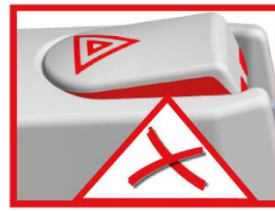
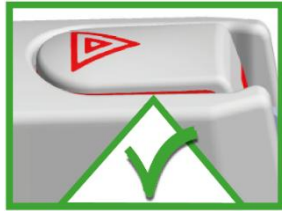


QuattroPlus Grab Handles with Vacuum Safety Indicator



EN

User Instructions QuattroPlus Grab Handle

REF

1400241S, 1400242S, 1400243S, 1400244S



Table of contents

1.	General	2
1.1	General information	2
1.2	Explanations/symbols in this manual and on the handle	3
1.3	Intended use	3
1.4	Indication	3
1.5	Contraindication	3
1.6	Application range of the product	3
1.7	For your information	4
1.8	Useful life	4
1.9	Reuse	4
2.	Safety information	4
3.	Operation / Assembly	5
3.1	Mounting (see page 9)	5
3.2	Attaching / suction (see pages 8 and 9)	5
3.3	Releasing	5
3.4	Disassembling (see page 9)	5
4.	Technical data	6
4.1	Markings on the product	6
4.2	Table of technical data	6
4.3	Materials	6
5.	Maintenance	6
5.1	Maintenance (cleaning/disinfection)	6
5.2	Maintenance (service)	7
5.3	Storage	7
6.	Recognizing and remedying malfunctions	7
7.	Disposal	7
8.	Pictures for operation	8
8.1	Pictures for operation / assembly	8
8.2	Pictures for operation mounting/ disassembly	9
8.3	Images of the function of the vacuum safety indicator	10
9.	Accessories	11

1. General

1.1 General information














Please read this instruction manual carefully before use and follow the safety

instructions to ensure your safety when using the mobile QuattroPlus grab handle. Keep this instruction manual for future reference and pass them on to other users!

If the safety rules stated in the instruction manual is not observed, any liability on our part is excluded.

1.2 Explanations/symbols in this manual and on the handle

	Instructions manual must be read! (ISO 7010; M002)
	For persons with visual impairment, the font size for this on-line manual can be set accordingly at https://www.mobeli.de/download-bereich .
	Warning (indicates a dangerous situation)
	Manufacturer (additionally, year of manufacture on the handlebar)
	Order number
	Maximum user weight
	The mobile MOBELI grab handles are compliant with Regulation (EU) 2017/745
	The mobile MOBELI grab handles are Class I medical devices
	Batch designation
	(Unique Device Identification)
	Keep out of direct sunlight



Allergy Notice: The high-quality suction pads contain natural rubber latex. Natural rubber latex can cause allergic reactions including anaphylactic reactions.

1.3 Intended use



As grab handle or stand-up handle for adults and children. The mobile grab handles have been developed to support natural movement. **They are not designed to bear the full body weight.**

Any other use, e.g. as a seat, carrying handle or climbing aid, is not permitted.

1.4 Indication

Suitable for people with the following conditions: limited mobility, balance problems, muscular weakness (mild to moderate), postoperative rehabilitation needs, functional impairments.

1.5 Contraindication

The grab handle is not suitable for persons who have one or more of the following conditions:

Cognitive impairments or dementia with a lack of ability to use the device safely (unless the caregiver or an assistant can lock the rocker arm with the rocker arm lock (accessory) and regularly checks the vacuum status for the surface in question). Persons weighing more than the specified maximum user weight.

Unsuitable non-porous surfaces or non-adhesive surfaces on which secure attachment cannot be guaranteed.

1.6 Application range of the product



The QuattroPlus grab handle is intended for largely independent use in enclosed spaces such as showers, bathtubs, toilets, and sinks. For the vacuum suction generated by the suction pads to be effective, **the grab handle may only be attached** to smooth and non-porous rigid surfaces that are pore- and steam-tight, clean, dry, and free of oils and grease.

On rough or porous surfaces, the vacuum hold will be diminished or does not exist at all. Please bear in mind that tiles are not necessarily always smooth and steam-tight (i.e., suitable for vacuum generation).



Test your tiles and the wall prior to use (with the help of another person, if necessary).

Since the vacuum suction pads are made of highly adhesive, soft, elastic natural rubber, they can usually adapt to slightly textured tiles. (Attention, reduced holding time! Pay attention to the safety indicator!)

The mobile grab handle is ideal for use at home, e.g., for temporary use after a hospital stay or for testing living space. It can also be used in clinics and care facilities as an additional and short-term supplement to stationary grab handles.

The mobile grab handle can also be used in places where stationary grab handles cannot be installed, e.g., in glass showers or bathtubs. If drilling into walls is not permitted (not possible), e.g., in a rented apartment, or if there may be water and/or electrical lines in the wall.

1.7 For your information

In hotels and public establishments in Europe, tiles must be non-porous and steam-tight (as per DIN/EN 159 and 176). According to the tile adhesives material standard DIN EN 12004, tile adhesives must have a minimum adhesive strength of 0.5 N/mm². E.g., for four tiles with a tile size of 147 mm x 147 mm x 0.05 kg/mm², this would result in an adhesive strength of approx. 4320 kg. Even with an effective adhesive surface of only 1/3 of the tile surface (e.g., due to a rough serrated trowel) and tile joints not filled-in, there would still be an adhesive strength of approx. 1400 kg. Unfortunately, though, one cannot always rely on this assumption; therefore, it is absolutely indispensable to test the adhesive strength of the respective tiles or other surface materials on the wall beforehand. Furthermore, due to material ageing or in prefabricated construction there might be a reduction of the adhesive strength, therefore testing is essential (e.g., by abrupt application of force).

1.8 Useful life

The expected useful life is six years (if used daily and in accordance with the intended purpose) in an institution or public facility. The prerequisite for this is compliance with the maintenance and safety regulations specified in these operating instructions. The actual service life may vary depending on the frequency and intensity of use. The handles have been tested in accordance with ISO 17966:2016.

1.9 Reuse

The product is suitable for repeated use. How often the product can be used depends on the type of use. Clean and disinfect the product thoroughly before re-use and check the handle carefully, especially the function of the vacuum safety indicator.

2. Safety information



- **Prior to any use of the mobile QuattroPlus grab handle, the vacuum safety indicator must be examined and acted upon according to the instructions (cf. page 10)**
- **Even on fully impermeable, flush tiles it can never be determined exactly when the vacuum will decrease (e.g. due to hairline cracks), therefore always pay attention to the vacuum safety indicator!**



- Use the mobile grab handle only when you have experience in handling it or while you are under supervision of a person who has experience in its use. Children may only use the handle under supervision or if you have secured the rocker arms with a rocker arm lock (cf. accessories on page 11).
- Before each new attachment, make sure of the proper functioning of the mobile QuattroPlus grab handle. Pay particular attention to the rubber suction pads; they must be clean and undamaged and must not show any signs of tearing or scoring.



Never use mobile QuattroPlus grab handles with damaged suction pads and/or when they have reduced adhesive strength.

- Keep in mind that the grab handle is only as strong as the surface it is attached to; so check the adhesion of the substrate (e.g. the tile on the wall) before using the handle in a new place.
- After applying the vacuum tilting levers, the sucking adhesive strength created by the vacuum can be entirely or partly absent, in particular with unglazed tiles, natural stone (marble), wood, as well as ceramic coating that has been textured/grinded or given a fine-grained texture to provide a non-slip finish.

This can be seen and felt when the safety rocker of the vacuum safety indicator is extended!



- **Attention!** Usage under water reduces the suction strength.
- The suction strength stated above refers to normal room temperature (10°–30°C); at high temperatures, e.g. in a sauna, the holding strength will be reduced. **Attention!** Temperatures higher than 41°C can be reached due to solar radiation or by contact with hot water which can lead to skin damage and/or burning.
- The indicated holding strength is calculated at about 300 m above sea level. At higher altitudes, the holding strength diminishes (by approx. 10% per every additional 1,000 m of altitude).



- Do not expose the suction pads to direct UV radiation (sunlight); otherwise, they will quickly lose their elasticity. For this reason, never attach the grab handles to any surface (e.g. window) that will be illuminated from the outside.
- Do not place anything underneath the grab handle that could be damaged by the handle suddenly releasing and dropping on it or remove the handle after use.



- **The detachable mobile grab handles may only be used with the tilting levers perfectly engaged.**
- Do not attach the mobile QuattroPlus grab handles to vehicle metal panels, foils, or thin glass panes because the vacuum created by the suction pad might deform and damage these materials.
- If the mobile QuattroPlus grab handle remains attached over prolonged periods of time, there is the risk that the underground (e.g. bathtub) gets permanently stained by the suction pad.



- Never combine MOBELI products with parts from other manufacturers. In this case, all warranties and liability shall lapse. **Risk of accident!!!**

If a serious incident occurs involving this medical product, contact the manufacturer of this product (E-mail: info@mobeli.de) as well as the national competent authority in your country.

3. Operation / Assembly

3.1 Mounting (see page 9)

Mounting: Push the snap-lock pins into the handlebar (fig. 7 arrow) and insert them into the crosspiece until the snap-lock pins are engaged in the bores of the crosspiece (clicking noise). Please take care that the cross parts are pointing upwards (fig. 11b).



Test the secure hold of the snap-lock pins by trying to pull the components apart!

The grab handle must not be used if not all snap-lock pins on both sides are securely locked.

The telescopic grab handle must not be mounted with the cross part pointing downwards (fig. 11a)!

3.2 Attaching / suction (see pages 8 and 9)

Video unpacking



1. Examine the vacuum suction pads and the surface they are to be attached to.
2. Clean the surface thoroughly (fig. 1) so that it is **clean** (e.g. from etched lime sludge) and **grease-free**. Likewise, the surface of the suction pad must be clean.
3. **Firmly press the mobile grab handle onto the surface where it should be sucked on.** (Fig. 2a, b, c, d).
 - a. The **tilting vacuum levers** must be **loose** at this point.
 - b. Take care that both **suction pads** are always positioned with their **full suction area** on the tiles or other surfaces so that no grouting line or tile joint (figs. 3 and 4) lies under a suction pad and the pads are attached at least 10mm above the lower edge of a joint (fig. 3).

To achieve this, you can adjust the length of the grip with the telescopic grab handle (figs. 4 and 5).
 - c. The built-in joints enable you to place the mobile grab handle also across corners (fig. 6).
4. While pressing the grab handle against the surface to be adhered to and at the same time pressing on the rocker (figs. 2a to d), turn over the all four rockers one after the other (figs. 2, 2a, b, c, d).
5. The vacuum safety indicators continuously monitor the current vacuum state.



After the rockers have been pressed and turned, all the red-coloured safety tabs must be **completely recessed flush with the surface** in the rockers (page 10, figs. 13 and 15)! In the course of time when the vacuum decreases, the safety rockers will extend.



- If a red side edge of the safety tabs (figs. 14 and 16) has become visible, the grab handle must not be used under any circumstances and **must be reattached** immediately!
- **The clearer a red side edge of the tabs** (figs. 14 and 16) **can be seen, the lower is the actual adhesive strength!**



6. Check the vacuum safety indicator prior to any use. This can be felt by visually impaired or blind people. If the vacuum safety indicator is not retracted (as just described), reattach the suction pads. If the indicator rockers still protrude after the rocker arms have been flipped and continue to protrude even after the rockers have been pressed in, the handle must be reattached. (cf. malfunctions on page 7).



If the safety rockers do not retract completely, do not use the handle under any circumstances!

3.3 Releasing

1. Place your finger under the rocker arm and lift it up; at the same time set your thumb on the structured recess of the vacuum tilting lever to prevent a recoil effect.

Caution! With wrong operation there exists danger of squeezing.
2. Wait a little while! The four suction pads will relax after approx. 30–60 seconds and return to their original shape, and then the suction pad can be removed from the wall. Should the suction pads keep adhering longer, you can additionally raise the pads at one side (between wall and suction pad) with a finger so that air can penetrate underneath.
3. **Do not try to loosen the suction pads with sharp edged items or tools; you would damage them.**
4. When not in use, store the mobile QuattroPlus grab handle with the suction pads relaxed (i.e., with vacuum tilting levers disengaged, see page 9 fig. 12), flat and plane. Protect your mobile grab handle (e.g. in the box) from direct sunlight.



3.4 Disassembling (see page 9)

Disassembling the grab handle: Push in the snap-lock pin (fig. 8) from the telescopic handlebar with the red push-in aid and pull the telescopic handlebar out of the crosspiece while firmly holding it.

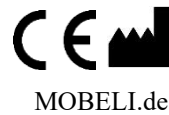
Disassembling the crosspieces and suction parts: Push in the snap-lock pin (fig. 9) from the crosspiece connector and pull it out from the suction casing (fig. 10).

4. Technical data

4.1 Markings on the product

(for explanations of the symbols, see page 3)

On the back of the grab handle (C) →



ROTH GmbH D-72213 Altensteig 202X

MD

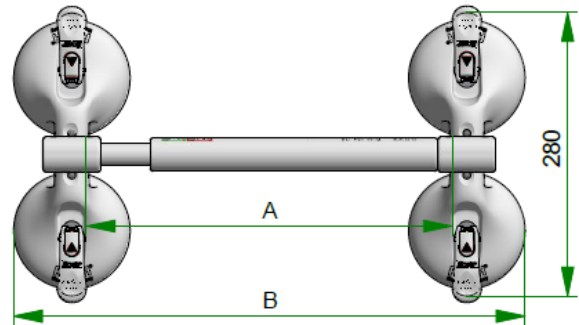
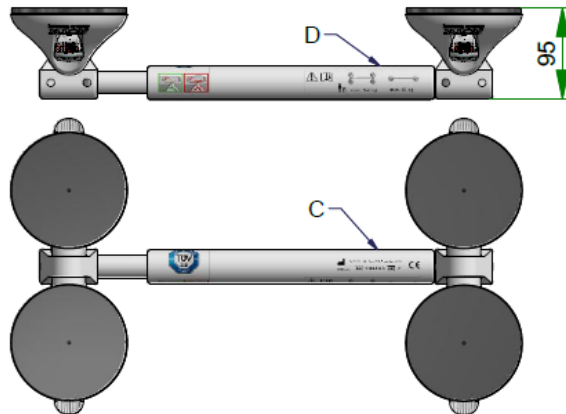
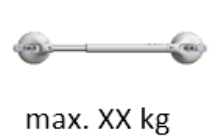
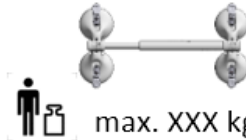
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On the top of the grab handle (D) →



Maximum user weights in the table of technical data and on the handlebar must be observed!
The mobile QuattroPlus grab handles have been developed to support natural movement.
They are not designed to carry the full body weight.

4.2 Table of technical data



REF ROTH order no.	Grip length A (adjustable for telescopic grips) in mm	Total length B in mm	Grip Ø in mm	Max. user weight in kg	Grip weight in kg
14002 41S	200-325	360-485	35	160	1.77
14002 42S	320-445	480-605	35	160	1.94
14002 43S	420-545	580-705	35	160	2.04
14002 44S	645-770	805-930	35	150	2.26

You can convert the QuattroPlus grab handles with 4 suction heads into grab handles with 2 suction heads. In that case, the lower values on the handlebar must be taken into account.

4.3 Materials

Handlebar made of high-impact PVC, all metal parts made of stainless steel
Suction pad made of NBR, suction casing made of PA 6.6, crosspieces of POM

5. Maintenance

5.1 Maintenance (cleaning/disinfection)

- Clean the handle with a cloth using standard household detergents such as soapy water, but do not use abrasive or aggressive cleaning agents. Do not use thinner or petrol and do not use detergents that attack plastics.
- Rinse the handle thoroughly with warm water until all soap and foam residues have been removed. (Otherwise, rust can adhere to the stainless-steel parts.)
- Always keep the suction pads free from dust and dirt by rinsing them with warm water and then drying with a lint-free cloth.

- Disinfect the product by wiping all surfaces with a cloth with disinfectant.
- In a medical environment, also refer to the "Recommendations of the Commission for Hospital Hygiene and Infection Prevention" on the website of the Robert Koch Institute www.rki.de.
- The grab handle is resistant to the active agents in the hand and surface disinfectants certified by the DGHM (Disinfection Commission of the German Society for Hygiene and Microbiology) with the exception of phenol ether, pyridine derivative, and thiocyanate.
- **Only alcoholic disinfection without re-fattening component may be used for the suction pads.**



5.2 Maintenance (service)

- If the handle has been attached to the wall for a prolonged period, the suction pads will overstretch. We therefore recommend that you remove the handle from the wall approx. every 14 days and leave it overnight on a flat surface with the rubber disks relaxed, then reattach it the next morning.
- Examine the suction pads for possible functional deterioration because of reduced elasticity due to age, wear, exposure to sunlight, uneven storage, scoring, etc.
If the suction pads are damaged and therefore the adhesive strength is limited, the complete suction heads (spare part no. 14002S) are to be replaced or the suction pads (spare part no. 1402721) must be exchanged by trained specialist staff.
- Keep the vacuum safety indicator always free from dirt!!
- **Check the handle regularly for damage and do not use the handle under any circumstances if it is damaged.**




5.3 Storage

- If the handle is not used for a long period of time, it must be stored with the suction pads relaxed on a flat surface (preferably in its packaging) and protected from sunlight.



6. Recognizing and remedying malfunctions

Malfunctions	Possible causes of malfunctions/test	Corrective measures
With new handle: safety indicator pops up after a short time	Lime or other dirt on the surface.	Clean the surface thoroughly.
	The surface is not non-porous even if it looks smooth, or it is damaged (e.g. hairline crack in the tile). Possible test procedure: Attach the handle to a glass pane or mirror and pay attention to the safety indicator. If now the safety indicator does not move any more, the fault is in the substrate.	If possible, attach the handle at another location where the underground is non-porous. If this is not possible, self-adhesive stainless-steel plates (order no. 1461418) to which the handles can be attached can be glued on. See accessories.
With older handle: safety indicator pops up after a short time	Suction pads scratched or damaged.	If there is damage, the suction pads (order no. 1402721) can be replaced by a specialist dealer or the complete suction head (order no. 14002S) can be replaced.
Indicator rocker is still slightly raised after mounting	1. Toggle lever not firmly pressed down before turning over!	Attach the handle again while beforehand pressing the rocker arm firmly down. (Page 8 fig. 2a arrow 2) See video: attach grab handle.
	2. The suction pad is overstretched. This happens when the handle has been attached to the wall for a long time. <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">Video attach grab handle</div>  </div>	Leave the handle overnight on a flat surface with the rocker released (page 9 fig. 12). Attach again the next day while beforehand pressing the rocker arm firmly down. If the mounting rocker still protrudes after pressing it in, the suction pads (order no. 1402721) must be replaced by a specialist dealer or the complete suction head (order no. 14002S) must be replaced.

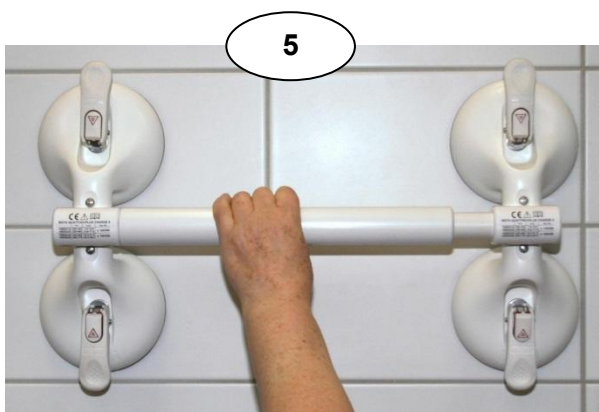
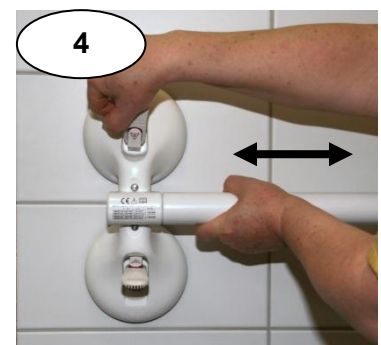
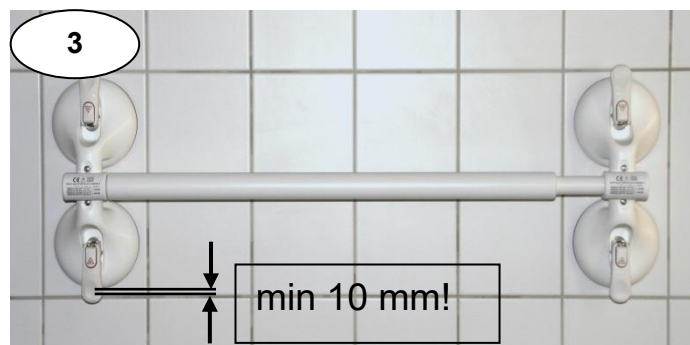
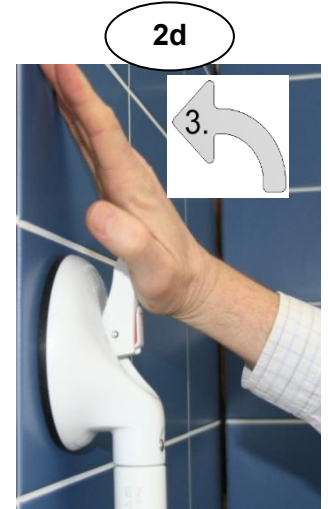
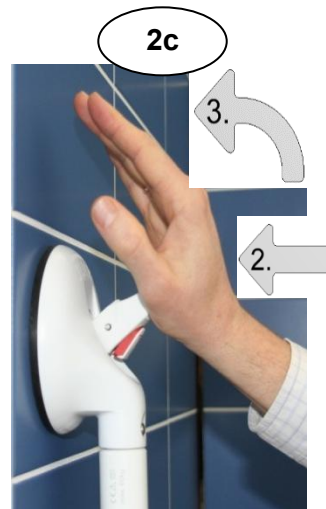
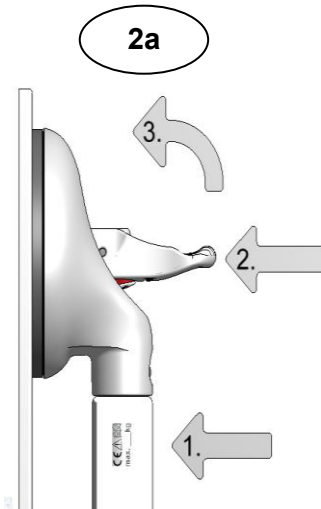
7. Disposal

The product packaging should be recycled. The metal parts can be recycled as scrap metal. Disposal must be carried out according to the respective national statutory regulations. Please ask your local or communal authority about local disposal facilities.

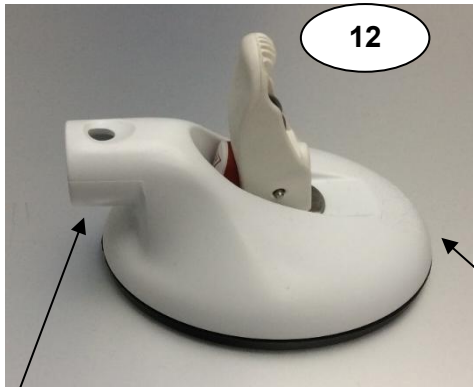
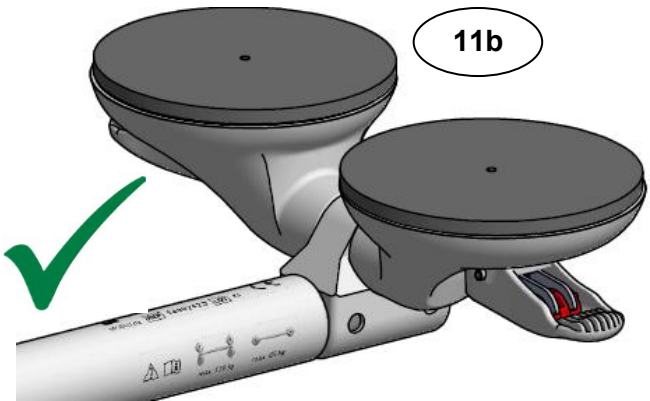
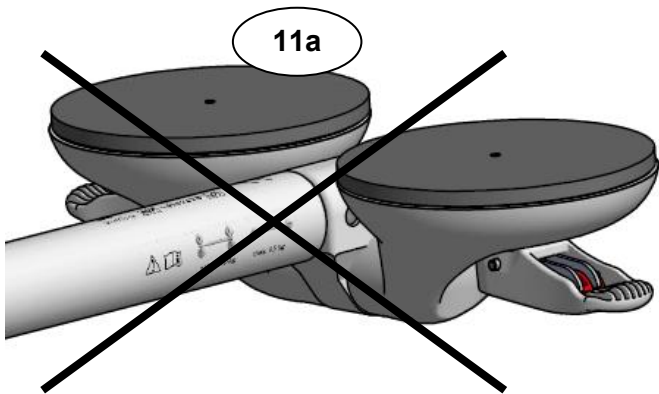
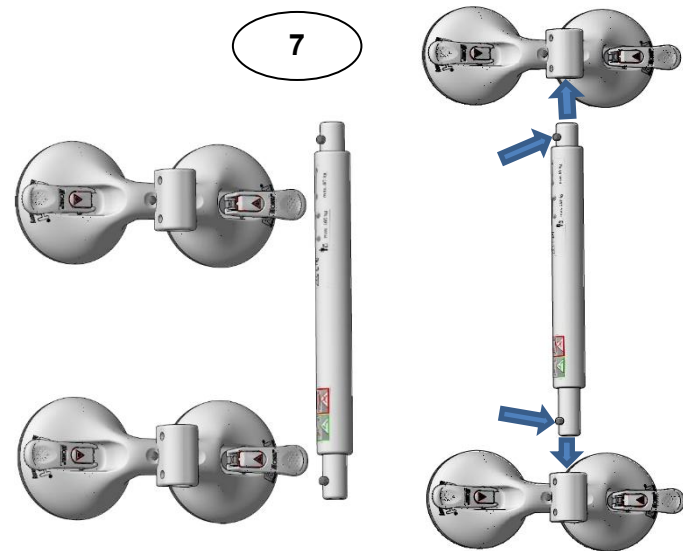
These ROTH mobile QuattroPlus grab handles may not be exported to the U.S. (cf. U.S. version). Subject to technical modification.

8. Pictures for operation

8.1 Pictures for operation / assembly



8.2 Pictures for operation mounting/ disassembly

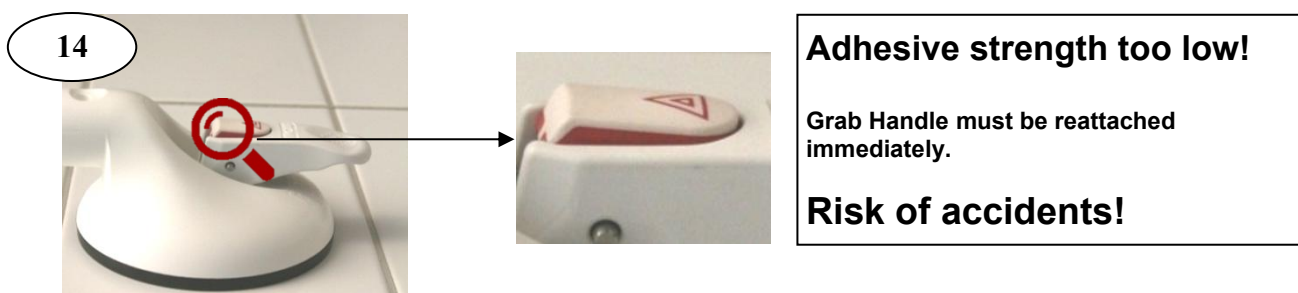
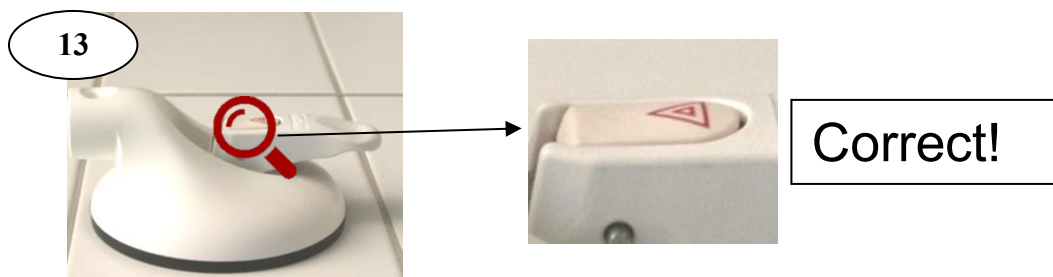


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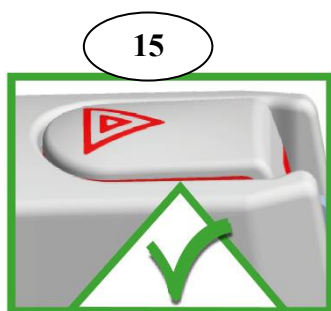
ROTH® Made in Germany

Vacuum safety indicator on the rocker arm

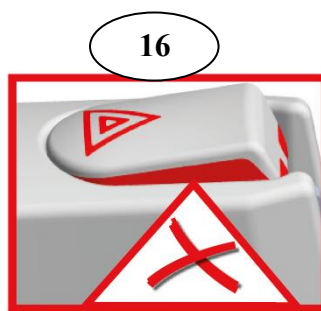


Mode of operation of the safety rocker: The vacuum is permanently monitored.

Explanation of the symbols on the handles:



Full security for the the specified maximum user weight.



Attention! Attention: The handle must be reattached immediately!

The vacuum of the handle is reduced. The handle is no longer permissible for the maximum user weight. (Only for your information: A reduced holding force is still present.)

9. Accessories

(Accessories are available from your specialist dealer.)

To prevent unauthorised persons (e.g. people with dementia, children, or in public areas) from opening the handle, we recommend our rocker arm safety lock.

REF 1400674 (for 4 locks and 1 key).

Video tilting lever lock



Rocker arm extension
Flexible contrast rings
Stainless-steel plates
Protective parts

Order no. 1400574, Force amplification for actuating the rocker arm
Order no. 1402766, for better contrast for visually impaired persons
Order no. 1461418, for non-porous tiles
Order no. 1400682, Protection of the suction pad during transport

Video rocker arm extension

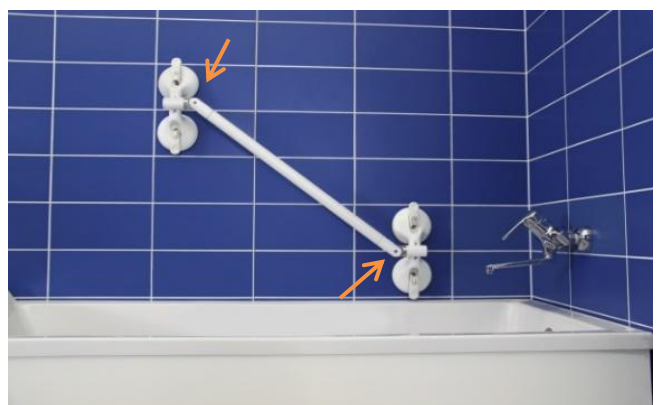


Diagonal joint adapter

Order number: Diagonal joint adapter:

REF 1400557

Attention! The diagonal joint adapter reduces the max. user weight to 120 kg.



Should you require further information and videos about the products, please contact us.

You can also find them on our website: www.mobeli.com

The instructions for use are available in the download area: www.mobeli.com/download

Video
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products



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