# **User Manual** *Operator Chair Carl*

- Model Carl Spring R6 Rilis
- Model Carl Swing R6 Rilis
- Model Carl Spring R7 OneGrip
- Model Carl Swing R7 OneGrip





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## 1. Operator chair Carl

Thank you for choosing the Rini Operator Chair.

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

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 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.

The chair is normally delivered in parts to save shipping space and is assembled by the following steps.

a) Put the wheel base on the floor and if not already mounted, the gas spring in the cone which is located in the base.



Carl Swing





b) Carl Spring has a cone that shall be placed on the thicker end of the gas spring (see picture below). For all models the seat is then placed on the cone and then the backrest.





c) Finally put the armrest into the armrest bracket and tighten. Note that the adjustment buttons for R6 armrests shall point out from the chair.

### 2.2 Intended areas of use

The operator chairs Carl Spring and Carl Swing 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 120kg.

### 2.3 Product identification label

The label is placed under the seat or gas piston and shows the product part number and its unique serial number.







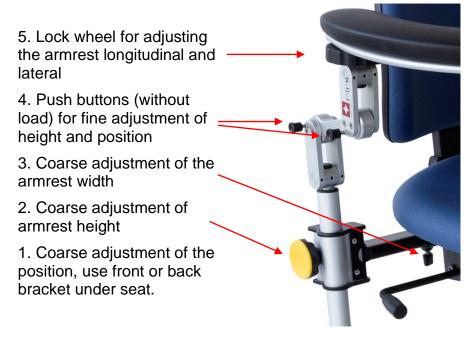
### 3. Basic adjustment of the chair



- 1. Armrests can be places in two alterative positions, either in front of the seat or towards the back of the seat (shown are R6 armrests).
- 2. Adjustment of height of backrest
- 3. Adjustment of seat and backrest angle
- 4. Height adjustment
- 5. Foot brake on back wheels (Carl Spring only)

### 3.1 Model R6 - "Rilis" safety armrest

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





#### 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.





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 90° 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.

### 3.4 Adjusting the foot control mechanism

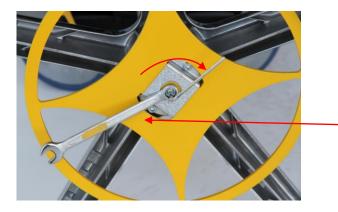
If the foot control does not work satisfactorily, it may need to be adjusted. The two most common causes are.

1. The chair can't be adjusted in height with the foot control at all.



Action: the adjustment is screwed clockwise until function is restored, see picture below

2. The chair collapse under load, even if the foot control is not being used. Action: the adjustment is screwed counter clockwise until function is restored, see picture below



Loosen with 10mm wrench and adjustment with hex wrench.

## 4. 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

#### 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.



## 5. 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.

5.1

CE Declaration of conformance

Operator chair 120-0010n-0n follows MDD EU Directive 93/42 EEC for medical products.

Tested according to EN/IEC 60601-1.

## 6. Technical specifications

Dimensions Back support Seat	<b>W x H (mm)</b> 350 x 300 460 x 420
Total width	600mm
Height range	Spring 540-680mm
neight range	Swing 500-700mm
Weight of chair	19kg/41lb (Swing) 25kg/55lb (Spring)
Safe Working Load	120kg/264lbs
Operational environment Temperature range Relative air damp Atmospheric pressure	+5ºC to +40 ºC 20% to 90% at 30ºC 700 to 1060 hPa

## 7. 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.

## 8. Warranty

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

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