SCHMITZ

A SENSE OF CONFIDENCE

Instructions for use Examination and treatment chair arco-matic 200 M / 300 M

arco-matic 114.9600.0
arco-matic 114.9700.0

CE

Table of contents

These instructions for use

General

These instructions for use reflect the state of knowledge at the time of printing and make no claim to completeness. The information provided in these instructions for use may be outdated due to the ongoing technical development of our products. However, all information is regularly updated in revisions.
Illustrations in these instructions for use are not necessarily to scale.
Keep these instructions for use at the place of use of the product.

These instructions for use must be read and observed by all persons who use, operate or clean the product.
To be able to use the described product safely, the provisions of these instructions for use must be observed. Please observe in particular warnings, ambient conditions, installation instructions, operating instructions, inspection and maintenance regulations, as well as the standards listed in these instructions for use.

Warnings

A risk assessment pursuant to ISO 14971:2007+ amendment:2009 (Risk management for medical devices) was performed for this device. The signal words, symbols and colours of the warnings were selected in accordance with ANSI 535.6.
The warnings were scaled in accordance with the following definitions for risk assessment.

⚠ DANGER!

“DANGER” refers to a hazardous situation which could result in serious injury or death if it is not avoided. Serious injuries are irreversible injuries requiring permanent and regular medical care.

⚠ WARNING!

“WARNING” refers to a hazardous situation which could result in moderate to serious injury if it is not avoided. This includes reversible injuries requiring care or examination by a medical professional.

⚠ CAUTION!

“CAUTION” refers to a hazardous situation which could result in slight to moderate injury if it is not avoided. This includes reversible injuries not requiring medical care.

NOTE

“NOTE” refers to information not relating to personal injury, e.g. information relating to damage to property.

RECOMMENDATION

Recommendations are information that helps readers use the product better, longer and more safely.

Text symbols

A triangle before the text means:
▶ Execute this work step.
▷ Execute this partial work step.

A square before the text means:
☐ This is the result of the previous action.

A bullet point before the text means:
• This is part of an itemisation.

Important safety information

Use of the product
This product is state-of-the-art and was built according to recognised safety rules. Nevertheless, risks to the life and limb of users or third parties may occur, or this product and other assets may be adversely affected by the use of this product. This product must only be used in sound condition and for its intended use.

Suitability for use in oxygenated atmosphere
The examination chair must not be operated in an oxygenated atmosphere.

Technical changes
It is not permitted to modify the examination and treatment chair without the consent of the manufacturer.

Attaching accessories
When mounting accessories, always check the condition of the accessory, and make sure that it is attached securely.

Replacement parts
Replacement parts have to meet the requirements established by SCHMITZ u. Söhne. Using original replacement parts guarantees at all times that the parts comply with requirements.

Non-slip setup
Before and during use of the product, it must be ensured that the product has sufficient floor adhesion and that there is good slip resistance for both product and user.

Mandatory training
This product may only be operated by persons instructed in its proper use.

Patient positioning
The user must be familiar with and must comply with the applicable organisational and national rules and regulations for the proper positioning of patients. The nursing staff are responsible for ensuring that the patients are positioned in such a way that no threats are posed to respiration, the nervous system or the circulatory system. This applies in particular to anaesthetised or unconscious patients.

HF devices
Combination with HF or defibrillator devices is possible. Please note that the patient must be insulated from the examination and treatment chair. Use electrically insulated underlays between the patient and the examination and treatment chair. To this end, the instructions for use issued by the device manufacturer must be complied with.

Checklist
Perform a visual and functional check regularly according to the device-specific checklist provided in these instructions for use.

Regulatory

Product classification

In combination with the accessories listed in “Tab. 1” on page 8, the product is a Class I medical device according to Annex IX of the Medical Device Directive 93/42/EEC. Harmonised standards were used to assess compliance. The product meets the fundamental requirements according to Annex I of Directive 93/42/EEC, as well as of amending Council Directive 2007/47/EC regarding medical devices (Medical Device Directive).

Intended use

Only uses that are listed in this “Intended use” chapter are intended for the purposes of IEC 60601-1:2005 + amendment: 2006 + amendment: 2007 + supplement1:2012. Any other use will result in an exclusion of liability.
The examination and treatment chair arco-matic is intended for use in human medicine only.
The examination and treatment chair may be used for the following purposes:

- for the short-term positioning of patients for urological examinations and treatment of non-anaesthetised or sedated persons. A person placed under the care of a guardian may only be positioned on the examination chairs under supervision. Under these same conditions, the examination chair can also be used in gynaecology and proctology.

The examination and treatment chair may not be used:

- as an operating table,
- for transporting patients.

The safe working load of the examination and treatment chair as per IEC 60601-1:2005 + amendment:2006 + amendment:2007 + supplement 1:2012 is 250 kg less the weight of the attached accessories. It may only be used in Group 0 and Group 1 medical rooms according to and/or IEC 60364-7-710:2002-11.
Permissible user groups for the product are:

- Trained medical personnel (doctor/nurse)
- Trained cleaning staff
- Hospital technicians

Approved accessories

Accessories from SCHMITZ u. Söhne were developed for and tailored to this product (for a list of accessories, see the table below). Third-party accessories must be inspected and used with reference to their instructions for use.
(*) The corresponding weight of the patient is indicated in brackets.
Example: a safe working load of “60 (250) kg” means that the accessory can support a weight of up to 60 kg. The part of the body that weighs 60 kg indicates a total body weight of 250 kg.

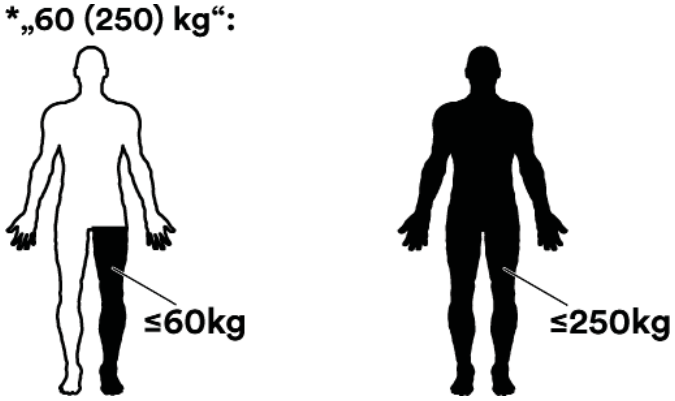


Fig. 1
Notes regarding the following table (sample values)

Article no.	Description	**Safe working load as per IEC 60601-1:2005, (*) in kg:**	Net weight per unit **in kg**:
101.0492.0	Foot supports for positioning the patient’s legs.	25	4
101.0464.0	Side rails for seat section (pair), 150 mm long, used to attach side rail accessories	25	0.3
101.0466.0	Integrated double castor (set) for the examination and treatment chair (“mobility”). Serves to transport the examination and treatment chair without a patient.	250	5
101.0472.0	Magnetic head cushion for positioning the patient’s head.	/	0.51
101.0474.0	Leatherette cover (pair) to improve the grip on the Göpel leg support	/	0.2
101.0475.0	Protective covers (pair), to protect the foot supports when used with shoes.	/	0.1
101.0482.0	2 sockets as power supply for accessories attached to the examination and treatment chair, such as colposcopes or examination lights	/	/
101.0487.0	LED illumination	/	/
101.0493.0	Göpel leg support with integrated handle, for positioning the patient’s legs during examination and treatment.	25	6
101.0471.0	Extensible leg plate to position the patient’s legs	50	3
101.0467.0	Colposcope support (attachable on both sides) for mounting colposcopes.	25	7
101.0473.0	Leatherette cover (pair) to improve the grip on the foot support	/	0.2
101.0478.0	Foot supports, short (version), for positioning the patient’s legs during examination and treatment	25	4
101.0481.0	Potential equalisation to reduce the patient leakage current	/	/
101.0483.0	2 sockets for the Swiss market as power supply for accessories attached to the examination and treatment chair, such as colposcopes or examination lights	/	/
101.0489.0	Paper roll, 500 mm wide, as hygienic cover for the pads.	/	1.5
101.0019.0	Arm rest, serves to stabilise the patient’s arm	20	6.8
101.1670.0	Attachment clamp (piece) for mounting approved accessories on the side rails.	25	0.7
101.0459.0	Göpel leg support for positioning the patient’s legs during examination and treatment	see “Safe working load” on page 45	4

Article no.	Description	Safe working load as per IEC 60601-1:2005, (*) in kg:	Net weight per unit:
101.0463.0	Side rails for seat section (pair), 290 mm long, for mounting side rail accessories	25	0.6
101.0468.0	Foot rest for the doctor, to support the doctor's feet during the examination (right-sided version).	25	1.5
101.0469.0	Foot rest for the doctor, to support the doctor's feet during the examination (left-sided version).	25	1.5
101.0476.0	Protective cover for seat pad to protect the seat pad	/	0.2
101.0465.0	Side rails for the back section for mounting accessories on the back section	20	1

Tab. 1
Approved accessories from SCHMITZ u. Söhne GmbH & Co. KG

Device description

Diagram

Fig. 2
Examination and treatment chair arco-matic 200 M / 300 M

1 Head pad	2 Head cushion (optional, 101.0472.0)	3 Back pad
4 Leatherette cladding	5 Seat pad	6 Lifting arm
7 Rear foot section cladding	8 Foot supports	9 Rinsing basin
10 Foot control unit (e.g. arco 200 M)	11 Hand control unit	12 Front foot section cladding

Tab. 2
Position numbers of the above illustration

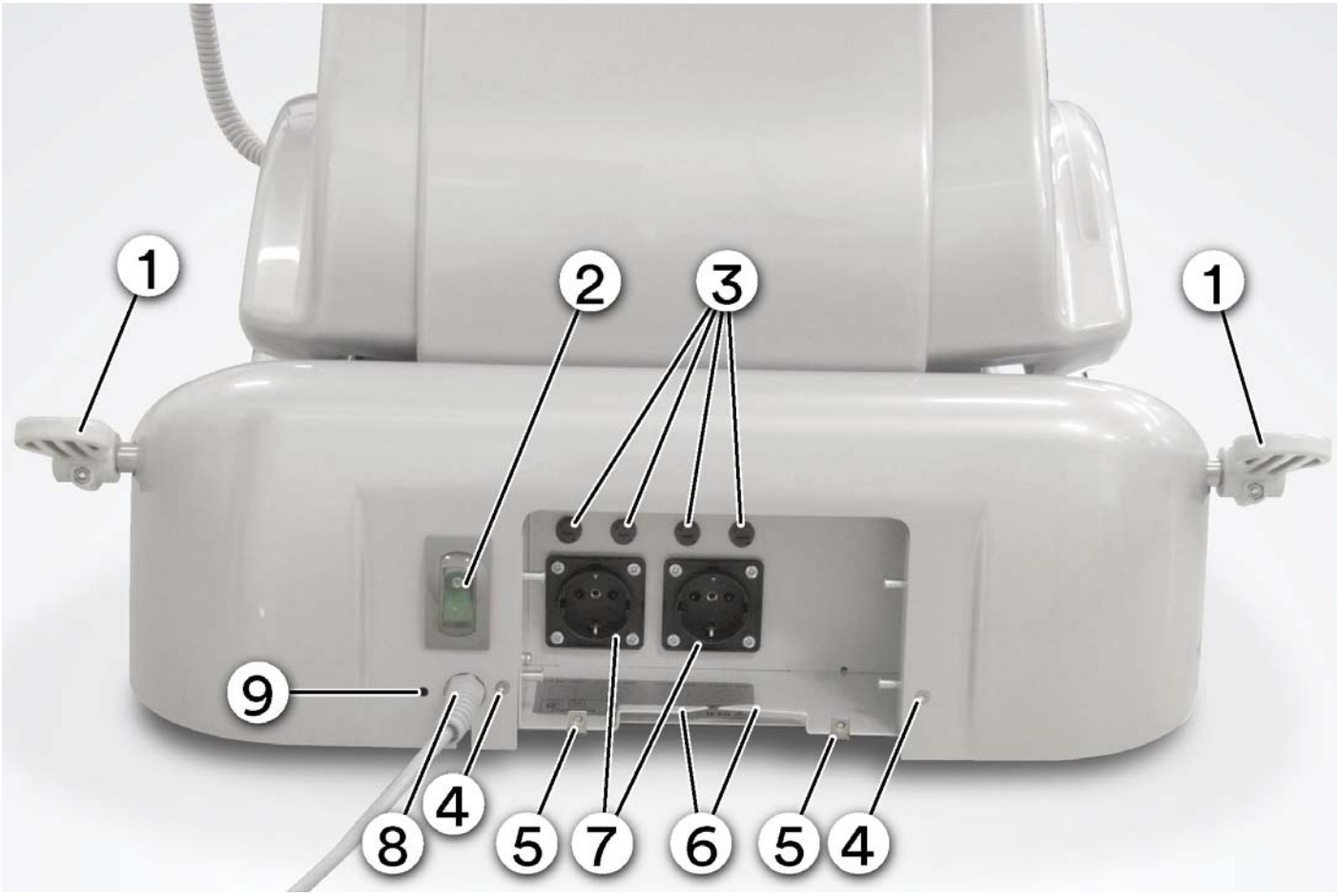


Fig. 3
Examination and treatment chair arco-matic 200 M / 300 M (back)

1	Locking pedal (optional)	2	On/off switch	3	Fine-wire fuses of the integrated sockets
4	Attachment screws for the rear foot section cladding	5	Screw thread for the attachment screws	6	Cable brackets
7	Integrated socket (optional, 101.0482.0)	8	Mains connection	9	Potential equalisation (optional, 101.0481.0)

Tab. 3
Position numbers of the above illustration

Features

arco-matic 200 M / 300 M is an adjustable examination and treatment chair for use in gynaecology.

Operation
The examination and treatment chair can be adjusted with a foot control or hand control. Four memory buttons are available for this purpose, with which the positions of all available adjustment features can be saved.
For version-specific features, see Tab. 4.

Accessories
The integrated double castors (article number 101.0466.0, optional) can be locked or set to a drive mode for “quick forward drive/rotation on its axis” or “easy mobility in all directions”.

The head cushion (article number 101.0472.0, optional) is fixed to the head pad magnetically. It can be adjusted by 560 mm in a longitudinal direction and 250 mm in a transverse direction.
During the adjustment of the examination and treatment chair, the rinsing basin remains in a horizontal position automatically. It measures 325 mm × 175 mm (depth: 65 mm) and can be removed.
Paper rolls with a width of 400 mm and 500 mm can be inserted. The diameter of these paper rolls may not exceed 140 mm. The mount for the paper roll is enclosed on all sides and thus protected against dirt.
Some models feature LED lighting. This LED lighting comes on as soon as the examination and treatment chair is connected to the mains and switched on. If the LED lighting is not required, it can be switched off by a maintenance engineer.

Feature	arco-matic 200 M	arco-matic 300 M
Seat height adjustment	present	present
Back section adjustment	present	present
Foot support adjustment	not present	present
Number of storable memory positions	4	4

Tab. 4
Version-related features of the examination and treatment chair

Control units

The examination and treatment chair is operated using a hand control unit or a foot control unit.
The control unit of the examination and treatment chair is equipped with a memory for four adjustable chair positions (“memory function”). Adjustment functions operated by electric motors are activated by a foot control unit or hand control unit.
For more information on the hand control unit, please see chapter “Hand control unit” on page 32.
For more information on the foot control unit, please see chapter “Foot control unit” on page 37.

Fig. 4
Control units of the arco-matic 200 M

Fig. 5
Control units of the arco-matic 300 M

Delivery

The product is generally stored prior to the shipping and transport of the product to the end user, and the unpacking of the delivered product at the end user's premises, by SCHMITZ u. Söhne and/or its distribution partners.

This chapter is intended for those people who handle the storage of the product prior to the shipping, the transport of the product at the end user's premises and the unpacking of the supplied product at the end user's premises.

Storing the product

NOTE

If ambient conditions deviate from the range of values stated in Tab. 5, the electronic control unit may be damaged irreparably during storage or transport.
Hence, the examination and treatment chair must not be exposed to conditions other than those indicated during transport and storage.

During transport to the place of destination and during storage, specific requirements apply for the ambient conditions. These requirements may deviate from the ambient conditions required during operation. The admissible ambient conditions during transport to the destination and during storage are indicated by symbols on the packaging.

For the ambient conditions permitted for storage and transportation, please see Tab. 5.

Parameter	Ambient temperature	Relative humidity	Air pressure
Range of values	-10°C – +50°C	20% – 95% at 30°C - non-condensing	700 – 1,060 hPa
Symbol on the packaging			

Tab. 5
Ambient conditions permitted during storage and transport

Transport to destination

The products from SCHMITZ u. Söhne are prepared for transportation when they leave the plant.

▶ After delivery, transport the product to its place of use in its original packaging!

Unpacking

NOTE

The pads of the examination and treatment chair can easily be slit when cutting open the packaging film.

The product must be unpacked at its place of use.

▶ Inspect the product during unpacking. Any damage incurred during transportation must be reported immediately to the applicable partner or SCHMITZ u. Söhne.

Transport at destination

To lift the examination and treatment chair, e.g. from a pallet, the cladding must first be removed from both foot sections. The chair must be lifted with carry straps (included in the delivery).

Attaching the carry straps
The examination and treatment chair comes with foot supports, which are fitted as shown in Fig. 6. The foot supports are fitted the other way round for delivery: the right foot support is on the left side and vice versa. The foot supports must be removed before the examination and treatment chair is transported at the destination.

- ▶ Remove the attached foot supports.
- ▶ Keep the right and left foot supports separately. Each is to be fitted on the other side respectively once the examination and treatment chair has been set up (see “Setup” on page 16).

- ▶ Attach two carry straps each on the left and right side as shown in Fig. 7 or in Fig. 8.
- ▶ Lower the examination and treatment chair from the pallet. This must be done by four people.

NOTE

The examination and treatment chair will be damaged if it is lifted by the back pad and seat pad. The examination and treatment chair must therefore always be lifted by the foot section.

Moving at the destination
Models with a mobility function can also be transported at the destination by moving the examination and treatment chair along to the desired location. Please refer to the instructions in chapter “Mobility (101.0466.0)” on page 54.

The following steps must be followed even if, at a later stage (e.g. after final use), the examination and treatment chair is to be moved and the chair is not equipped with a mobility function.

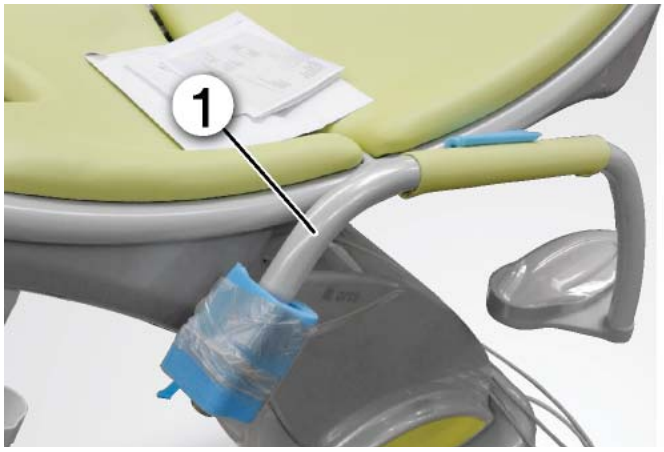


Fig. 6
Foot support, before assembly
1) Foot support

Fig. 7
Attaching carry straps (for non-mobile models)
1) Carry strap

Fig. 8
Attaching carry straps (for mobile models)

Carrying

⚠ WARNING!

Components such as the foot rest or colposcopes are not designed as carrying or lifting handles. When subjected to such a load, the component will detach from the examination chair. Serious injury may occur when the examination chair falls as a result.
Components such as the foot rest or colposcopes are not designed as carrying or lifting handles!

To carry the product after unpacking or final use, it must be brought into the transport position.

The transport position is the position in which the product was delivered:
- disconnected from the power supply,
- no mounted accessories,
- product moved down (height adjustment set to lowest level).

▶ Bring the product into the transport position.
  ▷ Disconnect the mains connection (disconnect the mains plug).
  ▷ Detach mounted accessories.
  ▷ Move the product to its lowest position.
▶ During transportation, ensure that the unit does not collide with persons or objects.

Setup

NOTE

The examination and treatment chair requires some time to acclimatise. If the acclimatisation period is too short, the examination and treatment chair may be damaged.
For this reason, please let the examination and treatment chair acclimate for at least 12 hours after every transport.

NOTE

The power cord and supply cable for the foot control unit may be damaged if the levelling screws touch down on them.
For this reason, always make sure that none of the electric cables are pinched under the levelling screws or under the foot section.

▶ Set up the unit so as to ensure that
  - the product can be used and operated without any obstruction,
  - the mains plug is easily accessible,
  - the displays can be read easily, and
  - that existing switches can be operated easily (e.g. the on/off switch at the rear must be easily accessible).
▶ Fit the removed foot supports (see “Attaching the carry straps” on page 15) to the opposite side to which they were previously fitted.

Preparation for operation

Final mechanical works on the product are generally performed by SCHMITZ u. Söhne or its distribution partners. In so doing, the examination and treatment chair must be levelled out, the foot section cladding must be attached and the cradle of the hand control unit must be mounted.
This chapter is intended for people who deal with the final mechanical works on the products.

The final mechanical works may be performed only by personnel trained and authorised by SCHMITZ u. Söhne or its distribution partners.
Performing the works described in this chapter requires a spirit level, an M3 hexagon spanner, a Phillips screwdriver, an M2.5 hexagon spanner and a bar.

Levelling

The levelling feet serve to compensate for uneven floors and to ensure that the examination and treatment chair is placed in a horizontal position.

- ▶ Lift the examination and treatment chair on one side.
- ▶ Secure the examination and treatment chair by placing a bar under the foot section.
- ▶ Turn the levelling foot in or out.
- ▶ Remove the bar and lower the examination and treatment chair.
- ▶ Check to see if the examination and treatment chair stands properly.

Repeat until the examination and treatment chair stands properly.

NOTE

The power cord and supply cable for the foot control unit may be damaged if the levelling screws touch down on them.
For this reason, always make sure that none of the electric cables are pinched under the levelling screws or under the foot section.

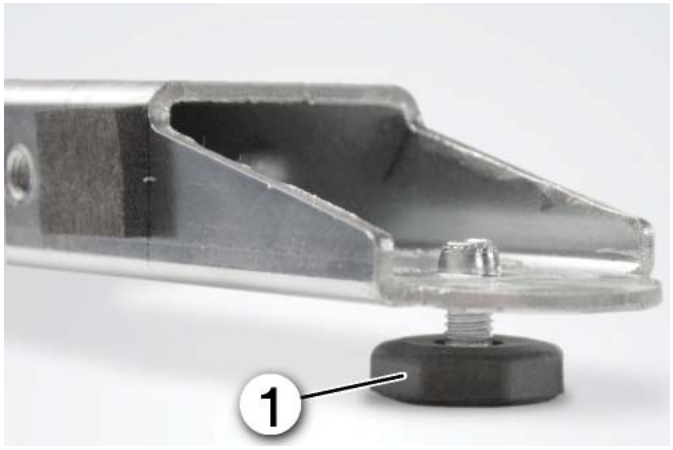


Fig. 9
Lifting the examination and treatment chair
1) Front levelling foot (octagonal)

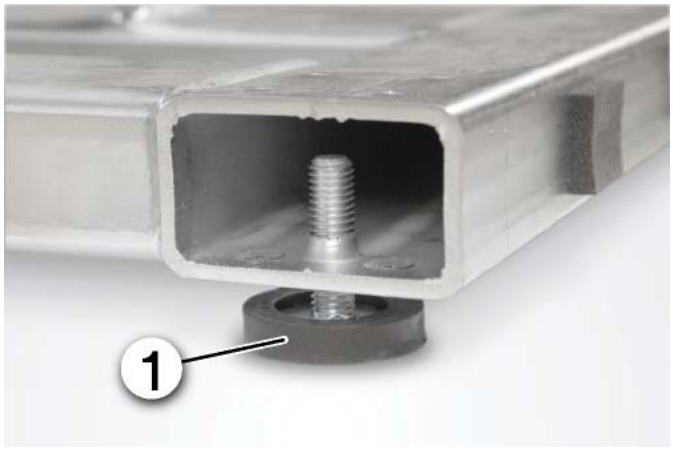


Fig. 10
Lifting the examination and treatment chair
1) Rear levelling foot

Setting up a hardwired connection (optional)

The examination and treatment chair can, if necessary, be hardwired on-site instead of connected to the mains supply via the mains cable. This requires some adjustments to be made in the control unit housing.

⚠ DANGER!

Risk of electric shock!
Improper electrical work to the examination and treatment chair puts patients, medical personnel and those carrying out the work at risk!
The modifications listed in this chapter must, therefore, only be carried out by qualified specialist personnel! The examination and treatment chair must be completely disconnected from the mains supply during such work!

If setting up an electrical hardwired connection for the examination and treatment chair, a wall switch must be installed, which can switch the examination and treatment chair off.

- ▶ Disconnect the mains plug of the examination chair.
- ▶ Undo and remove the attachment screws on the cover of the control unit housing as shown in Fig. 11.
- ▶ Remove the cover of the control unit housing as shown in Fig. 12.

- ▶ Undo the screw from the mains socket.
- ▶ Undo the conductors of the mains cable on the mains adapter.
- ▶ Undo the mains cable attachment screw (Fig. 13, Pos. 5).

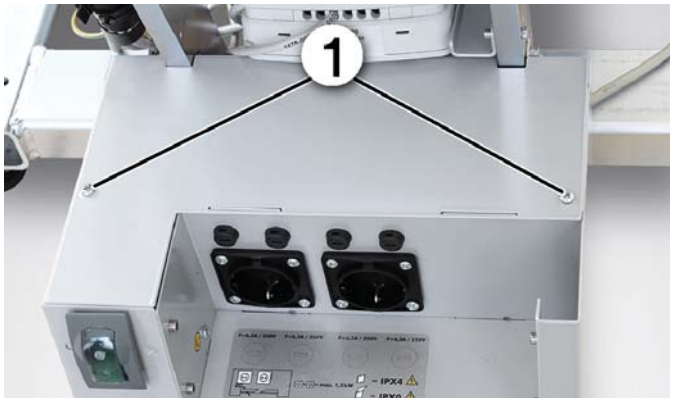


Fig. 11
Remove the cover of the control unit housing

Fig. 12
Remove the cover

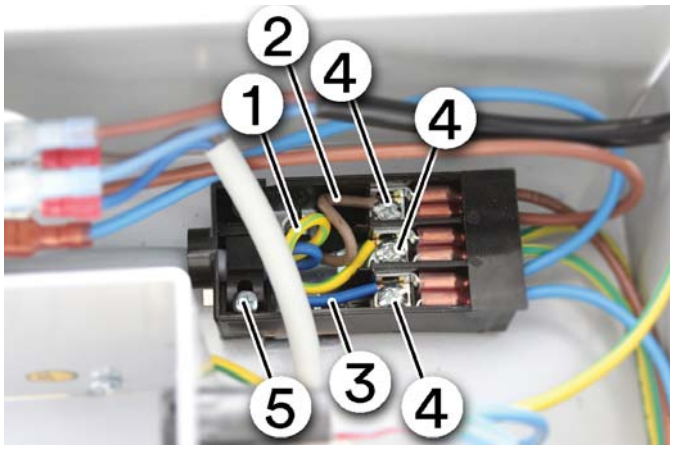


Fig. 13
Inside of the mains socket
1) Green and yellow protective earth conductor 2) Brown conductor 3) Blue conductor 4) Cable attachment screws 5) Mains cable attachment screw

▶ Disconnect the mains cable from the control unit housing.

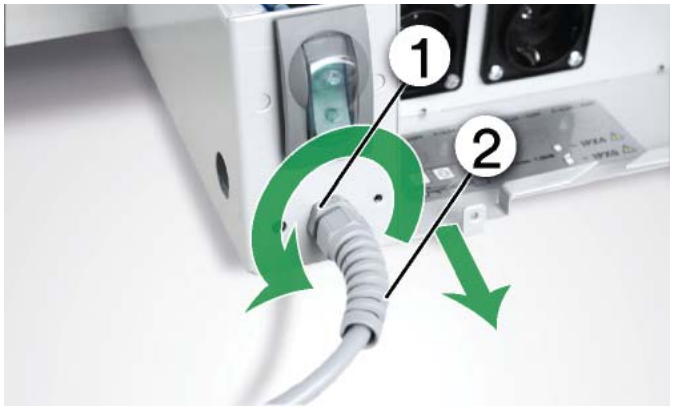


Fig. 14
Disconnect the mains plug
1) Screw connection 2) Mains plug

▶ Feed the mains cable of the on-site electrical connection through the opening in the control unit housing as shown in Fig. 15.
▶ Connect the conductors of the new mains cable to the mains socket as shown in Fig. 13.
▶ Put the cover back on the mains socket and screw on.
▶ Replace the cover of the control unit housing.
▶ Secure the cover of the control unit housing again with attachment screws.

Fig. 15
Feed the mains cable through the opening
1) Mains socket 2) Mains cable

Fitting the back foot section cover

If the product is equipped with mounted double castors, the rear foot section cladding is already mounted.

▶ If the product is not equipped with double castors:

▷ Place the rear foot section cladding in the correct position as shown in Fig. 16. The power cord must be guided through the recess in the rear foot section cladding.

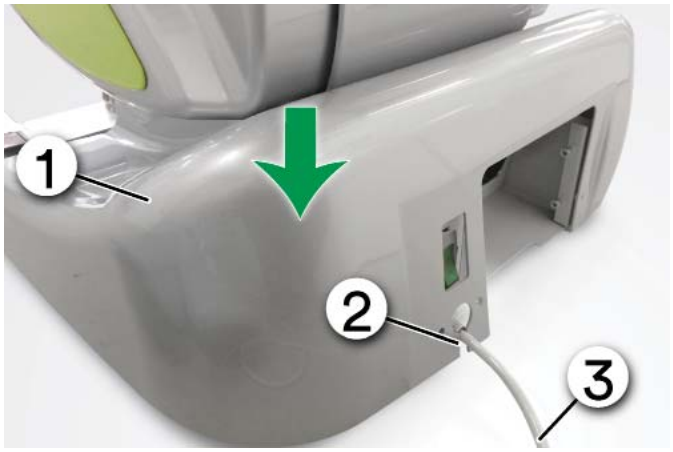


Fig. 16
Mounting the rear foot section cladding
1) Rear foot section cladding 2) Recess 3) Power cord

▷ Insert two attachment screws for the rear foot section cladding into the bores for the attachment screws and tighten them with the supplied 2.5 mm hexagon spanner.

Fig. 17
Mounting the attachment screws
1) Attachment screw (Allen screw, M 2.5)

▷ Position the splash protection for the on/off switch and press down firmly.

▷ Insert the socket cladding and fuses and press down firmly.

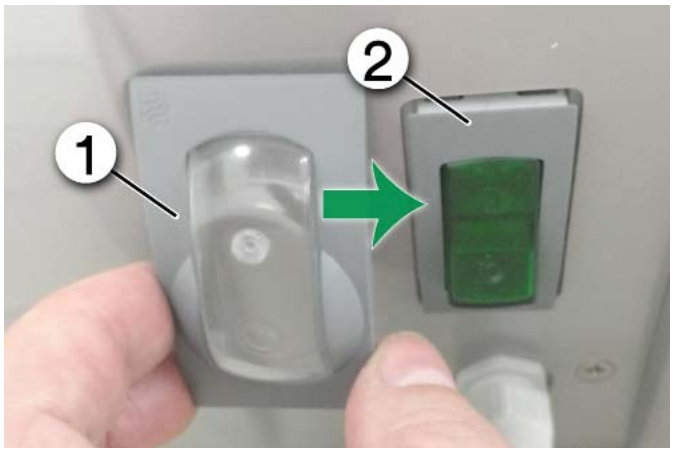


Fig. 18
Fitting the splash protection of the on/off switch
1) Splash protection of the on/off switch 2) On/off switch

▷ Tighten the screw locking device of the power cable.

Fig. 19
Mounting the screw locking device of the power cable
1) Screw locking device of the power cord 2) Screw thread of the power cord 3) Attachment screw

▷ Insert the socket cladding and press down firmly.
▷ Insert the attachment screws and tighten with the M2.5 hexagon spanner provided.

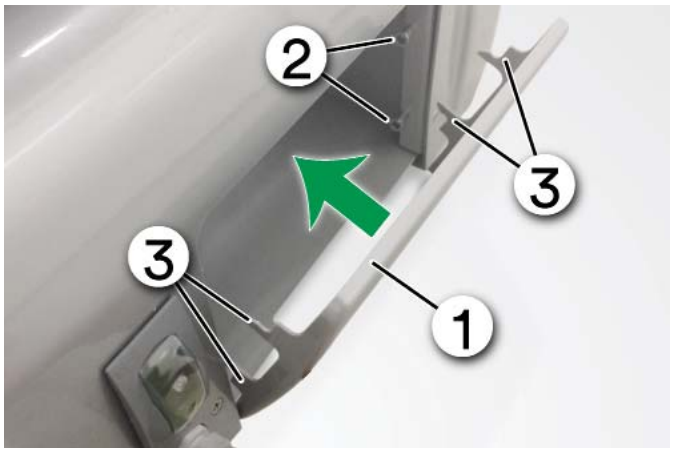


Fig. 20
Fitting the socket cladding
1) Socket cladding 2) Retaining pin 3) Retaining clips

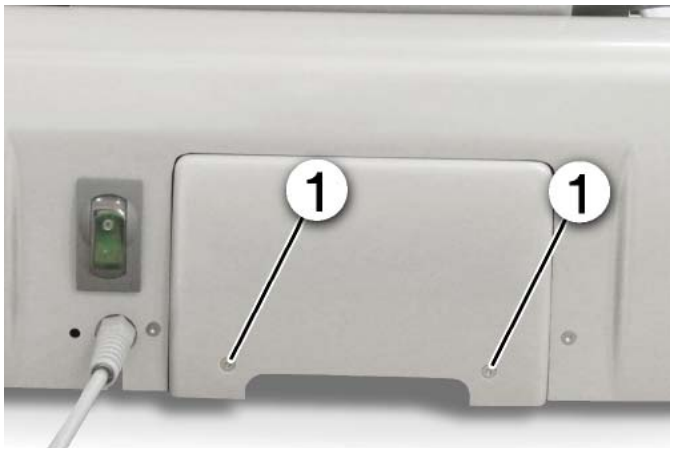


Fig. 21
Tightening the attachment screws
1) Attachment screws (Allen screw, M 2.5)

- ▶ Connect the mains connection cable to the mains supply.
- ▶ Switch on the examination and treatment chair using the on/off switch.
- ▶ Elevate the examination and treatment chair to the highest position (see Tab. 8 on page 34).

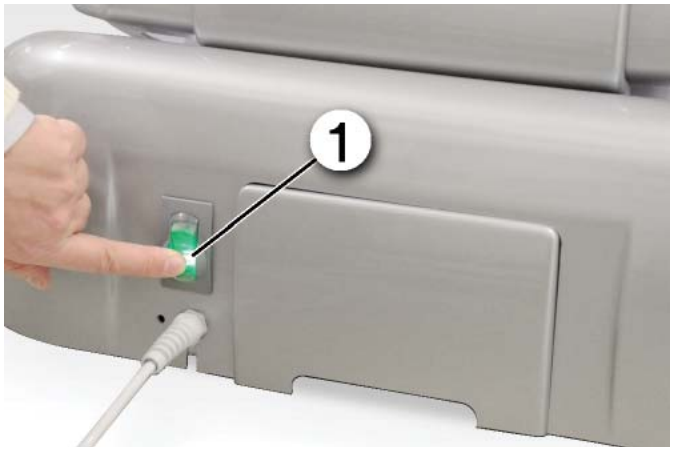


Fig. 22
Switching on the examination and treatment chair
1) On/off switch

Connecting the foot control unit

- ▶ Place the frontal foot section cover on the foot section as shown in Fig. 23.
- ▶ Pull the connecting cable of the foot control (3) through the recesses on the bottom of the foot section cover.

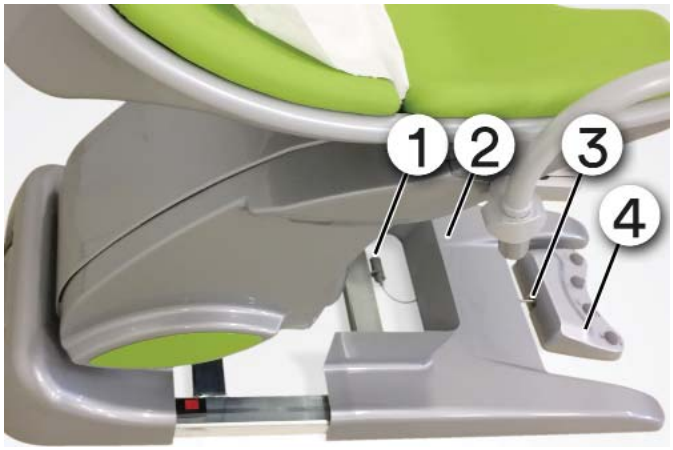


Fig. 23
Feed the connecting cable through the foot section cover
1) Connector socket 2) Frontal foot section cover 3) Connecting cable 4) Foot control unit

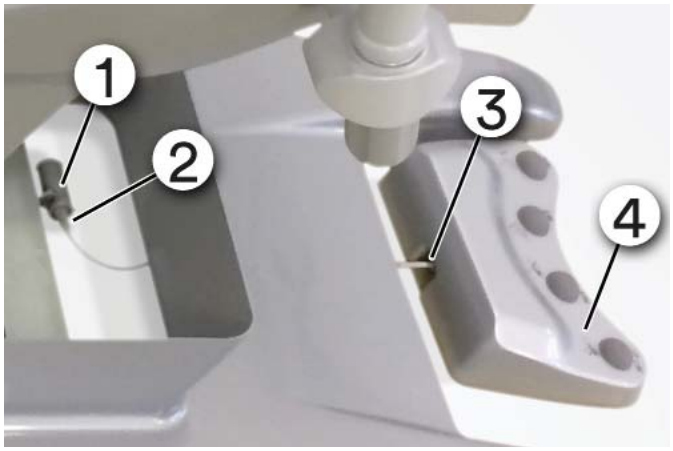


Fig. 24
Connecting the foot control unit
1) Connector socket 2) Connector plug 3) Connecting cable 4) Foot control unit

The connector plug features a nose.

- ▶ Turn the connector plug so that, when it is plugged in, the nose fits into the corresponding groove in the connector socket.
- ▶ Insert the connector plug of the connecting cable into the connector socket. Gently push the connector plug until it engages.
- ▶ Secure the connector plug with a locking plate and two wing nuts as shown in Fig. 25 (insert top left).

Fig. 25
Securing the connector plug
1) Retaining pin 2) Wing nuts 3) Locking plate 4) Connector plug

Fitting the front foot section cover

▶ Lift the panel as shown in Fig. 26.
▶ Slide the front foot section cladding towards the rear foot section cladding as shown in Fig. 26.

Fig. 26
Mounting the front foot section cladding
1) Front foot section cladding 2) Panel

▶ Ensure that the panel does not rest at any point on the collar of the foot section cover.

NOTE

If the panel rests on the collar of the front foot section cladding, the cladding of the examination and treatment chair will be damaged when the seat pad is lowered.
Hence, ensure that the panel can slide without obstruction over the collar of the front foot section cladding!

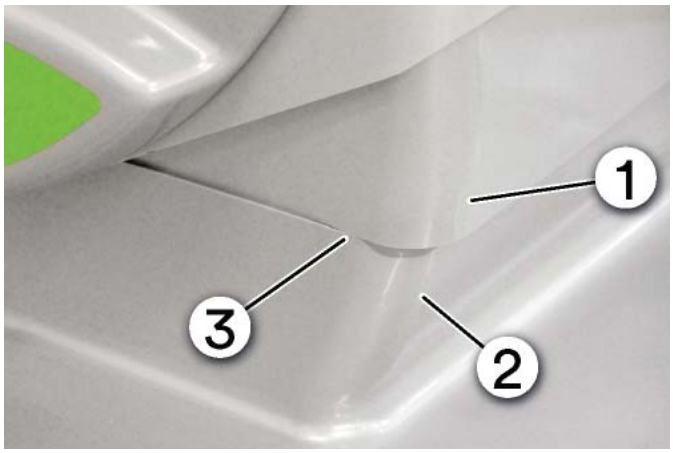


Fig. 27
Faulty installation of the front foot section cladding
1) Panel 2) Collar of the front foot section cladding 3) Point where the panel rests on the collar

▶ Attach the front foot section cladding to the back foot section cladding using the top and bottom attachment screw as shown in Fig. 28.

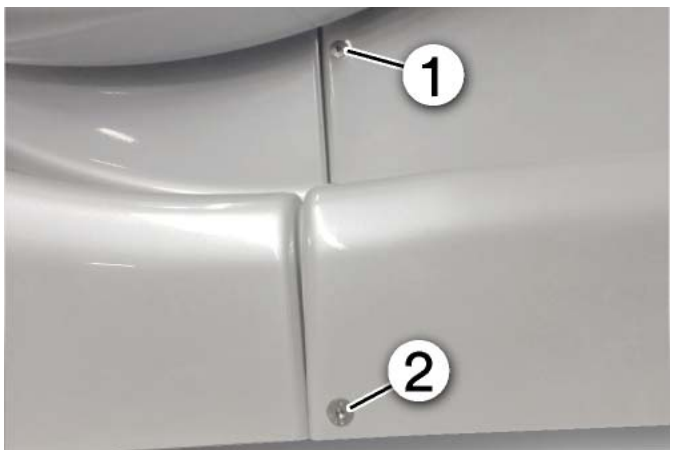


Fig. 28
Attaching the front and rear foot section cladding
1) Top attachment screw 2) Bottom attachment screw

Connecting the hand control unit

▶ Connect the plug of the connection cable to the hand control unit.

Fig. 29
Connect the plug of the connection cable to the hand control unit
1) Plug of connection cable to hand control unit

▶ Insert the locking plate.

Fig. 30
Insert the locking plate

▶ Insert and tighten attachment screws.

Fig. 31
Tightening the attachment screws

Mains connection

⚠ DANGER!

Operating the examination chair without electric protective earth conductors may cause electrocution and burns on patients and third parties.
To prevent the risk of electric shock, the examination chair may only be connected to a mains supply with a protective earth conductor.

⚠ CAUTION!

Power cords may cause people to trip and get hurt. Such cords include the examination chair or instrument disposal power cords, or the supply cable for the foot control unit.
For this reason, do not run power cords where people walk, wherever possible. Where doing so is unavoidable, install cable ducting.

NOTE

The equipment may be damaged if the incorrect mains voltage is connected.
The mains voltage and mains frequency of the connected voltage supply must correspond to the voltage indicated on the identification plate of the examination chair!

▶ Connect the mains connection to the mains voltage.

Permitted mains voltage: see the information on the identification plate (see also “Identification plate” on page 70).

Potential equalisation (optional, 101.0481.0)

Under normal operating conditions, the device parts are under no or only minimal electrical voltage. Technical faults can however give rise to considerable voltages which on contact would be transmitted to people.
The potential equalisation protects patient, users and third parties from such contact voltages.

▶ Connect the potential equalisation with a cable to the main earthing terminal of the building.

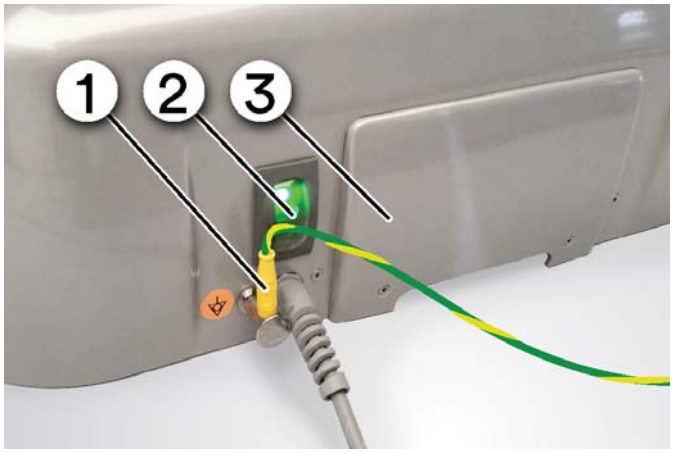


Fig. 32
Potential equalisation
1) Fitted potential equalisation 2) On/off switch 3) Socket cladding

Sockets on the device (optional, 101.0482.0)

⚠ DANGER!

Risk of electric shock!
If a multi-socket outlet is installed, connecting electrical devices to the multi-socket outlet constitutes an ME system and thus a reduced level of safety according to IEC 60601-1:2005+A1:2012. This has consequences for the “Responsible Organisation” (the operator).
The operator (doctor, clinic, hospital) must ensure that the ME system (the examination and treatment chair together with the connected devices) fulfil certain electrotechnical installation and operational requirements in order to protect the patient and medical personnel.
These requirements can be found in IEC 60601-1:2005+A1:2012.

⚠ WARNING!

When connecting the mains plug, devices connected to the integrated sockets can sometimes unexpectedly move and cause personal injury. This can happen regardless of the position of the master switch on the examination and treatment chair. Therefore, before connecting the mains plug, make sure that the devices connected to the integrated sockets are safe to operate.

For example, examination lights and video colposcopes can be connected to the integrated sockets on the examination and treatment chair.
Voltage is applied to the integrated sockets on the examination and treatment chair as soon as the mains plug of the examination and treatment chair is connected to the mains. If the examination and treatment chair is hardwired to the mains, there is always voltage at the integrated sockets.
Unlike other examination and treatment chairs by SCHMITZ u. Söhne GmbH & Co.KG, it is not possible to switch the integrated sockets on and off.
The sockets can be disconnected from the power supply in the following ways:

- Disconnect the mains plug (if the examination and treatment chair is connected to the mains by a mains plug),
- Press the switch of the ground cable (if the examination and treatment chair is hardwired to the mains).

Fig. 33
Remove the socket cladding

Connecting

▶ Undo the attachment screws of the socket cladding.
▶ Remove the socket cladding.
▶ Connect electric equipment, such as a colposcope or examination light, to the integrated socket.

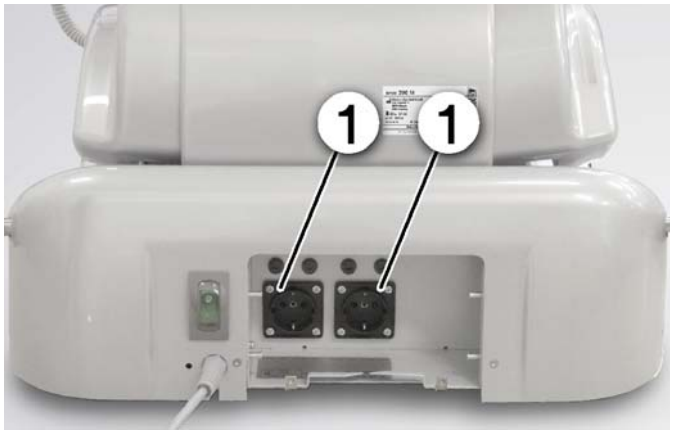


Fig. 34
Power supply on the device
1) Integrated socket

▶ Insert the power cord of the accessory device under the cable bracket.

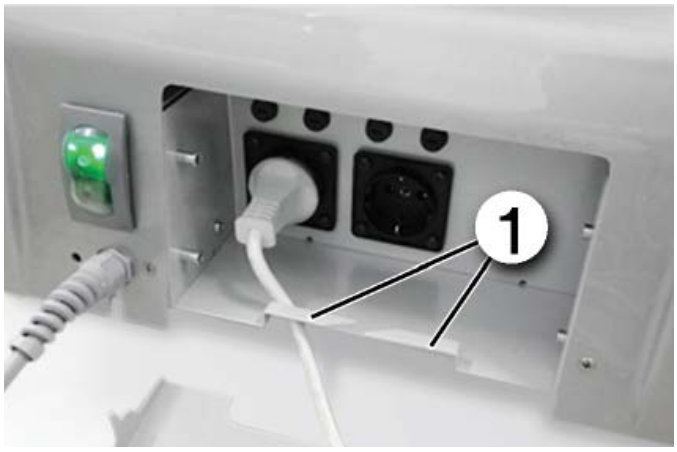


Fig. 35
Installing the cables
1) Cable brackets

▶ Replace the socket cladding.

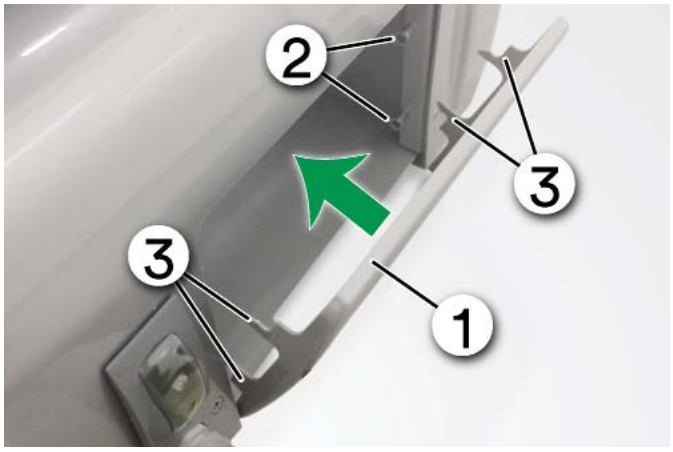


Fig. 36
Fitting the socket cladding and fuses
1) Socket cladding 2) Retaining pin 3) Retaining clips

▶ Reinsert the attachment screws of the socket cladding and tighten with the M2.5 hexagon spanner.

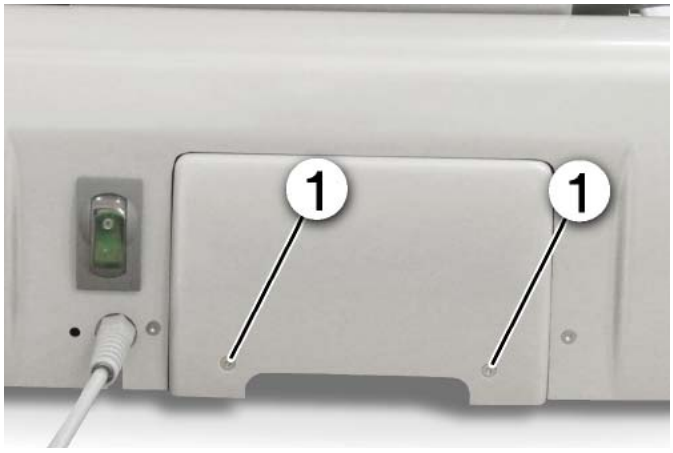


Fig. 37
Tightening the attachment screws
1) Attachment screws (Allen screw, M 2.5)

Positioning patients

⚠ DANGER!

The examination and treatment chair may tip in a longitudinal or transverse directions if the chair is loaded incorrectly or inappropriately. During an examination/treatment, in particular, a tipping examination and treatment chair may cause injury to people.
Hence, to improve the tipping safety, position patients in the middle of the chair and have them get on the centre of the chair. If side rail accessories or insertable accessories have been mounted, in some cases the tipping safety in the longitudinal or transverse directions will be reduced. Follow the respective instructions for use!

⚠ DANGER!

If loaded excessively, a material failure of the examination and treatment chair may cause damage. This may cause patients to suffer life-threatening injuries in some cases.
Do not load the examination and treatment chair with a weight of more than 250 kg!

⚠ DANGER!

Risk of serious injury!
Because the examination and treatment chair is electrically conductive, HF surgical devices and defibrillator devices may cause care-providing staff to sustain electric shocks and burns.
The patient must be electrically insulated from the examination and treatment chair if the examination and treatment chair is used in combination with HF surgical devices and defibrillator devices. Use electrically insulated underlays between the patient and the examination and treatment chair.

⚠ WARNING!

Unsecured equipment may move unexpectedly when the patient is getting on, which can lead to injuries or damage to property.
Hence, before the patient gets on, always ensure that all castors on the device have been locked!

⚠ CAUTION!

Unintentionally stepping on the foot control unit will cause the examination chair to begin moving, and may lead to personal injury in some circumstances.
For this reason, position the foot control unit so that patients are unable to inadvertently step on its buttons when getting on and off the examination chair.

⚠ CAUTION!

If the rinsing basin has been removed, the patient may collide with the rinsing basin bracket when getting on/off the chair.
Accordingly, insert the rinsing basin before the patient gets on/off the chair!

RECOMMENDATION

Help patients to get on or off the examination and treatment chair.

- ▶ Before positioning patients on the examination and treatment chair, ensure that the examination and treatment chair functions properly.
- ▶ Do not fail to lock the double castors of the examination and treatment chair before patients get on the chair!
- ▶ Raise back pad.
- ▶ Make sure that patients only get into the chair via the seat pad!
- ▶ If the patient is unsure, help him or her get in and out the chair.

The access height is 550 mm.

Safety information

⚠ WARNING!

When adjusting the device and accessories, body parts may be crushed/overstretched.
For this reason, please observe the patient during adjustment and ensure that such injuries are avoided!

⚠ WARNING!

There is an increased risk of injury for patients, users and third parties when using the memory function, as it is difficult to assess automatic adjustment in relation to accessories and other objects. This can lead to e.g. crushing injuries.
For this reason, keep the examination chair under constant observation during automatic adjustment! Make sure that you are able to step in to help at any time! In order to cancel an adjustment, press any button on the hand control or foot control.

⚠ WARNING!

During adjustment, the examination chair or the accessories mounted on it (e.g. Göpel leg support) may collide with body parts or other objects, leading to personal injury or property damage.
Make sure that there is sufficient clearance when performing adjustments for this reason!

⚠ CAUTION!

When the examination chair is lowered, the doctor's feet may be crushed if they are on the foot rest.
For this reason, the feet should be removed from the foot rest before lowering the examination chair!

⚠ CAUTION!

Patients may slide off the seat surface if the Göpel leg support is lowered all the way down.
For this reason, only lower the Göpel leg support ¾ of the way!

NOTE

While adjusting the device and accessories, objects may be damaged.
Ensure sufficient clearance when performing adjustments!

NOTE

When adjusting the examination and treatment chair, mounted colposcopes can easily collide with the chair or attached accessories and cause damage.
Before adjusting the examination and treatment chair, swivel the mounted colposcope to the side!

Switching on / off

Switching on

▶ To switch on the examination and treatment chair, press the top half of the on/off switch.

The indicator light in the on/off switch lights up.

Ambient conditions

During operation there are specific limits that apply with regard to the ambient conditions. To view the list of ambient conditions permitted for operation, please see Tab. 6.

Ambient condition	Value
Ambient temperature	+5°C – +40°C
Relative humidity	20% – 95% at 30°C - non-condensing
Permitted operating height	2.000 m above sea level

Tab. 6
Permissible ambient conditions during operation

Switching off

▶ To switch off the examination and treatment chair, press the lower half of the on/off switch.

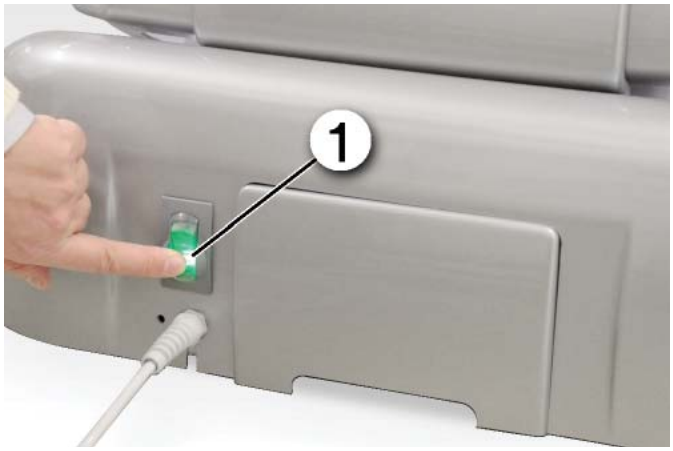


Fig. 38
Switching on the examination and treatment chair
1) On/off switch

Hand control unit

The examination and treatment chair can be adjusted using the hand control unit. The integrated LED illumination indicates the saving of memory positions, the operating status and warnings.

Buttons and displays

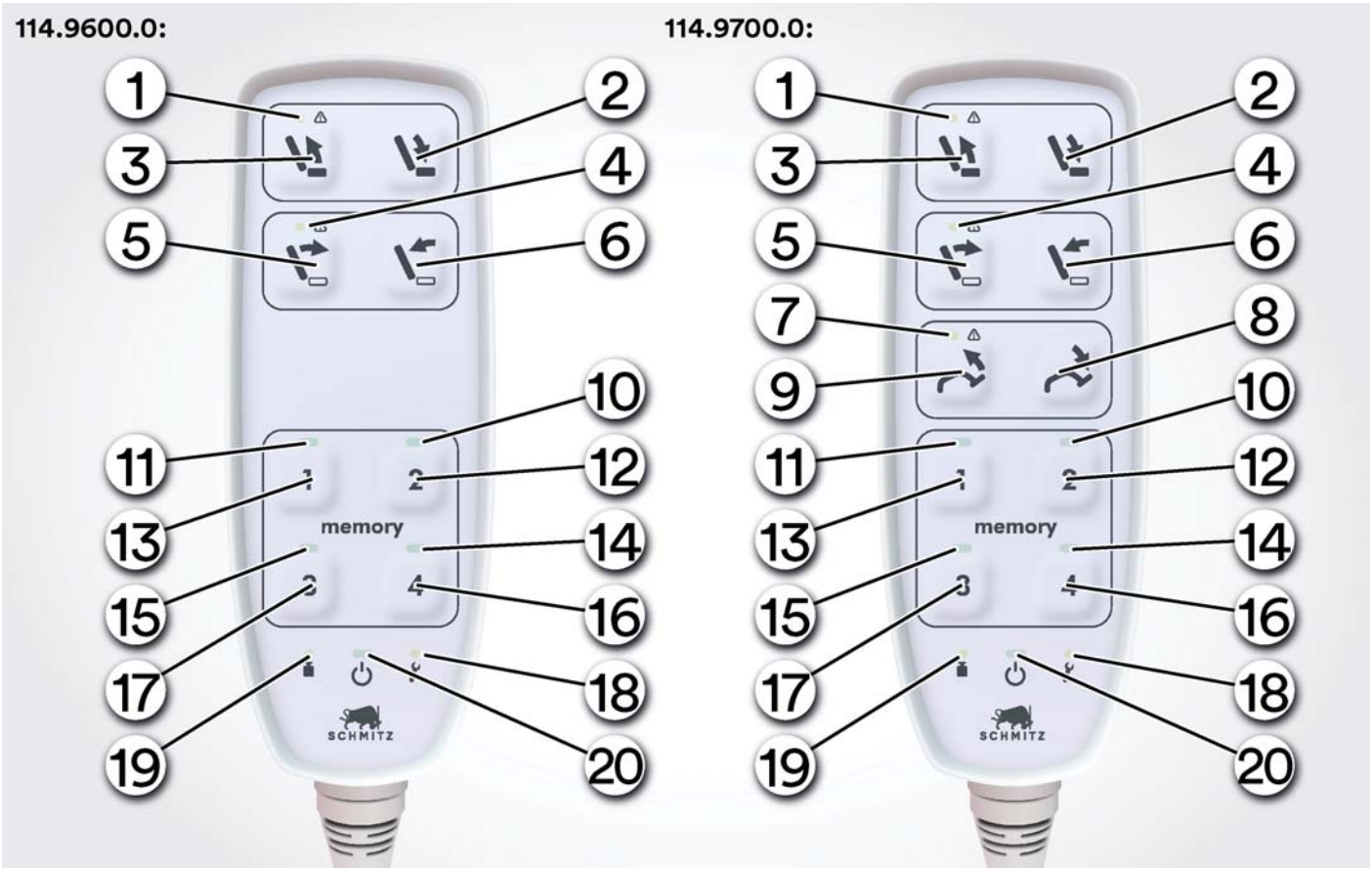


Fig. 39
Hand control unit of the arco-matic 200 M (114.9600.0) and 300 M (114.9700.0)

1	Motor indicator light of the height adjustment	7	Motor indicator light of the foot support adjustment	14	Indicator light, memory position 4
2	Adjustment button: lower seat section	8	Adjustment button: lower foot support	15	Indicator light, memory position 3
3	Adjustment button: raise seat section	9	Adjustment button: raise foot support	16	Memory button: move to memory position 4
4	Motor indicator light of the back section adjustment	10	Indicator light, memory position 2	17	Memory button: move to memory position 3
5	Adjustment button: raising the back section	11	Indicator light, memory position 1 (access position)	18	General warning light: notify Technical Service
6	Adjustment button: lowering the back section	12	Memory button: move to memory position 2	19	General warning light: excessive strain on motor
		13	Memory button: move to memory position 1	20	Indicator light for operating status

Tab. 7
Position numbers of the above illustration

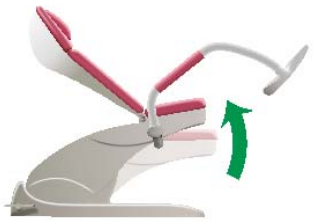
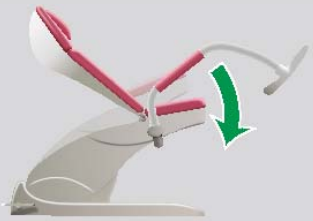
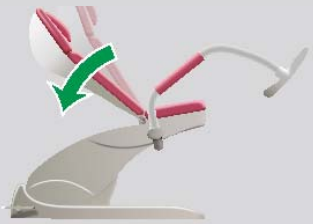
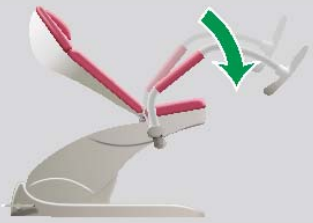
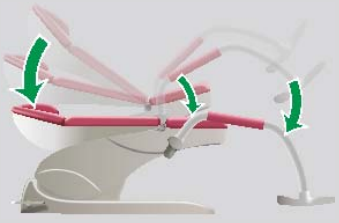
Operation

The examination and treatment chair can be adjusted using the following buttons:

- adjustment buttons and
- memory buttons.

For an overview of the various functions, see Fig. 39.

The adjustment buttons adjust the examination and treatment chair as long as the adjustment button remains pressed or until the chair is in the end position. For adjustments using the memory buttons, see Tab. 8. Memory position M1 is reserved for the access position.

Operation	Symbol	Function	Diagram
Press the adjustment button		Raises the seat of the examination chair	
Press the adjustment button		Lowers the seat of the examination chair	
Press the adjustment button		Raises the back of the examination chair	
Press the adjustment button		Lowers the back of the examination chair	
Press the adjustment button		Raises the foot supports of the examination chair (only available on arco-matic 300 M)	
Press the adjustment button		Lowers the foot supports of the examination chair (only available on arco-matic 300 M)	
Press the memory button until the related indicator light lights up constantly (for about 5 seconds)	1 2 3 4	**Save memory position:** The current position of the examination and treatment chair will be saved as the new memory position.	
Double-clicking the memory button	1 2 3 4	**Load memory position:** Moves to saved memory position	

Tab. 8
Operating the hand control buttons

Example of an adjustment: horizontal position
The ideal ergonomic access height of just 550 mm in turn means a low height when putting the patient into the horizontal position.

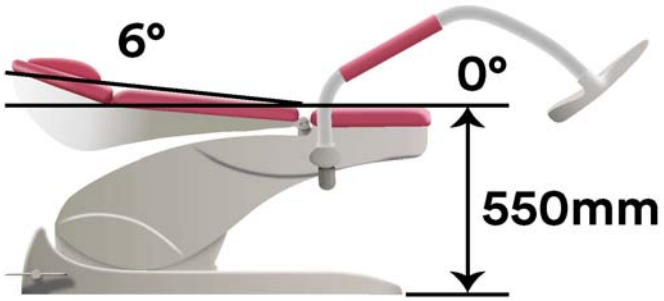


Fig. 40
Example 1

Alternatively, the patient can be put into the horizontal position as shown in Fig. 41.

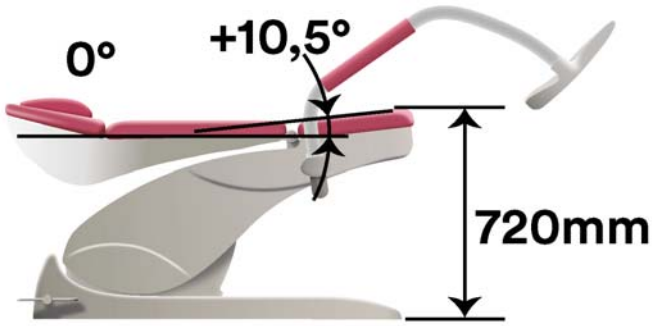


Fig. 41
Example 2

Example of an adjustment: shock position

⚠ CAUTION!

In the event of an unexpected movement into the shock position (seat pad up, back pad down), patients may get a fright and injure themselves by sudden countermovements.
Therefore, move the examination and treatment chair carefully to the shock position, and inform the patient about the planned changed in position!

Fig. 42
Caution in the shock position

Displays

The display of the hand control unit has
- two general warning lights,
- one motor indicator light for every adjustable element,
- four memory lights and
- the operational status light.

For the meaning of the light modes of the warning lights, display lights and memory lights, see Tab. 9.

Lights	Colour	Symbol	Action to be taken when LED is permanently on	Action to be taken when LED is flashing
General warning light	yellow		(not applicable)	Excessive strain on motor ▶ Reduce load.
General warning light	yellow		(not applicable)	▶ Controller reset: press and hold buttons 1 and 2 on the hand control unit together for approx. 5 seconds. ▶ If the warning light continues to flash amber: notify Technical Service.
Malfunction indicator lights	yellow		▶ Notify Technical Service.	▶ Lower the seat section as far as possible. ▶ Lower the back section as far as possible. ▶ Lower the foot support as far as possible. The LED illumination stops blinking.
Memory lights	green	**1 / 2 / 3 / 4**	The memory position was saved successfully.	The current position of the examination and treatment chair will be saved as the new memory position (press the memory button).
Operational status light	green		The examination and treatment chair is switched on.	(not applicable)

Tab. 9
Light mode and meaning of the warning lights and memory lights

⚠ CAUTION!

Unintentionally stepping on the foot control unit will cause the examination chair to begin moving, and may lead to personal injury in some circumstances. For this reason, position the foot control unit so that patients are unable to inadvertently step on its buttons when getting on and off the examination chair.

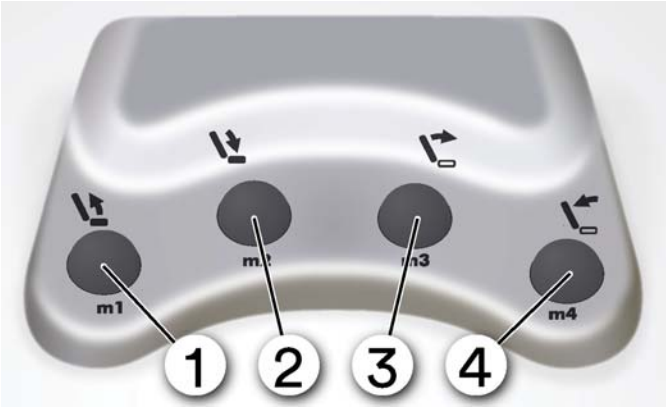


Fig. 43
Foot control unit arco-matic 200 M
1) “Seat up” adjustment button / memory button 1
2) “Seat down” adjustment button / memory button 2
3) “Back up” adjustment button / memory button 3
4) “Back down” adjustment button / memory button 4

The foot control unit has the same adjustment and memory functions as the hand control unit. Adjustment functions are triggered by a continuous pressing of the adjustment button. The chair moves to memory positions by double-clicking.
The foot control unit does not have any warning lights, memory lights or operational status lights. It is not possible to program memory positions.

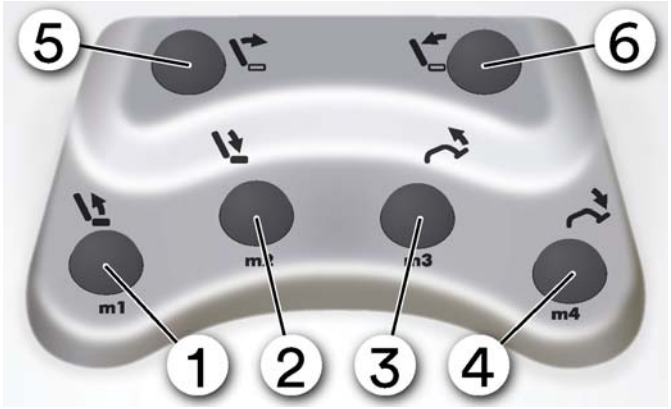
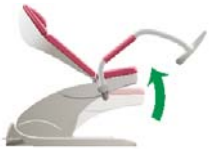
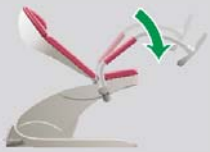
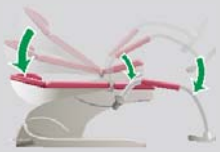


Fig. 44
Foot control unit arco-matic 300 M
1) “Seat up” adjustment button / memory button 1
2) “Seat down” adjustment button / memory button 2
3) “Leg support up” adjustment button / memory button 3
4) “Leg support down” adjustment button / memory button 4
5) “Back up” adjustment button
6) “Back down” adjustment button

Operation	Position number in Fig. 43 and Fig. 44	Symbol	Function	Diagram
Continuous pressing of the adjustment button	1		Raises the seat of the examination chair	
Continuous pressing of the adjustment button	2		Lowers the seat of the examination chair	
Continuous pressing of the adjustment button	3		Raises the back of the examination chair	
Continuous pressing of the adjustment button	4		Lowers the back of the examination chair	
Continuous pressing of the adjustment button	5		Raises the foot supports of the examination chair (only available on arco-matic 300 M)	
Continuous pressing of the adjustment button	6		Lowers the foot supports of the examination chair (only available on arco-matic 300 M)	
Double-clicking the memory button	1	m1	Moves to saved memory position	
Double-clicking the memory button	2	m2	Moves to saved memory position	
Double-clicking the memory button	3	m3	Moves to saved memory position	
Double-clicking the memory button	4	m4	Moves to saved memory position	

Tab. 10
Operating the foot control buttons

Standard accessories

This chapter summarises how to assemble and operate the moving product parts that come with the product as standard.

Back pad

The back pad can be moved upright. This permits access to the paper roll.

Setup

- ▶ Lift off the back pad.
- ▶ Lift the upper part of the back pad as shown in Fig. 45.
- ▶ Remove the retaining bar (Pos. 1) from the bracket (Pos. 2).
- ▶ Support the top half of the back pad with the retaining bar as shown in Fig. 45. The retaining bar must stand vertical to the back pad.

Now you can replace the paper roll, etc.

⚠ WARNING!

The retaining bar is not designed to support a person's weight. If the upright back pad has to bear a person's weight, the retaining bar breaks, and the person falls. In this case, the person may suffer severe injuries.
Never allow anyone to get on the examination and treatment chair as long as the top half of the back pad is held upright by the retaining bar.

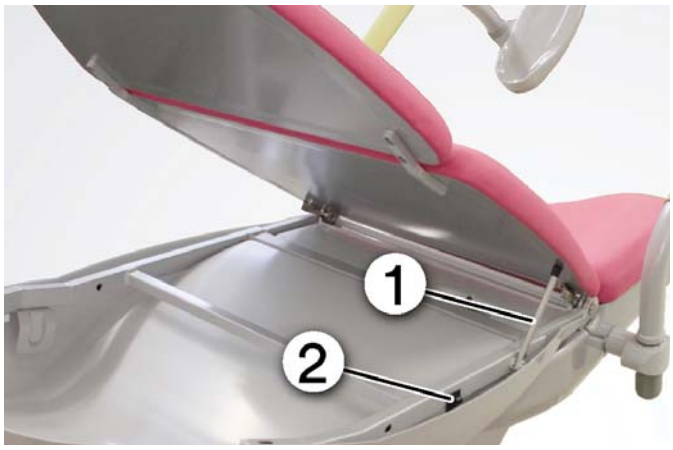


Fig. 45
Propping up the back pad
1) Retaining bar 2) Bracket

Lowering

- ▶ Lift the upper part of the back pad.
- ▶ Press the retaining bar into the bracket.
- ▶ Lower the top half of the back pad.

Seat pad

The seat pad can be raised.

Replacement

▶ Lift off the old seat pad.

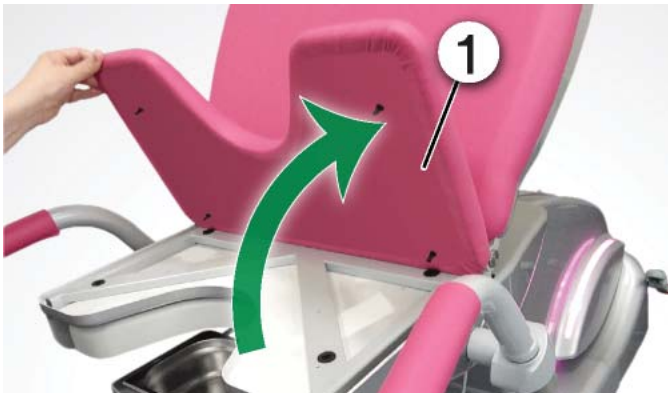


Fig. 46
Lifting off the old seat pad
1) Seat pad

▶ Put on the new seat pad. The four pins on the back must fit into the opposite pin mounting hole.
▶ Firmly press down the new seat pad. The four pins on the back must lock into the opposite pin mounting hole.

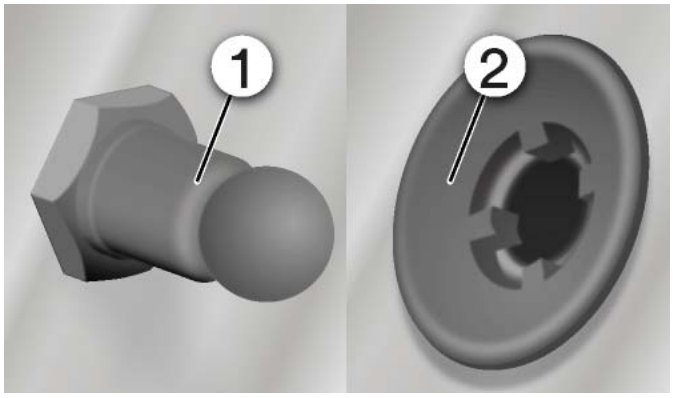


Fig. 47
1) Pin 2) Pin mounting hole

Head pad

The back pad can be tilted forwarded together with the head pad attached to it.

Replacement

- ▶ Fold the back pad forward as shown in Fig. 48.
- ▶ While firmly holding the head pad, unscrew and remove the four attachment screws. Hold on firmly to the head pad.
- ▶ Remove the old head pad.

- ▶ Mount the new head pad on the back pad, as shown in Fig. 49, with four attachment screws.
- ▶ Fold the back pad back again.

Fig. 48
Folding the back pad forward
1) Back pad

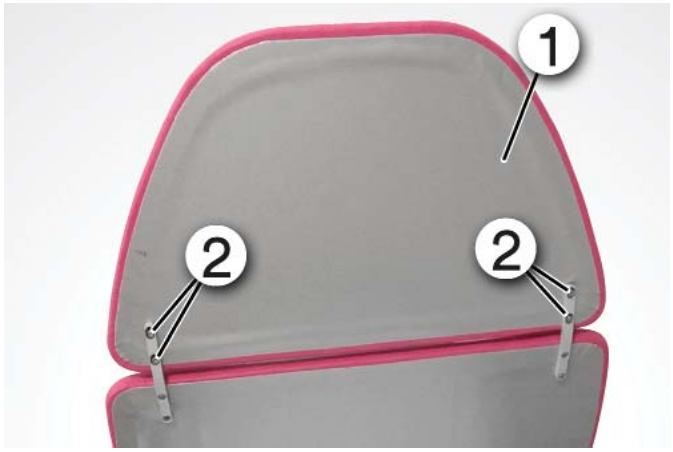


Fig. 49
Removing the head pad
1) Head pad

Rinsing basin

Tilting the rinsing basin
The rinsing basin tilts. The maximum and minimum inclination apply.

▶ Hold the edge of the rinsing basin as shown in Fig. 50.

Fig. 50
Tilting the rinsing basin, minimum inclination
1) Rinsing basin

▶ Tilt the rinsing basin as required.

Fig. 51
Maximum inclination
1) Rinsing basin

▶ Tighten the locking wheel.
☐ The rinsing basin is now locked at the set angle. This angle is linked to the seat plate. If the seat height is adjusted, the inclination of the rinsing basin will also change.

RECOMMENDATION

If the rinsing basin is locked in place, it will tilt when the height of the seat is adjusted. Any liquids that might be in the rinsing basin could spill onto the floor, or items stored in the rinsing basin could fall out.
Therefore, when adjusting the height of the seat, adjust the position of the rinsing basin so that this does not happen!

Fig. 52
Fixing the rinsing basin in place
L1) locking wheel

Cradle of the hand control unit

The cradle comes fitted. The customer specifies the side on which the cradle is to be fitted at the time of ordering.
However, the cradle can be mounted to the other side of the examination and treatment chair at a later stage.

Remounting

- ▶ Unscrew two M3 Allen screws from the bracket mount (see Fig. 53).
- ▶ Insert the bracket mount in the insertion aperture on the other side (see Fig. 54).

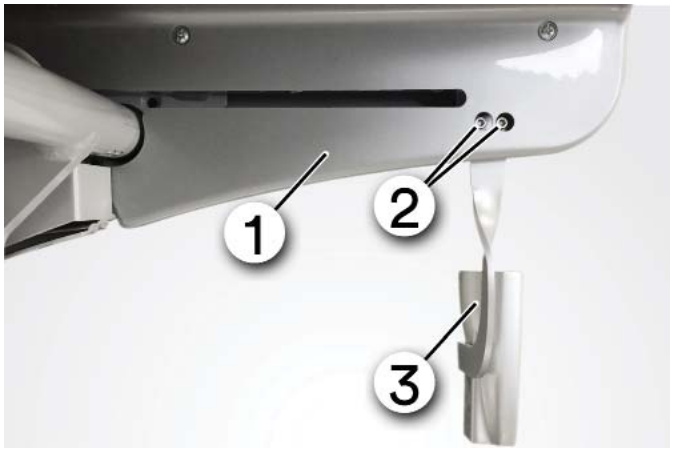


Fig. 53
Cradle of hand control unit (example shows right-hand side)
1) Seat section 2) Attachment screws (M3 Allen screws) 3) Cradle

Fig. 54
Fitting the bracket mount, view from below
1) Insertion aperture

- ▶ Attach the bracket mount with two M3 Allen screws.

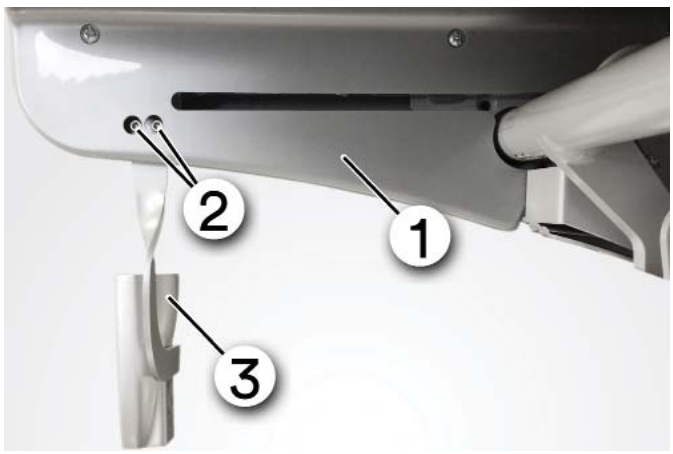


Fig. 55
Installing the cradle on the hand control unit
1) Seat section 2) Attachment screws (M3 Allen screws) 3) Cradle

Side rail accessories

This chapter summarises how to assemble and operate the moving product parts that can be ordered as optional extras to the standard components and which can be attached to the side rails.

⚠ DANGER!

Risk of serious injury!
Every accessory has its own permitted patient weight, which may differ from that of the examination and treatment chair. Do not place any load on the examination and treatment chair and accessories that exceeds the lower of these two values! Overloading can cause parts of the patient's body to suddenly fall off the table. This could prove life-threatening, especially during treatment!

⚠ DANGER!

Risk of serious injury!
Poorly attached, worn or damaged accessories can suddenly come loose during use, leading to life-threatening situations.
For this reason, when mounting accessories always ensure that they are properly attached, and review the condition of the accessory.

Arm rest (101.0019.0)

Information about safe use of the arm rest can be found in the accompanying instructions for use for the arm rest.
There must be side rails on the back section (article number 101.0465.0) to fit the arm rest.

Göpel leg support (101.0459.0), attachment clamp (101.1670.0)

The Göpel leg support consists of a cradle with a silver-grey integral foam pad and a rod with an integrated handle. The product must be fastened to a side rail of the examination chair using the attachment clamp 101.1670.0.

Safe working load
According to Fig. 57, the safe working load for the Göpel leg support is 25 kg when it is semi-extended and 20 kg when it is fully extended.

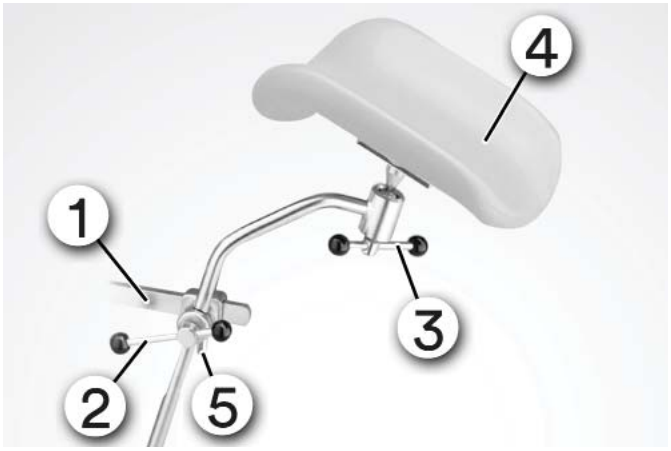


Fig. 56
Göpel leg support 101.0459.0
1) Side rail 2) Toggle screw of the attachment clamp
3) Toggle screw of the Göpel leg support 4) Cradle

Fig. 57
Safe working load
1) Semi-extended: maximum 25 kg
2) Fully extended: maximum 20 kg

Mounting the attachment clamp

- ▶ Slide the attachment clamp 101.1670.0 onto the side rail.
- ▶ Tighten the clamping screw with locking mechanism at the desired position.

⚠ WARNING!

If the attachment clamp is not adequately fixed in place, the inserted accessory may move unexpectedly and lead to hazardous situations!
The attachment clamp must be pushed the whole way onto the side rail!
Firmly tighten the clamping screw with locking mechanism!

- ▶ Tighten the clamping screw with locking mechanism.

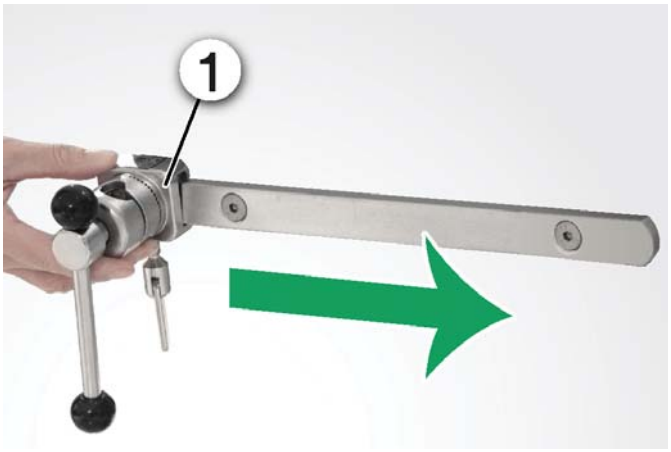


Fig. 58
Mounting the attachment clamp
1) Attachment clamp 101.1670.0

Fig. 59
Mounting the attachment clamp
1) Clamping screw with locking mechanism

Mounting the Göpel leg support

- ▶ Loosen the toggle screw of the attachment clamp.
- ▶ Turn the mounting hole to the desired angle.
- ▶ Insert the rod into the mounting hole of the attachment clamp. The bottom end of the rod must protrude from the attachment clamp.
- ▶ Tighten the toggle screw of the attachment clamp. The gear teeth must interlock again.

⚠ WARNING!

If the rods are not fully inserted or the toggle screw has come undone, the Göpel leg support can move unexpectedly causing hazardous situations!
The mounted rod must be inserted fully into the bar mount (the bottom side must be level with the lower opening or protrude from the opening)!
Tighten the lower toggle screw each time you adjust the Göpel leg support!

Adjusting the Göpel leg support

- ▶ Loosen the toggle screw of the attachment clamp.
- ▶ Change the inclination of the rod as required.
- ▶ Turn the rod around its own axle as required. The cradle will turn inwards or outwards as shown in Fig. 61.

⚠ WARNING!

Risk of injury!
Turning the lever beyond an angle of 45° (as shown in Fig. 61) can cause the side rail to unexpectedly give way under load. This sudden movement could cause personal injury when being used by the patient.
Therefore, do not use the Göpel leg support when it is rotated more than 45° away from the examination and treatment chair!

- ▶ Tighten the toggle screw of the attachment clamp. The gear teeth must interlock again.

Fig. 60
Inserting the rod
1) Toggle screw of the attachment clamp

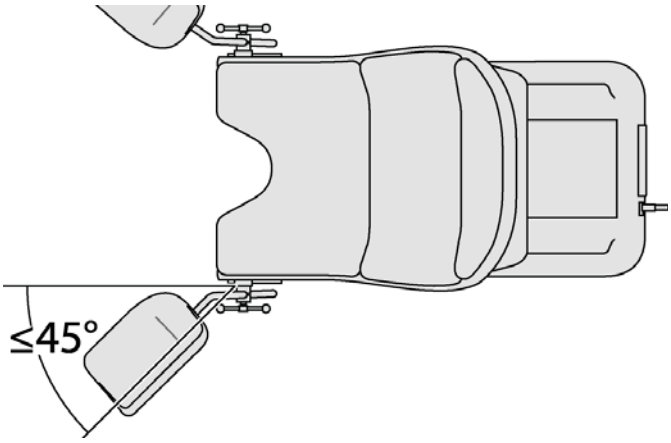


Fig. 61
Do not swivel the Göpel leg support outwards more than 45° during use!

Adjusting the cradle
The cradle can be adjusted sideways as desired. In doing so, the curved end of the cradle must face the seat section of the examination and treatment chair.
- ▶ Loosen the toggle screw of the cradle.
- ▶ Align the cradle to the desired position.
- ▶ Re-tighten the toggle screw of the cradle.

NOTE

If the toggle screw of the Göpel leg support is tight, an attempt to adjust the Göpel leg support will quickly damage the Göpel leg support.
For this reason, loosen the toggle screw of the Göpel leg support before adjusting the Göpel leg support, and apply only moderate force to make the adjustment!

Fixing the lower leg in position
- ▶ Position the cradle under the leg.

⚠ CAUTION!

Supporting the leg the other way around, by which the thigh is located in the strap section of the Göpel leg support (see Fig. 63, right), can lead to pressure points on the patient's leg. Therefore make sure that the lower leg is located in the strap section of the Göpel leg support (see Fig. 63, left)!

- ▶ Open the fastening strap.
- ▶ Place the lower legs of the patient in the cradle.
- ▶ Fit the fastening strap around the patient's lower leg. The fastening strap must run through the buckle at the bottom of the cradle.
- ▶ Close the fastening strap with the Velcro fastener.

⚠ CAUTION!

Overtightening the strap can lead to pressure points on the patient's leg. Therefore do not overtighten the strap! Pad the leg and strap, if necessary.

Fig. 62
Fixing the cradle in place
1) Cradle 2) Toggle screw of the cradle

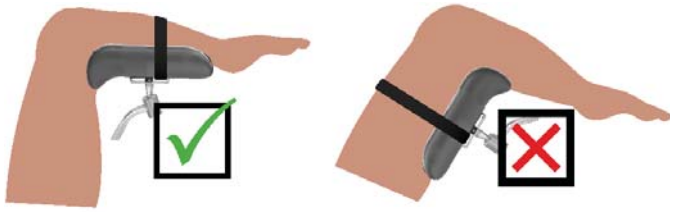


Fig. 63
Positioning of thigh
Left: correct, right: incorrect

Fig. 64
Closing the fastening strap
1) Fastening strap

Other optional accessories

This chapter summarises how to assemble and operate the moving product parts that can be ordered as optional extras to the standard components and which cannot be attached to side rails.

Foot supports (101.0492.0)

⚠ WARNING!

The foot supports are designed to bear a load of up to 25 kg each. If a foot support is loaded with the entire body weight of the patient (for example when getting in or out of the chair) this may damage the foot support and lead to injury (such as sprains). For this reason, make sure that patients do not use the foot support to help them get in or out of the chair!

Foot supports can be inserted in the mount for conical end pieces. Foot supports can be adjusted with a control unit.
Safe working load: see table in chapter “Approved accessories” on page 7.

Mounting

- ▶ Put the conical end piece in the mount for conical end pieces.
- ▶ Turn in the hand screw from below.
- ▶ Swing the stirrup into the desired position.
- ▶ Tighten the hand screw.

CAUTION!

When the hand wheel is loose, the foot support may swing about unexpectedly under certain circumstances. This may cause patients to slide off the foot support and sustain injury. For this reason, retighten the hand wheel every time you adjust the foot support!

Fig. 65
Foot support
1) Foot support 2) Leatherette cover

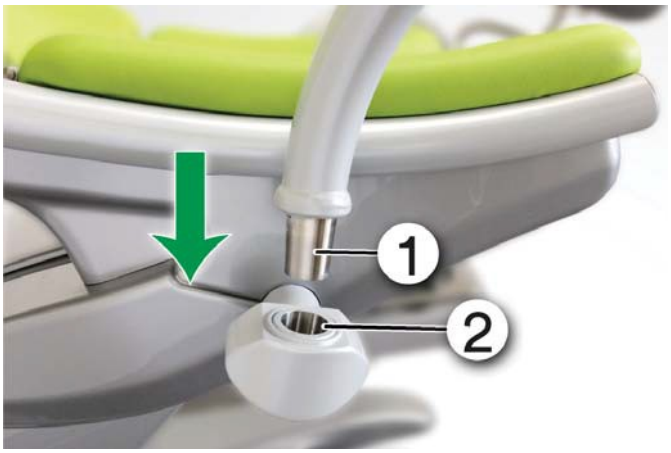


Fig. 66
Mounting the foot support
1) Conical end piece 2) Mount for conical end pieces

Fig. 67
Fastening the foot support
1) Hand screw

Replacing the leatherette cover (optional, 101.0473.0)
The leatherette cover can be removed for cleaning or replacement.
- ▶ Unzip the leatherette cover. Pull off the leatherette cover.
- ▶ Place the new leatherette cover over the leg support stirrup. Thread the zipper.
- ▶ Pull the leatherette cover over the leg support stirrup and smooth it down.
- ▶ Zip it closed.
- ▶ Turn the leatherette cover until the zipper faced down.

Fig. 68
Mounting the leatherette cover
1) Leatherette cover

Protective cover for foot supports (101.0475.0)

The foot supports can be protected against dirt by a cover.

Mounting
- ▶ Open the protective cover slightly.
- ▶ Pull the protective cover over the foot supports.

Fig. 69
Protective cover for the foot support

Göpel leg support (101.0493.0)

This version of the Göpel leg support can be inserted in the mount for conical end pieces. This Göpel leg support can be adjusted with a control unit .

Safe working load: see table in chapter “Approved accessories” on page 7.

Mounting
See the chapter with the same title at “Foot supports (101.0456.0)” on page 49.

Setting
- ▶ Hold the Göpel leg support. Loosen the lower toggle screw. Set the desired height and direction of the Göpel leg support.
- ▶ Re-tighten the lower toggle screw.

⚠ WARNING!

Insufficiently secured accessories can come loose under load, which many cause injuries or damage to property.
Prior to use, ensure that all accessories have been properly secured.

⚠ CAUTION!

When the hand wheel is loose, the Göpel leg support may swing about unexpectedly under certain circumstances. This may cause patients to slide out of the Göpel leg support and sustain injury. For this reason, retighten the hand wheel every time you adjust the Göpel leg support!

⚠ CAUTION!

Patients may slide off the seat surface if the Göpel leg support is lowered all the way down.
For this reason, only lower the Göpel leg support ¾ of the way!

Fig. 70
Göpel leg support 101.0493.0
1) Stirrup 2) Mount for the adjusting rod 3) Bottom toggle screw 4) Top toggle screw

Adjusting the cradle
The cradle can be adjusted sideways as desired. In doing so, the curved end of the cradle must face the seat section of the examination and treatment chair.
- ▶ Loosen the toggle screw of the cradle.
- ▶ Align the cradle to the desired position.
- ▶ Re-tighten the toggle screw of the cradle.

⚠ WARNING!

Insufficiently secured accessories can come loose under load, which many cause injuries or damage to property.
Prior to use, ensure that all accessories have been properly secured.

Fig. 71
Fixing the cradle in place
1) Cradle 2) Toggle screw of the cradle

Fixing the lower leg in position
- ▶ Open the fastening strap.
- ▶ Place the lower legs of the patient in the cradle.
- ▶ Fit the fastening strap around the patient's lower leg. The fastening strap must run through the buckle at the bottom of the cradle.
- ▶ Close the fastening strap with the Velcro fastener.

Fig. 72
Closing the fastening strap
1) Fastening strap

Replacing the leatherette cover (optional, 101.0474.0)
The leatherette cover can be removed for cleaning or replacement.
- ▶ Unzip the leatherette cover. Pull off the leatherette cover.
- ▶ Place the new leatherette cover over the leg support stirrup. Thread the zipper.
- ▶ Pull the leatherette cover over the leg support stirrup and smooth it down. Zip it closed.

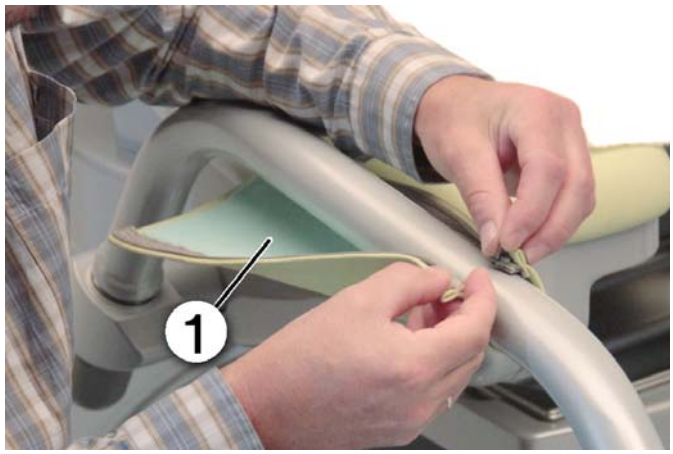


Fig. 73
Mounting the leatherette cover
1) Leatherette cover

Head cushion (101.0472.0)

⚠ DANGER!

The head cushion of the examination and treatment chair is attached by means of a magnet. This magnet can sometimes interfere with the function of pacemakers and other implants, such as hearing aids. Therefore, do not use head cushions for patients with a pacemaker or other implants!

The head cushion is fixed to the head pad with a magnet. It can be adjusted by 560 mm in a longitudinal direction and 250 mm in a transverse direction.

Mounting

▶ Press the head cushion against the head pad at the desired position.

The head cushion is fixed in position with a magnet.

Fig. 74
Magnetic head cushion
1) Magnetic head pad

Mobility (101.0466.0)

“Mobility” refers to fitting out the examination and treatment chair with two double castors and four fixed-type castors as well as a pedal for central locking. These fittings makes the examination and treatment chair mobile.
Due to the fixed-type castors and the double castors, the height of the seat increases by 11 mm.
The examination and treatment chair cannot be fitted with mobility equipment if it is hardwired.
Safe working load: see table in chapter “Approved accessories” on page 7.

⚠ DANGER!

Patients may incur severe injuries through collisions or falling down when they are transported on the examination and treatment chair.
Therefore, never move the examination and treatment chair when patients are sitting on it!

⚠ DANGER!

If the mains plug is not disconnected, the power cord may suddenly snap when moving the examination and treatment chair. People may be exposed to a life-threatening electric shock as a result.
Disconnect the mains plug before moving the examination and treatment chair!

⚠ WARNING!

Unsecured equipment may move unexpectedly when the patient is getting on, which can lead to injuries or damage to property.
Hence, before the patient gets on, always ensure that all castors on the device have been locked!

NOTE

The power cord and supply cable for the foot control unit may be damaged if the double castors roll over them.
Therefore, always ensure that the double castors never roll over an electric cord.

Fig. 75
Pedal
1) Pedal

Moving
The load placed on the examination and treatment chair during motion must not exceed 160 kg.

RECOMMENDATION

It is recommended to push the examination and treatment chair with the backside facing forwards when moving it. This makes it easier to surmount bumps in the ground.

RECOMMENDATION

Due to the fixed double castors on the foot end, the examination and treatment chair cannot be moved in a transverse direction. When moving the chair, we recommend swivelling out the head section to steer the chair.

- ▶ Bring the examination and treatment chair into the transport position (see “Carrying” on page 16).
  - ▷ Lower the examination and treatment chair fully.
  - ▷ Disconnect the mains plug.
  - ▷ Secure the power cord, foot control and foot control cable.
- ▶ Lift the pedal of the examination and treatment chair up with your foot.

The examination and treatment chair is now ready to be moved. Move the examination and treatment chair to the desired location.
Never move the examination and treatment chair with a patient on it!

- ▶ The foot control must be repositioned at the new location.
- ▶ Reconnect the examination and treatment chair to the mains supply.

While moving the product, please observe the following:
- ▶ During transportation, ensure that the unit does not collide with persons or objects.

Locking
- ▶ Push the pedal of the examination and treatment chair down with your foot.

Position	Dynamic behaviour	Electrical conductivity
Front double castors	Fixed	Conductive
Rear double castors	Inclinable	Not conductive

Tab. 11
Features of the double castors

Foot rest for the doctor (right: 01.0468.0, left: 101.0469.0)

The foot rest allows the doctor to put his feet down.

Safe working load: see table in chapter “Approved accessories” on page 7.

Mounting

- ▶ Remove the panel from the right or left side of the foot cover.
- ▶ Insert the foot rest in the mount, as shown in Fig. 76.
- ▶ Insert attachment screws and turn them tight.

Removal

- ▶ Undo and remove the attachment screws.
- ▶ Remove the foot rest.
- ▶ Remount the panel on the right or left side of the foot cover.

⚠ WARNING!

The foot rest is not designed to be used as a support or lifting handle. When subjected to such a load, the foot rest will release from the examination chair. Serious injury may occur when the examination chair falls as a result.
For this reason, do not use the foot rest as a support or lifting handle!

⚠ WARNING!

The foot rest is designed to bear a load of up to 25 kg. If the foot rest is loaded with the entire body weight of the patient (for example when getting in or out of the chair) this may damage the foot rest and lead to injury (such as sprains).
For this reason, make sure that patients do not use the foot rest to help them get in or out of the chair!

Fig. 76
Foot rest for the doctor
1) Attachment screws

Leg plate (101.0471.0)

⚠ DANGER!

Loading the insertable leg plate with over 50 kg can cause the examination chair to tip over and in some cases result in serious injury to the patient or a third party.
For this reason, always remove the insertable leg plate before the patient gets in the chair!

NOTE

An incompletely inserted leg plate may sustain damage under load.
Before use, make sure that the insertable leg plate is completely inserted!

NOTE

When the integrated leg plate is pulled out, it may tilt up and sustain damage. For this reason, always pull the integrated leg plate straight out.

Safe working load: see table in chapter “Approved accessories” on page 7.

Bring into working position

- ▶ Adjust the seat section into the horizontal position.
- ▶ Pull the integrated leg plate under the seat surface all the way out.
- ▶ Lift the leg plate all the way up.

Slide under the seat surface

- ▶ Fold the integrated leg plate’s pad down. Push leg plate back under the seat until it stops.

Fig. 77
Pulling out the leg plate
1) Leg plate

Paper roll (101.0489.0)

The paper roll can be used to cover the back pad and the seat pad with a paper band. This improves the hygiene of the covered pad.

Inserting the paper roll
Paper rolls with a width of 400 mm and 500 mm can be inserted.
The mount for the paper roll is enclosed on all sides and thus protected against dirt.

▶ Fold the back pad forward as shown in Fig. 48.

▶ Place the shaft of the paper roll into the shaft mount as shown in Fig. 78. Observe the direction of rotation as illustrated. Pull the paper web over the rod (3)!

▶ Lead the paper through the paper exit. There are three possible options.
▶ Reposition the back pad.

▶ Pull the paper over the seat pad.

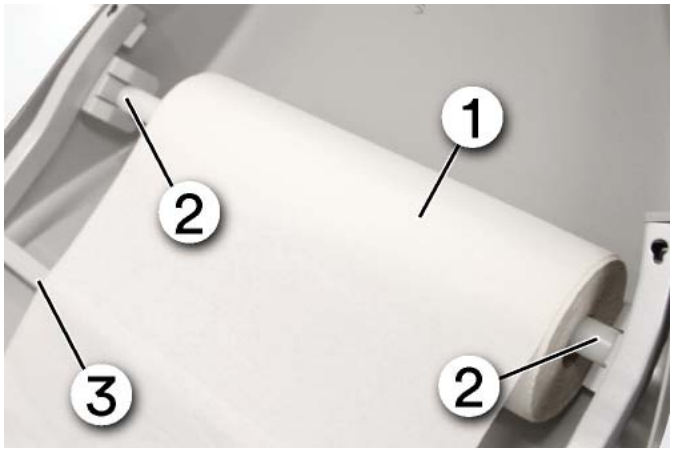


Fig. 78
Inserting the paper roll
1) Paper roll 2) Shaft in the shaft mount 3) Rod

Fig. 79
Paper track options

Rinsing basin with convenient holder (101.0495.0)

⚠ CAUTION!

If the rinsing basin has been removed, the patient may collide with the rinsing basin bracket when getting on/off the chair.
Accordingly, insert the rinsing basin before the patient gets on/off the chair!

This examination and treatment chair comes with a rinsing basin as standard, but there is also an optional rinsing basin with convenient holder available to order (article number 101.0495).
Both models of the rinsing basin measure 325 mm × 175 mm (length × width). They are 65 mm deep. The capacity is 2.5 *l*.

Standard rinsing basin	Rinsing basin with convenient holder (article number 101.0495.0)
Manual tilt	Automatically remains horizontal
Can be locked at an angle using hand wheels	Locks automatically
Cannot be pulled out	Can be pulled out

Tab. 12
Properties of the different models

Inserting the rinsing basin
- ▶ Hold the rinsing basin by its bottom.
- ▶ Slide the rinsing basin forward or backward to the desired position.

Removing
- ▶ Slide the rinsing basin ahead to the stop.
- ▶ Hold the rinsing basin at the two recesses (Fig. 81, Pos. 3) and lift it from the rinsing basin bracket.

Cleaning
Information about cleaning, disinfecting and sterilising the rinsing basin can be found in chapter “Cleaning and disinfecting”, “Rinsing basin” on page 64.

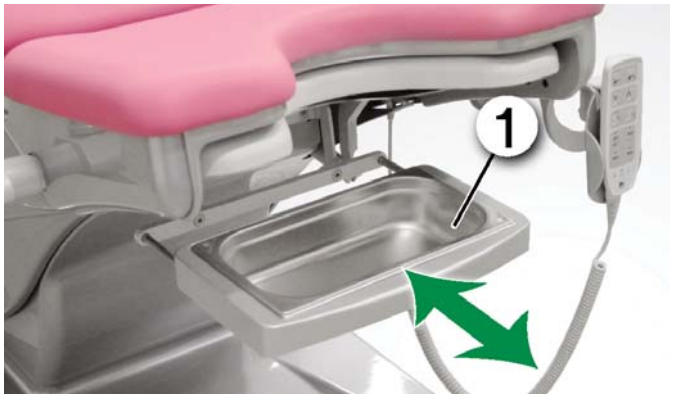


Fig. 80
Pulling the rinsing basin forward
1) Rinsing basin

Fig. 81
Removing the rinsing basin
1) Rinsing basin 2) Rinsing basin bracket 3) Recesses

Colposcope support (101.0467.0)

⚠ WARNING!

The colposcope support is not designed to be used as a support or lifting handle. When subjected to a certain load, the colposcope support can come off the examination chair. Serious injury may occur when the examination chair falls as a result.
For this reason, do not use the colposcope support as a support or lifting handle!

All common colposcopes can be attached with the colposcope support.

Safe working load: see table in chapter “Approved accessories” on page 7.

Mounting

NOTE

When adjusting the examination and treatment chair, mounted colposcopes can easily collide with the chair or attached accessories and cause damage. Before adjusting the examination and treatment chair, swivel the mounted colposcope to the side!

- ▶ Remove the panel from the right or left side of the foot cover.
- ▶ Insert the colposcope support in the mount as shown in Fig. 82.
- ▶ Insert attachment screws and turn them tight.

Removal

- ▶ Undo and remove the attachment screws.
- ▶ Remove the colposcope support.
- ▶ Remount the panel on the right or left side of the foot cover.

Fitting a Leisegang Balance-o-Matic

- ▶ Remove the bottom clamp (see Fig. 84).
- ▶ Slide the two clamping pieces onto the connecting tube.
- ▶ Mount the Balance-o-Matic and clamping pieces in the adapters on the colposcope arm.
- ▶ Fasten the fastening flange with two attachment screws and washers to the foot cover.
- ▶ Mount the colposcope on the colposcope support according to the manufacturer’s instructions.

Fig. 82
Colposcope support
1) Attachment screws

Fig. 83
Mounted colposcope

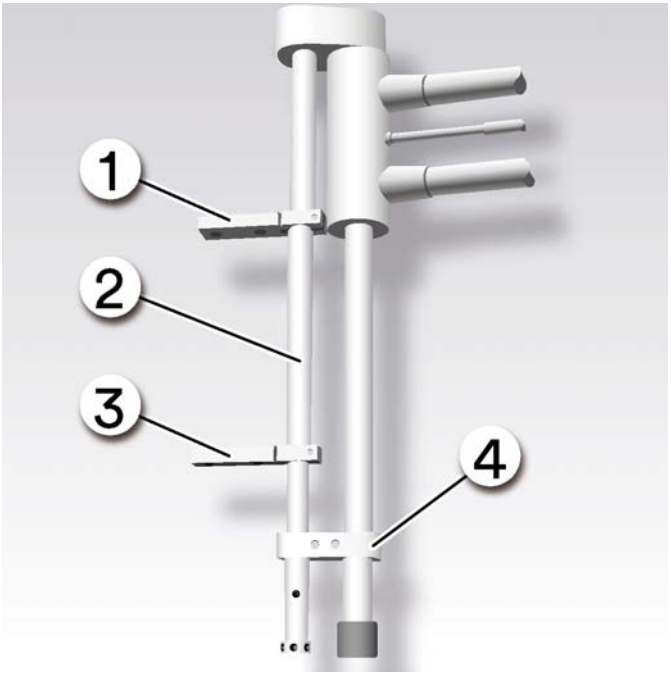


Fig. 84
Leisegang Balance-o-Matic
1) Clamping piece 2) Connecting tube
3) Clamping piece 4) Lower clamp

Potential equalisation (101.0481.0)

Under normal operating conditions, the device parts are under no or only minimal electrical voltage. Technical faults can however give rise to considerable voltages which on contact would be transmitted to people.
The potential equalisation protects patient, users and third parties from such contact voltages.

▶ Connect the potential equalisation plug with the potential equalisation designated for this purpose.

Fig. 85
Potential equalisation

Cleaning and disinfecting

This chapter describes the rules that have to be observed when cleaning and disinfecting this products.
In addition, in-house rules for cleaning and disinfecting that result from the operational duties of your hospital / your clinic / your surgery apply.
Furthermore, the instructions of the cleaning and disinfectant manufacturers must be observed.
Observe the regulations in effect in your country and at your organisation for the cleaning and disinfection of medical devices. Observe the safety and operating information of the cleaning and disinfectant manufacturer, the applicable hygiene rules as well as the occupational health and safety rules!

⚠ DANGER!

If the device or part of the device (e.g. the rechargeable batteries) is plugged into the mains power, moisture from the cleaning process may lead to electric shock and inflict burns on the cleaning personnel.
For this reason, disconnect the power supply prior to cleaning.

NOTE

Spraying/spritzing or pouring cleaning or disinfecting fluids will cause these fluids to enter and damage mechanical and electronic parts (e.g. through corrosion). Therefore only ever apply cleaning and disinfection fluids by wiping the device with a cloth soaked in the cleaning or disinfection fluid!

Products from SCHMITZ u. Söhne are delivered non-sterile and cannot be sterilised.

- ▶ Remove the pad from the supporting surface for cleaning if this is possible.
- ▶ Clean the product in accordance with the instructions for use issued by the cleaning agent manufacturer as well as the adjacent description. Then remove any cleaning agent residue.
- ▶ After cleaning the product, dry it with an absorbent lint-free cloth.
- ▶ Check the product after cleaning/disinfection for freedom of movement, corrosion, damaged surfaces, chipping and any remaining dirt. Replace damaged products.

NOTE

Inappropriate disinfectants will damage the surface of the product, including the pad! Use disinfectants with the following active ingredient combinations:

- aldehyde (e.g. formaldehyde)
- quaternary ammonium compounds (“Quats”)
- guanidine derivatives

Do not use the following for cleaning and disinfection:

- abrasives or solvents, in particular organic solvents such as benzine, benzol or acetone
- products containing alcohol (e.g. skin disinfectant)
- solutions that contain or split off halides (e.g. fluorine, chlorine, iodine or bromine)
- abrasive cleaning agents (e.g. wire brushes, steel wool)
- water containing ferrous particles
- cleaning sponges containing iron
- products containing hydrochloric acid
- saline or isotonic solutions
- machine cleaning procedure
- superheated steam procedure

Do not use disinfectant sprays on mechanical parts.

⚠ WARNING!

When used, pads absorb infectious germs which can spread to other users. As a result, patients can contract further illnesses. It is also important to remember that infectious germs multiply extremely quickly in unclean and undisinfected residues. Therefore, clean and disinfect the pads before and after use by the patient!

NOTE

Some solutions attack the surface of the pads. For this reason, please remove skin disinfectants as well as wound and mucous membrane disinfectants as quickly as possible from the pad surface.

Dirty pads must be cleaned and disinfected without delay. For hygienic reasons, replace damaged replaceable pads immediately.
The use of “Cleaner 500” is recommended for cleaning pads (cleaning set with brushes: art. no. 2026973, set of three bottles: art. no. 2019878). Follow the instructions for use of the cleaning agent (see http://cleaner.sergeferrari.com). As an alternative to “Cleaner 500” a weak alkaline detergent, e.g. mild cleaning agent or soap and water, can be also used.
If pads are disinfected with watery solutions, residual organic salts must be removed regularly (approximately every three months) to protect the pad surfaces. In addition, use a cleaner with non-ionogenic tensides or “Cleaner 500”.

⚠ WARNING!

Damaged pads (e.g. slit or torn) often contain stubborn infectious germs from normal use. These germs cannot be completely removed even by means of thorough disinfection. Upon contact with injuries or open skin areas, the infectious germs can be transferred to the bloodstream of the patient and third parties.
For this reason, always replace damaged pads immediately!

NOTE

The surface of the pad can easily be damaged. For this reason, keep pointed or sharp objects away from the pads!

Please also note the instruction sheet provided with the pad concerning how to clean the pad.

Stainless steel parts

NOTE

Only an intact stainless steel surface will not rust. Care must therefore be taken to prevent the stainless steel surface from being damaged by scratches, the use of unsuitable cleaning agents, or prolonged contact with chlorides, acids, humidity, iron, or similar! Always observe the following directive for the cleaning, storage and use of stainless steel parts!

Cleaning
Only clean using standard cleaning agents for stainless steel products!
For mechanical cleaning, only use stainless steel wool or brushes with natural, plastic or stainless steel bristles! Do not use steel wool or brushes with carbon steel!
Do not damage the surface of stainless steel products through scratching, scraping, etc.!

After each cleaning, always remove all cleaning agent residues by wiping the surface thoroughly with fresh water! Carefully dry the surface afterwards!

Retaining
Always store stainless steel products carefully so that they are accessible to air. Always remove cleaning fluid residues prior to storage!
Always keep stainless steel products clean! Clean every day to remove limescale, grease, starch and protein layers.

Use
Do not allow stainless steel products to come into contact with concentrated acids, acid vapours, salt, chlorides, etc. for any longer than is absolutely necessary!
Do not allow the stainless steel products to come into contact with iron or steel (shavings from wires, ferrous water) or with other metals.

Rinsing basin

The rinsing basin is made of stainless steel. Treatment:

Treatment step	Treatment agent	Duration
1. Cleaning	Alkaline cleaner, temperature: 55°C	at least 10 minutes
2. Disinfection	Alkaline cleaner, temperature: 93°C	at least 10 minutes
3. Sterilisation	Steam, temperature: 134°C	at least 5 minutes

Tab. 13
Treatment steps for the rinsing basin
The values in this table are guidelines and may vary depending on the treatment device. The information provided by the manufacturer of the treatment device applies.

Replacing fuses

NOTE

Improper equipment fuses present the risk of equipment failure.
Equipment fuses may only be replaced by a qualified technician. Only replacement fuses that match the ratings in Tab. 14 may be used. After replacing a fuse, perform a functional test on the equipment.

On/off switch fuse
The examination and treatment chair is equipped with thermal overload protection on the on/off switch. Replacement is not necessary.
If the thermal overload protection has tripped, the examination and treatment chair can be switched on again with the on/off switch.

Socket fuses
The sockets are protected with two fuses each (Fig. 86, Pos. 1). The appropriate equipment fuses are also indicated on the examination and treatment chair below the sockets.

- ▶ Turn the fuse link anti-clockwise in the fuse holder.
- ▶ Remove the fuse link from the fuse holder above the sockets.
- ▶ Change the fuse.
- ▶ Insert new fuse in the fuse holder and tighten by turning it clockwise.

After replacing a fuse link, perform a functional test on the socket.
- ▶ Connect an electric device or light (e.g. an examination light) to the socket.
- ▶ Check if the device or light functions properly.

Fig. 86
Fuses
1) Fuse

Fig. 87
Extracted fuse link
1) Fuse 2) Fuse link

Feature	Value
Short description	T6,3 A H 250 V
Characteristics	slow-blow
Breaking capacity	1500 A
Measurements	5 × 20 mm

Tab. 14
Technical data of fuses F1 and F2

Technical Service

When asking service questions, always state the following numbers, which appear on the identification plate of your product:

- the model number (on the identification plate after “REF”) and
- the serial number (on the identification plate after “SN”, if present).

See chapter “Identification plate” on page 70 for the location of the identification plate. If the identification plate is damaged, please contact Technical Service at SCHMITZ u. Söhne.

Faults and repairs
In the event of malfunctions, please contact your dealer, or call Technical Service at SCHMITZ u. Söhne GmbH & Co. KG directly. Only personnel authorised by the manufacturer may carry out repairs on SCHMITZ u. Söhne GmbH & Co. KG products. Unauthorised intervention with your product voids the warranty.

Technical service contact details

Telephone:	+49 (0) 2377 84 549
Fax:	+49 (0) 2377 84 210
Email:	service@schmitz-soehne.de

⚠ WARNING!

Technical works on the examination and treatment chair may give rise to personal injury if patients are positioned on the examination and treatment chair while the works are performed.
Accordingly, no repair works may be performed while the examination and treatment chair is in use.

Replacement parts
Replacement parts can be ordered from your authorised dealer or directly from Technical Service at SCHMITZ u. Söhne GmbH & Co. KG.

Inspection and maintenance
Careful handling, inspections and maintenance preserve the permanent functional safety and operational reliability of this product. Inspections also minimise the risk of faults.
Maintenance should be performed every two years.
Maintenance may only be performed:

- by the service personnel of SCHMITZ u. Söhne GmbH & Co. KG, or
- by personnel duly trained and authorised by SCHMITZ u. Söhne GmbH & Co. KG.

In order to guarantee that all features will be available and to extend the product’s service life, SCHMITZ u. Söhne GmbH & Co. KG recommends a maintenance contract. The maintenance contract guarantees that maintenance will be performed on your product by SCHMITZ u. Söhne GmbH & Co. KG maintenance personnel. The scope of maintenance includes inspection and electrical safety testing in accordance with IEC 62353:2014.

⚠ DANGER!

During its use, this medical device comes into contact with materials that carry pathogens or harmful substances (e.g. body fluids). During repair works, minor injuries in particular can lead to infections.
For this reason, thoroughly clean this medical device prior to maintenance!

Wear parts

SCHMITZ u. Söhne GmbH & Co. KG products contain components subject to wear as a result of their design, function or chemical composition, or which may wear due to improper use. These wear parts include pneumatic springs, batteries and pads.

Under the General Terms and Conditions, these wearing parts are not covered by the two-year warranty period. For these wearing parts, SCHMITZ u. Söhne GmbH & Co. KG provides a one-year warranty.

Visual and functional checks

For proper operation, visual and functional checks must be performed by trained personnel prior to every use.

The results of the visual and functional checks are to be documented with the date and signature of the tester. The following table can be used as a template.

Checklist

1. Has the product been cleaned and disinfected in accordance with the hygiene guidelines in effect at your hospital/clinic?

Yes	▶ No actions are required for this item.	**No**	▶ Stop using the product for the time being. ▶ Clean and disinfect the product.

2. Do the pads show signs of cracking or damage?

Yes	▶ Stop using the pads. ▶ Replace the pads.	**No**	▶ No actions are required for this item.

3. Does the plastic cladding show damage?

Yes	▶ Replace the plastic cladding.	**No**	▶ No actions are required for this item.

4. Does the hand control unit or the foot control unit show any damage?

Yes	▶ Notify Technical Service. ▶ Replace the damaged control unit.	**No**	▶ No actions are required for this item.

5. Does the mains feed cable or the on/off switch show any damage?

Yes	▶ Notify Technical Service. ▶ Professionally replace the damaged components.	**No**	▶ No actions are required for this item.

6. Is the examination and treatment chair wobbly? (Only if the examination and treatment chair is not equipped with double castors.)

Yes	▶ Adjust the levelling feet of the examination and treatment chair.	**No**	▶ No actions are required for this item.

7. Operate the adjustment buttons of the hand/foot control unit one after the other. Do all adjustment functions work properly?

Yes	▶ No actions are required for this item.	**No**	▶ Press adjustment buttons and on the hand control unit at the same time (reset).

8. Do all adjustment functions of the hand/foot control unit work properly after pressing the reset buttons?

Yes	▶ No actions are required for this item.	**No**	▶ Stop using the product for the time being. ▶ Notify Technical Service.

9. Is the leg plate extractable?

Yes	▶ No actions are required for this item.	**No**	▶ Notify Technical Service.

Date	**Signature of the inspector**

Tab. 15
Checklist for visual and functional checks

Disposal

⚠ DANGER!

During its use, this medical device comes into contact with materials that carry pathogens or harmful substances (e.g. body fluids). During disposal, minor injuries in particular can lead to infections.
For this reason, thoroughly clean this medical device prior to disposal!

Dispose of the components of this product (e.g. metal parts, electronic components, foam (e.g. pads), PVC parts (e.g. bellows), hydraulic oil etc.) according to the applicable national regulations.
To dispose of this device, please contact Technical Service at SCHMITZ u. Söhne. In EU member states, Directive 2002/96/EC must be observed for electric appliances (e.g. no disposal via municipal collection points, obligation to notify of proper disposal in the event of transfer to commercial third parties).

Product identification

Identification plate

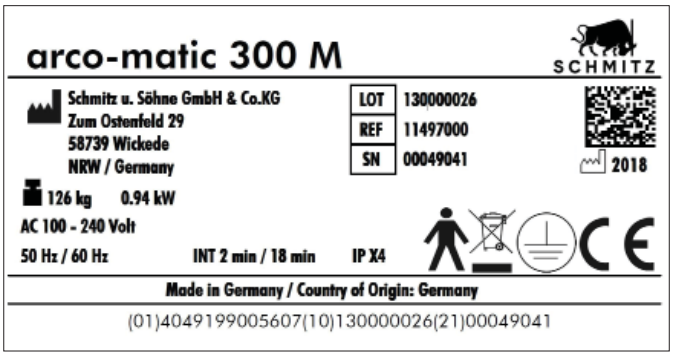


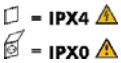
Fig. 89
Identification plate (e.g. arco-matic 300 M)

Fig. 90
Position of the identification plate
1) Identification plate

Fig. 91
Identification plate of the foot control unit (example)

Symbols used

Tab. 16 explains the symbols used on the labels of the product in accordance with IEC 60601-1:2005 + amendment :2006 + amendment:2007 + supplement1:2012, Section 7.6. This also includes symbols on labels, on the identification plate and on the packaging.

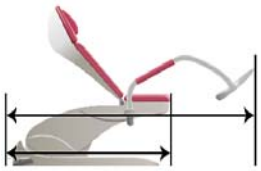
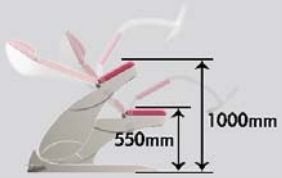
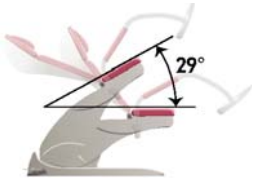
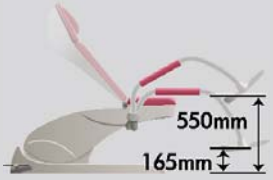
Symbol	Meaning	Symbol	Meaning
	Name and address of the manufacturer		Date of manufacture
	Centre of gravity		Permitted temperature range for transport and storage
	Permitted air humidity range for transport and storage		Permitted air pressure range for transport and storage
	Top		Fragile, handle with care
	Protect against moisture		Applied part, Type B
	Weight of the examination and treatment chair		Protection class I
	Always use the product in accordance with the instructions for use.		Danger: high voltage!
	The capacity of both sockets is 1.5 kW maximum		Insert the plug cable as illustrated through the cable fuse.
	The safe working load is 250 kg.		The degree of protection of the electric connection pursuant to EN 60529:2014 is IPX0 if the protective cover is open, and IPX4 if the protective cover is closed.
	Push the foot lever down to lock the examination and treatment chair and up to adjust the chair.		Push the foot lever down to lock the examination and treatment chair and up to adjust the chair.
	Contact point for protective earth conductor (symbol on the examination and treatment chair)		Wiring diagram for connection
	Do not place any person with a pacemaker in this position!		Attention! Strong magnetic field!

Symbol	Meaning	Symbol	Meaning
	Never transport patients on the examination and treatment chair!		Only push a mobile examination and treatment chair when there is no one on it
	Packaging is recycled in Germany under the RESY system		The product satisfies Council Directive 93/42/EEC, Annex 1.
	The device is subject to EU Directive 2002/96/EC (WEEE).		

Tab. 16
Symbols used and what they mean

Technical data

Subject to design and dimensional changes. Technical data of the accessories: see the “Intended use” chapter.

Dimensions	arco-matic 200 M	arco-matic 300 M	Diagram
Total length of the examination chair with / without foot supports	1,783 mm / 1,253 mm	1,783 mm / 1,253 mm	
Pad width seat / back	595 mm / 680 mm	595 mm / 680 mm	
Pad height	45 – 50 mm	45 – 50 mm	
Electromotive pelvic elevation, minimum - maximum height	550 mm – 1,000 mm	550 mm – 1,000 mm	
Electromotive pelvic elevation, minimum - maximum angle	0° – 29°	0° – 29°	
Electromotive back section adjustment	6° – 52°	6° – 52°	
Electromotive foot support adjustment, minimum - maximum angle	Not present	-38° – 0°	
Electromotive foot support adjustment, minimum - maximum height	Not present	165 mm – 550 mm (pad height)	
Shipping dimensions (without foot supports, without pallet)	1.253 × 765 x 718 mm (L x W x H)	1.253 × 765 x 718 mm (L x W x H)	

Feature	Value
Expected service life in accordance with IEC 60601-1:2005 + amendment :2006 + amendment:2007 + supplement1:2012, Section 3.28 (see “Glossary” on page 82)	10 years, subject to compliance with the recommended biannual inspections.
Safe working load as per IEC 60601-1:2005 + amendment :2006 + amendment:2007 + supplement1:2012 (maximum permitted patient weight less the weight of the accessories attached to the examination and treatment chair) (see“Glossary” on page 82)	250 kg
Weight (without accessories)	96 kg (arco-matic 200 M), 100 kg (arco-matic 300 M),
Degree of protection as per IEC 60529:1989 + A1:1999 + A2:2013 (see “Glossary” on page 82)	IPX4 with closed safety cover, IPX0 with open safety cover
Protection class as per IEC 61140:2001 (see “Glossary” on page 82)	I
Suitability for use in oxygenated atmosphere	The examination chair must not be operated in an oxygenated atmosphere.
Mains voltage	100-240 V AC
Frequency	50 Hz / 60 Hz
Power consumption (including sockets)	maximum 1.7 kW
Power output of the sockets	maximum 1.5 kW
Nominal duty type as per IEC 60034-1:2017 (see “Glossary” on page 82)	Intermittent periodic duty (duty type S3) INT 2 mins/18 mins (the device is not designed for continuous duty. After 2 mins of full load operation, an 18 min break is required.)

Tab. 17
Technical data of the examination and treatment chair

Feature	Value
Short description	T6,3 A H 250 V
Characteristics	slow-blow
Breaking capacity	1,500 A
Measurements	5 × 20 mm

Tab. 18
Specification for fine-wire fuses

Permissible ambient condition	During storage and transportation	In operation
Ambient temperature	-10°C – +50°C	+5°C – +40°C
Relative humidity	20% – 95% at 30°C - non-condensing	20% – 95% at 30°C - non-condensing
Air pressure	700 – 1,060 hPa	–
Maximum permitted operating height	–	2.000 m above sea level

Tab. 19
Permissible ambient conditions

Pads	Surface	Colour	Lifespan	Guarantee
Comfort	grained	coloured	6 years	12 months
Classic	smooth	coloured	4 years	12 months

Tab. 20
Technical data of the pads

The specifications require proper handling of the pads. Please observe the directions in these instructions for use.

Connection dimensions

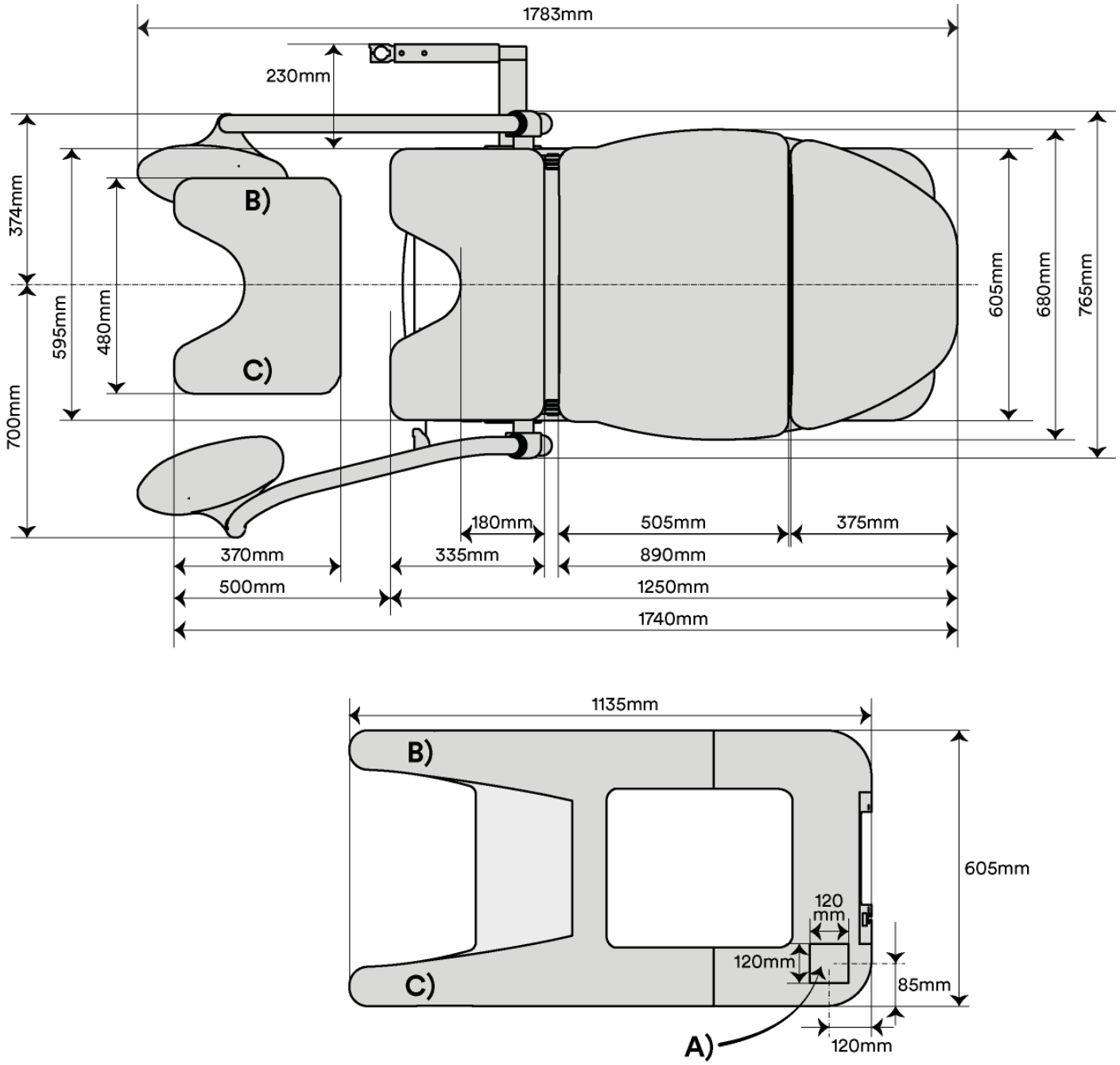


Fig. 92
Connection dimensions
A) Area for cable feedthrough (for hardwiring) B) Right side C) Left side

Electromagnetic compatibility (EMC) arco-matic

Portable or mobile RF communication devices may affect medical equipment. Electrical equipment intended for medical use requires special EMC precautions. Observe the EMC instructions in this manual for installation and commissioning.

Electromagnetic emissions

Guidelines and manufacturer's declaration – electromagnetic emissions				
arco-matic arco-matic	is intended for use in the environment specified below. Users of the should make sure that it is used in such an environment.			
Electromagnetic emissions	**Compliance**		**Electromagnetic environment – guidelines**	
RF emissions, CISPR 11	Group:	1	arco-matic	uses RF energy only for its internal functions. Therefore, its RF emissions are low and are not likely to cause any interference in nearby electronic equipment.
RF emissions, CISPR 11	Class:	B	arco-matic	is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that also supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class:	A		
Voltage fluctuations/flicker emissions, IEC 61000-3-3	conformed to			

Electromagnetic immunity

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – Guide lines
Electrostatic discharge (ESD) of IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electric fast transient/burst, IEC 61000-4-4	±2 kV on power cables ±1 kV on input/output lines	±2 kV on power cables ±1 kV on input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge according to IEC 61000-4-5	±1 kV differential mode voltage ±2 kV common mode voltage	±1 kV differential mode voltage ±2 kV common mode voltage	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interrupts and variations on power supply lines, IEC 61000-4-11	<5% U_T (>95% dip of U_T) for ½ cycle 40% U_T (60% dip of U_T) for 5 cycles 70% U_T (30% dip of U_T) for 25 cycles <5% U_T (>95% dip of U_T) for 5 sec	<5% U_T (>95% dip of U_T) for ½ cycle 0,4 U_T (60% dip of U_T) for 5 cycles 0,7 U_T (30% dip of U_T) for 25 cycles <5% U_T (>95% dip of U_T) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the arco examination chair requires continued operation even during interruption of the power supply, supply of the arco examination chair from an uninterruptible power supply or from a battery is recommended.
Power frequency magnetic fields (50/60 Hz) IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be those of a typical commercial or hospital environment.
NOTE: U_T is the AC mains voltage prior to application of the test level.			

Fig. 93
EMC declaration, Part 1

Fig. 94
EMC declaration, Part 2

Electromagnetic immunity for non-life-supporting equipment

Guidance and manufacturer's declaration – electromagnetic immunity			
arco-matic	is intended for use in the electromagnetic environment specified below. Users should make sure that they are in such an environment.		
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment – Guide lines**
Conducted RF disturbance, IEC 61000-4-6	3 V_{eff} 150 kHz to 80 MHz	3 V	Portable and mobile RF communication equipment should not be used at a closer distance to the arco-matic (including its cables) than the recommended separation distance estimated using the equation applicable to the frequency of the transmitter. Separation distance: d= 1,17 $P^{0,5}$ 80 MHz to 800 MHz: d= 1,17 $P^{0,5}$ 800 MHz to 2,5 GHz: d= 2,33 $P^{0,5}$ Where P is the maximum output power rating of the transmitter in watts (W) according to the manufacturer of the transmitter and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol.
Radiated RF disturbance 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3 V/m	
Note 1: At 80 MHz and 800 MHz, the higher frequency range applies. Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which arco-matic is used exceeds the applicable RF compliance level, arco-matic should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating arco-matic Over the 150 kHz to 80 MHz frequency range, field strengths should be less than 3 V/m.			

Recommended separation distances

Recommended separation distance between portable and mobile RF communications equipment and			**arco-matic**
arco-matic	is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The user of the arco examination chair can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the examination chair as recommended below, according to the maximum output power of the communications equipment.		
Rated maximum output power of transmitter (W)	**Separation distance according to frequency of transmitter (m)**		
	150 kHz to 80 MHz; d= 1,17 $P^{0,5}$	**80 MHz to 800 MHz**; d= 1,17 $P^{0,5}$	**800 MHz to 2,5 GHz**; d= 2,33 $P^{0,5}$
0,01 W	0,12 m	0,12 m	0,23 m
0,10 W	0,37 m	0,37 m	0,74 m
1,00 W	1,17 m	1,17 m	2,33 m
10,00 W	3,69 m	3,69 m	7,38 m
100,00 W	11,67 m	11,67 m	23,33 m
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the manufacturer of the transmitter. Note 1: At 80 MHz and 800 MHz, the higher frequency range applies. Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			

EC Declaration of Conformity (including accessories)

SCHMITZ

EG-Konformitätserklärung für Medizinprodukte

Declaration of EC-Conformity for Medical Devices

Hersteller
Manufacturer

SCHMITZ u. Söhne GmbH & Co. KG

Zum Ostenfeld 29
D-58739 Wickede (Ruhr)

Erklärt in alleiniger Verantwortung dass
Declares under sole responsibility that

das Produkt,
the product,

arco Serie 114.9 Untersuchungs- und Behandlungsstuhl für Gynäkologie

arco series 114.9 Examination and treatment chair for gynaecology

Modell / Artikel / Bezeichnung / *Description*	**Artikel.Nr.** / *Modell-No.*
Untersuchungsstuhl arco-matic 200 M / *Examination and Treatment Chair arco-matic 200 M*	**114.9600.0**
Untersuchungsstuhl arco-matic 300 M / *Examination and Treatment Chair arco-matic 300 M*	**114.9700.0**

Produkt-Code gemäß Nomenklatur UMDNS: **13-958, 13-969, 17-549, 17-759**
Product Code from nomenclature UMDNS:

in Verbindung mit den in Anhang 1 aufgeführten Zubehör,
in connection with in the accessories, listed in annex 1,

entspricht den einschlägigen Bestimmungen der Richtlinie nach Anhang VII der Richtlinie:
is in accordance with the relevant provisions of the specific regulation acc. to Annex VII of the Directive:

93 / 42 / EWG **für Medizinprodukte (Klasse I gemäß Artikel 9 der Richtlinie vom 14. Juni 1993), zuletzt geändert durch die Richtlinie 2007/47/EG vom 5. Sep. 2007**
93/42/EEC *for Medical Device, Class 1 (acc. to art. 9 of the specific regulation of 14. June 1993) last amended by Directive 2007/47/EC of 5. Sep. 2007*

Konformität erstmals erklärt am: ***31.08.2017***
First declaration of conformity issued:

Die Konformitätserklärung wird erneuert bei Ablauf der Gültigkeit des Qualitätsmanagementzertifikats oder bei einer wesentlichen Produktänderung. Somit ist diese Konformitätserklärung gültig bis zum 05.07.2018.
This Declaration of Conformity will be re-issued by expiry of Quality Management Certificate or in case of any essential change of Product Design. Therefore this Declaration of Conformity is valid until 2018/07/05.

Ausstellungsdatum: **02.01.2018**
Date of Issue:

Matthias Schmitz
Mitglied der Geschäftsleitung
Member of Company Management

Thomas Krüger
Leitung Qualitätsmanagement
Head of Quality Management

Fig. 95
EC Declaration of Conformity, Part 1

SCHMITZ

EG-Konformitätserklärung für Medizinprodukte

Declaration of EC-Conformity for Medical Devices

Anhang 1 (Seite 1 von 2)
zur Konformitätserklärung für Medizinprodukte

Annex 1 (Page 1 of 2)
to the Declaration of EC Conformity for Medical Products

Zubehör zu
arco Serie 114.9 Untersuchungs- und Behandlungsstuhl für Gynäkologie
Accessories for
arco series 114.9 Examination and treatment chair for gynaecology

Bezeichnung	*Description*	**Artikel-Nr.** *Model No.*
Fußstützen (Paar)	Foot supports (pair)	**101.0492.0**
Beinhalter nach Göpel mit integriertem Handgriff (Paar)	Leg supports, Göpel type (pair)	**101.0493.0**
Beinhalter nach Göpel für Seitenschiene (Stück)	Göpel leg support (pcs)	**101.0459.0**
Seitenschienen für Sitzteil arco-matic (Paar), 290 mm lang	Side rails for seat section (pair), 290 mm	**101.0463.0**
Seitenschienen für Sitzteil arco-matic (Stück), 150 mm lang	Side rails for seat section (pcs), 150 mm	**101.0464.0**
Seitenschienen für Rückenteil arco-matic (Paar), 400 mm lang	Side rails for back section (pair), 400 mm	**101.0465.0**
Spannkloben (Stück)	Clamp (pcs)	**101.1670.0**
Fahrbarkeit	Mobility	**101.0466.0**
Kolposkophalterung	Colposcope support	**101.0494.0**
Fußbügel für den Arzt, rechts	Foot rest for the doctor, right	**101.0468.0**
Fußbügel für den Arzt, links	Foot rest for the doctor, left	**101.0469.0**
Beinplatte herausziehbar	Leg plate, extensible	**101.0471.0**
Kopfpolster	Head section pad	**101.0472.0**
Kunstlederbezug (Paar), für Fußstützen	Leatherette covers (pair), for foot supports	**101.0473.0**
Kunstlederbezug (Paar), für Göpel	Leatherette covers (pair), for Goepel leg supports	**101.0474.0**
Schutzbezüge (Paar), für Fußstützplatten	Plastic covers (pair), for foot supports	**101.0475.0**
Schutzbezug für Sitzpolster	Cover for seat section	**101.0477.0**

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Fig. 96
EC Declaration of Conformity, Part 2

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EG-Konformitätserklärung für Medizinprodukte

Declaration of EC-Conformity for Medical Devices

Anhang 1 (Seite 2 von 2)
zur Konformitätserklärung für Medizinprodukte

Annex 1 (Page 2 of 2)
to the Declaration of EC Conformity for Medical Products

Zubehör zu
arco Serie 114.9 Untersuchungs- und Behandlungsstuhl für Gynäkologie
Accessories for
arco series 114.9 Examination and treatment chair for gynaecology

Bezeichnung	*Description*	**Artikel-Nr.** *Model No.*
Fußstützen kurz (Asien) (Paar)	Foot supports short (Asia) (Paar)	**101.0478.0**
Armauflage	Arm rest	**101.0019.0**
Potentialausgleich	Potential equilization	**101.0481.0**
2 Steckdosen	2 power sockets	**101.0482.0**
2 Steckdosen, Schweiz	2 power sockets, Swiss type	**101.0483.0**
LED-Beleuchtung	LED illumination	**101.0487.0**
Farbblende	Colour trims	**101.0488.0**
Papierrolle 50 cm	Paper roll, 50 cm	**101.0489.0**

Konformität erstmals erklärt am: ***31.08.2017***
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Fig. 97
EC Declaration of Conformity, Part 3

Glossary

The following terms are defined in standards. They are explained in more detail below.

Term	Origin	Meaning
Safe working load	IEC 60601-1:2005 + amend-ment:2006 + amend-ment:2007 + A1:2012	Maximum weight (specified in kilograms), which may be placed on the product or accessory. The value includes the weight of any attached accessories. Therefore, to determine the weight load actually permitted, the weight of any attached accessories must be subtracted from the safe working load. The standard stipulates that manufacturers state this information.
Expected service life	IEC 60601-1:2005 + amend-ment:2006 + amend-ment:2007 + A1:2012	For how long (at minimum) the manufacturer believes the product can be safely used after delivery and in compliance with the prescribed maintenance intervals. The standard stipulates that manufacturers state this information.
Intended use	IEC 60601-1:2005 + amend-ment:2006 + amend-ment:2007 + A1:2012	Use for which the product is intended according to the specifications, instructions and information provided by the manufacturer. The standard stipulates that manufacturers state this information.
Intended purpose	EU Directive 2006/42/EC (Machinery Directive), EN 12100:2010	Use of a machine in compliance with the information provided in the user information. Using this product in a way that does not comply with the intended purpose will lead to exclusion of liability.
Applied part	IEC 60601-1:2005 + amend-ment:2006 + amend-ment:2007 + A1:2012	Part of an electrical medical device that necessarily comes into physical contact with the patient when used in keeping with the intended purpose. The operator of the product must measure the patient leakage current at applied parts. There are three different types of applied part: B (Body), BF (Body Float) and CF (Cardiac Float).
Patient leakage current	IEC 60601-1:2005 + amend-ment:2006 + amend-ment:2007 + A1:2012, Table 3	Maximum permitted current allowed to flow through or along the patient which is not necessary for functioning. If the value stipulated in the standard is exceeded, the operator of the device must earth the product, e.g. using a potential equalisation.
Degree of protection (IP code)	IEC 60529:1989 + A1:1999 + A2:2013	Classification of electrical equipment based on the casing protection against contact and the penetration of foreign bodies and water. This is indicated by the letters “IP” and two numbers and possibly another letter.
Protection class	IEC 61140:2001	Classification of electrical devices based on the measures taken to protect against electric shock. This is indicated in Roman numerals.
Protection class (AP)	IEC 60601-1:2005 + amend-ment:2006 + amend-ment:2007 + A1:2012, Annex G	Classification of medical devices based on their protection against the ignition of flammable anaesthetic mixtures. The protection classes are AP and APG.
Nominal duty type	IEC 60034-1:2017	Describes the strain on an electrical machine, such as during “continuous duty”.

Index

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A SENSE OF CONFIDENCE

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All articles including corresponding accessories marked with the CE label meet the standards for medical devices acc. to the EC regulation 93/42/EEC.

CE

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We have been certified acc. to DIN EN ISO 9001:2008 DIN EN ISO 13485:2012 + AC:2012