



Operation & maintenance manual

RollUP Rescue Stretcher

Issue / Version V01-2021

This edition replaces all
previous versions and instructions



Emergency & Rescue Systems

Made in Austria

KOHLBRAT & BUNZ GMBH

A-5550 Radstadt



Valid for the following variants of the RollUP:

RL2000RP-V01/V02/V03

RL2000RS-V01/V02/V03

RL200RX-V01/V02/V03

RL2000RP-V11/V12/V13

RL2000RS-V11/V12/V13

RL2000RX-V11/V12/V13

RL2000RP-V21, RL2000RS-V21, RL2000RX-V21

RL3000RP-V01/V02/V03

RL3000RS-V01/V02/V03

RL300RX-V01/V02/V03

RL3000RP-V11/V12/V13

RL3000RS-V11/V12/V13

RL3000RX-V11/V12/V13

RL3000RP-V21, RL3000RS-V21, RL3000RX-V21

RL4000RP-V01/V02/V03

RL4000RS-V01/V02/V03

RL4000RX-V01/V02/V03

RL4000RP-V11/V12/V13

RL4000RS-V11/V12/V13

RL4000RX-V11/V12/V13

RL4000RP-V21, RL4000RS-V21, RL4000RX-V21



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1 Introduction

Thank you for choosing a high-quality rescue device from Kohlbrat & Bunz.

Before using it for the first time, please read this manual carefully. We expressly point out that we assume no liability for damages resulting from improper use or disregard of our instructions / guidelines.

It is not allowed to be used until the user has familiarized himself with the correct and safe handling. We recommend that you regularly exercise the various possibilities of use of this rescue device in order to ensure an absolutely safe handling in the application.

1.1 Important warnings

For safety reasons, the RollUP must be withdrawn immediately from use if:

- there are doubts about safe use, or
- the equipment has been claimed by a crash, and that this equipment may only be used again if a competent person has given a written consent;
- the Rollup is not suitable for as a safety harness / fall arrest

1.2 Explanation of terms / interpretations

User

Person who has been instructed to handle the product.

Specialist

person who is familiar with the product regarding application / maintenance and repair - This expert takes decisions by means of his technical expertise. The expert is responsible for the maintenance and annual inspection.



1.3 Introduction / Product description

The RollUp is a lightweight universal rescue stretcher, which can also be used as a technical rescue device.

Field of application: Horizontal as well as vertical salvage.(rescue)

Please pay attention to the correct choice of lifting bridle.

The various rescue situations can only managed with correctly selected lifting bridle.

The light, compact and robust rescue stretcher, rolled about 92 cm x 20 cm, with mounted struts (Thorax / Pelvis / Leg protection and foot plate) approx. 92 cm x 30 cm, protects the patient and also allows the rescue from extreme situations.

The RollUP consists of a flexible, rollable hard plastic shell PE – HD (lying surface).

The RollUp is not intended for the transport of material - which is not directly used for the rescue or rescue of the patient.

Please note that sharp edges can damage the RollUp material.

Only the buckles / belts approved by us the manufacturer may be used.

Self-securing slings used by rescuers for personal protection may only be connected to a central attachment point - such as a rigging plate or central carabiner - but not to the device itself.

The maximum load (patient incl. luggage / accessories) is 150kg

1.4 Intended use

The RollUP is used exclusively for transporting injured / wounded persons.

Operating temperature: -30 ° C to + 50 ° C

Usable weight max. 150.0kg

Before use, the necessity of the transport must always be weighed against any further damage to the patient caused by the transport.

The RollUP is intended for the following operations:

The RollUP is designed for the following applications:

- In any terrain, especially difficult to access terrain.
- In urban terrain, even very narrow spaces as well as tubes.
- Transport over stairs.



However, the RollUP rescue stretcher is not designed as a spinal rescue device. If a spinal injury is suspected, the patient, before being placed in the RollUP carrier, is to be placed in an approved immobilization device, e.g. A vacuum mattress.

1.5 Application possibilities

1.5.1 Pulling on the ground (Straight terrain)

The patient can be pulled on grass or snow without any problems
However, please note the increased wear of the lying surface, resp. possible damage due to contact with sharp objects



1.5.2 Transport by means of carrying handles

Sturdy and ergonomic carrying handles,

4 pcs on each side



1.5.3 Horizontal salvage

6 pcs. Suspension straps, suspended in 2 open rings,

Are integrated into the carrying handles.



1.5.4 Vertical salvage

The vertical suspension straps, RLP2217, are inserted into the reinforcing plates



1.5.5 Adjustable rescue lifting bridle Balance

Balance lifting bridle: Variable adjustment between vertical / horizontal

Any angle between vertical and horizontal can be set.





1.6 Approvals:

The "RollUP" was tested by TÜV Austria regarding product safety.

Test Report No. FT15-115

The following standards were used as a basis for the test procedure:

- EN 813: 2008 Seat belts
- EN 1497: 2007 Rescue harnesses
- EN354: 2010 lanyards for fall arrest
- EN 358: 2000 Restraining straps and fasteners
- EN 12277: 2007 Mountaineering equipment
- DIN 23400: 2008 Rescue stretcher for mining (grinding basket)

1.7 Identification

Identification plate with part number, serial number, year of manufacture / quarter

The device has been approved as a European medical device and complies with the applicable MDR specifications.



LOT ROLLUP21

 www.kohlbrat-bunz.com

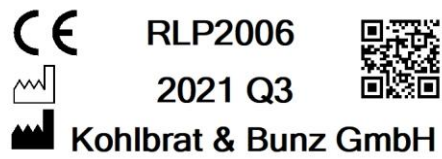
RLP300R - V01



The CE marking, part identification area, article number, inscription: manufacturer's declaration www.kohlbrat-bunz.com is marked on the lying surface



On all belts a label with part number, production year / quarter is sewn.



Belt identification (**sample**)

All components (carabiner, rigging plates, etc.) which are included in the scope of delivery are marked.

2 Technical data Rollup

2.1 Modells

RollUP RL2000RP, RL2000RS & RL2000RX

Diameter rolled up	Ø 27 cm
Weight (without bag and accessories)	Min 5,4 kg – 7,8kg
Maximum permitted load	Max 150 kg
Minimum permissible body measurements	50 kg / 160 cm
Maximum permissible body measurements	130 kg / 195 cm
Temperature range	-30°C bis +50°C

dimensions

Length / Width: Ca.248 cm / ca. 92 cm



RollUP RL3000RP, RL3000RS RL3000RX

Diameter rolled up	Ø 27 cm
Weight (without bag and accessories)	Min 5,4 kg – 8,8kg
Maximum permitted load	Max 150 kg
Minimum permissible body	50 kg / 160 cm
Maximum permissible body measurements	130 kg / 195 cm
Temperature range	-30°C bis +50°C

dimensions

Length / Width: Ca.254 cm / ca. 92 cm



RollUP RL4000RP, RL4000RS RL4000RX

Diameter rolled up	Ø 27 cm
Weight (without bag and accessories)	Min 5,4 kg – 8,8kg
Maximum permitted load	Max 150 kg
Minimum permissible body	50 kg / 160 cm
Maximum permissible body measurements	130 kg / 195 cm
Temperature range	-30°C bis +50°C

dimensions

Length / Width: Ca.254 cm / ca. 92 cm



2.2 Lifting bridles



fixed integrated with fixed length

RLP2228R/RLP2228B/RLP2228Y

Mounting height: 76cm



Fixed integrated with adjustable length

RLP2228R/ RLP2069B/ RLP2069Y

Mounting height: 76cm



BALANCE – Lifting Bridle

RLPBAX01

Mounting height: 140cm



suspension standard with fixed length

RLP2008

Mounting height: 54cm

can be removed and hooked into the handle loops



suspension standard with fixed length

RLP2034

Mounting height: 63cm

can be removed and hooked into the handle loops



suspension standard with fixed length

RLP2046

Mounting height: 100cm

can be removed and hooked into the handle loops



Designation	<i>Handles with integrated lifting bridle with variable length</i>
Use:	Horizontal & vertical salvage
Inclination adjustable:	yes

Designation	<i>Handles with integrated lifting bridle with fixed length</i>
Use:	Horizontal salvage
Inclination adjustable:	no

Designation	<i>Head strap with integrated strap for vertical salvage</i>
Use:	Vertical salvage
Inclination adjustable:	no

Designation	Lifting bridle Standard
Use:	Horizontal salvage
Inclination adjustable:	no

Designation	Strap for vertical salvage
Use:	Vertical
Inclination adjustable:	no

Designation	BALANCE – Lifting Bridle
Use:	Horizontal & vertical salvage
Inclination adjustable:	yes

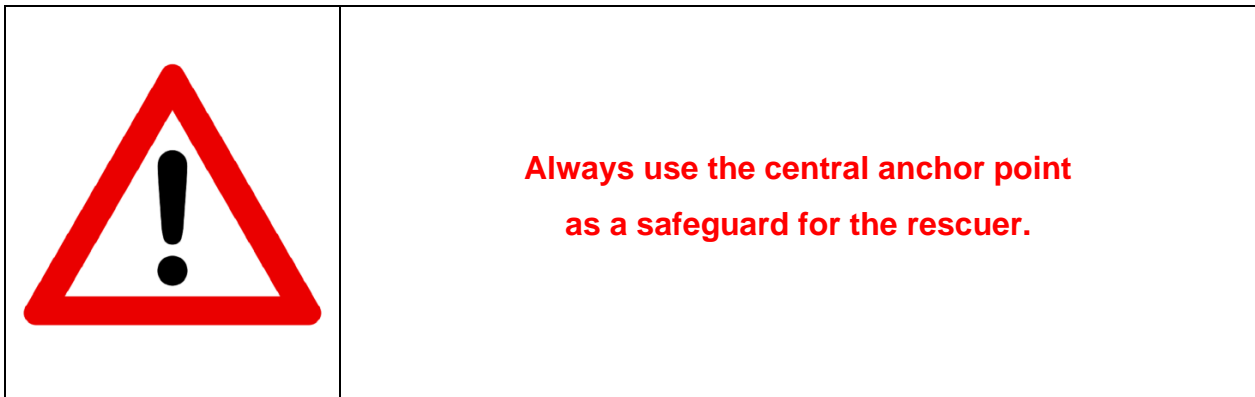
Lifting bridles:

- Are weather-independent and can be used in all climatic zones
- Suitable for winding operation

In principle, only to be used for the intended application.

Depending on the rescue situation the various lifting bridles can be used.

Only the intended anchor points may be used.



- If the original application situation changes - the suitability of the selected lifting bridle must be checked or possibly exchanged for another variant.
- Depending on the expected rescue situation, there are different bridles.
- The most universal rescue possibilities are obtained only by using the balance lifting bridle - (adjustment between vertical / horizontal is possible under load)

You will find an overview of the various lifting bridles under point 2.2.

After an extended period of time in direct sunshine, more than 200 hours, the RollUP must not be used for lifting of patients.

For use on waterways, the floats, head pillow inflatable and accessories must be provided in accordance with section 5.4.

3 Tests before commissioning - by the user

3.1 Tests before use

The RollUP must be checked for completeness and ready for use before and after each use. A defective or objected RollUP is no longer permitted for use and is to be marked accordingly with a blocking certificate. The device must be handed over immediately to the responsible test personnel.



It is recommended that the RollUp be stuck or sealed in the transport bag after use and testing. Depending on the company's internal regulations, a re-examination before use may possibly be omitted.

Examinations after use

- After completion of the deployment, the RollUP is, as required, to be cleaned
- It must be checked for externally recognizable damage.
- Defective equipment must be returned to the manufacturer for repairs, stating the complaint.

3.2 Safety regulations during operation

The following points must be observed:

- Use only by trained personnel.
- When transporting suspicious persons, taking into account the medical necessities, appropriate precautions must be taken to ensure that the safety of



the person during transport is ensured. (Additional securing of the patient in the rollup)

- In the case of obvious, recognizable damage, the RollUp must not be used and must be returned immediately to the inspection.
- The additional struts are not absolutely necessary for the transport of injured persons, but they increase the lying comfort and contribute to the stress reduction of the patient. (Exception - winch operation) The same applies to vacuum mattresses.
- The use of vacuum mattresses is recommended.

4 Handling during operation

4.1 Preparing RollUP / Storing Patient

- Remove the RollUP from the transport bag
- Loosen the retainer strap
- Unroll the RollUP and bend it into shape.
- Open all patient belts.
- Bring all straps to maximum length.
- Insert the spinal protector.
- If no in place, insert cross struts.
- Place the RollUP next to the patient
- Slide the patient / lift the patient / onto the RollUP
- Close and clamp the patient's belt (in small patients the chest and waist belt are to be cross-wise closed due to the risk of strangulation)

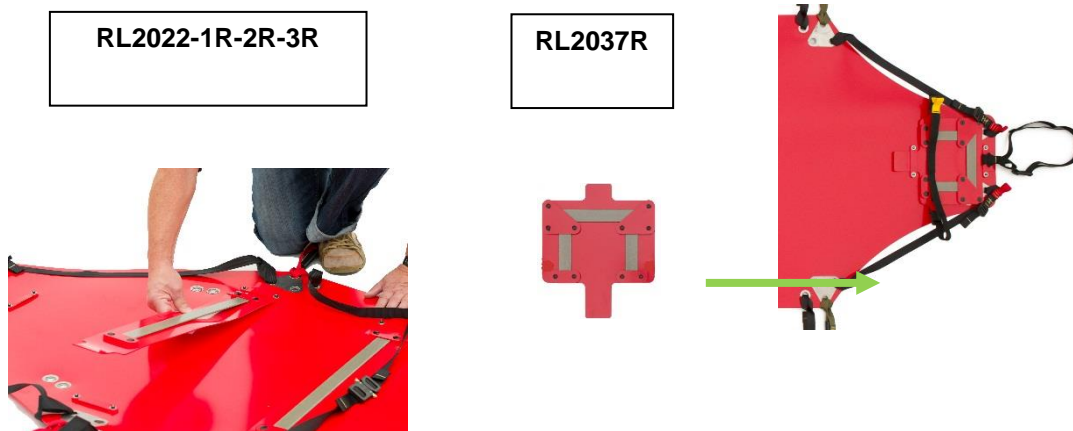


4.2 Unroll

In order to be able to place the RollUP flat, it must first be bent back.

		<p>Transport the RollUp in the provided bag</p>	<p>Open the bag - remove all necessary components</p>
		<p>Shaping the base plate</p>	<p>Insert middle strut</p>
		<p>Depending on the model - fix the headboard</p>	<p>RollUP is ready for use</p>

4.2.1 Assemble the cross braces and the footrest (Detail)



Normally, the cross braces and the foot plate can always remain mounted. With these parts mounted, the RollUP can be easily stowed in the bag.

4.2.2 Installing the longitudinal strut

Push it under the crossbars through the two tabs as far as they will go.

In order to roll up the RollUP, only the longitudinal brace must be removed. This is then simply pushed back into the tabs during assembly.



4.2.3 Roll up

The cross braces and the footrest can remain mounted. The longitudinal strut must be dismantled. Place the RollUP flat. Start rolling up at the head of the head. Firmly roll up and tension the roll belt around the rolled up carrier.



When rolled up, the RollUP has a very compact size (about 20cm diameter)

4.3 Patient positioning

Place the RollUp flat next to the patient.
Slide-log roll the patient onto the RollUP.



Position the patient with the shoulders lining up with the first triangle anchor plates



If present, place footplate RLP2037R in vertical position using risers RLP2219.

Stretch the patient restraint straps RLP2003 / 2004/2006.



Close the ratchet closure in the head area as far as it will go. (RL3000-RL4000)



4.3.1 Additional information on patient storage



The position of the patient in the RollUP is important.

The patient should be positioned with the shoulders on the upper strut.

If no foot straps are used, then positioning must be done using the foot plate.



RLP2226-V02

Straps for patient positioning and fixing

Foot straps for patient positioning and fixing, adjustable length



RLP2236 Shoulder straps for patient positioning and fixing, adjustable length



patient perfectly positioned in the RollUP



important: no belt should be placed over the neck. Alternatively, cross the two upper patient belts


Secure the foot plate so that the lying surface rests against the feet and both feet are supported between the two belts. **when using the foot straps, the foot plate is not used**



If foot straps RLP2226-V02 for patient positioning are available position the **patient with the shoulders in line with the first triangle anchor plates**



The rollup is equipped with eight carrying handles (4 on each side) for lifting / carrying.


	<p>It is recommended that the patient be redundant, eg. using an additional securing.</p>
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5 Rescue operation- Technical rescue

5.1 Notes for cableway operation and removal with helicopter

- Observe the maximum permissible total weight / weight of 150kg
- During the entire rescue, the person being stored must be secured at the central attachment point (carabiner / rigging plate) by means of an additional person safety device (belt) or belt sling.
- In the case of vertical rescue, the use of the foot strap RLP2226-V02 is recommended
- **Helmet requirement - to protect the patient by falling stones if necessary.**

5.2 Helicopter rescue

	<p>In order to prevent any problems with the rescue organization, the patient should be redundantly secured to the central anchorage point by means of a fall / seat -arrest harness. or similar. A redundant backup is recommended.</p>
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The patient has to be fixed in the RollUP in coordination with the respective flight rescue organization and prepared for transport.

The handling of the RollUP in the operating mode by helicopter should be coordinated with the respective rescue organization in advance. Due to the large number of different rescue organizations / countries / regulations, no general statement can be made hereto - how the respective organization handles the transport of the RollUP.

- Foot strap RLP2226-V02 and shoulder strap RLP2236 are mandatory during helicopter transport - Fixation of the patient for a possible rotation.
- Observe the applicable winch regulations of the respective helicopter.
- Observe the flight operating manual of the respective helicopter.
- Warning of uninvolved persons in the danger area.
- In order to avoid dangerous rotations in the wind-away area of the helicopter during winding rescue, an appropriate anti-rotation system is necessary!
- Winch operation requires the use of the struts.

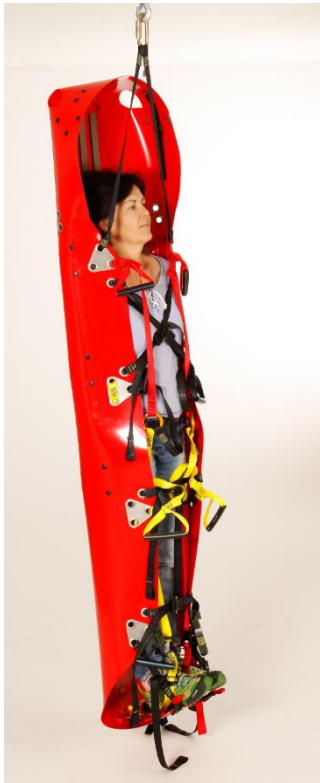
5.3 Pulling of the RollUP



- The tension belt must be individually adjusted in length and adjusted according to the mountain situation.
- If there is a gradient or steep gradient, an additional brake line / restraint may be used.
- In the case of a head injury, be careful not to raise the patient during pulling.

5.4 Vertical rescue

- Retighten patient belts.
- Insert the steel carabiner through both loops of the vertical belt and connect with the lifting rope
- Tighten the rope and secure it.
- Pull the RollUP gently from horizontal to vertical position. If possible, support the RollUP from the sides.
- When using a guide line from below, there is a risk of falling objects (helmet requirement!).



Vertical rescue

5.5 Horizontal rescue

- Retighten the patient straps.
- Horizontal suspension according to the color coding of the labels / Hang the signal ring on the head side in the corresponding carrying handles.



Fig. Color coding of labels / signal ring on head side

- Attach steel carabiners to both rigging plates.
- Attach the mountain rope to the steel carabiners.
- When using a guide line from below, there is a risk of being hit by falling objects (helmet compulsory!).

• 5.6 Winch recovery:

- Hook the anti-rotation rope into the D-ring provided.
- Hook the winch hook into the steel carabiner, lifting the horizontal suspension until the tension of the winch cable is transferred and keeping it in tension.
- When guiding the anti-rotation rope, the relevant safety regulations must be observed.

- **5.6 Salvage from water (only with supplementary set Marine)**

Floating devices are the standard equipment for a RollUP when It is used in water.

There is one float device on the right side, and one float device on the left side of the RollUP required for the correct function.

Basically, 2 floats are the minimum requirement to create the necessary buoyancy so that the RollUP does not sink in the water.

An additional inflatable pillow increases the buoyancy a little in the water - but is not absolutely necessary.

For use in the sea (swell) a foot weight as well as a breast float is required. This "Marine Set" ensures an upright / vertical position of the RollUP in the water, and turns the RollUP automatically in the event of a possible tipping into the "head up position".

It is recommended to install the floats as soon as contact with water is possible.

During a recovery in the water, never leave the RollUP unattended.

When the RollUP tips over - there is a risk of drowning for the patient.



Fig. Symbol image for RollUP with float and pillow. (Application area inland waters)

5.6 Implementation of the assembly

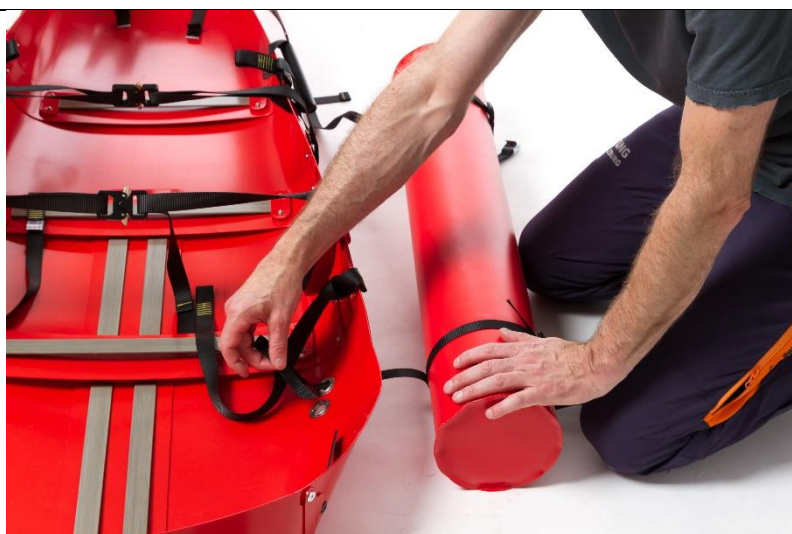


Detailed view of how to thread the belts



place the float next to the RollUP.

In the area where it is to be mounted.

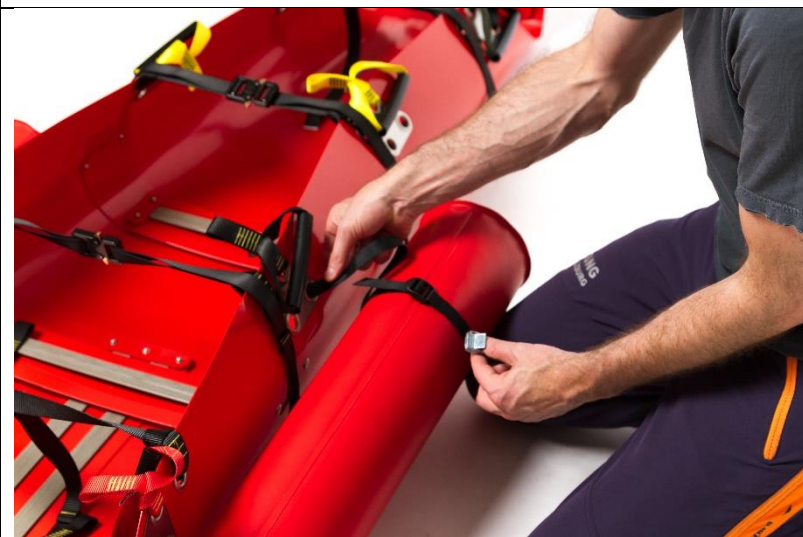
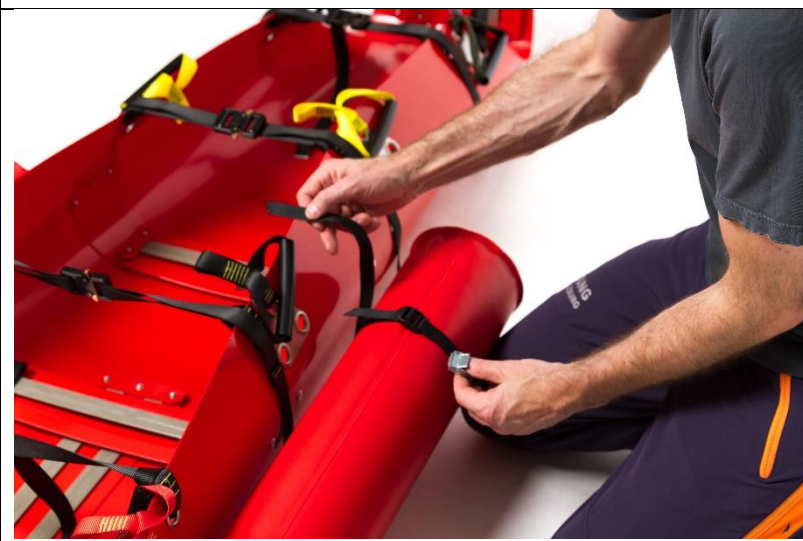


In the head area there are two eyelets. These are specially designed for mounting the float.

Thread the belt through both eyelets.



pull the belt through the metal tightener and tighten it firmly



The procedure for the second belt is similar.



However, the belt is passed through two eyelets in the trapezoidal plate. It is possible that one hole is already occupied - this is not a problem simply guide the belt parallel.


Pass this strap through the metal buckle as well and tighten it.



To assemble the Pillow, (pillow Inflatable) pass the strut through the pillow and fix it.



reinsert the center brace into the RollUP

		<p>check the position and location of the pillow</p>
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5.7 Water application accessories

<p>VK20X01</p>	<p>Pillow Pillow, Inflatable olive</p>	
<p>VK20X02</p>	<p>Pillow Pillow, Inflatable</p>	
<p>VK20X03</p>	<p>Pillow Pillow, Inflatable black cordura Easy mount</p>	
<p>VK20X04</p>	<p>Pillow Pillow, Inflatable black TPU Easy Mount</p>	
<p>RLP2070R</p>	<p>Flotation device, rigid</p>	



RLP101	Flotation device, inflatable	
RL100G	RollUP module marine II	
RLP2077	Marine foot weight (included in the set RL100G)	
RLP102	Chest float chest inflatable included in the set RL100G)	

5.8 Use as ackja

The use as Ackja is basically possible. However, this should only be done by trained / skilled operators. On sloping terrain, additional back-up securing by means of a rope is recommended for safety reasons.

5.9 Winter use

Using the RollUP on snow and ice is not a problem.

Please note to protect the patient against hypothermia by means of blankets / thermal bag.

Also note when using the RollUP on snow / ice that the smooth surface of the RollUP causes almost no friction on the snow, and this therefore promotes traction operation.

Furthermore, when used on snow / ice, it is necessary to check - to what extent additional securing is required - "back-up securing during removal".



6 Maintenance and care

6.1 Cleaning and disinfection

- After each use, the RollUP must be cleaned of foreign bodies by shaking it out, removing it by hand or brushing it off.
- Body fluids, etc. can be rinsed out under a water jet.
- Steam jet must not be used.
- Water temperature must not exceed 40°C.
- Soiled textile components can be washed in clear fresh water, possibly with the addition of a commercially available mild detergent.
- Washing temperature not above 40°C.
- Disinfection with commercially available alcohol-based agents. (Follow the application instructions of the respective manufacturer!)
- Disinfection with pH-neutral disinfectants based on quaternary ammonium compounds with chlorhexidine. (Follow the application instructions of the respective manufacturer!)
- After washing with detergent and / or disinfectant wash at least twice with clear fresh water to remove all detergent residues.
- Spray disinfection with alcohol-based disinfectants is permitted. (Follow the application instructions of the respective manufacturer!)

6.1 Drying

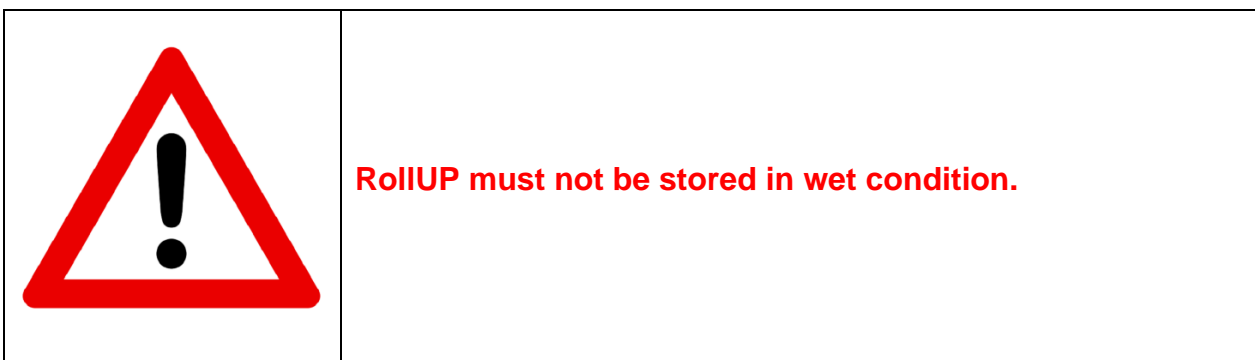
- Wet or damp components of the RollUP must be dried outdoors or in well-ventilated rooms (normal room climate is a guide).
- Do not expose to direct sunlight or direct heat radiation from heating sources.
- Remove the RollUP complete with accessories from the transport backpack and dry it completely unrolled.
- After drying, the entire system must be subjected to a visual and functional check.

6.2 Contact with salt water

- Keep a RollUP contaminated with salt/seawater moist until it is possible to rinse sufficiently with fresh water.
- This rinsing process must be repeated at least twice with fresh fresh water. Then dry according to point 6.1
- Textile load-bearing belts that have been continuously exposed to salt/seawater for more than 24 hours must be discarded.

7 Storage

- The RollUP must be stored in such a way that its readiness for use remains undiminished.
- The RollUP must be stored in a dry, well-ventilated place and protected from direct sunlight. (Normal room climate as a guide).
- Storage rooms must be kept free of vermin.
- Do not store fuels, lubricants, acids or chemicals in the immediate vicinity.



8 Repair work / exchange of components

Permitted work / conversions by the user / operator:

- Replacement of belts, belt buckles and carabiners.



9 Tests / maximum service life

Regular checks:

- Visual and functional inspection before and after each use by the user.

Periodic inspections:

- Every 12 months from the month of first use -.
- Condition assessment according to inspection card - by competent / trained person.

Maximum service life of slings and lanyards:

- 10years, from the month of manufacture

Maximum service life of RollUp

- 10years, from the month of manufacture

10 Service life:

The stated maximum service life is reduced by damaging influences, such as temperatures, mechanical stress due to regular and possibly intensive use or a drop load, damage due to abrasion, cuts, chemicals, fusing due to high temperatures, etc.

These influences can have different effects on the reduction depending on the intensity, duration of exposure and combination of different influences.

Intensive use and / or extreme operating conditions such as sharp edges, chemical influences, etc. lead to a reduced duration of use for safety reasons.- The contractor must ensure this in the hazard analysis of the workplace.

10.1 Examination dates / occasions

- Before first use
- After 12 months have elapsed since the last inspection - even if the RollUP is unused.



- For special reasons, in particular after overuse has been detected or cannot be ruled out.
- After malfunctions.
- After damage that has occurred during use.
- After replacement work by users / competent personnel.
- On special instruction.
- Before / after use.

10.2 Testing before first use

In particular, the following must be checked

- Completeness
- dimensional accuracy
- qualitatively flawless processing
- correct function of all functional elements
- freedom from damage

10.2.1 Periods of the periodical tests

As-delivered condition	Inspection
After 1 year (date of purchase)	by qualified /skilled person
After 2 year (date of purchase)	by qualified /skilled person
After 3 year (date of purchase)	by qualified /skilled person
After 4 year (date of purchase)	by qualified /skilled person
After 5 year (date of purchase)	by qualified /skilled person
After 6 year (date of purchase)	by qualified /skilled person
After 7 year (date of purchase)	by qualified /skilled person
After 8 year (date of purchase)	by qualified /skilled person
After 9 year (date of purchase)	by qualified /skilled person
After 10 years (date of manufacture)	Maximum service life achieved

The perfect condition as well as the safe function of the device must be ensured and documented by means of a periodic inspection. This inspection must be carried out by a competent person. This person must be familiar with the contents of the operating instructions and must have understood them.



The RollUP must be inspected at intervals of 12 months in accordance with the inspection card.

The evaluations / inspection must be documented by means of a high-resolution photo - archive.

10.3 Extraordinary tests of the RollUP

Außerordentliche Prüfungen müssen nach Schadensfällen oder besonderen Vorkommnissen, welche die Tragfähigkeit beeinflussen können, sowie nach Austausch- / Reparaturarbeiten durchgeführt werden.

10.4 Documentation of the quality inspection / periodic inspection / other inspections

If the test result is positive, the test carried out must be confirmed on the device run card.

Replacement work on load-bearing parts (straps, carabiners) must be entered on the equipment run card, and an inspection for a special reason by a second inspector (4-eyes principle) must be carried out.

If the test result is negative, the RollUP must be returned to the manufacturer for repair or the device must be taken out of service.

10.5 Sorting out

After expiry of the period of use specified in the section Periodic inspections, the RollUP must be taken out of service.

If the continued airworthiness can no longer be determined during the periodic inspection and the device is no longer worthy of repair, the RollUP must also be retired.

The equipment record card shall be closed by registration and certification and shall be kept for 3 years from the month of retirement by the last holder.

The RollUP must be clearly marked as discarded.

Systems that have been discarded may continue to be used for training purposes after they have been discarded. Use for horizontal or vertical recovery and operation with aircraft is excluded.



10.6 Test points RollUP -- Before/after each use/application

Function and condition checks must be carried out before and after each use.

In detail, the following must be checked

- the red base plate and base plate lugs for deformation, cracks and breaks
- all carabiners for function, deformation, cracks and breaks.
- tight fit of all riveted joints.
- all belt edges for cuts and chafing.
- Suspended belts and carrying handle belts (check label with date of manufacture) for integrity of seams and damage.
- Harnesses for stains damaging the fabric and other damage.
- Damaged and overaged belts, older than 10 years, must be replaced.
- Damp equipment must be dried by appropriate airing, conspicuous soiling of the belts must be removed with clean water or a mild detergent solution and brush
- Do not expose to direct sunlight or direct heat radiation from heating sources.
- Disinfect with commercially available alcohol-based agents.

Do not use any other chemical cleaning agents or solvents.

Follow the application instructions of the respective manufacturer.

11 Periodic review RollUP - Annual review

11.1 General (to be checked for all components)

- Check for unobtrusive odor - neutral, (not musty or moldy).
- Check for dry condition,
- Check all components for existing and legible labeling (incl. operating instructions).
- Check for unusual soiling or discoloration due to chemicals or similar.

11.2 Webbing

(carrying handles, vertical belt, horizontal suspension, patient / head / foot straps).

Particularly inspect the sections of webbing that are routed around or within the metal components (buckles, rings, rigging plate eyelets).

All webbing should be visually inspected for:

- cut edges of the webbing,
- severely chafed belt edges or belt sections,
- pulled-out and severed fiber bundles,
- excessive roughening (e.g. fluffing)
- Melt marks,

If any of the above criteria are found, the component must be replaced.

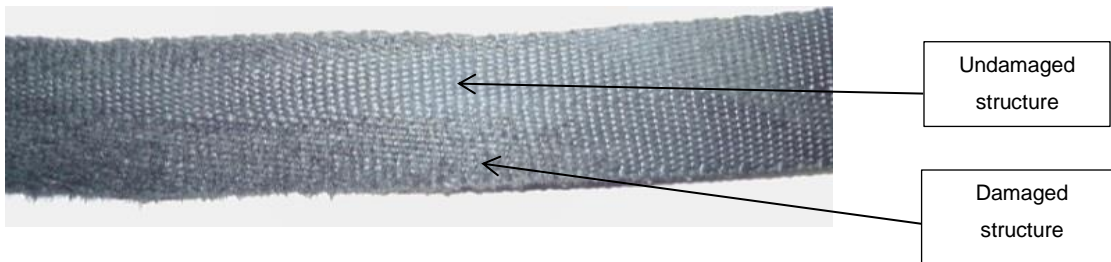


Fig. Exemplary signs of wear

11.2.1 Seams

All exposed seams must be visually inspected for:

- pulled out seam thread,
- heavily abraded seams,
- traces of melting,

If any of the above criteria are found, the component must be replaced.

11.2.2 Metallic components

All metal slinging, connecting and adjusting means (rigging plates, metal buckles, carabiners, eyelets, riveted connections, sleeve nut with slotted screw, etc.) must be checked for:

- Malfunctioning
- cracks or fractures,
- deformations,
- heavy wear and corrosion

If any of the above criteria are found, the component must be replaced.



11.2.3 The material of the lying surface / struts

Top and bottom surfaces, are to be checked for:

- Cracks and holes,
- scuffing or melting spots,
- excessive deformation on the triangle plates or in the belt guide area,
- Metallic components

If signs of wear according to Appendix 1 are no longer tolerable, the device must be returned to the manufacturer for inspection or discarded.

11.2.4 Transportation backpack

The transport backpack must be checked for the following points:

- Condition of the cover intact,
- Zipper common and functional,
- carrying system: firmly sewn and undamaged,

If it is determined that one of the above criteria is not met, the transport backpack must be replaced or sent for repair.

11.3 Antirotation set

The anti-rotation set must be checked for the following points:

- Transport bag: undamaged,
- drawstring: intact
- Breakaway coupling: sheathing intact,
- AR line firmly connected to transport bag,

If it is determined that one of the above criteria is not met, the AR set must be replaced or sent for repair.

12 Ersatzteile

A complete list of spare parts can be found in the current RollUP catalog.

In case of doubt, you can request the required spare parts directly from K&B, stating the serial number and type designation of your RollUP.

All spare parts can be exchanged by the customer himself.

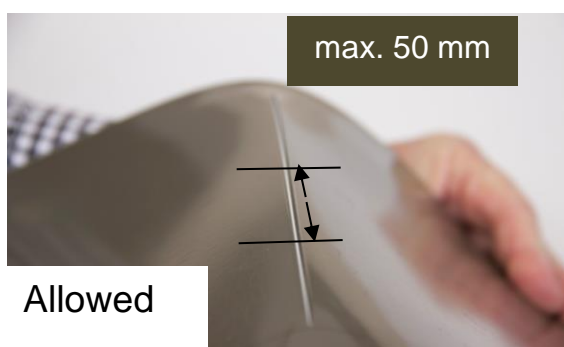
13 - Annex 1- Wear pattern

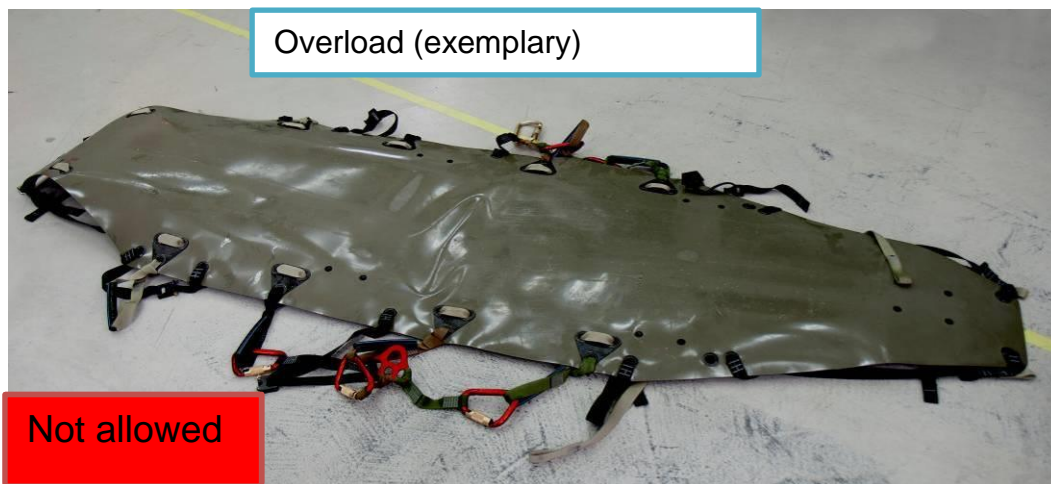
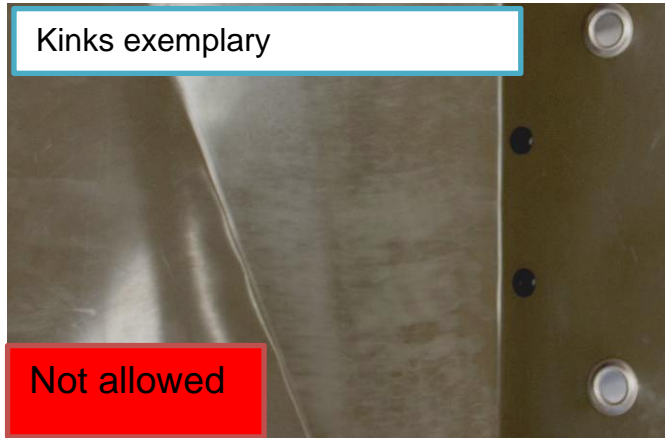
The RollUP must be blocked for horizontal movement if:

- Sharp-edged scratches deeper than 1 mm and longer than 50mm are present.
- Continuous holes or cuts through the material
- inside the RollUP wear / abrasions / scuffing on the lying surface of more than

Lying surface of more than 1mm depth are present.

- Overloading / buckling / permanent deformation
- Damage that cannot be clearly classified is detected.







14 1 Appendix 2 - Warranty card

Device warranty card

Manufacturer : Firma Kohlbrat&Bunz , Radstadt, Österreich

1. Date of manufacture:

2. Date of 1st use

3. Devices/parts number:

4. Testing before first use on:..... by:

5. Serial number: (to be entered manually)

The conformity of the above information with the labeling of the associated device is certified:

Official seal / stamp of the department / signature



15 Check card

CHECK CARD

FOR ANNUAL MONITORING Part1

<p>The inspection card must be completed in full by the expert during the periodic annual inspection.</p> <p>This inspection card makes no claim to completeness of the inspection criteria and does not release the expert from his decision on the overall condition.</p> <p>For each inspection, a high-resolution image of the tread / lying surface must be taken and archived.</p>	Devices/parts number:
	Designation:
	Serial number:
	Manufacturer Date:

	Date	Signature	Next test	Reason for the test
1.year				
2.year				
3.year				
4.year				
5.year				
6.year				
7.year				
8.year				
9.year				
10.year				



CHECK CARD

FOR ANNUAL MONITORING Part2

	1. year	2. year	3. year	4. year	5. year	6. year	7. year	8. year	9. year	10. year
Lying surface - no scratches deeper than 1mm?										
Webbing undamaged?										
Seam patterns undamaged?										
Strap ends secured / sewn around?										
No deformations on metal parts?										
Clamp buckles not deformed and free to move?										
Snap hook present and functional.										
Instruction manual available										
Product labeling readable.										
Other:										
All right										
Locked										



Qualitätsmanagement gemäß

EN ISO 9001:2008 und EN ISO 13485:2003

KOHLBRAT & BUNZ GMBH

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Austria