

Instructions for use

PHYSIO Evo/Evo F/One



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1 User instructions

Prerequisite

Read these instructions prior to putting into service to avoid misuse and prevent damage.

General marks and symbols

	Action request
	Important information for users and service technicians
	See Chapter on User Instructions/Hazard Levels
	Original language German

Service



KaVo Technical Service

If you have any questions or complaints, please contact the KaVo Technical Service:

+49 (0) 7351 56-1000

service.einrichtungen@kavo.com or service.treatmentunits@kavo.com

Please refer to the serial number of the product in all inquiries! For further information, please visit: www.kavo.com

Target group

This document is for dentists, dental office staff and service staff.

Hazard levels

The warning and safety notes in this document must be observed to prevent personal injury and material damage. The warning notes are designated as shown below:



 **HAZARD**

In cases which – if not prevented – directly lead to death or severe injury.



 **WARNING**

In cases which – if not prevented – can lead to death or severe injury.



 **CAUTION**

In cases which – if not prevented – can lead to minor or moderate injury.

CAUTION

In cases which – if not prevented – can lead to material damage.

1.1 Terms and conditions of warranty

KaVo provides the final customer with a warranty that the product cited in the transfer form will function properly and guarantees zero defects in the material or processing for a period of 12 months from the date of purchase, subject to the following conditions:

Upon justified complaints of flaws or a short delivery, KaVo will make good its warranty by replacing the product free of cost or repairing it according to the customer's wishes. Other claims of any nature whatsoever, in particular with respect to compensation, are excluded. In the event of default and gross negligence or intent, this shall only apply in the absence of mandatory legal regulations to the contrary.

KaVo cannot be held liable for defects and their consequences due to natural wear, improper cleaning or servicing, non-compliance with operating, servicing or connection instructions, calcification or corrosion, contaminated air or water supplies or chemical or electrical factors deemed abnormal or impermissible in accordance with factory specifications.

The warranty does not usually cover bulbs, glassware, rubber parts and the colourfastness of plastics.

Defects or their consequences that can be attributed to interventions on or changes made to the product by the customer or a third party are excluded from the warranty.

Claims from this warranty can only be asserted when the transfer form (copy) belonging to the product has been sent to KaVo, and the original can be presented by the operator or user.

1.2 Transport and storage

Currently applicable packaging law

Dispose of and recycle the packaging appropriately in accordance with current packaging law, employing waste management / recycling companies. Comply with the comprehensive return system. KaVo has had its packaging licensed for this purpose. Please comply with the regional public waste-disposal system.

1.2.1 Damage in transit

In Germany

If the packaging is visibly damaged on delivery, please proceed as follows:

1. The recipient of the package must record the loss or damage on the delivery receipt. The recipient and the representative of the shipping company must sign this delivery receipt.
2. Leave the product and packaging in the condition in which you received it.
3. Do not use the product.
4. Report the damage to the shipping company.
5. Report the damage to KaVo.
6. Consult with KaVo first, before returning a damaged product.
7. Send the signed delivery receipt to KaVo.

If the product is damaged but there was no discernable damage to the packaging on delivery, proceed as follows:

1. Report the damage to the shipping company immediately and no later than 7 days after delivery.
2. Report the damage to KaVo.
3. Leave the product and packaging in the condition in which you received it.
4. Do not use a damaged product.



NOTE
 Failure on the part of the recipient to comply with any of the above-mentioned obligations will mean that the damage will be considered to have arisen following delivery (in accordance with the General German Freight Forwarders' Terms and Conditions, Art. 28).

Outside Germany



NOTE
 KaVo shall not be held liable for damage arising from transportation. The shipment must be checked on arrival.

- If the packaging is visibly damaged on delivery, please proceed as follows:
1. The recipient of the package must record the loss or damage on the delivery receipt. The recipient and the representative of the shipping company must sign this delivery receipt.
 Without this evidence, the recipient will not be able to assert a claim for damages against the shipping company.
 2. Leave the product and packaging in the condition in which you received it.
 3. Do not use the product.

- If the product is damaged but there was no discernable damage to the packaging on delivery, proceed as follows:
1. Report any damage to the shipping company immediately and no later than 7 days after delivery.
 2. Leave the product and packaging in the condition in which you received it.
 3. Do not use a damaged product.



NOTE
 If the recipient fails to comply with any of the above-mentioned obligations, the damage will be considered to have arisen following delivery (in accordance with CMR law, Chapter 5, Art. 30).




1.2.2 Information on the packaging: Storage and transportation



NOTE
 Please keep the packaging in case you need to return the product for servicing or repair.

The symbols printed on the outside are for transportation and storage, and have the following meaning:

	Transportation and storage conditions (air pressure)
	Transportation and storage conditions (Humidity)
	Transportation and storage conditions (temperature range)
	Protect from impact
	Protect from moisture (Keep dry)

	Permissible stacking load
	Transport upright
	Properly dispose of cardboard

2 Safety

2.1 Safety Instructions

CAUTION

Damage from unsuitable accessories.

The use of accessories, other components, and cables other than those specified, with the exception of components and cables sold by KaVo as spare parts for internal components, can increase emissions or reduce the electromagnetic immunity of the product.

- ▶ Use accessories recommended by KaVo only!



⚠ CAUTION

Damage due to working on the pressure vessel.

Forceful opening of the pressure vessel or extensive heat exposure can lead to injury and damage.

- ▶ Only instructed specialists may work on or exchange parts in the vicinity of the seat height adjusting element.



⚠ CAUTION

Screws are pre-tensioned.

Inappropriate loosening of screws on the support plate beneath the seat upholstery can lead to injury and damage.

- ▶ Only instructed specialists may dismantle screws from the support plate.

3 Description of the product

3.1 Intended use

The PHYSIO Evo/Evo F/One is a dentist chair for dentists in a dental surgery in accordance with DIN EN ISO 7493.

All versions of the dentist chair PHYSIO Evo/Evo F/One are tested and approved in accordance with the currently applicable guidelines.

All versions of the dentist chair PHYSIO Evo/Evo F/One comply with DIN EN 1335 - 2 and 3, DIN 4550 and DIN EN ISO 7493.

The intended use also includes compliance with all notes provided in the instructions for use as well as compliance with prescribed inspections and maintenance.

Application of and compliance with the general guidelines and/or national laws, national regulations, and the rules of technology applicable to this product for start-up and use of the KaVo product for the intended purpose are to be applied and complied with.

The user must ensure that the unit works properly and is in satisfactory condition before each use.

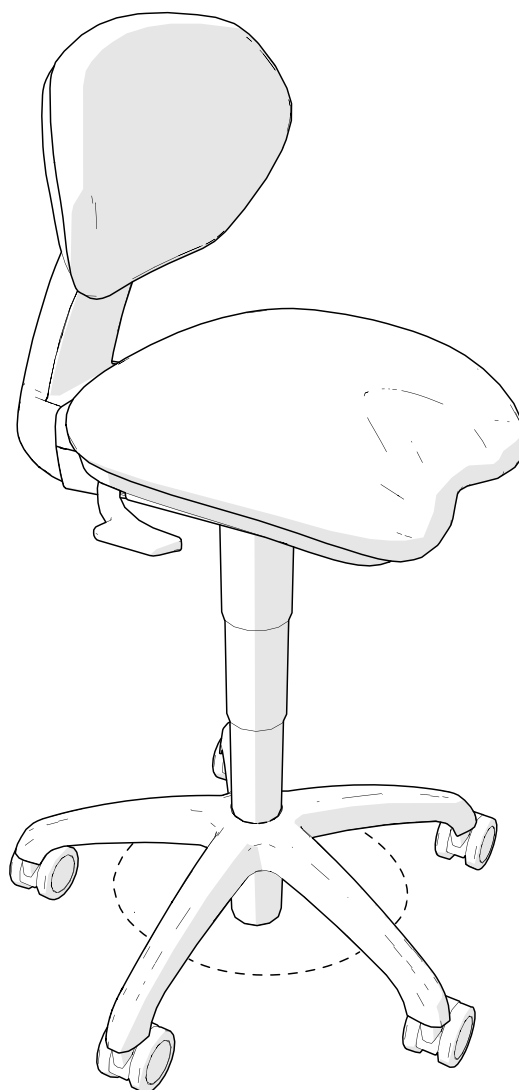
The applicable national legal regulations must be observed during the use of the device, in particular the following:

- Current occupational safety regulations
- Current accident prevention regulations

It is a responsibility of the user:

- to only use equipment that is operating correctly,
- to protect him or herself, the patient and third parties from hazards, and
- to prevent contamination from the product

3.2 Dentist chair PHYSIO Evo/Evo F/One



KaVo PHYSIO Evo/Evo F/One

The dentist chair PHYSIO Evo/Evo F/One delivered from the factory with soft castors **Mat. no. 1.010.3896** for hard flooring. The running surface and housing of the castors are bi-chrome.

Hard castors for soft flooring, e.g. fitted carpet are available as an assembly kit **Mat. no. 1.010.3827**. The running surface and housing of the castors are monochrome.

Castors with locking brake (set of 3 castors with locking brake and 2 without) are available as assembly kit **Mat. no. 1.015.2671** for 3D imaging patient positioning.



NOTE

Use the castors that are appropriate for the flooring.

Only use soft castors for hard flooring. Only use hard castors for soft flooring. Alternatively, castors with locking brake are available for the 3D imaging patient positioning.

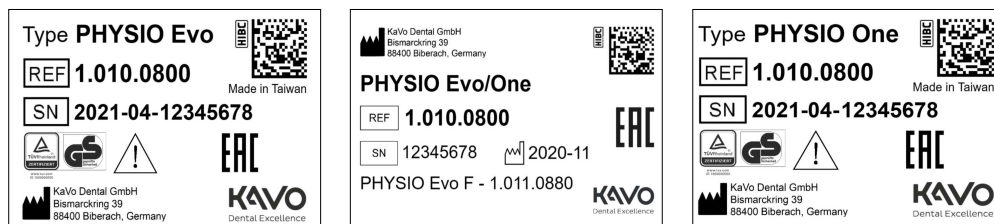


NOTE










With the use of the castors with locking brake, this is a visitor's in accordance with DIN EN 16139, test level 1 and is not the typical case of a dentist chair.

3.3 Rating plates and instruction labels

The rating plates are located underneath the stool.



Rating plate KaVo PHYSIO Evo/Evo F/One

	Device type
	Material number
	Year of manufacture - month - serial number
	Manufacturing date
	Note: Please note accompanying documents
	HIBC Code
	GS mark
	EAC conformity mark (Eurasian Conformity)
	Manufacturer

The information label is located beneath the stool, on the left beside the rating plate.

Achtung: Austausch und Arbeiten im Bereich des Sitzhöhenverstellelementes nur durch geschultes Personal!
 Attention: Exchange and work in the area of the gasspring only by trained personnel!

Information label PHYSIO Evo/Evo F/One

3.4 Technical Specifications PHYSIO Evo

Lowest seat height, with load	465 mm
Highest seat height, without load	660 mm
Lowest seat height, loaded	460 mm
Highest seat height, loaded	630 mm
Seat height adjustment range, without load	195 mm

Seat width	max. 400 mm
Seat depth	380 mm
Adjustment range of the backrest inclination	30°
Seat inclination	15°
Altitude	1000 mm
Width:	600 mm
Weight	12.5 kg
Permissible load	150 kg

3.5 Technical Specifications PHYSIO Evo F

Lowest seat height, with load	475 mm
Highest seat height, without load	660 mm
Lowest seat height, loaded	470 mm
Highest seat height, loaded	630 mm
Seat height adjustment range, without load	185 mm
Seat width	max. 400 mm
Seat depth	380 mm
Adjustment range of the backrest inclination	30°
Seat inclination	15°
Altitude	1000 mm
Width:	600 mm
Weight	13 kg
Permissible load	150 kg

3.6 Technical Specifications PHYSIO One

Lowest seat height, with load	465 mm
Highest seat height, without load	660 mm
Lowest seat height, loaded	460 mm
Highest seat height, loaded	630 mm
Seat height adjustment range, without load	195 mm
Seat width	max. 400 mm
Seat depth	380 mm

Adjustment range of the backrest inclination	15°
Seat inclination	15°
Altitude	1000 mm
Width:	600 mm
Weight	12 kg
Permissible load	150 kg

4 Installation

4.1 Packaging

4.1.1 Transport and storage

The packaging consists of styrofoam and is itself packaged in Superwell cardboard. The instructions printed on the outside are for transportation and storage, and have the following meaning:

1. Transport upright; the arrows point upward
2. Protect from impact
3. Protect from moisture (Keep dry)
4. Temperature -20 °C to + 55 °C
5. 5% to 95% non-condensating
6. Air pressure 700 hPa to 1060 hPa

4.1.2 Packed items

The dentist chair PHYSIO Evo/Evo F/One is packed in a special carton. Beside the dentist chair, the packaging contains further assembly kits according to the order.

The upholstery for the seat and backrest are packaged separately and must be mounted to the dentist chair.

Weight	15 kg
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4.2 Assembly of dentist chair PHYSIO Evo/Evo F/One

**NOTE**

The dentist chair PHYSIO Evo/One is delivered in the lowest seat height and with the backrest folded forwards.

**NOTE**

Only specially trained personnel may work on or exchange parts of the seat adjustment element.

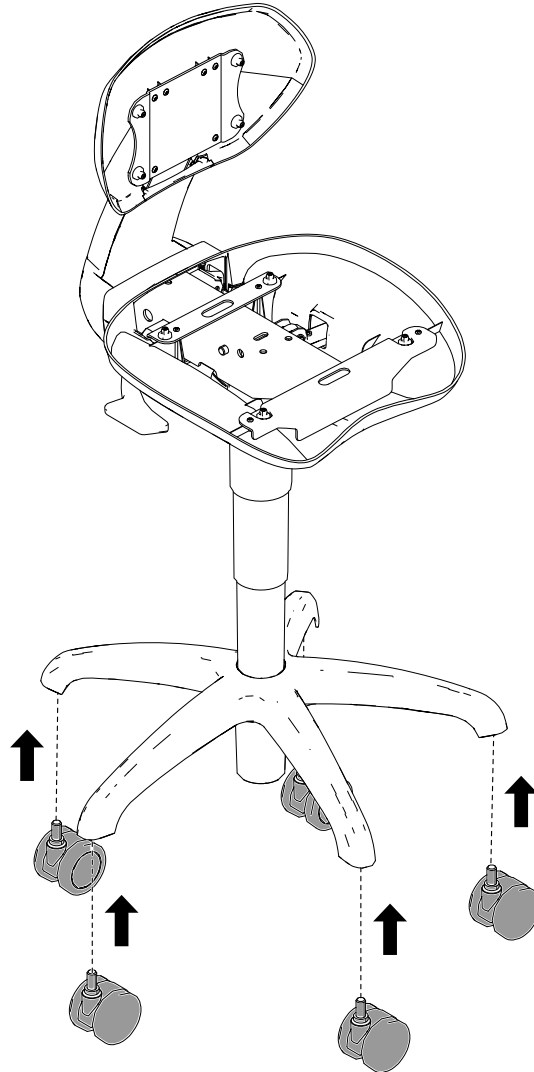
4.2.1 Mounting the castors



NOTE

Use the castors that are appropriate for the flooring.
Only use soft castors for hard flooring. Only use hard castors for soft flooring.
Alternatively, castors with locking brake are available for the 3D imaging patient positioning.

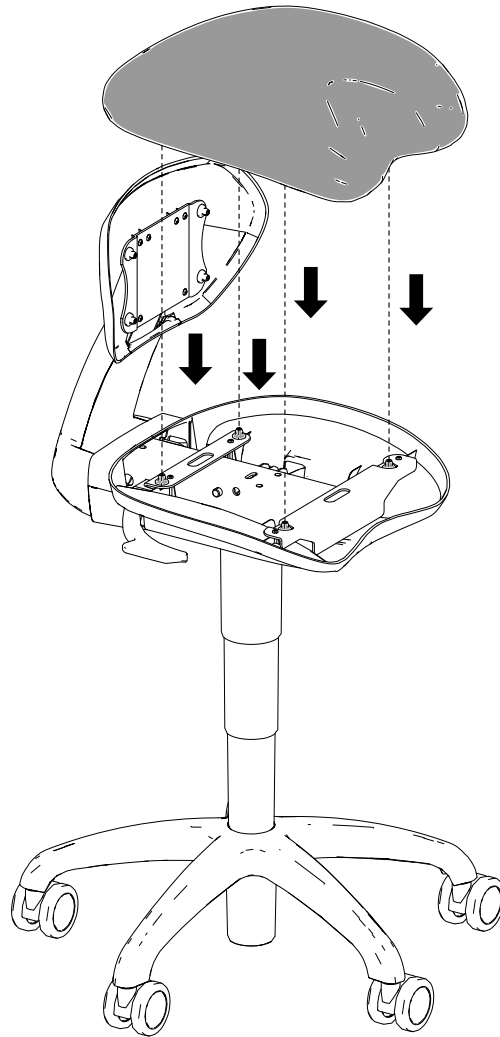
- ▶ Insert the castors into the stool base and press until the castors engage.



- ▶ Pull the castors lightly to ensure that they have securely engaged.

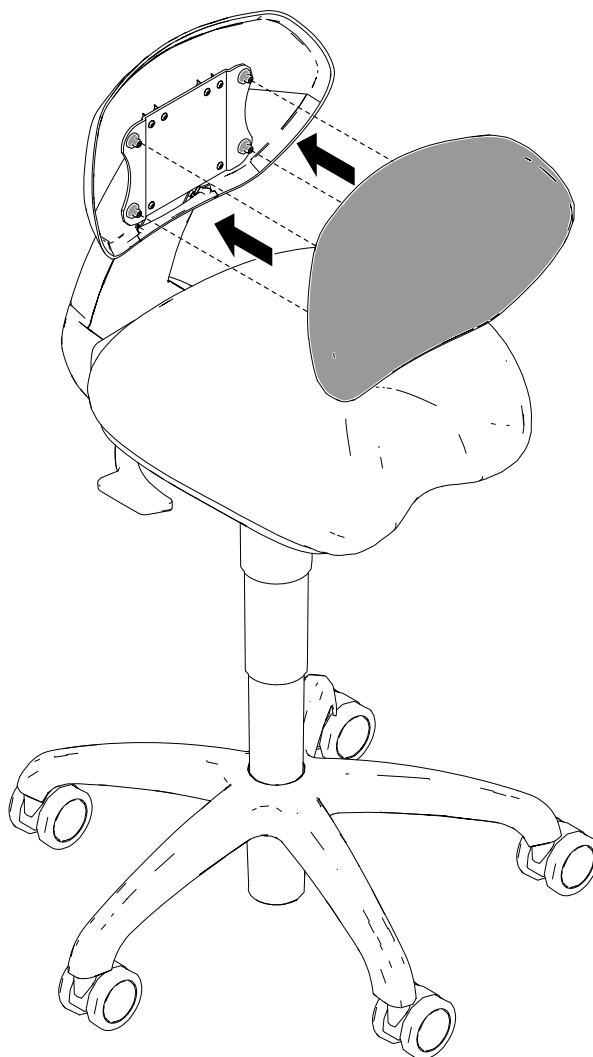
4.2.2 Mounting the upholstery

- ▶ Engage the seat upholstery at the 4 ball pins.



4.2.3 Mounting the backrest upholstery

- ▶ Engage the backrest upholstery at the 4 ball pins.



4.2.4 Adjust the gas-pressure spring



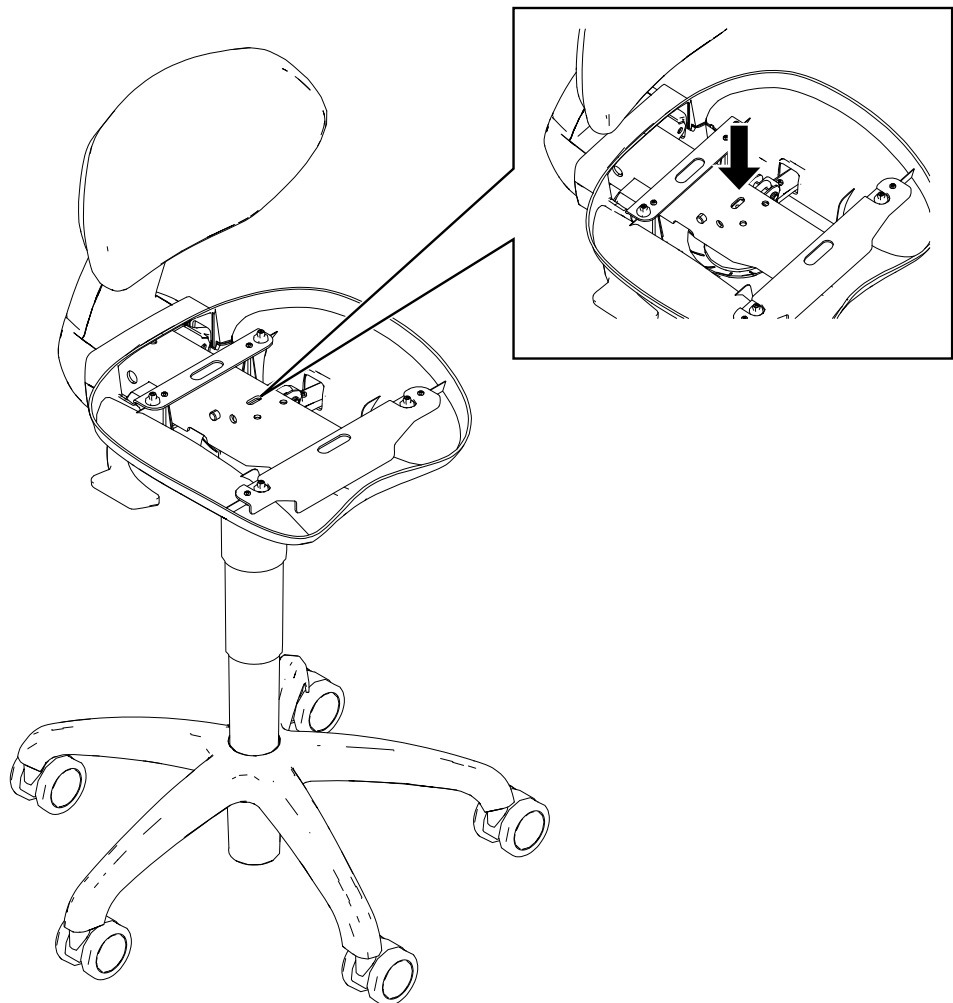
NOTE

The pressure point of the gas-pressure spring is set at the factory. If the seat of the dentist chair PHYSIO Evo/EvoF/One is not adjusted securely, the pressure point of the gas-pressure spring must be adapted.

Also refer to:

6.1.1 Adjust the seat height, Page 29

- ▶ Incline the seat forwards and remove the upholstery.
- ▶ Adjust the pressure point as described below using a Phillips screwdriver: screw in screw, the gas-pressure spring is released earlier. unscrew screw, the gas-pressure spring is released later.



- ▶ Remount the seat upholstery.

4.3 Assembly of dentist chair PHYSIO Evo F

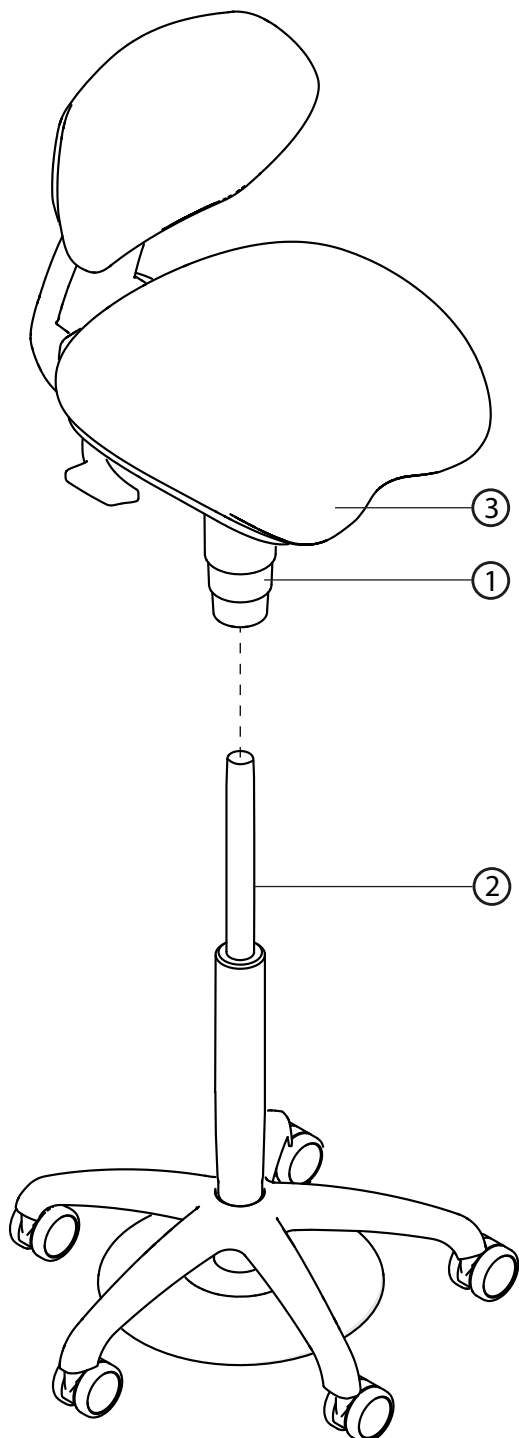


NOTE

The chair is delivered with soft castors for hard flooring as standard. Use suitable castors for the relevant flooring. Only use soft castors for hard flooring. Only use hard castors for soft flooring.

4.3.1 Mounting the top part of the chair

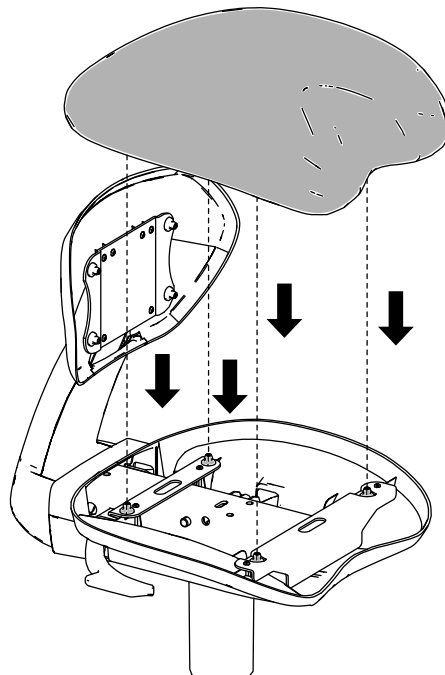
- ▶ Mount the intervention protection cover ① to the top part of the chair, slide them together and guide over gas-pressure spring ②.



- ▶ Place the top part of the chair ③ on the gas-pressure spring ②.

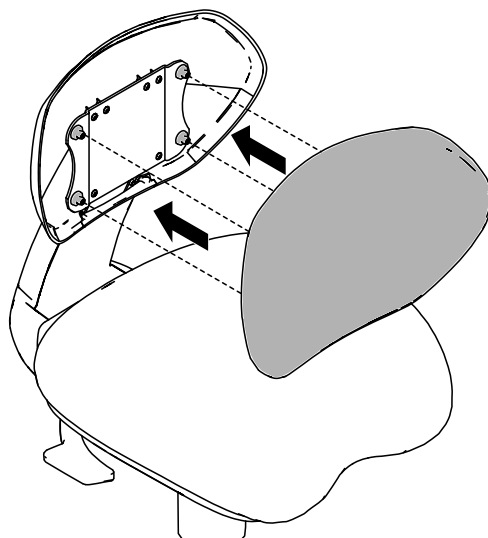
4.3.2 Mounting the upholstery

- ▶ Engage the seat upholstery at the 4 ball pins.



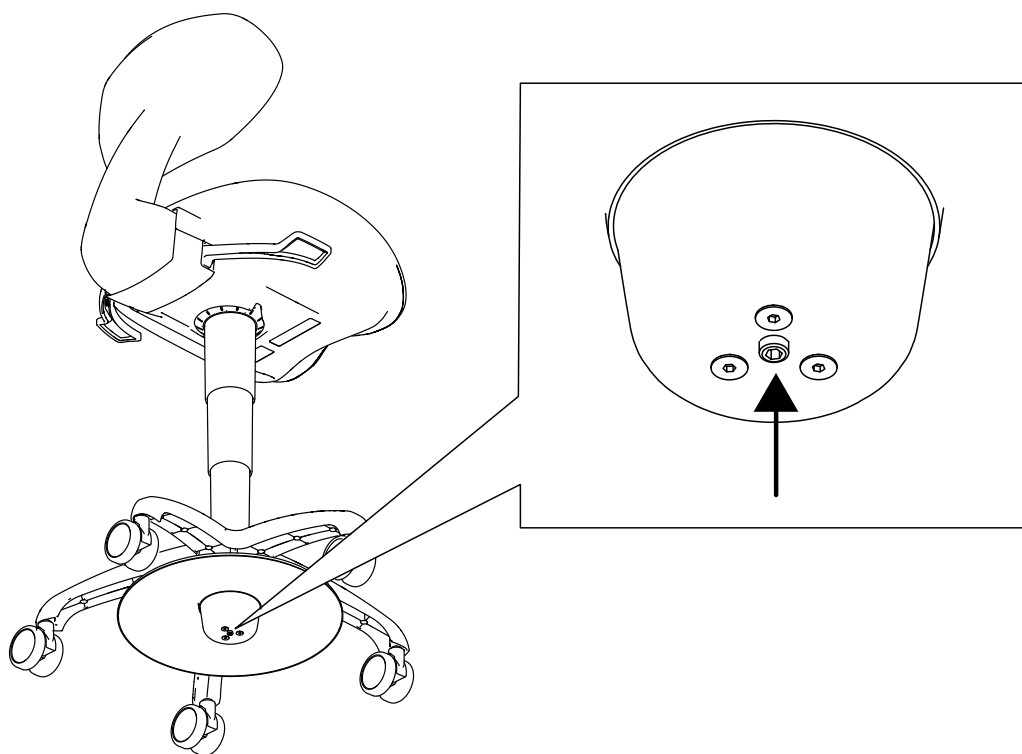
4.3.3 Mounting the backrest cushion

- ▶ Engage the backrest upholstery at the 4 ball pins.



4.3.4 Adjust the gas-pressure spring foot control

- ▶ Adjust the pressure point as described below using a Phillips screwdriver:
screw in threaded pin, the gas-pressure spring is released earlier.
unscrew threaded pin, the gas-pressure spring is released later.





5 Disassembly

NOTE

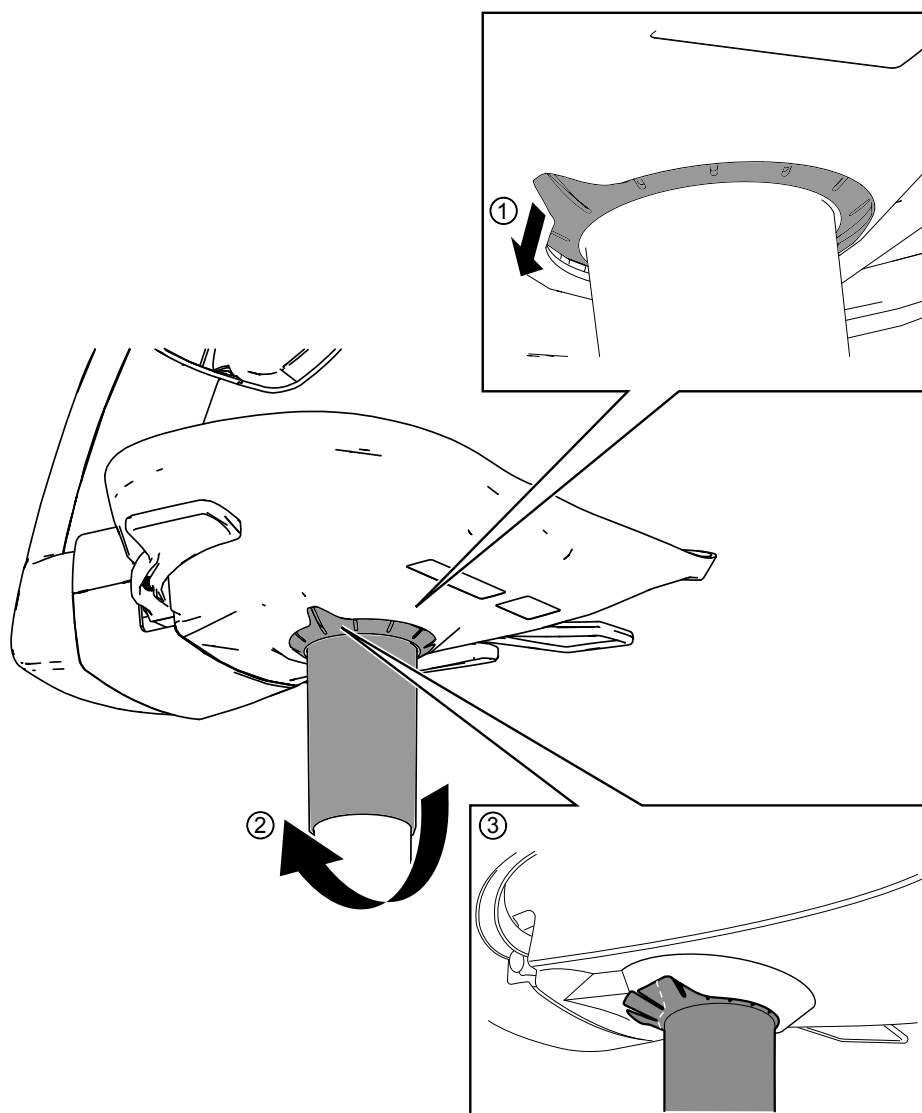
Only specially trained personnel may work on or exchange parts of the seat adjustment element.

5.1 Dismantling the dentist chair PHYSIO Evo/Evo F/One

- ▶ Remove the backrest and seat upholstery to prevent damage.
- ▶ Position the operator stool at the highest position.
- ▶ Incline the seat forwards.

5.2 Remove the intervention protection cover of the gas-pressure spring

- ▶ Press the lugs of the interference protection outwards through the opening in the underside of the stool ①. Turn the cover of the gas-pressure spring ② until all lugs have been pressed out ③.



NOTE

If necessary, the upholstery must be removed and the interference protection must be pressed downwards out of the seat cover using a screwdriver.

5.3 Dismantling the gas-pressure spring



CAUTION

Damage due to working on the pressure vessel.

Forceful opening of the pressure vessel or extensive heat exposure can lead to injury and damage.

- ▶ Only instructed specialists may work on or exchange parts in the vicinity of the seat height adjusting element.

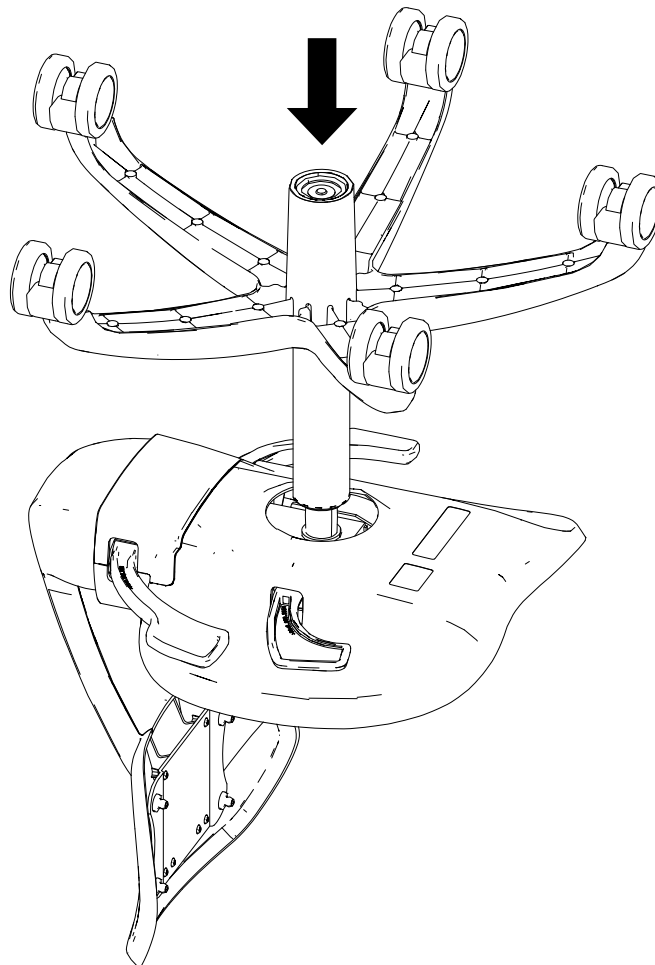
5.3.1 Dismantling the gas-pressure spring Evo / One



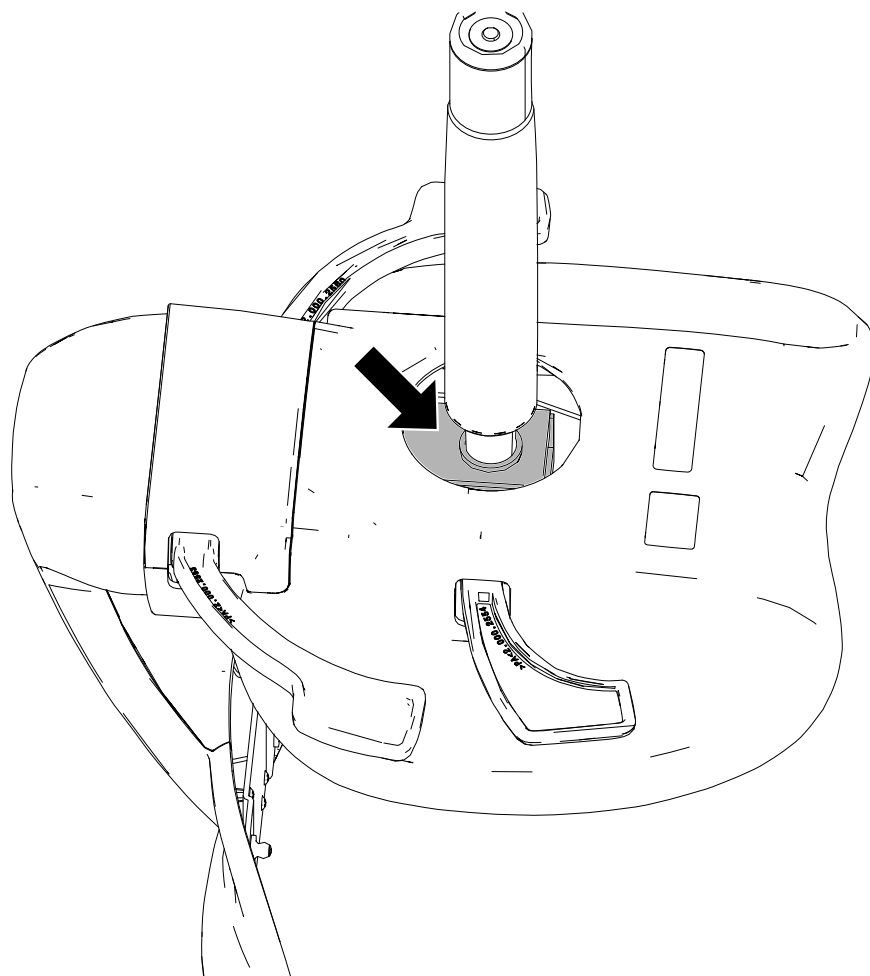
NOTE

If the gas-pressure spring is knocked out of the stool base too violently, this could lead to damage to the paintwork of the dentist chair PHYSIO Evo/One. To prevent damage to the paintwork, you can place a piece of wood between the gas-pressure spring and the hammer.

- ▶ To prevent damage to the paintwork of the operator stool, carefully hammer the gas-pressure spring out of the stool base using a large rubber hammer. You can place a piece of wood between the gas-pressure spring and the hammer.



- ▶ Hammer the gas-pressure spring out of the stool base as far as the stool support.

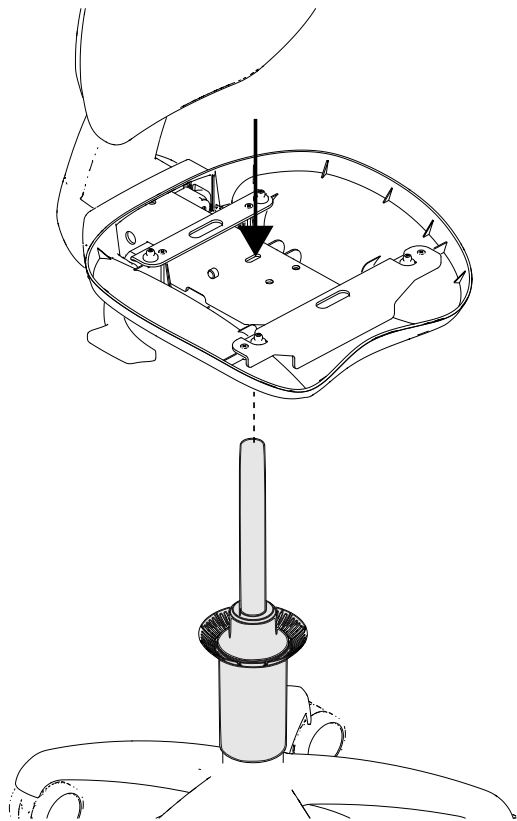


5.3.2 Dismantling the gas-pressure spring Evo F

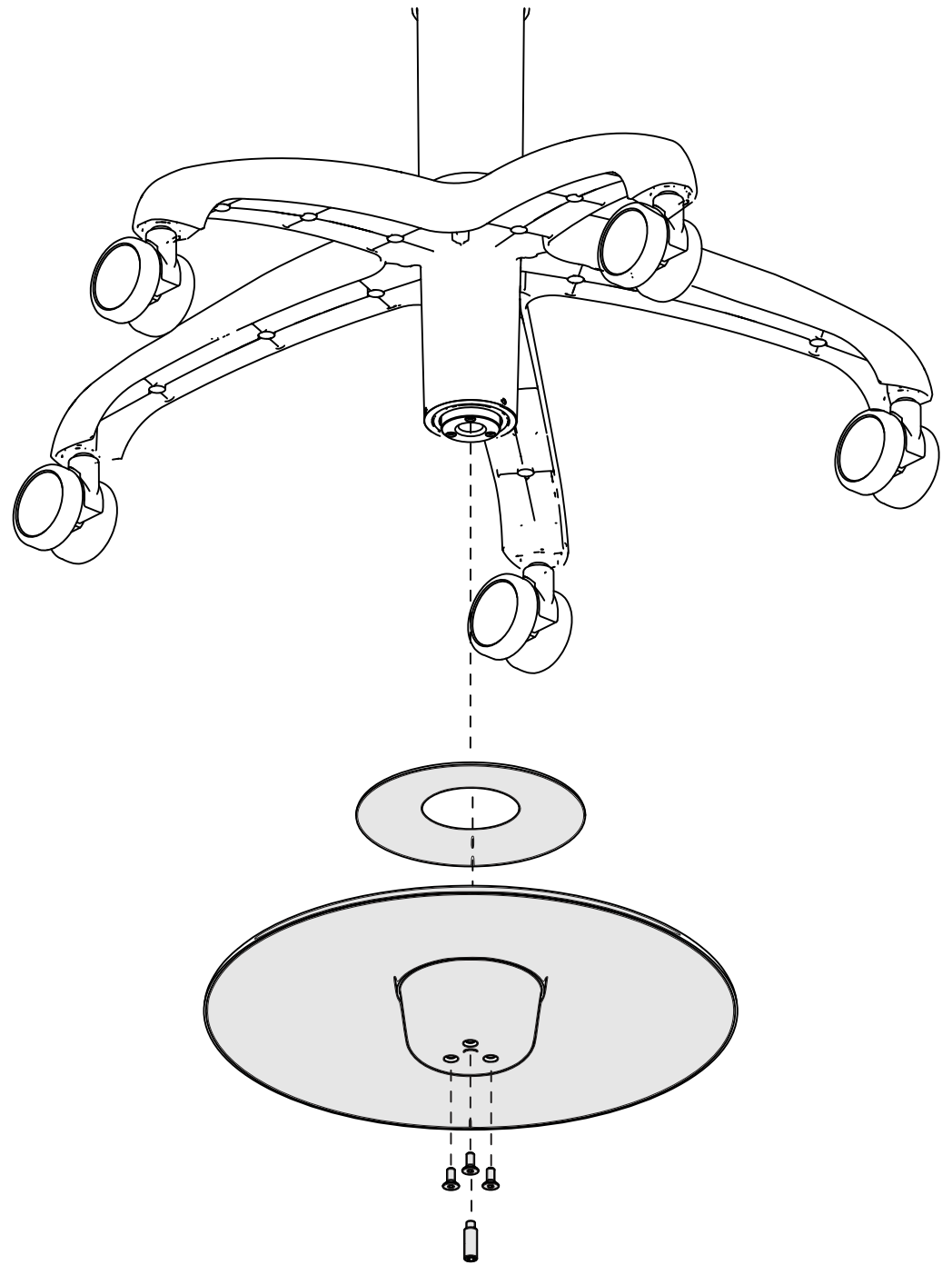
Also refer to:

5.2 Remove the intervention protection cover of the gas-pressure spring, Page 23

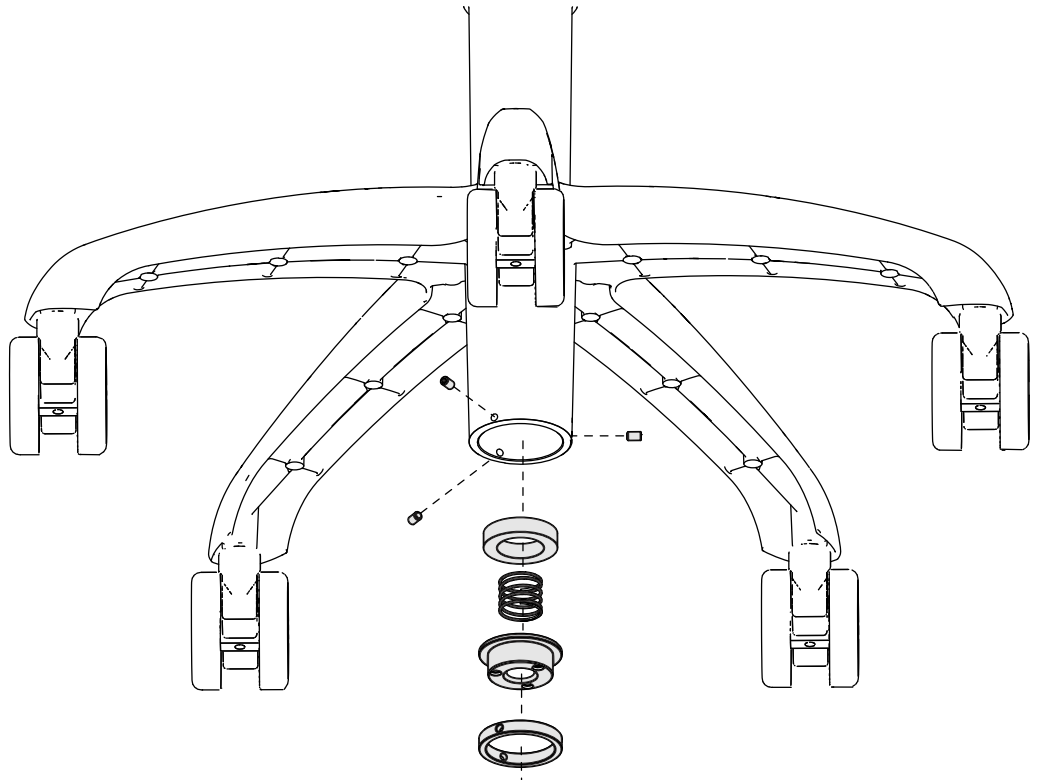
- ▶ Dismantle the intervention protection cover of the gas-pressure spring on the top part of the chair.



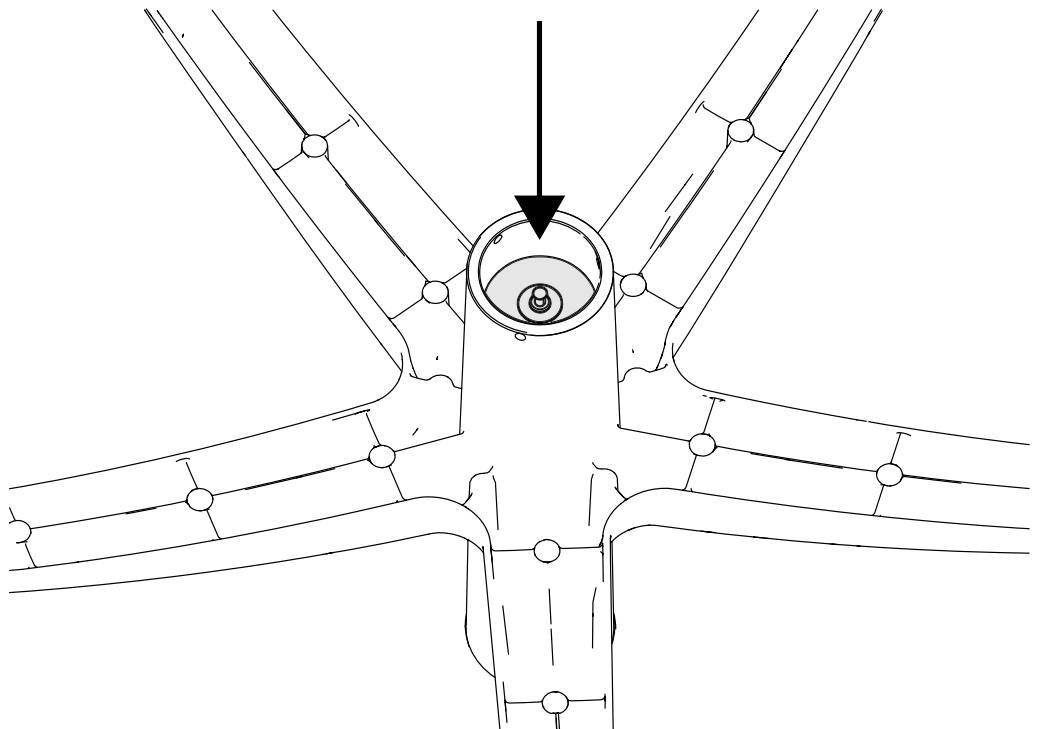
- ▶ Hammer the gas-pressure spring out of the stool base.
- ▶ Remove the intervention protection cover of the gas-pressure spring.
- ▶ Dismantle the actuator plate.



► Unscrew 3 countersunk screws.



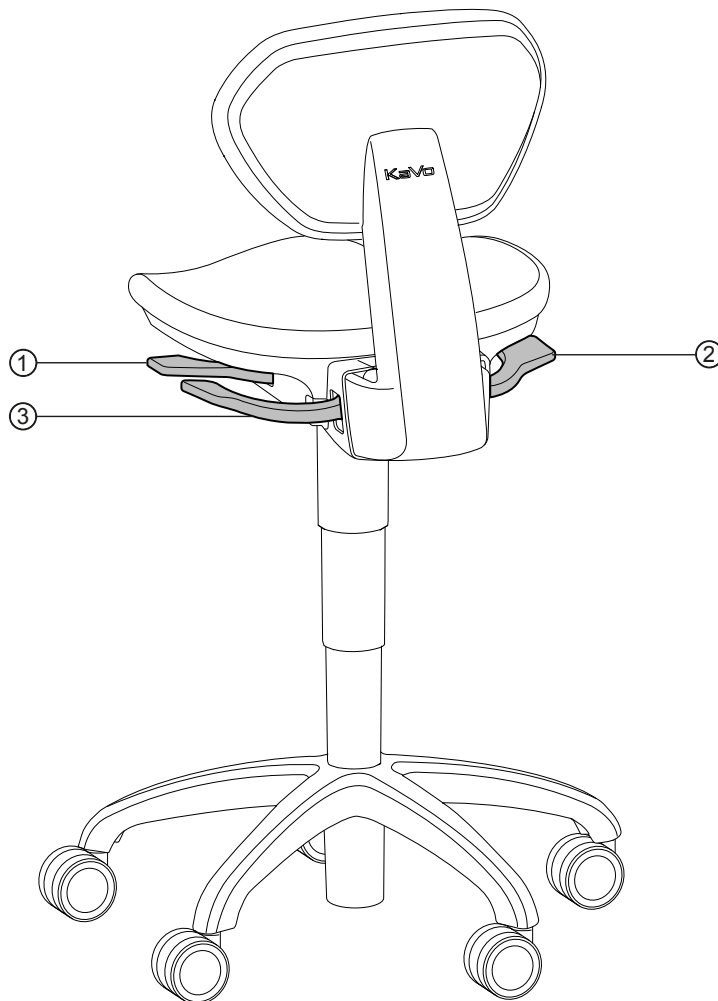
- ▶ Dismantle the spring mechanism from the standpipe.
- ▶ Use the soft hammer and an appropriate pipe, e.g. larger-sized socket wrench, to drive the gas-pressure spring out of the base.



- ▶ To mount the new gas-pressure spring, proceed in reverse order.

6 Operation

6.1 PHYSIO Evo



PHYSIO Evo

- ① Adjust the seat height
- ② Adjust the seat angle
- ③ Adjust the backrest angle

6.1.1 Adjust the seat height

- ▶ Activate the lever ① on the left forwards.
- ▶ Load or unload the seat according to the required height.
- ▶ Release the front lever ① on the left to fix the required seat height.

6.1.2 Adjusting the seat



NOTE

The seat angle is adjusted individually to the operator as a rule.

- ▶ Loading the seat and backrest.
- ▶ Press the rear lever ② on the right downwards until the lever ② engages.
- ▶ Incline the seat as you wish.
- ▶ release the rear lever ② on the right to fix the position of the seat.



6.1.3 Adjust the backrest angle

NOTE

The backrest can be adjusted in two ways:

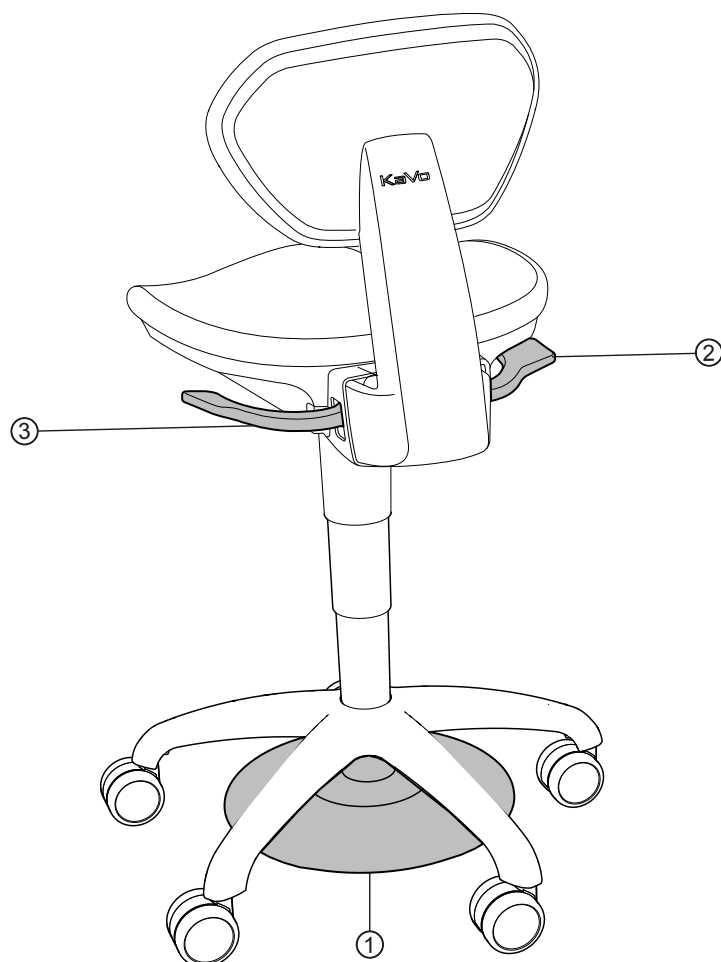
- freely selectable inclination with locking
- - freely moveable backrest for active support of the back muscles

- ▶ Loading the seat and backrest.
- ▶ Press the rear lever ③ on the left downwards until the lever ③ engages.
- ▶ Incline the backrest as you wish.
- ▶ Release the rear lever ③ on the left to fix the position of the backrest.

or

- ▶ Let the rear lever ③ on the left engage.
 - ⇒ The backrest is freely moveable and allows active support for the back muscles.

6.2 PHYSIO Evo F



PHYSIO Evo F

- ① Foot actuator plate for adjustment
- ② Adjust the seat angle of the seat height
- ③ Adjust the backrest angle

6.2.1 Adjust the seat height

- ▶ Actuate the foot actuator plate ① by foot.
- ▶ Load or unload the seat according to the required height.
- ▶ Release the foot actuator plate ① to fix the seat height as desired.

6.2.2 Adjusting the seat



NOTE

The seat angle is adjusted individually to the operator as a rule.

- ▶ Loading the seat and backrest.
- ▶ Press the rear lever ② on the right downwards until the lever ② engages.
- ▶ Incline the seat as you wish.
- ▶ release the rear lever ② on the right to fix the position of the seat.



6.2.3 Adjust the backrest angle

NOTE

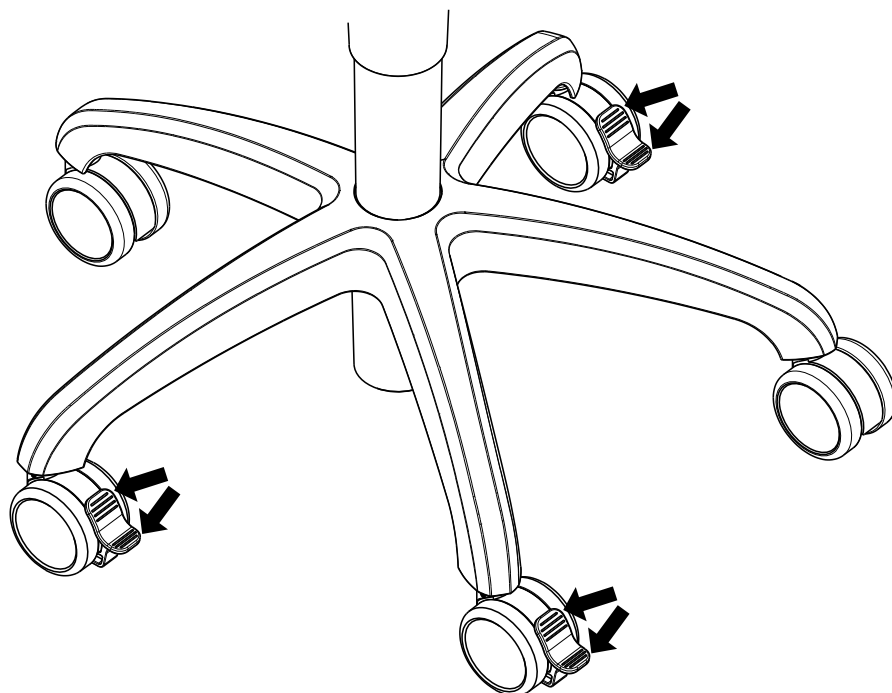
The backrest can be adjusted in two ways:

- freely selectable inclination with locking
- - freely moveable backrest for active support of the back muscles

- ▶ Loading the seat and backrest.
- ▶ Press the rear lever ③ on the left downwards until the lever ③ engages.
- ▶ Incline the backrest as you wish.
- ▶ Release the rear lever ③ on the left to fix the position of the backrest.

or

- ▶ Let the rear lever ③ on the left engage.
 - ⇒ The backrest is freely moveable and allows active support for the back muscles.



7 Reprocessing methods according to DIN EN ISO 17664

7.1 General care instructions



CAUTION

Product damage due to improper disinfection.

Malfunctions.

- ▶ Use disinfectant in accordance with the manufacturer's instructions!
- ▶ Disinfect by wiping only!
- ▶ Do not immerse product or product parts in liquids!

Damage can occur on painted and plastic surfaces due to the diversity of medicaments and chemicals used in dental surgeries. Investigations have shown that there is no one hundred percent surface protection against all the agents on the market.

As surface damage against these agents is strongly dependent on the reaction time, it is essential to clean the affected areas with a moistened cloth immediately.

Potential residues resulting from disinfectants on painted and plastic surfaces can be conditionally cleaned with neutral, non-abrasive detergents and cleaning agents.

cleaning with water and mild, non-abrasive cleaning agents is sufficient for painted surfaces that are as good as new, from which water still beads off.

7.2 Cleaning and disinfection

- ▶ Use disinfectants in accordance with the Instructions for Use of the manufacturer.
- ▶ Observe the safety data sheet of the manufacturer of the relevant disinfectant.
- ▶ Clean all surfaces with a soft cloth and an approved disinfectant.

Approved disinfectants:

- Mikrozyd AF (liquid or cloths); manufacturer: Schülke & Mayr
- FD 322; manufacturer: DÜRR Dental GmbH
- Incidin Liquid; manufacturer: Ecolab
- CaviCide; manufacturer: Metrex



8 Troubleshooting

NOTE

The pressure point of the gas-pressure spring is set at the factory. If the seat of the dentist chair PHYSIO Evo/EvoF/One is not adjusted securely, the pressure point of the gas-pressure spring must be adapted.

Also refer to:

4.2.4 Adjust the gas-pressure spring, Page 19

Also refer to:

4.3.4 Adjust the gas-pressure spring foot control, Page 21



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