside of the chair handle tube, on both sides of the chair



4. Keeping the Chair on the floor, pull the rear wheels out, pulling the bar out towards you and then upwards until the rear wheels are fully extended and lock into place





5. Tilt the Chair sideways so that it is sitting on all four wheels



6. Pull the seat forward and downwards into the sitting position



7. The Chair is now ready to use



### 3b. Securing the patient into chair

1. Slightly tilt the chair forward such that the seat is horizontal whilst the occupant is helped onto the Chair
2. Once the person is on the Chair, bring the Chair back so that it rests on all four wheels



3. Once the occupant is sat comfortably into the Chair secure the occupant in the Chair using the supplied chest restraint strap
4. Secure the patient's head with head-strap (if required)



5. The patient is now ready for transporting down stairs



### 3c. Transporting the Chair and occupant down stairs

**Ferno recommends that at least two operators are used wherever possible when evacuating down stairs**

1. With one operator located at the top of the stairway and other operator at the head-end behind the chair, push the chair towards the stairs, and stop short of the first step, at an angle away from the stairway



2. Slowly tip the chair forwards until the rubber-coated front bar is on the floor, the front wheels are slightly off the ground and the patient's weight is transferred onto the front bar and not resting on the operator, the rear wheels can then be folded away as described below



3. Maintaining hold on the chair at this same angle throughout, use your foot to push down on the rear-wheel axle bar (indicated by red sticker) and then push your foot forward towards the front of chair all the way until the rear wheels fold away fully and click into the holding clip



4. With the second operator still at the top of the staircase, manoeuvre the Chair to the top step, ensuring that the both front wheels are square with the step



5. The second operator can give support from the front of the chair to manoeuvre in position and to ensure the chair does not go over the first step whilst positioning the chair on the stairway



6. Once the Chair is correctly positioned in front of the top step and both operators and occupant are ready to descend the stairs, manoeuvre the Chair front wheels over the first step until the track is resting on the top step nose (edge)

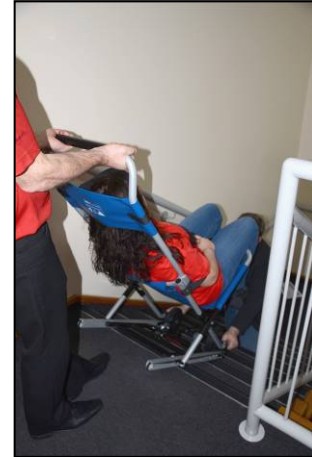


7. The foot-end operator can aid the head-end operator to guide the Chair wheel over the first step either by holding the seat frame, or holding the front bar at the base of the chair



8. Continue to manoeuvre the Chair until the track is resting on 2 stair edges and then onto 3 stair edges

For safety reasons it is recommended that the head-end operator holds the handle by gripping from under the handle, to maintain grip at all times

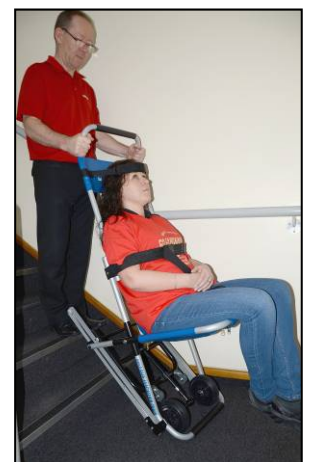


9. Maintain the correct angle of track such that the track belt is resting on the 3 stair edges at all times as the Chair is moved down the stairs

10. If required to better maintain the angle of track, the head-end operator may change their handle grip such that one hand is gripping from above the handle and one from below. This ensures safety whilst holding the chair and at the same time allows the operator to be able to push the chair down into the stairs to maintain correct angle of chair



11. Once at the foot of the stairs and the wheels have touched the ground, the chair can be manoeuvred away from the last step by the head-end operator



### 3d. Manoeuvring around a landing

1. When a landing is reached, turn the Chair by slightly tilting it forwards and lifting the weight onto the front wheels and then manoeuvre the Chair round the bend until level and square on with the top of the next flight of steps
2. Using the same procedure as before, guiding the Chair carefully over the first step and then down the remaining steps, maintaining the track angle at all times



### 3e. Reaching the bottom of the stairway

1. When the bottom of the stairs is reached, manoeuvre the Chair far enough away from the stair such that the rear wheels can be deployed again
2. Tilt the chair slightly forwards and whilst maintaining a secure hold on the chair, use your foot to pull the rear wheels out towards you until they deploy fully
3. Ensuring that the wheels are fully deployed and extended, bring the chair down so that it is resting on all 4 wheels
4. The Chair can now be wheeled away from the stairway and to a safe area



#### 4. Using Additional Help

**Ferno recommends that at least two operators are present when the Chair is used for evacuating patients.**

**Circumstance such as access, weather conditions or patient weight may require additional help when operating on stairs; this must be assessed at the time.**

#### 5. Maintenance

##### 5a. Checking the Saver Safe Chair

The following informal visual checks are required to be carried out by the end user on a regular basis and a physical check of the chair also made after use.

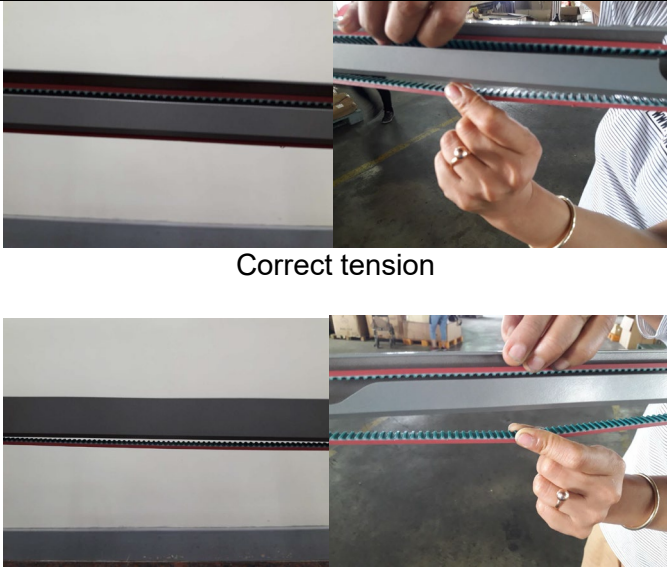



- Overall cleanliness of the Chair
- Check that there are no bent or damaged parts, missing fasteners, etc.
- Check that the wheels rotate freely with no excess movement or damage
- Check that the Chair unfolds and locks securely in the seating position for normal use
- Check that the track belt is not loose and that the track system operates correctly
- Examine the track belt for damage
- Check the seat cover for cracks, splits or any loose fabric or stitching, etc.
- Check that the seat cover is correctly secured to the frame

**If in any doubt then contact a Ferno Service Engineer**

**NEVER LUBRICATE OR ALLOW LUBRICANTS TO COME INTO CONTACT WITH THE TRACK AND BELT SYSTEM**

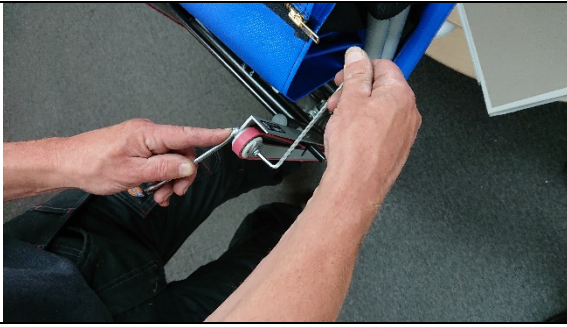
### 5b. Tensioning of the belt

To ensure the Chair operates as designed and correctly under control, the track belt must be of the correct tension. Recommended procedures for checking the belt tension are as follows:

 <p>Correct tension</p> <p>Belt too loose</p>	<p>Check the tension of both belts. Pulling the belt away from the frame, you should be able to insert no more than one finger into the gap between the belt and metal frame</p> <p>If the gap is substantially greater then contact Ferno as the belt probably needs replacing</p>
	<p>The rotation of both belts should be assessed to ensure they are freely moving and to ensure that one belt is not tighter than the other. Manually pulling the belt as per the photo, the belt wheel at both ends of the track should rotate and you should be able to feel resistance without the belt being so tight that it will only move with extreme force</p>
<p>If a wheel is not free-moving then the bolt holding the wheel to the frame may need loosening slightly to allow it to freely-move</p>	
<p>It is recommended that both belts should be of a similar tension, if one belt requires additional tension use a 4mm Allen key and 8mm spanner to tighten the drive wheel</p>	

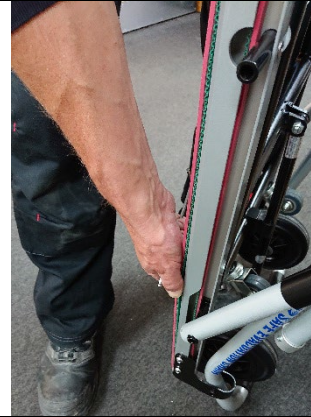


### 5b. Tensioning of the belt (cont...)



It is suggested that increments of half a turn be used to increase the tension, this may need to be increased or decreased according to the required tension

After every half a turn assess the tension of the belts for increased or decreased resistance



### 5c. Suggested Maintenance schedule

The Saver Safe Chair requires regular informal visual checks. Set up and follow your own maintenance schedule but use the following as a minimum.

More frequent maintenance will be required in situations of heavy use. If any damage is discovered, take the Chair out of service until repair or replacement can be made.

Action	As Needed	Each Month
Disinfecting	•	
Cleaning	•	
Inspection	•	•
Lubrication (hinges, castors etc.) DO NOT LUBRICATE TRACK OR BELT	•	

When using any product for maintenance, follow the manufacturers' guidelines and read the manufacturers' material safety data sheet.

#### **WARNING**

**Improper maintenance can cause injury. Maintain the Chair only for the purpose described in this manual.**

### 5d. Disinfection

Disinfect all surfaces of the Chair including the patient restraints. Follow disinfectant manufacturers' directions for use. Spray or wipe disinfectant onto the patient restraints. Do not immerse in disinfectant.

### 5e. Cleaning

Clean the Chair and its components with a clean cloth or soft brush and warm soapy water. Rinse with warm water and air dry. Do not clean with products containing bleach or phenol. A stiff bristled brush can be used if necessary.

**Regular cleaning helps reduce the risk of transmitting disease and enables the equipment to function at its optimum.**

## 6. Technical Information

Saver Safe Chair		
	Position	Dimension
UNFOLDED	Depth of seat	43.2 cm (17" )
	Width of Seat	51.1cm (20.1")
	Height of top handle - Max - Min	133.4cm extended 92.71cm retracted
	Overall width	52.7cm
	Overall Depth	91.4cm
	Weight	10.5 Kg
	Max Load Capacity	180 Kg
FOLDED	Height	103cm
	Width	52.7cm
	Depth	25.4cm

- All dimensions are approximate
- Load capacity is total weight distributed in accordance with basic human anatomy proportions.
- Attendants must consider the weight of the patient and accessories when determining total load on the Chair.



**7. Warranty and Service**

Standard terms and conditions apply to all sales. A copy is available upon request. These contain full details of warrant terms and do not limit the statutory rights of the customer.

For service, maintenance and any questions regarding this, or any other Ferno product, please contact:

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Or your local dealer if you are based outside the UK.

<b>Date</b>	<b>Service By</b>	<b>Remarks</b>





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As our policy is one of continuous development Ferno (UK) Ltd reserves the right to change the specifications without notice.

Stock Code: 2003-0115



The CE mark on this product demonstrates conformity with the requirements of the EC Directive 93/42/EEC for Medical Devices