



KANGUR-LIFT

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USER MANUAL

January 2019

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Kangur-Lift

Lifting system with pneumatic telescopic column, compact and easy for transportation

Kangur-Lift is a telescopic column made of anodized aluminum with pneumatic extensions by hand pump, complete with manual locks that allow to stop the column at the desired height, with maximum height of 6.00 meters.

The column is mounted on a cart with rubber wheels.

Provided with adjustable feet combined with a spherical bubble to ensure the vertical position of the pole and a set of wind bracing ropes.

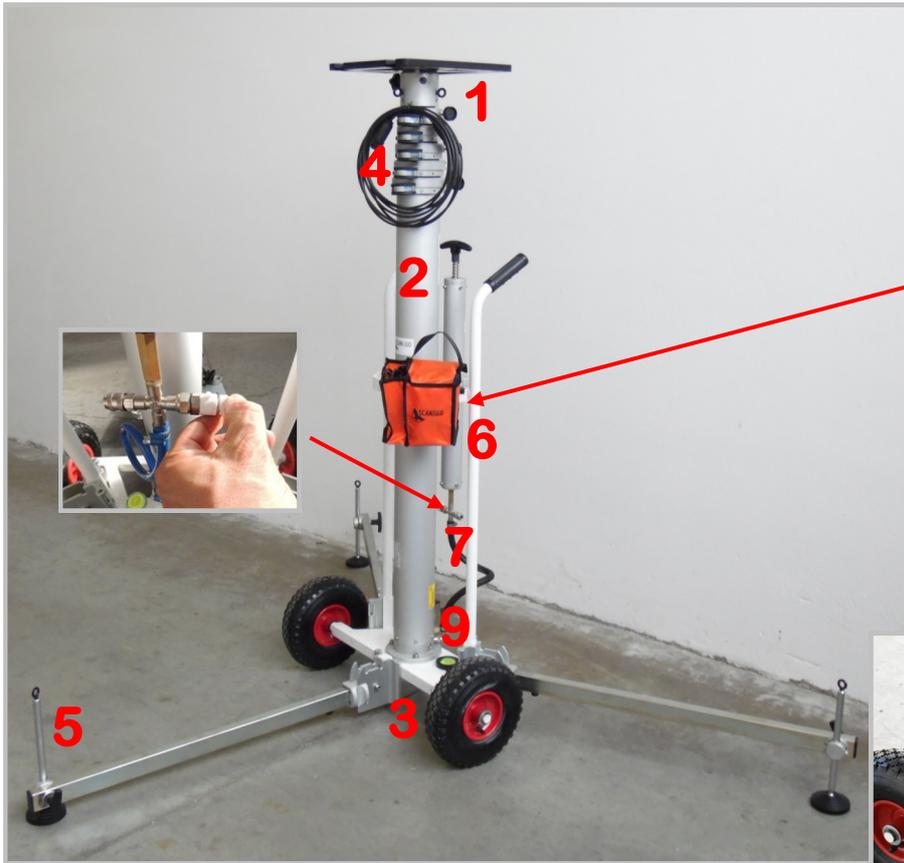


ATTENTION !!!!

READ CAREFULLY THE PRESENT INSTRUCTION
MANUAL BEFORE USING THE EQUIPMENT

IT IS STRICLY FORBIDDEN THE USE OF THIS
EQUIPMENT TO PEOPLE AGED LESS THAN 18

DETAILS AND ACCESSORIES



1	HEAD
2	COLUMN
3	CART
4	FAIRLEADS
5	ADJUSTABLE LEGS WITH STABILIZERS
6	ELECTRIC SYSTEM FOR LP16R
7	VALVE FOR CLOSING THE EXTENSIONS
8	OPENING AND CLOSING FEET FOR THE
9	SPHERICAL BUBBLE
10	VENT AND SECURITY VALVE
11	KIT SECURITY LEG WITH WHEEL



ACCESSORIES

A	BMA	SOFT BAG FOR ACCESSORIES	* #
B	PFR-M	PIN WITH 5/8" MALE ADAPTOR	* #
C		FIXING KNOBS FOR LP16R	#
D	CCLB	CONNECTING CABLE FROM LP16R	#
E	KCV	WIND BRACING ROPES	* #
F	PCP	SUPPORT PLATE FOR LP16R	#
G	TRLK	TRILOCK	@
H	AD58	ADAPTER FOR TRILOCK – 5/8"	@
I	AD38	ADAPTER FOR TRILOCK – 3/8"	@
L	EKB-NB	ELECTRIC KIT FOR CONNECTING LP16R TO BATTERY WITH BATTERY CHARGER	#
M	SUC	SUPPORT FOR LPE16R CONTROLLER	#



- * Standard equipment for KL60
- # Standard equipment for KL60-S
- @ Can be ordered separately

INSTRUCTIONS FOR INSTALLATION AND USE

1° STEP

The Kangur-Lift is shipped in a wooden box, specially designed to insure the integrity of the product during the transportation.



Open the hooks and remove the screws that keep the cover of the box closed. Remove the black plastic ties that keep the equipment blocked inside the box and extract the system.

Kangur-Lift (KL60) and Kangur-Lift System (KL60-S)

2° STEP

Install the **KIT SECURITY LEG WITH WHEEL**, proceed as follows:

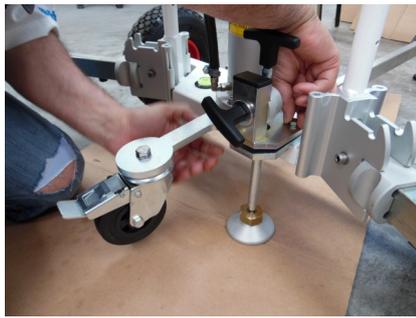


Composed of:

- Security Leg
- Support with wheel
- Bolts and nuts
- Spanner keys



1



2



3



4



Set up the kit by screwing the bolts and nuts. (1, 2, 3, 4)

Kangur-Lift (KL60) and Kangur-Lift System (KL60-S)

3° STEP

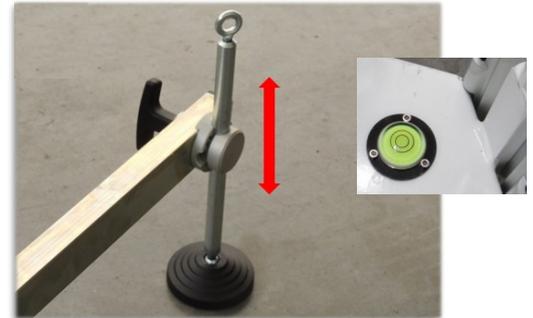
Put the Kangur-Lift in a vertical position, with the SUPPORT AND SECURITY LEG blocked and proceed as follows:



Loosen and rotate the adjustable foot bases 90° outwards



Extend outwards the skates and rotate the stabilizers until the skates click into place



Use the adjustable feet to level the full equipment



When the operation is performed, make sure that the wheels do not touch the ground, to prevent a possible tipping of the column

Kangur-Lift (KL60)

4° STEP

Mount the TRILOCK, topographic tribach with blocked footscrews and proceed as follows:

(The joint on the top can be combined with the adaptors of any brand, while on the bottom is with a universal 5/8" screw. The Trilock has been realized to fix any type of Laser Scanner in safe.)



Insert the pivot with the 5/8" male with the round plate thread to the Trilock



Insert it into the top-head of the structure by tightening the locking screw

Kangur-Lift System (KL60-S)

4° STEP

Install the leveler on the top of the mast and its accessories (battery and controller), proceed as follows:



Place the plate on the top-head of the structure and tighten the locking screw



Place the LP16R using two pins



Tighten the 4 locking knobs



Insert the connecting cable inside the cables glands



(fig.1)

Place the battery with the hook provided (fig. 1) and connect the cables following the instructions on the connector labels.

5° STEP

TELESCOPIC MAST OPENING, proceed as follows:



Connect the wind bracing ropes to the top- head of the structure



Connect the wind bracing ropes to the stabilizer feet like



Close the valve for the extensions descent



Fully open the mechanical lock of the first extension



Use the hand pump to fully rise the first extension



Close the mechanical lock of the first extension

Continue in the same way for all extensions till the complete opening of the mast



Complete the procedure by pulling the wind bracing ropes being careful not to overdo with the tension force



**BEFORE SETTING THE COLUMN DOWN, GIVE PRESSION IN ORDER TO
GUARANTEE A SAFE DESCENT**

6° STEP

TELESCOPIC MAST CLOSURE

Once the equipment has been used, proceed to the descent of each extension starting from the last that has been risen. Before this operation, restore pressure to the column to ensure a safe descent of the extensions and of the equipment placed on the top, as follows:



Completely open the mechanical lock of the very first extension (from the bottom)



Open the air safety valve for the descend of the first extension.
As soon as it reaches the bottom, close the valve avoiding the exit of more air



Close the mechanical lock of the first extension and open the one of the second one

Continue in the same way for all the extensions till the complete closure of the pole

TECHNICAL DATA

- | | |
|--|---------------------|
| • Minimum height closed column | 1,40 mt |
| • Maximum height opened column | 6,00 mt |
| • Maximun permitted load | 30 kg |
| • Extention | 6 |
| • Size closed column | 71 x 32 x h. 155 cm |
| • Weight | 37 Kg |
| • Power supply, external battery for use wth LP16R | 12V 12.0 Ah |

REQUIREMENTS:

LIMITS OF USE

The two most important limits to be always checked are THE MAXIMUM PERMITTABLE PAYLOAD as well as the WIND STRENGTH

* MAXIMUM LOAD (see the technical data) refers to the weight that can be installed on the top of the mast to ensure a safe use. All loading conditions that exceed the limit will be considered as dangerous and will result as immediate end of any form of warranty.

* The STRENGTH OF THE WIND must be considered. If there is a strong wind, the manufacturer is not responsible of damages that may be caused by the inappropriate use of the equipment such as tipping etc.

RISKS RELATED TO THE USE

The three main sources of risk are :

RISK OF FALLING of the equipment extended in height, resulting from the action of wind that has not been evaluated adequately

COLUMN VERTICAL DESCENT with the accessories installed on the top of it can only happen in exceptional circumstances and in case that, during the lifting because of the problems of: extreme temperatures, damage of one of the parts of the column, defect of pneumatic seal, one of the seals loses efficacy in a sudden coming out from its seat which causes a substantial absence of sealing with a rapid reduction of the internal pressure. In this case it is possible that the column returns to the ground causing itself a damage. All of this can be prevented if you use the mechanical locks for each extension. (See the mast opening phase)

CONTACT WITH ELECTRICAL CABLES. All the risks can be avoided if the product is used properly by paying attention to the possible sources of danger present in the area. Please, remember that the electrical cables for high voltage, may define the electric discharge to the ground simply approaching and not necessarily touching the conductor.

It is therefore recommended to limit, as far as possible, the influence of the above risks, both for the operational staff and for other persons, in the following way:

- * prohibit the transit and parking space surrounding the Kangur-Lift
- * maintain the efficiency of the equipment
- * in case of use of compressed air sources, limiting the value of supply pressure to a maximum of 2.5 bar

Prohibited the use of the Kangur-Lift in the installer mode different from the original configuration and delivery processes other than those provided by the manufacturer.

Prohibited the use of the Kangur-Lift in presence of functional anomalies and discrepancies in the rules of use and safety instructions given in this manual. If needed, please ask and wait for intervention of the staff in charge.

- The instructions, drawings and documentation contained in this document are of confidential technical nature, of property of the manufacturer and may not be reproduced in any manner, either wholly, or in part.
- The manufacturer reserves the right to make changes and improvements at any time, without any modification to this manual, and without prior notice.
- This document must be kept for future reference, until the scrapping of the machine and must be made available to the operators.
- If the unit is sold or leased, both the person who rents and the one who offer the service, is obliged to give the manual to the new owner or user.
- The original instructions are provided by the manufacturer in the Italian language.
- This document assumes that in the places where the equipment is sold, users respect the safety standards in force in the country.
- If the manual is lost or damaged, you can request a copy to the dealer, providing the data of the model, serial number and year of construction.
- Do not use the manual for any purpose other than the use and maintenance of the product.

CLEANING INSTRUCTIONS

- Clean with mild soap and water, do not use chemical cleaners.
- Do not lubricate with grease or oil of any kind.



INSTRUCTIONS FOR DEMOLITION

The demolition of the machine must be done by qualified personnel in such activities and provided with adequate expertise.

The disassembled components must be separated according to the nature of the materials they are made in compliance with the applicable laws of "different waste".

WARRANTY

- **The product warranty is of 12 months from the date of the Invoice.**
- SCAN & GO S.r.l. will support, at its discretion, the repairment and / or replacement of parts with manufacturing defects or damages during the warranty period, after having evaluated the failure.
- The shipping cost of the damaged/defective parts during the warranty period, and the labour for its removal and replacement , are not included in the warranty, and may be approved only after prior written request and consequent authorization.
- The warranty does not cover cases of normal wear and tear, negligence in use, improper maintenance and improper use.
- The warranty lapses in case the 'machine' is equipped with non-original accessories or parts.
- In no event SCAN & GO srl will cover the expenses, for loss or damage of any kind resulting from the use more or less correct or from the partial or total malfunctioning of the equipment.
- The goods travel at the risk of the recipient, any damage incurred during the shipment must be claimed at the delivery by the courier in charge.

The manufacturer is deemed non-responsible in the case of:

- 1) inappropriate use of the KANGUR-LIFT
- 2) use of the equipment, against to any other applicable national regulations;
- 3) serious lack of attention in the maintenance;
- 4) interventions or unauthorized modifications;
- 5) use of non-original parts or replacing parts;
- 6) failure to comply, in whole or in part, of the instructions;
- 7) exceptional events.

TECHNICAL PROBLEMS RESOLUTION AND FAQ

**THE MAST
DOES NOT
EXTEND
COMPLETELY**

1) Hand pump malfunction

Test the hand pump with the air valve open. If the pump does not provide adequate air pressure replace the internal seals.

2) One of the release valves is open

Check both valves (on the mast and on the pump, if supplied) are closed.

3) Sections locked

Check all locking devices.

4) Unidirectional valve malfunction

Check the correct functionality of valve.

5) Internal seals malfunction

Determine the leaking seal, and proceed with mast disassembly and replace the seal.

**THE MAST
DOES NOT
RETRACT
COMPLETELY**

1) A locking device is still locked

Unlock completely the section which does not retract.

2) Ice inside the mast

Wait for a temperature rise and retract the mast.

3) A seal is jammed

Supply air pressured to release the seal.

4) The mast is deformed

If the mast is deformed (one or more sections are damaged) it cannot be retracted completely. Extra ordinary maintenance is necessary and this must be performed by the constructor.



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