User Manual

Operator Chair Carl

- Model - Carl Foot R6 Rilis
- Model - Carl Heel R6 Rilis
- Model - Carl Foot R7 OneGrip
- Model - Carl Heel R7 OneGrip

Heel R6

Heel R7

Foot R6

Foot R7

rini

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1. Operator chair Carl

Thank you for choosing the Rini Operator Chair.

The chair comes in two models and offers excellent comfort with its ergonomic design, enabling high efficiency in daily patient work for surgeons and medical professionals.

The chair is battery operated and easy to raise and lower either by controls on the main chassis using the heels or with buttons on top of the front wheels for foot operation.

The model R6 is supplied with Rini's patented safety armrest "Rilis" that can be adjusted with high precision to the desired position. The model R7 is equipped with "OneGrip" armrest, popular when small precise adjustments are required.

The operator chairs are specially designed for micro surgery and developed in cooperation with operators and surgeons in Sweden and internationally.

Rini is constantly improving existing products and developing new ones. Consequently, we value the professional user's point of view; so don't hesitate to let us know your opinion about any of our product lines.

2. Important - Before use

To ensure patient safety and the lifespan of the product, it is important to observe the following instructions before use. Please read this manual carefully and understand how to use the product before you start.

2.1 Unpacking and installation

Before the product is unpacked make sure that the packaging has not been damaged during transport. If so, document these with a picture and report this to the transport company and your local Rini representative.

In the packages the chair is normally in the following parts:

- Complete chair with wheels and seat mounted
- Backrest and two armrests
- Battery charger and user manual

Be careful when lifting the chair off the pallet. The chair is heavy and may cause injury. Do not use sharp tools when removing the packaging material. This may cause damage.

Make sure that the delivery includes all ordered parts. Contact your Rini sales representative if you find any discrepancies.

Mount the backrest, the armrests in the back or front bracket and raise the chair to a suitable height. Charge the battery to full capacity.

Backrest

Armrests

2.2   Intended areas of use

The operator chairs Carl Foot and Carl Heel are developed for different types of microsurgery where the operator needs a stable seated work position with flexible relief for the arms.

Intended uses include: Neurosurgery, Eye Surgery, Ear, Nose and Throat surgery, Facial Plastic Surgery, Robotic Surgery, Dental Surgery

The chair may only be used for the purposes specified in this manual. Any other use may pose a risk to the user. The chair should not be used by operators that weigh more than 150kg.

2.3   Product identification label

The label is placed on the lifting column and shows the product part number and its unique serial number.

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3. Basic adjustmets of the chair

1. Armrests can be places in two alterative positions, either in front of the seat or towards the back of the seat
2. Adjustment of height of backrest
3. Adjustment of seat and backrest angle simultaneously
4. Battery and charger inlet located on the back of the chassis
5. Brake pedal acting on the rear wheels
6. Height controls; left Carl "Foot" right Carl "Heel"

3.1 Model R6 - "Rilis" safety armrest

Rinis patented safety armrest Rilis has extensive adjustment possibilities to offer an optimal ergonomic working position.
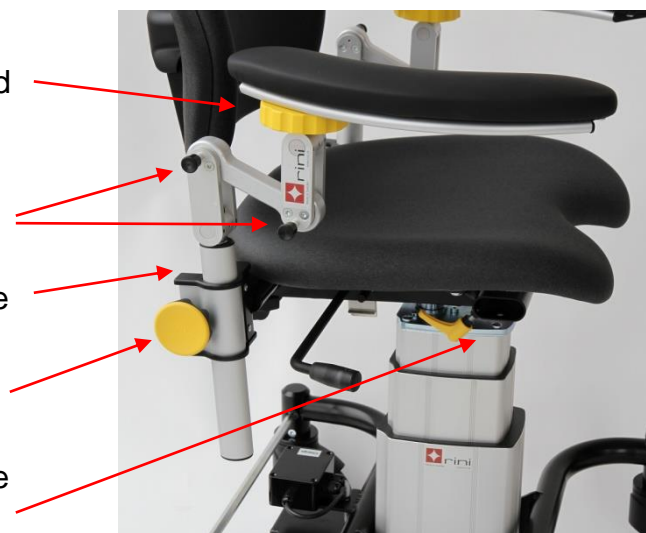

5. Lock wheel for adjusting the armrest longitudinal and lateral

4. Push buttons (without load) for fine adjustment of height and position

3. Coarse adjustment of the armrest width

2. Coarse adjustment of armrest height

1. Coarse adjustment of the position, use front or back bracket under seat.

Setting 1 (coarse setting)
Place the armrest in the front or back bracket and lock the position.

Setting 2 (coarse setting)
The height of the entire armrest can be adjusted so it is in the center of the work area for subsequent fine tuning. Use the knob to set the appropriate armrest height.

Setting 3 (coarse setting)
The width between the armrests can be adjusted by loosening the knob (same as setting 1) under the seat.

Setting 4
By pressing the buttons, the armrest can be adjusted for an optimal working position. To release the armrest, you need to use two hands for safety reasons. One hand to move the armrest pad up and down, while the other hand push the button. Set the armrest in the desired position and release the button to lock the position. **Note! that the adjustment of the armrest should be without load.**

Setting 5
The armrest plate is curved and loosen the black locking wheel to position the armrest. Tighten when the correct position is found. The armrest can also rotate around the black locking wheel, allowing maximum flexibility and ergonomic relief. It also helps the operator to be seated or get up from the chair and still be able to maintain sterile hands by using the elbows to rotate the armrests.

The Rilis armrest should not be loaded with more than 15 kg.

3.2   Model R7 - "OneGrip" armrest

The OneGrip is suitable when an up/down adjustment range is needed and it is required to be able to adjust the armrest while draped.

5. Lever for fine adjustment of the armrest up/down

4. Knob for adjustment of sideway position/friction

3. Coarse adjustment of the armrest width

2. Coarse adjustment of armrest height

1. Coarse adjustment of the position, use front or back bracket under seat.

Setting 1 (coarse setting)
Place the armrest in the front or back bracket and lock the position.

Setting 2 (coarse setting)
The height of the entire armrest can be adjusted so it is in the center of the work area for subsequent fine tuning. Use the knob to set the appropriate armrest height.

Setting 3 (coarse setting)
The width between the armrests can be adjusted by loosening the knob under the seat.

Setting 4
Turn knob to adjust the sideway position as well as the friction of the armrest.

Setting 5
By pulling the lever upwards, the armrest can be adjusted to an optimal working position. Set the armrest in the desired position and release the lever to lock the position.

The armrest should not be loaded with more than 10 kg.

3.3 Tips for comfortable position

To achieve the best level of comfort please try the following steps.

1. Whilst seated in the chair, adjust the height of the chair to achieve a 90º angle of the legs. The feet shall have the whole sole against the ground during the adjustment.

2. Adjust the seat and backrest to a comfortable position.

3. If necessary, fine-tune the height of the seat.

4. Adjust the armrests to a comfortable surgical position.

5. Move the chair against the operating table to achieve optimal access to the patient and foot pedals.

6. If necessary, fine-tune the position of the armrests to achieve a satisfactory surgical position.

7. Adjust the height of the operating table to achieve optimal access to the patient.

4. Handling of the battery

4.1 Charging

The charging inlet is located on the top of the control box at the rear of the chair. A fully charged battery will operate the chair for approximately five days during normal working conditions.

Charger inlet
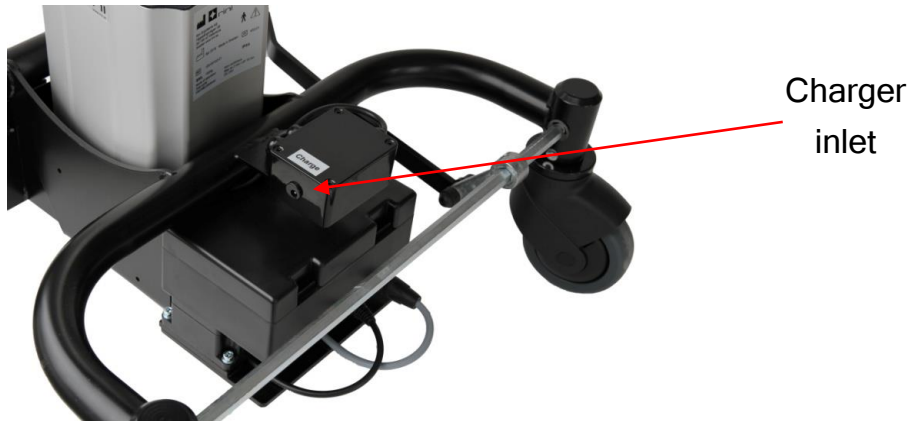
It takes approximately 12 hours to fully charge the battery and charging is automatically is switched off to avoid overcharging.
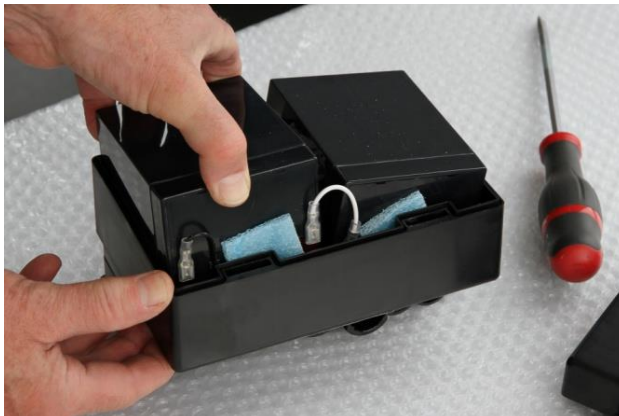

The chair shall not be used during charging. Only the dedicated charger must be used for the chair.

4.2   Replacing the battery modules

The batteries are mounted inside the control box and to replace them first unplug the control box connectors and remove the four screws.

Then use a small screwdriver to open the cover of the control box.

Remove the batteries and unplug the connectors. Insert new batteries and reconnect them accordingly. Re-install the control box and cables.

4.3 Maintenance of the battery

Batteries have a limited lifecycle and must be replaced after approximately four years of use under normal operating conditions. For optimum performance the battery should be charged weekly and must be charged at least every third month to avoid damage from self-discharge.

5. Disinfection, cleaning and repairs

No part of the product is normally in contact with the patient and the armrests are normally draped during surgery.

Disinfection

Part	Product	Other information
Upholstery and armrests	Virkon (including most disinfectants without alcohol).	1% concentration. (Disinfectants containing alcohol cannot be used due possible to dehydration)
Chassis and buttons	Noedischer Dekonta CCOTRADE RW	1-3% concentration 0,5% concentration

Cleaning

Part	Product	Other information
Upholstery and armrests	Water and soap	Use damp cloth
Chassis and buttons	Water and soap	Use damp cloth
Battery charger	Water	Use damp cloth

Repairs

The product should only be repaired by Rini or a Rini authorised service centre. Product to be repaired under warranty must be sent to Rini factory or an authorised Rini service centre.

Unauthorized repairs and modifications may result in loss of function and void warranty.

6. Safety

The product should only be used as intended otherwise it can cause injury to persons or product. Read this manual before the product is put into service. Necessary knowledge of the product is required before clinical use and this manual should always be available when using the product. No accessories other than those mentioned in this manual may be used. Please note the warning signs on the product.

Warning signs are used when there is a risk for patients, staff or product.

6.1 CE Declaration of conformance

Operator chair 120-00102-xx follows MDD EU Directive 93/42 EEC for medical products.

Tested according to EN/IEC 60601-1.

7. Technical specification

General	
Weight base unit	37kg / 81lbs
Length (chassis)	580mm
Width (chassis)	530mm
Medical classification	Class 1 Type B
Standard	EN/IEC 60601
Protective class	IPX4
Battery	24V 2,9Ah rechargeable lead acid
Charger	100 - 240V
Cushions	Medical classified material - black colour (standard) or other colours as options
Operator data	
Lifting capacity	150kg / 331lbs (max weight operator)
Height adjustment	500 - 800mm - foot control by buttons
Back support	
Type	Standard H 350mm x B 300mm - other types as options
Inclination and height	Angle -8° till +12° Height 340 - 420mm from seat
Seat	
Type	Standard L 420mm x B 460mm - other types available as options
Inclination	Angle +3° till -12°
Armrest	
Type	Model R6 - Rilis safety armrest Model R7 - OneGrip
Brake	
Type	Mechanical brake pedal for back wheels
Operational environment	
Temperature	+5ºC to +40ºC
Relative humidity	20% to 90% at 30ºC
Atmospheric pressure	700 to 1060hPa
Transport and storage	
Temperature	-10ºC to +50ºC
Relative humidity	20% to 90% at 30ºC
Atmospheric pressure	700 to 1060hPa

8. Disposal and recycling

The product is mainly made from environmentally recyclable materials as steel, stainless steel, aluminum and plastics. Rini recommends that the material be sorted and recycled in connection with the destruction of the product.

Electronic parts and cables shall be handled as electronic waste in accordance with local requirements. The battery contains lead and is disposed according to current environmental legislation.

9.   Warranty

The warranty is valid one year from the date of purchase. Please contact Rini for further information.