Restricted Access Stretcher

Code
LSYNRAS MK2

CE, 93/42/EEC Class 1, 2007/47/EC
EN 1498:2006 Class B

lyon.co.uk/user-instructions

For more detailed user information and to download a PDF copy of these instructions follow the link above or scan the QR code with your smart phone

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This information to be read and kept for the lifetime of the product in conjunction with the Lyon General User Instructions.
All users must have appropriate training, knowledge and experience of casualty care and work and rescue at height, or be working under the direct supervision of such a person.

**Maximum rated load**
150 kg

**Certification**
CE, 93/42/EEC Class 1, 2007/47/EC
EN 1498:2006 Class B,

**Nomenclature of parts**
1. Suspension ring
2. Karabiners
3. Rope adjuster
4. Drag handles
5. Plastic body
6. Maillon Rapides
7. Seat section
8. Stretcher bridle
9. Chest strap (black)
10. Leg straps (blue and red)
11. Seat positioning straps (yellow)

**Rope termination**

![Rope termination diagram]

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Limitations
The stretcher has passed EN 1498:2006 test requirements with a test mass of 150 kg, and may be used for casualties up to this weight. When working with loads over 100 kg, take care not to exceed the load-bearing capacity of other components in the system.

Please note that this stretcher may not be suitable for children or small adults.

Due to the nature of this product it is not possible to make it personal issue.

Use
This stretcher is for rescue purposes only. It may be used for lifting or suspending an injured or stranded person in an emergency, within the guidance set out in these instructions and by trained and competent users. Use in conjunction with a spine splint if spinal injuries are suspected. All other uses are forbidden without the written approval of Lyon Equipment Ltd.

The stretcher must not be used in a fall arrest system.

The stretcher may be used in conjunction with compatible items of personal fall protection equipment of suitable specification, with due consideration to the limitations of each individual piece of equipment in the safety chain.

Planning a rescue
Taking into consideration the casualty’s injuries and the intended extraction system, assess whether this stretcher is suitable for the particular application.

Before commencing the rescue, a plan must be in place as to how to deal with any emergencies which may arise during the rescue.

The time that a casualty is held in the stretcher must be kept as short as possible to minimise risks to respiration and circulation (suspension intolerance).

Securing the casualty in the stretcher
Before securing the casualty in the stretcher, consider any medical conditions and take care to ensure the casualty is not further injured by poor fitting, trapping parts of the body, adjustment of straps, or by displacement of straps during the rescue. Do not allow the stretcher or any components to come into contact with any open wounds. Ensure that the stretcher bridle is not allowed to drop onto the casualty during the rescue.

Place casualty in stretcher with seat flat (yellow straps undone) and head below the drag-handles.

Fasten chest strap (black) around chest and upper arms.

Fasten leg straps (blue and red) around each leg.

Close strap buckles by inserting the male part into the female part until they lock together.
Buckles may be tightened by pulling on the slack end of the strap, and loosened by tilting the buckle backwards whilst pulling the strap back through the buckle.

**Carrying the casualty**

Carry or drag via the bridle ropes and drag handles. Take care if lifting by the drag handles as this can flex the casualty’s neck. The ropes of the bridle can be clipped back to the stretcher to form carrying handles.

**Lifting or suspension of the casualty**

Rope rescue system anchors must be unquestionably reliable, situated above the user and of sufficient strength for the anticipated load. Ensure all other components in the system are compatible and of sufficient strength.

All connections to the rope rescue system must be made via the main ring, using a suitable locking connector or by tying in directly. The three releasable ropes of the stretcher bridle must all be connected to the main ring using the captive karabiners fitted to them. The karabiners are self-locking but care should be taken to verify that the locking mechanism is operating correctly.

**ONLY LIFT/SUSPEND WITH ALL FOUR POINTS CONNECTED TO THE RING**

The angle of suspension may be adjusted by sliding the metal adjusters along the red bridle ropes.

To increase comfort for the casualty, always raise the seat section (by connecting the yellow straps) when suspended, so that the casualty is in a seated position with the legs bent unless contraindicated by the casualty’s injuries.

**DO NOT OVERTIGHTEN THE LEG STRAPS**

Load should be shared between the leg straps and seat when suspended unless contraindicated by the casualty’s injuries.

Keep arms inside the plastic body, using the Velcro strap if necessary.

It is essential to regularly check fastening and adjustment elements during use.

If at any stage the casualty shows signs of distress or potential injury from use of this stretcher, cease use immediately and review its suitability and / or adjustment.
For a full vertical position tilt the stretcher forward, then allow it to return to an angled position as soon as practicable.

Note: Casualty should be in a seated position with legs bent unless being moved horizontally through an exceptionally restricted space, in which case the seat positioning straps may be temporarily released to allow the casualty to lie completely flat.

**Training in the use of this stretcher**
It is essential that all potential users receive training in the use of this stretcher.

This stretcher is classed as rescue equipment/medical device and not PPE. It is only for use as the sole means of suspension in an emergency situation.

If training with live casualties, the use of a back-up safety system (including an additional fall arrest harness) is strongly recommended.

**Inspection**

Stretchers should be subject to:
- Pre-use checks
- Thorough inspections
- Interim inspections (as appropriate)

The stretcher and all components should be checked. Loosen all straps and move adjusters, connectors and buckles to allow all components to be fully inspected.

Check for correct operation and legibility of markings of all components.

The checks should be undertaken in good light. Any item showing any defect should be withdrawn from service immediately.

Do not dis-assemble any part of the stretcher. Contact Lyon Equipment for servicing and spares.

Remove from service and destroy any product which fails inspection, has arrested a fall or reaches 10 years of age regardless of use.

It is recommended that the stretcher is marked with the date of the next or last inspection. This can be done on the stretcher label, with an indelible laundry marker.

**Metal items – suspension ring, rope adjusters, Maillon Rapides, strap buckles, karabiners**
Check all metal items for any signs of wear, corrosion or deformity. Check the Maillon Rapides function correctly, and once checked the nut must be correctly and completely screwed onto the bolt with no threads showing. Check that the strap buckles release and engage correctly. Check that karabiners open easily and lock when closed.

**Plastic body**
Check for cracks, splits or deformity, especially around slots and eyelets.

Check eyelets for security in plastic body.

**Straps**
Check the webbing visually and by passing the straps slowly through the
hands (e.g. to detect small cuts in the edges, abrasion or cuts across the face of the webbing, softening or hardening of fibres, ingress of contaminants, broken, cut and worn threads in the stitching). Pay particular attention to areas where the webbing is in contact with connectors, buckles and the plastic body. Check the webbing for discoloration, which could be the result of chemical or UV damage.

**Stretcher bridle**

On the stretcher bridle, check the thimbles for cracks. If the thimble is cracked and there is no sign of related damage (evidence of overloading which may have caused the cracking, or damage to the rope as a result of the cracked thimble), the thimble should be removed to prevent possible damage to the rope.

Check for cuts, burn marks, abrasion, bulging of the core through the sheath, bulges and flat sections in the rope. Check the load bearing stitching for abrasion or distortion, and cut or loose threads. Check both rope and stitching for discoloration, which could be the result of chemical or UV damage.

**Chemicals**

Avoid all contact with chemical reagents that could affect the performance of the stretcher, e.g. acids, caustic substances and oxidising agents. Discard this product immediately if contamination is even suspected to have occurred.

**Materials**

The plastic body is low density polyethylene.

All webbing is polyamide stitched with polyamide (Nylon) thread.

The rope and thread of the stretcher bridle are polyamide (Nylon). The heatshrink cover over the stitching is polyolefin. The thimbles are plastic.

The Maillon Rapides are galvanised steel. All other metal components are aluminium alloy; in addition, the strap buckles have brass and stainless steel components.

**Obsolescence**

The maximum lifetime of this stretcher is 10 years from date of manufacture.

**Cleaning and storage**

See General User Instructions.

Before storage, adjust all straps out to their full extent before repacking.

If contaminated by biohazard, dispose of immediately.

**Note to resellers**

If this product is re-sold outside of the UK and Eire, but within the EU, the reseller is responsible for providing instructions for use, maintenance, periodic examination and for repair in the language of the country in which the product is to be used.
**Markings**
Marking, on the stretcher label, can be made with an indelible laundry marker.

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<thead>
<tr>
<th>Manufacturer’s logo</th>
<th>Refer to user instructions</th>
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<td>Individual serial number will be in the format YYDDD 12345. The first two digits give the year of manufacture, the next three digits the day of the year from 001 to 365 and the five digits after is the number in the series</td>
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<tr>
<th><strong>Max rated load 150 kg</strong></th>
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### Lyon Product Inspection Record

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<th>Individual serial number</th>
<th>Date of first use</th>
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**Manufacturer**
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**Fax.** +44 (0)15396 26330
**info@lyon.co.uk**
**lyon.co.uk**

### Record of inspection and repair

<table>
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<th>Date</th>
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All user instructions supplied with this product must be kept as part of the product inspection record.
WARNING
Make sure that you have read and understood these instructions before using this equipment. These user instructions are to be read and kept along with any other user information provided.

Activities at height are hazardous and may lead to injury or death. It is the user’s responsibility, at all times, to ensure that they understand the correct use of any equipment supplied by or through Lyon Equipment, use it only for the purposes for which it is designed, and practice proper safety procedures including having a rescue plan in case of emergency.

This product must not be used outside its limitations, or for any purpose other than those described in the user instructions. Misuses forbidden in these instructions are examples only; many other misuses may exist which could lead to injury or death.

Please note, the information in these user instructions is not exhaustive, and is not a substitute for comprehensive instruction and training by a competent person.

Lyon Equipment is not responsible for any consequences, whether direct, indirect or accidental, resulting from the use of its products. If you are unsure about the correct use of this product, please contact us.

Who can use this equipment
This equipment should only be used by trained, competent and responsible persons, or the user should be under the direct supervision of a trained, competent and responsible person.

Activities at height should not be undertaken by persons affected by alcohol or drug dependence, diabetes, epilepsy, fits, blackouts, fear of heights, vertigo / dizziness / difficulty with balance, heart disease / chest pain, high or low blood pressure, impaired limb function, obesity, psychiatric illness, musculoskeletal issues, e.g. a bad back.

General instructions for use
Equipment must be checked before each use, to ensure it is serviceable and operates correctly. Checks should also be carried out during use. In addition, a thorough inspection by a competent inspector should be carried out in strict accordance with these user instructions, and a record kept of these inspections.

This product may be used with any compatible item of Personal Protective Equipment (PPE) which conforms to the European Union Directive 89/686/EEC, keeping in mind the limitations of each item in the safety chain. It should be noted that a full body harness is the only type of harness which may be used in a fall arrest system.

The anchor device or anchor point is of primary importance and should be unquestionably reliable. It should be strong enough to withstand the
foreseeable maximum load that could be applied e.g. in the event of a fall.

When selecting an anchor, the anticipated directions of loading and potential loads should be taken into account.

Anchors should be selected and positioned to allow work to be carried out in such a way as to minimise the potential for a fall and potential fall distance, for example by keeping the anchor point / device above the user.

Anchors should not have sharp or rough edges which could damage equipment (use edge protection if necessary).

On each occasion of use, verify the free space required beneath the user in order to avoid an impact. Always try to place protection so that any fall will be stopped before the user hits the ground or any other obstruction. Remember to allow for rope stretch and slippage in the belay device or rope ascender / descender. In a fall arrest situation, the user must be protected from dynamic forces of greater than 6 kN in the event of a fall, e.g. by use of a fall arrest system incorporating an EN 355 energy absorber.

**Maintaining your equipment**

Wash in clean water not exceeding 30°C with pure soap and rinse in clean cold water. Do not use chemical products, solvents or detergents – these should be regarded as harmful.

Due to the difficulties in effectively disinfecting equipment, we recommend that any contaminated equipment should be withdrawn from use and disposed of in a suitable manner.

Equipment must be clean and dry before storing. Always allow to dry naturally, away from direct heat. Equipment should be stored in a cool, dry, well-ventilated area, away from excessive heat, high humidity, sharp edges, corrosives, sunlight or other sources of ultraviolet light (UV) and other possible causes of damage.

During transport, this product should be protected from abrasion, mechanical damage, chemical contamination, UV and heat.

**Textiles**

Always keep textile items at temperatures between -30°C and +50°C.

**Metal items**

Always keep metal items at temperatures between -20°C and +60°C.

No alterations, additions or repairs may be made to this product without the manufacturer’s prior written consent; if done, the repair must be carried out by a competent person for repair authorised by Lyon Equipment to make the repair, and in accordance with specified procedures.

These instructions must be strictly adhered to.
**Inspection**

A thorough inspection should be carried out at least every 6 months by a competent inspector in accordance with these user instructions. A record of these checks should be kept with the product along with these user instructions. In addition, interim inspections should be carried out where products are used intensively, or in particularly harsh environments where damage is more likely to occur, or where legislation or the type of equipment make it necessary.

Pre-use and thorough inspections are essential because the user’s level of protection depends on the continuing correct performance of this product.

PPE (Personal Protective Equipment) inspection training is available from Lyon Equipment.

**Lifetime, and when to withdraw your equipment from use**

Withdraw your equipment from use if any one of the following applies:

- It shows sign of wear and tear / damage that may affect performance
- Markings on the product are no longer legible
- You suspect it may have been exposed to chemical contamination or extreme temperatures
- It fails a periodic examination
- It has been used to arrest a fall or has been excessively loaded
- It is more than 10 years after the date of manufacture (textile items or items with textile components). Metal items have a potentially indefinite lifespan if stored correctly.
- If you have any reason to doubt that it is safe to use.

It is the responsibility of the competent inspector to decide whether the equipment should be put back into use, or permanently withdrawn from use. Equipment permanently withdrawn from use must be destroyed, and should be recycled where facilities exist.

Certain environmental elements will considerably accelerate wear: salt, sand, dust, snow, ice, moisture, chemicals, sunlight (UV radiation) – list not exhaustive.

Warning: the safe working life of this product may be as short as its first use in extreme circumstances.

If in doubt, do not hesitate to scrap this product.

**Guarantee**

In the event of any defect in materials or workmanship please return the product to the dealer, distributor or manufacturer within 3 years of purchase for inspection. We will replace or repair as required. This guarantee does not cover normal wear and tear or accidental damage.
Note to resellers

If the product is re-sold outside the UK and Eire, but within the EU, the reseller is responsible for providing instructions for use, maintenance, periodic examination and for repair in the language of the country in which the product is to be used.

If you require the Intrastat commodity code / customs tariff code or NATO stock number (where applicable) for this product, please contact us via lyon.co.uk

Inspection records

A record must be kept for each component, subsystem and system, including name and contact details of the manufacturer or supplier, product description, serial number, year of manufacture, date of purchase, date of first use, any other relevant information, and history of periodic examinations and repairs, the name and signature of the competent inspector and the next due date for inspection. An example of a suitable equipment record is shown on this user instruction and can also be downloaded at lyon.co.uk

Local jurisdiction may dictate that extra information be recorded in the inspection record – check your country’s legal requirements. Some products may have features which need special monitoring during periodic inspections, e.g. wear indicators, in which case this information should also be recorded on the inspection record.
### Explanation of symbols

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