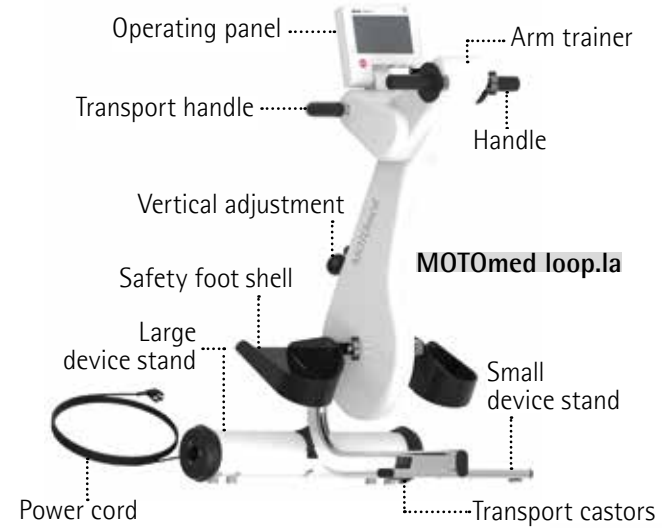
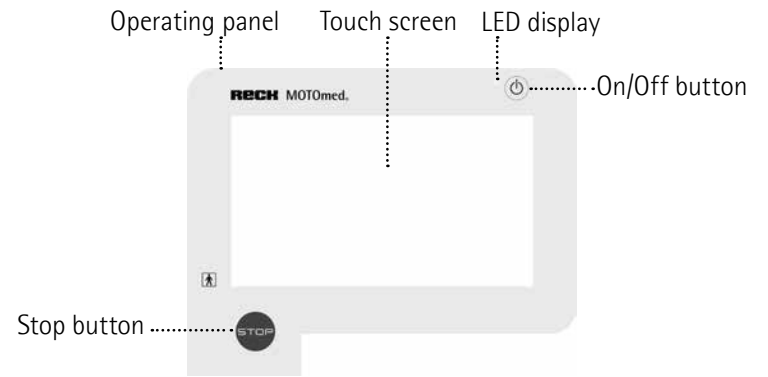


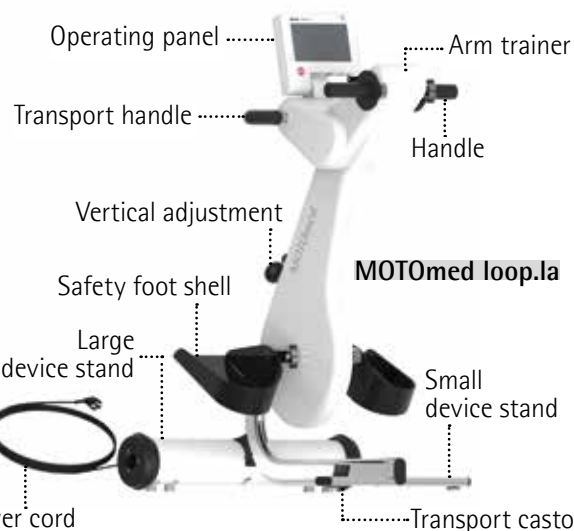
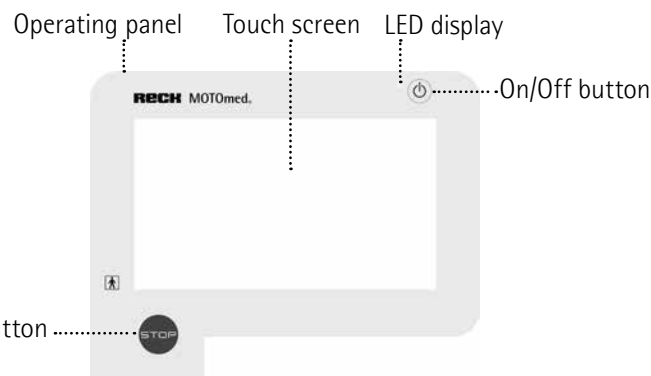
Instruction Manual

MOTOmed® loop edition



Reck





- en Please use the MOTOmed only after you have read the instruction manual. If you should not understand the language of the present version, please request the instruction manual in your national language.
- de Benutzen Sie das MOTOmed erst, nachdem Sie die Gebrauchsanweisung gelesen haben. Sollten Sie die vorliegende Sprachversion nicht verstehen, fordern Sie bitte eine Anleitung in Ihrer Landessprache an.
- fr Avant de commencer votre entraînement MOTOmed, veuillez lire les instructions d'utilisation. Si ces instructions d'utilisation ne correspondent pas à votre langue, n'hésitez pas à nous demander une autre traduction.
- es Utilice el MOTOmed sólo después de haber leído las instrucciones de uso. Si no entiende el idioma de la presente versión, por favor exija un manual en su lengua nacional.
- pt Use o MOTOmed somente, depois de ter lido as instruções de operação. Em caso que você não compreenda a língua desta instrução, peça por favor uma orientação em sua língua nacional.
- it Per un ottimo funzionamento del MOTOmed leggere le istruzioni per l'uso. Se riscontrate qualche difficoltà riguardo la vostra lingua madre consultate il vostro servizio assistenza.
- nl Neem uw MOTOmed pas in gebruik nadat u de gebruiksaanwijzing hebt gelezen. Indien de gebruiksaanwijzing niet overeenstemt met uw moedertaal, aarzel dan niet ons te contacteren en een andere taalversie aan te vragen.
- sv Använd MOTOmeden endast, efter du har läst fungerande anvisningen. Om dig bör inte förstå den tillgängliga språkversionen, förfrågan var god a vägledning i ditt nationella språk.
- da MOTOmed må først anvendes, når brugsanvisningen er gennemlæst. Forstår du ikke vedlagte brugsanvisning, rekvirer en dansk vejledning hos ProTerapi.
- pl Przed skorzystaniem z urządzenia MOTOmed prosimy zapoznać się z instrukcją obsługi. Jeśli instrukcja obsługi jest napisana w języku obcym ządajcie Państwo instrukcji w języku przez Państwa znanym.
- ru Используйте MOTOmed только после того, как прочитаете инструкцию по эксплуатации. Если Вам не понятен язык, на котором написана инструкция, запросите, пожалуйста, на родном языке.

gentle, attractive and intelligent ...

Congratulations! You have made an excellent choice by purchasing your MOTOMed. This movement therapy device provides outstanding performance. Supported by the latest computer technology, it is an innovative RECK quality product »Made in Germany«.

The MOTOMed is a motor-assisted movement therapy device that thinks with you. Enjoy a daily therapy with positive effects.

This instruction manual will help you to get to know the MOTOMed. It will guide you through the functions and give some suggestions and tips on how to use your new movement therapy system so as to gain optimal benefit from the training. Before starting the MOTOMed, please note the *Safety precautions* listed in section 2.

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If you have any further questions or comments, please don't hesitate to call your MOTOMed representative or the RECK customer service team.

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Enjoy the training with your MOTOMed!

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Information about this manual

Read this instruction manual carefully before first use and note the points listed. Keep the manual for future use.

The instructions for use in this manual apply to all MOTOMed loop product variants:

MOTOMed loop.l	Order-No. 260.010
MOTOMed loop.a	Order-No. 260.020
MOTOMed loop.la	Order-No. 260.030
MOTOMed loop.la prof	Order-No. 260.039
MOTOMed loop p.l	Order-No. 260.040
MOTOMed loop p.la	Order-No. 260.060
MOTOMed loop light.l	Order-No. 260.100
MOTOMed loop light.a	Order-No. 260.110
MOTOMed loop light.la	Order-No. 260.120
MOTOMed loop kidz.l	Order-No. 260.070
MOTOMed loop kidz.a	Order-No. 260.080
MOTOMed loop kidz.la	Order-No. 260.090

This manual contains safety information that helps you to identify and prevent hazards.

Two signal words and the associated symbols highlight potential dangers:

WARNING



Indicates a potential hazard with medium risk, which can result in death or (serious) bodily injury if it is not avoided.

CAUTION



Indicates a low-risk hazard which, if not avoided, could result in minor or moderate personal injury or property damage.

Can also be used to warn of property damage.

The following symbols indicate additional or further information:



Additional information about operating the MOTOMed, accessories and MOTOMed software.

Page 77 Reference to further information or illustrations elsewhere (here for example on page 77).

Intended purpose

The MOTOMed is intended exclusively for passive, assistive and active movement of the lower and upper extremities of seated persons. During use, the MOTOMed can be controlled via an operating panel. The MOTOMed is mobile and can therefore be used at different locations.

Patient target group

The MOTOMed loop is suitable for young people and adults. The typical patient is over 15 years old, 140–200 cm tall, has a maximum weight of 135 kg, is bound to a wheelchair or has restricted mobility.

Intended use

The MOTOMed is applied by the user to train in a safe and stable wheelchair or on a stable and sturdy chair (without wheels) with a sufficiently high backrest in front of the movement therapy device. The user must assume a sitting position and the wheelchair or chair must not tilt backwards.

The MOTOMed must stand on a level and solid surface.

You may only attach or connect accessories and equipment authorised by the manufacturer or explicitly approved by them.

General

The use of the MOTOMed is only permitted if the measures and safety instructions described in this manual are observed and none of the therapeutic contraindications listed here, or determined by the physician, are present.

Adjustments and changes, with the exception of the operation of the operating panel, are only permitted if the pedal or arm cranks do not move and the legs or arms are not inserted or not fixed.

The MOTOMed is suitable for environments in professional health care settings and a home health care environment.

Disclaimer

The manufacturer and its distribution partners assume no liability for consequences of:

- improper, incorrect, unintended use
- disregard of this manual
- wilful damage or gross negligence
- over-intensive training, e.g. for competitive sports
- use of inappropriate wheelchairs or chairs
- application contrary to the specifications of the responsible specialist or therapist
- mounting of unauthorised accessories
- repairs or other interventions on the MOTOMed by persons not authorised by the manufacturer
- use of a power cord other than the one supplied by the manufacturer to operate the MOTOMed

Treatment goals

Avoidance, reduction, improvement of (consequential) damage due to loss of movement or lack of exercise in the following main indications:

Indications (clinical pictures)

- (Spastic) paralysis or neuromuscular disorders with major loss of leg (limb) mobility (e.g. stroke, multiple sclerosis, paraplegia, post-polio syndrome, Parkinson's, craniocerebral trauma, cerebral palsy, cerebral palsy, spina bifida)
- Orthopaedic complaints such as rheumatism, arthritis, knee/hip replacement, condition after capsule ligament injuries
- Cardiovascular and metabolic diseases (e.g. arteriosclerosis, diabetes mellitus type 2, hypertension, PAOD, osteoporosis)
- Supplementation of the therapeutic measures, for example in dialysis patients, chronic obstructive bronchitis and patients with very low general performance ability
- Circulatory disorders of the legs and organs
- Other medical conditions that lead to restricted mobility or bed rest

Contraindications

resulting in the exclusion of a subject from the study did not occur during the clinical evaluation.

On the basis of a risk analysis and many years of experience in the field of movement therapy, the following indications must be consulted with the physician and therapist before beginning the training session: Fresh joint injuries, fresh supply of joint replacement/prostheses, fresh cruciate ligament rupture, fresh knee and hip TEP, severe knee and hip osteoarthritis, joint stiffness, extreme muscle shortening, risk of hip and shoulder dislocation (e.g. subluxed shoulder), acute thrombosis, bedsores and very strong osteoporosis.

Clinical benefit

The benefits of MOTOmed devices for patients have been scientifically evaluated and empirically proven.

Undesirable side effects

No undesirable side effects have been recorded or reported as a result of training with the MOTOmed movement therapy device.

Notes on the residual risk:

The principle of the MOTOmed movement therapy device is based on the function of electric motors, which drive the cranks of the arm or leg trainer with defined forces. The manufacturer has taken extensive measures to ensure the electrical and functional safety of the MOTOmed, so that the residual risk is minimal if all safety instructions are observed.

It is important to note, however, that rotating cranks can cause injury if the user is negligent, fails to follow the safety instructions, or misuses the MOTOmed.

Users who are unable to personally implement the safety instructions or are unable to recognize and avoid hazardous situations themselves may only train under qualified supervision.



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When using the MOTOmed, be sure to observe the safety precautions listed in section 2.

Serious incident

Note according to Regulation (EU) 2017/745:

If a serious incident directly or indirectly related to the product occurs or could have occurred (e.g. temporary or permanent serious deterioration of the health status of a user/patient), it must be reported immediately to the manufacturer (vigilance@motomed.com) and to the competent authority of the Member State in which the user and/or the patient is established.

Safety precautions

General information

Adjust the MOTOMed training to the individual clinical picture. Training tips by the manufacturer or its distribution partners are not binding. We cannot specify exactly how you should use the MOTOMed for the various diseases. This also applies to the details of the training functions, as the possible settings are dependent on age, height, individual fitness, postoperative resilience and general condition of the user.

The MOTOMed should always be used for the first time under the instruction and supervision of specialized personnel. Prior to the first training, be sure to discuss the nature, extent, intensity, and timing of the training with the physician and therapist. When starting the device, also note the presets of the selected MOTOMed training program.

Make sure that the user understands the functions and operation of the MOTOMed and can independently reach, operate and switch off the MOTOMed during training via the operating panel (especially in case of arm/upper body training with forearm shell). Otherwise, the user must not train or place their legs or arms in and out without supervision. In this case, it is essential to have another person that continuously supervises the user.

Unauthorised persons (visitors, assistants, etc.) must not make any changes to the wheelchair, chair or MOTOMed during the training. After starting the device, reduce the speed if the health of the user does not allow MOTOMed training with a maximum speed of 20 rpm.

The handles, or the foot shells and calf shells of the leg guides, may generally come into contact with intact skin.

When using fastening straps, wear socks and/or shoes, long pants or similar textiles. This avoids the direct contact of the skin with the foot shells or fastening straps and thus prevents bruises, skin irritations and abrasions.

Training is not recommended if there is a risk of skin abrasions, pressure points or other injuries that are dependent on the illness, foot position and adjustment of the leg movements. If the device is nevertheless used under these circumstances, the user must take appropriate safety precautions (insertion of buffer material, etc.) in consultation with the physician and therapist.

In the case of open wounds or the risk of decubitus (e.g. due to sensitive tissue or skin condition), especially on the body parts that are in contact with the therapeutic device, MOTomed training is allowed only after consultation with the doctor and therapist, or at own risk of the user. The device manufacturer is not liable for injuries that may occur if these instructions are not followed.

There may be an increased health risk if the user is under the influence of alcohol, drugs or medicine. In this case, the use of MOTomed is not recommended.

In case of pain, nausea, poor circulation, etc., stop training immediately and consult a doctor. The manufacturer or his sales partners do not assume any responsibility in case of incorrect or too intensive use by the user.

Only put your feet in the safety foot shells when sitting down. Do not step into the foot shells with your whole body weight while standing. Never load with more than 25 kg (with a pedal radius of 7 cm) per side of the pedal.

One-sided training, either with only one leg or arm or with large weight differences of the limbs, initially only perform in the presence of a caregiver. Only carry out one-sided training with a high braking resistance or using a counterweight provided by the manufacturer.

Arm/upper body training

In case of a separate arm/upper body training, remove the legs from the safety foot shells and place them on the floor or on the foot rests of the wheelchair.

Safety precautions for upper limb ergometry:

In children, bone stability is still relatively low, which can easily lead to fractures or so-called bulge fractures (incomplete fractures). To reduce the risk of such an injury, ensure that the wrist is well supported during upper limb ergometry.

Make sure that the hand, wrist and arm adjustments recommended by your clinic are always used.

Also, make sure that the child remains seated upright with a view to the movement trainer and avoid turning of the forearm and wrist.

If the correct connection of the MOTOmed is not clear to you or if you have any questions, please contact our staff at MOTOmed Service Centre.

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Safety and technical information

The MOTOmed is a highly specialized movement therapy device that is not designed for high-performance sports or for diagnostic purposes. We recommend using approved and calibrated ergometers or treadmills for this purpose.

No specific knowledge is required for use of the device. A prerequisite for safe operation is the ability to read and operate the display.

The use of the MOTOMed does not require any product-specific knowledge, e. g. from training courses.

The indicated values only show a trend and give psychological feedback to the user.

Page 71 As an electrically powered medical device, the MOTOMed is subject to special precautions regarding EMC. The EMC instructions must therefore be observed during installation and commissioning.

Children are not allowed to train without supervision at MOTOMed. Keep unattended children away from the MOTOMed.

Keep animals away from the MOTOMed to avoid injury to the animal.

Certain electric wheelchairs, stand-up wheelchairs, sports wheelchairs, etc. with a large stem, or with non-folding or non-removable foot shells, may not be suitable or may need a special, flat, small device stand, which allows driving over.

Train only when the MOTOMed has been switched on.
Do not use the MOTOMed while standing.

Do not alter the position and location of the MOTOMed during exercise or when the legs or arms have been inserted or attached.

CAUTION Risk of injury due to falling device



The transport handle is used solely for moving the device and is not designed for support.

Do not load the MOTOMed sideways. Do not load the handles and handles with the partial or total body weight (e.g. by supporting or pulling up). The handles and handles must only be for holding firmly with the hands while exercising.

CAUTION Risk of injury due to rotating pedal cranks and moving parts of the device

Do not make any mechanical adjustments (pedal radius, height adjustment of hand and grab handles or arm/upper body trainer, etc.) on the MOTOMed while the pedal cranks are turning.

When operating the buttons on the operating panel, also pay attention to the rotating pedal cranks.

Be careful not to insert your fingers between the housing and the crank while the pedals are rotating.

Never reach into a piece of equipment that moves!

Before starting the device, make sure that there are no collisions with the handles when the legs are in place.



When changing the pedal radius, the power ratios can change.



If the MOTOMed cannot be switched off with the red stop button or the On/Off button, immediately reduce the speed to 1 rpm and end the training or disconnect the mains cable from the socket. A new training is only possible if the fault has been eliminated.



Portable and mobile RF communication devices, such as mobile phones or amateur radio stations, can affect the function of the MOTOMed. Corresponding devices are marked with the adjacent symbol and can be thus identified.

CAUTION Danger of overheating the housing parts

Parts of the housing may overheat if permanently exposed to direct sunlight, so place the MOTOMed appropriately.



The surface temperature of the operating panel housing is up to 13°C above the ambient temperature due to the heat dissipation of the electronic components. Even if not exposed to direct sunlight, the buttons of the operating panel temperatures may reach up to 53°C at the maximum permissible ambient temperature (40°C). Users who may be harmed by brief contact with this temperature, should take appropriate measures for protection.

CAUTION

Danger of damage to engine and electronics

Do not actively press against the passively specified rotary motion.



WARNING

Risk of injury due to electric shock

Never operate the MOTOMed if the covering has been removed. Never open the housing or reach into the MOTOMed with metal objects. Opening the MOTOMed is only permitted for persons with corresponding specialist training. Before opening the MOTOMed, always unplug the power plug!

Never operate the MOTOMed in wet or humid environments. The MOTOMed must not come into contact with water or steam. If any object or liquid enters the MOTOMed, have it checked by qualified personnel before continuing to use it.



Make sure that no oil gets into the drive parts.

Repairs should only be carried out by or under the direction and supervision of professionals who, by virtue of their training, knowledge and experience, are capable of assessing repairs and identifying potential effects and risks.

The MOTOMed must not be altered without the manufacturer's permission.

Only original parts and original accessories may be used for the attachment or conversion.

In commercial facilities, the accident prevention regulations of the employer's liability insurance association for electrical installations and equipment must be observed.

WARNING Risk of injury due to packaging material



Do not leave the packaging material lying carelessly around. Plastic films, plastic bags, styrofoam parts, etc. can be a dangerous if used as a toy by children.

If you should pass on the MOTomed to other persons, please enclose this instruction manual.

Visual inspection

Instructions for visual inspection of the MOTOMed before starting the training

Your MOTOMed is a high quality medical device and is designed and manufactured according to the highest medical and safety standards. In accordance with the legal requirements, the manufacturer of a medical device has to give the user a multitude of safety instructions which can be found on the following pages.

Please note that the large number of safety instructions does not imply that using the MOTOMed carries a higher risk than other appliances used in everyday life. Rather, most instructions are a consequence of adherence to the particularly strict regulations applicable to medical devices to guarantee the safety of users and patients, which we are happy to follow and implement conscientiously in the interests of our customers.

Even if some instructions may seem obvious, we would still like to ask you to read the following pages carefully and to strictly follow the instructions, so that your MOTOMed remains a valuable aid that provides the highest level of safety for a long time to come.

Please carry out the visual inspection **before starting** the training to ensure that the device is in proper condition. The controls described below are done in a few moments.

Test step	Measures if errors are detected during the visual inspection	Reason for the test step
1. Control of the power supply and the PSU		
Is the power cord free of damage, e.g. abrasions, pressure points, porous spots or kinks?	<p>The power cord must be replaced if signs of damage are visible.</p> <p>Repairing the damaged power cord is not permitted, so it must be replaced immediately with an original RECK spare part, which has been tested and approved for the MOTOMed. For this, contact the service partners of RECK.</p>	<p>If the power cord is damaged, there is a risk of electric shock, either if the damaged area is touched directly or if the damaged area comes into contact with the MOTOMed housing.</p> <p>Damaged power supply cables must therefore not be used under any circumstances!</p>
<p>Is the power supply cord laid out so that:</p> <p>a) it does not have any contact with the device?</p> <p>b) it is not overrun or crushed by other objects/devices?</p> <p>c) it cannot be caught up by the cranks?</p> <p>d) it cannot otherwise be mechanically damaged?</p> <p>e) nobody can trip over the line?</p> <p>f) it is freely accessible at all times?</p>	<p>Never use power cords which have bare wires or damaged insulation!</p> <p>The power cord must be laid in such a way that nobody can trip over it or the cord cannot be mechanically damaged in any way.</p> <p>The power cord must be routed so that it is freely accessible at all times.</p>	<p>If the power cord is damaged, there is a risk of electric shock, either if the damaged area is touched directly or if the damaged area comes into contact with the MOTOMed housing.</p> <p>In the event of a malfunction of the MOTOMed, the supervising person must be able to disconnect it from the mains without hindrance.</p>
2. Control of the device status		
Are the device and the operating panel and the accessories used free of visible damage?	Check whether defective parts can be repaired or whether they need to be replaced.	If parts of the device are damaged, their safe function can no longer be guaranteed. If there is recognizable damage (cracks, demolition of housing parts) on the operating panel, it must be replaced.

Test step	Measures if errors are detected during the visual inspection	Reason for the test step
Is the surface coating of the handles undamaged?	Have the handles replaced by the manufacturer.	The PVC coating of the handles offer the user additional protection against electrical voltages.
Is the device free from contamination?	Contaminants should be removed before using the device according to the care instructions.	Removing contaminants reduces the risk of transmitting pathogens.
Are optional accessories suitable and appropriate for the user?	For example, if the optional arm cuffs are too small or too large, we ask you to replace them with suitable accessories. Accessories should be selected and used so that, for example, chafing on the skin is avoided.	Accessories that have been incorrectly selected can in some cases not fulfil their intended purpose or lead to a risk of injury. This must therefore be considered before starting the training. For users who cannot perform this assessment independently, the caregiver must make the assessment.
In case of leg training, are the handles positioned in the holding position and collision-free, so that they are available for holding?	Bring the handles into holding position and check that your inserted legs do not come into contact with them (page 49).	The handles provide a better grip during leg training and allow greater legroom.
Is the user wearing appropriate clothing for the training?	Measures must be taken to ensure that wide trousers, long shawls, scarves, long collars, jewellery, long hair, etc. cannot wrap around the pedals (especially when using the arm trainer). Do not wear shoes with laces. Tie up long hair before using the arm/upper body trainer or protect it with a headgear.	Inappropriate garments can get wound around the foot shells/cranks and cause injuries. If garment or hair gets caught in the cranks, immediately press the red Stop button or the On/Off button so that the movement of the cranks is interrupted and the detected parts can be released without further danger.

Test step	Measures if errors are detected during the visual inspection	Reason for the test step
<p>Is the device set up and adjusted so that the intended movements can be carried out without encountering other objects/housing parts? In leg training alone, is it ensured that the handles are positioned in the holding position and collision-free so that the legs do not collide with them?</p>	<p>The position of the handles should be adjusted so that the inserted legs do not collide with the handles (page 49).</p>	<p>To exclude any risk of injury, the MOTomed should be positioned and adjusted so that the user does not collide with other objects in the area during training.</p>
<p>Is the vertical adjustment securely locked with the safety knob and tightened by the locking screw?</p>	<p>Slowly move the vertical adjustment up or down until you hear an audible click at the desired height and then firmly tighten the locking screw (page 39).</p>	<p>Unscrewed connections may cause parts to detach from the device during exercise. Should parts of the device become loose during the training, the training should be stopped immediately by pressing the Stop button and the loose part properly fastened.</p>
3. Checking the optimal training conditions		
<p>Is the device on a level surface and can it not wobble, tip over or fall over?</p>	<p>Choose a suitable location so that the device cannot wobble, tip over, or fall over while exercising. Possibly adjust the feet on the small stand.</p>	<p>The device must not wobble, tilt or fall over, as this results in a risk of injury to the user/patient.</p>
<p>Does the floor surface provide sufficient adhesion so that the device cannot move?</p>	<p>Select a non-slip surface to ensure that the device and the seat have a safe stand.</p>	<p>The MOTomed can shift if it is standing on a smooth surface (tiles, laminate, parquet, etc.).</p>

Test step	Measures if errors are detected during the visual inspection	Reason for the test step
Is the wheelchair or chair with which the user is sitting in front of the device positioned so that it cannot tilt, fall over, or roll away during exercise?	<p>If tilting and backward-rolling of the wheelchair due to severe spasticity or active exercising cannot be ruled out, the use of a wheelchair stabilizer is required.</p> <p>Only stable, sturdy chairs should be used, if possible with an armrest. Chairs with unfixed castors are not allowed for MOTomed training.</p>	<p>In case of strong spasticity in the legs, the driving force of the foot pedals can cause the seat to shift or tilt. This should be prevented by appropriate means in order to prevent a risk of injury.</p> <p>Chairs with castors may shift during exercise.</p>
If the user is exercising while sitting in a wheelchair: Have the wheelchair brakes been fixed before beginning the training session?	Apply the brakes and check whether the wheelchair is really standing safely.	The wheelchair must not roll away during the training.
If the training is carried out while seated in an electric wheelchair: Is the electric wheelchair switched off and are the brakes of the wheelchair fixed?	Switch off the electric wheelchair and apply the brakes. Then check whether the wheelchair is really standing securely.	The wheelchair must not roll away during the training.
Can the cranks/foot shells move freely and is there no danger of the cranks getting caught and winding other items during the subsequent training session?	<p>Please remove any objects around the cranks that could later get caught up by the cranks or interfere with the crank movement.</p> <p>Pay particular attention to the fact that, for example, the scalp hair, scarf or jewellery items cannot get caught in the cranks.</p>	In the case of rotating parts driven by motors, special care must be taken to ensure that nothing can get caught in the rotating parts. Here the same precautions must be taken as for example with kitchen appliances or hand drills.

Test step	Measures if errors are detected during the visual inspection	Reason for the test step
Is the crank radius set the same on both sides?	If the cranks on the left and right have different lengths, you should set the crank to the same length on both sides (page 47).	Different crank lengths result in an uneven movement, as different forces act on the cranks due to the different lever lengths. Therefore adjust the lever length on both sides as equal as possible.
If the user is training the legs or arms/upper body, are the legs/arms of the user securely fixed in the foot shells or forearm shells?	Fix the legs/arms as described in the section "Preparation" (page 38).	The legs/arms should not move inadvertently from the foot shells or forearm shells during training.
Are other electrical devices that are not approved as medical devices within reach of the patient?	Remove all other electrical devices that are not approved as medical devices from the reach of the user (patient area).	If other mains-powered electrical devices are touched by the patient during training, protection against electric shock can no longer be ensured by the high protection insulation of the MOTomed, but by the properties of the other device which the user has touched. To ensure that the patient is effectively protected during training by the high medical device safety standard of MOTomed, no mains-connected devices, which are not approved as medical devices, may be within the reach of the user.

28 **Transport**

29 **Scope of delivery**

33 **Commissioning**

35 **Standby**

Transport

The MOTomed is equipped with two big transport castors, enabling easy transport within a building.

To avoid damage to sensitive surfaces, the transport castors are provided with a circumferential rubber ring.

Page 35 Before transport, remove the mains connection cable completely. To relocate, grab the MOTomed by the transport handle ① firmly and tilt it over the large device stand far enough that you can pull or push the MOTomed easily on its large transport castors ②.

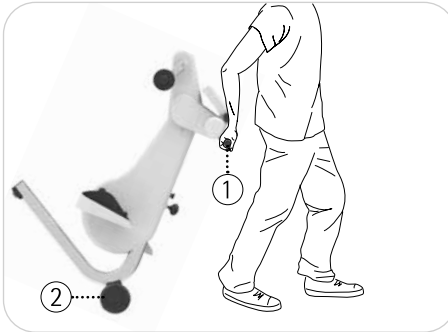


Fig. 4.1

If you pull the MOTomed over a threshold, make sure both castors ② roll over the threshold simultaneously (in parallel).

CAUTION



Danger of property damage due to vibrations

Do not transport the MOTomed on uneven ground (e.g. paving stones). This may cause damage to the electronics or housing of the MOTomed.

When transporting over long distances and uneven ground, use a suitable means of transport (e.g. a luggage cart or equivalent)

Scope of delivery

- MOTOMed loop
- Power supply cable, length 2.5 m
- Allen key SW4
- MOTOMed loop edition Instruction Manual

Features and functions of all MOTOMed loop models:

- Tool-free height adjustment of leg and arm/upper body trainer. The pedal axle of the leg trainer is height adjustable from 30 cm to 45 cm (measured from the floor)
- Tilttable, retractable operating panel with colour touch screen (7")
- Sturdy, stable metal construction
- Closed, easy to clean and disinfect plastic body (PC/ABS)
- Maintenance-free joints and bearings
- Plastic wrapped transport handle
- Easily movable with large transport castors (Ø 13 cm)
- Reduced device stand width to 38.5 cm
- Serial interface, USB interface
- Passive, assistive and active training
- Electronic foot insertion aid
- Braking resistance from 0 to 20 (active)
- Motor power levels from 1 to 10 (passive)
- Presettable therapy time from 0 to 120 minutes
- Adjustable, automatic MovementProtection & SpasmControl
- Safety stop
- SymmetryTraining
- Quiet, gentle and harmonious cycle movement (SmoothDriveSystem)
- Gentle starting and stopping of the movement
- Detailed biofeedback during and after training
- Presettable training parameters
- Language selection

Model-dependent equipment and functions:

MOTOmed loop.l

- Plastic-coated safety foot shells with fixation by fastening straps
- Ergonomic Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)

MOTOmed loop.a

- Soft Grip handles
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)

MOTOmed loop.la

- Plastic-coated safety foot shells with fixation by fastening straps
- Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Change from leg to arm training by touch
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)

MOTOmed loop.la prof

- Plastic-coated safety foot shells
- Leg guides with plastic-coated calf shells and disinfectable fastening straps
- "QuickFix" foot fastening system
- Plastic-coated handles with quick release system
- Gas spring support for height adjustment
- Pedal radius quick adjustment (leg trainer, pair)
- Change from leg to arm training by touch
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)

MOTOmed loop p.l

- Plastic-coated safety foot shells with fixation by fastening straps
- Ergonomic Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Passive speed from 1 to 90 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)

MOTOmed loop p.la

- Plastic-coated safety foot shells with fixation by fastening straps
- Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Change from leg to arm training by touch
- Passive speed from 1 to 90 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)

MOTOmed loop light.l

- Soft Grip safety foot shells with fastening straps
- Ergonomic Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Passive speed from 1 to 60 rpm

MOTOmed loop light.a

- Soft Grip handles
- Passive speed from 1 to 60 rpm

MOTOmed loop light.la

- Soft Grip safety foot shells with fastening straps
- Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Change from leg to arm training by touch
- Passive speed from 1 to 60 rpm

MOTOmed loop kidz.l

- Plastic-coated safety foot shells with fixation by fastening straps
- Ergonomic Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)
- Child-friendly software

MOTOmed loop kidz.a

- Soft Grip handles
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)
- Child-friendly software

MOTOmed loop kidz.la

- Plastic-coated safety foot shells with fixation by fastening straps
- Soft Grip handles
- 2-stage pedal radius adjustment (7 cm or 12.5 cm)
- Change from leg to arm training by touch
- Passive speed from 1 to 60 rpm
- Therapy and motivation programs
- Export of training data and import of own training programs
- Games
- Slideshow via USB (delivered without USB stick)
- Child-friendly software

Commissioning

After a long journey, allow the MOTOmed to stand at room temperature for at least 3 hours before first use.

Adjustment of handlebars for MOTOmed loop.l

The MOTOmed loop.l models are delivered with the handles pointing downwards. Before commissioning, the handles must be turned upwards by 180°.

see Fig. 4.2, 4.3 Loosen the supplied SW4 Allen key ① from the clip on the underside of the left-hand safety foot shell. Use the Allen key to loosen the screws ② on both retaining handlebars ③. Unscrew the screws completely and store them safely. Turn both handles 180° so that the ends point upwards. Use the hexagon socket wrench to install the screws again and tighten them until resistance is felt. Clip the Allen wrench back into its holder.

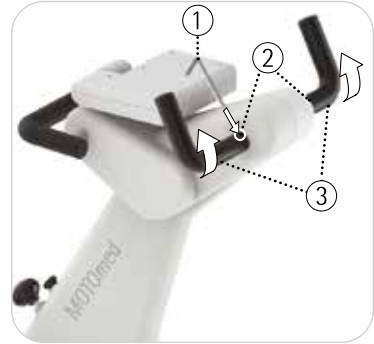


Fig. 4.2, 4.3

Tilt the operating panel ① until it stops. You can also tilt the operating panel ① forwards as desired.

Page 51 For arm/upper body training, bring the handles into opposing positions ③.

Page 49 For leg training, leave the handles in the holding position ②.

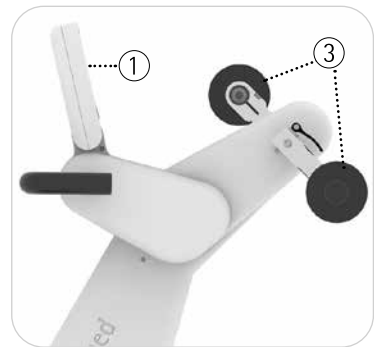
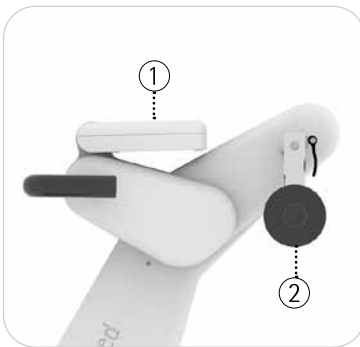


Fig. 4.4, 4.5

Standby

First, connect the power cord ① to the IEC connector ② in the wheel hub of your MOTomed. Make sure that the connection is secure. Next, insert the mains plug ③ of the power cord ① into a power outlet in your room.

The power plug ③ and the IEC connector ② must be freely accessible at all times so that the MOTomed can be connected and disconnected without any obstacles.

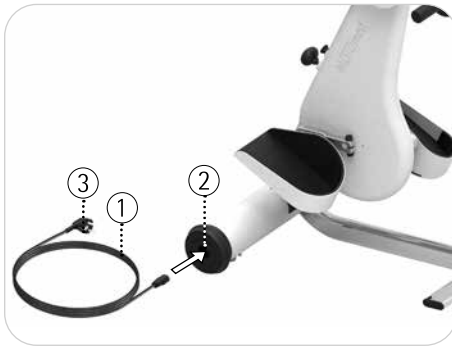


Fig. 4.6

The MOTomed is now in standby mode.

see Fig. 4.7 You will recognize this by the green LED indicator ④ on the operating panel.

Press the On/Off button ⑤ to turn on the MOTomed. The MOTomed is ready for operation no later than 30 seconds after switching on. The main screen appears. Press the On/Off button ⑤ again to switch off the screen.

The MOTomed is now in sleep mode. To put the MOTomed completely into standby mode, press the On/Off button ⑤ for 3 seconds.

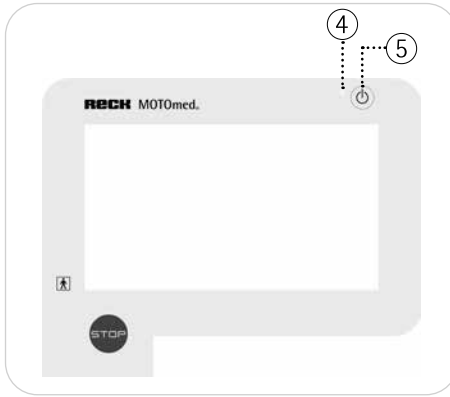


Fig. 4.7

To save energy, the screensaver will appear 15 minutes after the end of the training session or after the last input. 30 minutes later the screen turns off, and after another 15 minutes the MOTomed switches into standby mode.

The MOTomed is designed for continuous standby operation. Unplug the power cord when carrying out repair, cleaning or transport tasks to ensure complete interruption of the power supply.

38	Introduction
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39	Vertical adjustment
40	Free training
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53	Setting motor power or resistance
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Introduction

The operation of the MOTOMed will be explained on the following pages.

Preparation

Place the large device stand of the MOTOMed as close as possible to a wall. Sit in a wheelchair or on a sturdy chair close enough to the MOTOMed so that the knee joints are not fully stretched while training (when the foot shells are at the furthest distance from the body).

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WARNING



Risk of injury!

Secure your wheelchair or chair against tilting and slipping.

If necessary, fix your feet with the existing fixings in the safety foot shells and your lower legs on the calf shells of the leg guide (if available).

Operating panel

The operating panel ① of the MOTOMed is equipped with a fixed On/Off button ② and Stop button ③.

All other functions and menu operation are controlled via the touch screen ④ that responds to finger pressure.

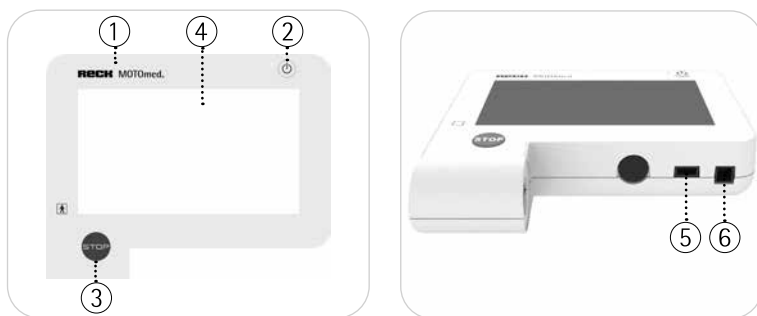


Fig. 5.1, 5.2

A USB interface ⑤ and a serial interface ⑥ are located at the bottom of the housing.

A memory stick can be connected to the USB interface ⑤. This is used to store training data or to display your own photos during training (not with Order No. 260.1**) and, if necessary, for software updates.

Training mode

Vertical adjustment

Adjust the height for the leg or arm/upper body training as is appropriate for you.

Open the locking screw ② and pull the locking button ③. Adjust the MOTOMed ① to the desired height.

You can choose among five adjustment positions, which you will recognise by the locking button ③ snapping into place. Then tighten the locking screw ② again until you feel a clear resistance.

Note:

Always make sure that there is no collision between the legs and the handles.

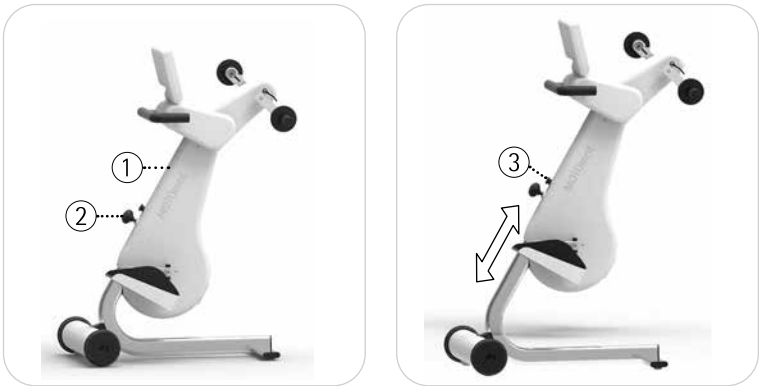


Fig. 5.3, 5.4

Free training

see Fig. 5.1 Press the On/Off button ② to turn on your MOTOMed.
The MOTOMed starts up and goes into standby mode.
The home screen appears.

MOTOMed loop.l

The buttons for the leg trainer appear on the home screen.



Fig. 5.5

The training session starts after activating the leg trainer button.
The foot shells will now slowly start moving at the set passive speed.
The speed increases slowly, linearly. The maximum final speed is
reached after 10 seconds at the earliest.

MOTOMed loop.a

The buttons for the arm/upper body trainer appear on the home screen.



Fig. 5.6

The training session starts after activating the arm/upper body button. The handles will now slowly start moving at the set passive speed. The speed increases slowly, linearly. The max. final speed is reached after 10 seconds at the earliest.

MOTOmed loop.la

The buttons for the leg trainer and arm/upper body trainer appear on the home screen.

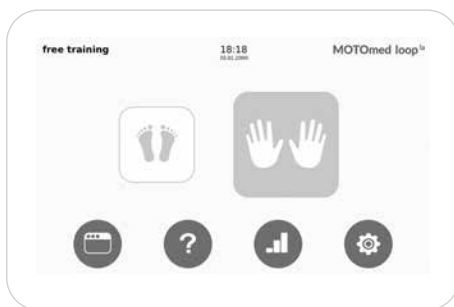


Fig. 5.7

During leg training, the cranks of the arm trainer are locked in the pre-set position and serve as handles.

The safety foot shells can be moved freely during the arm/upper body training session.

The last used trainer is highlighted.

Start training with the last used setting

If you want to train again with the last used trainer, you can start training immediately by selecting it again. The foot shells and/or handles will now slowly start moving at the set passive speed.

Change from leg training to arm/upper body training

If you want to train your upper body, but the device was previously used as a leg trainer, the drive must be adjusted accordingly.

A message appears indicating that the drive is now switched from leg to arm/upper body training and the switchover process begins.

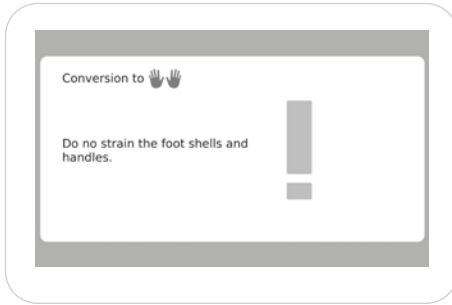



Fig. 5.8

If necessary, you can remove your legs first with the foot insertion aid.

Follow the instructions for repositioning the handles and confirm each time with .

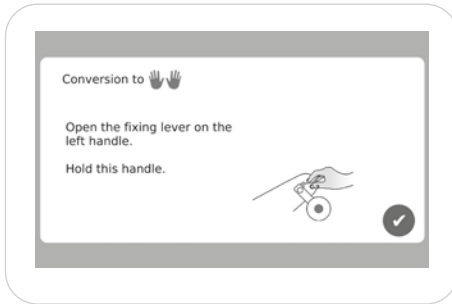


Fig. 5.9

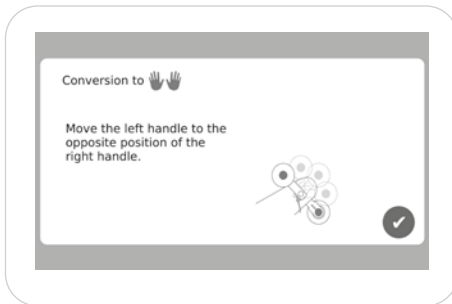


Fig. 5.10

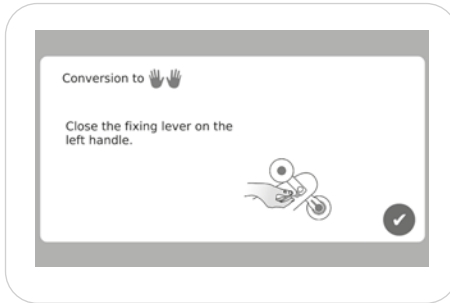


Fig. 5.11

The MOTOMed automatically activates the handles for the arm/upper body training.

The training starts after the countdown (5 seconds) and the handles start to move slowly at the set passive speed.

Change from arm/upper body training to leg training

If you want to train your legs, but the device was previously used as an arm/upper body trainer, the drive must be adjusted accordingly.

A message appears that the drive is switched from arm/upper body training to leg training and the switchover process begins.



Fig. 5.12

During leg training, the handles provide support and stabilisation.

Therefore, place the handles in a comfortable holding position.

Follow the instructions on the screens and confirm each one with .



Fig. 5.13

There are 8 possible stop positions on the MOTomed.
First, move the right handle to the desired position.

WARNING



Risk of injury!

Do not position the handle too low to avoid a collision with the knees.

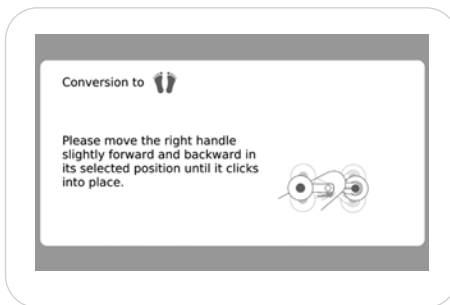


Fig. 5.14

If the handle does not lock automatically, move it slightly forwards and backwards until you feel/hear it click into place.

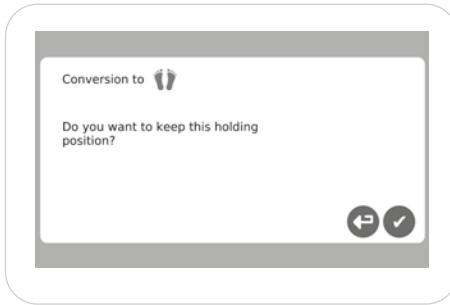


Fig. 5.15

By selecting the button  you can correct the position.

Follow the instructions on the screens and confirm each one with .

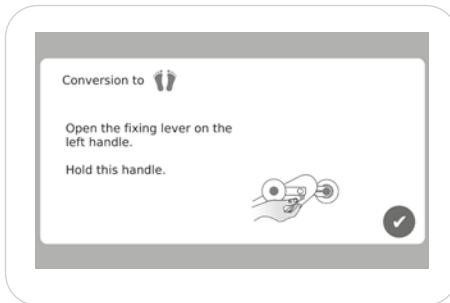


Fig. 5.16

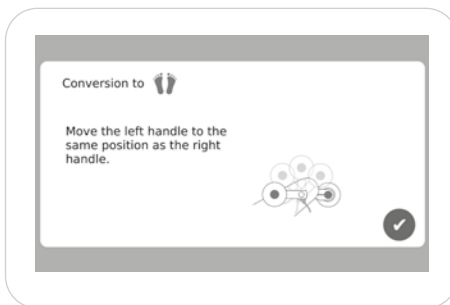


Fig. 5.17

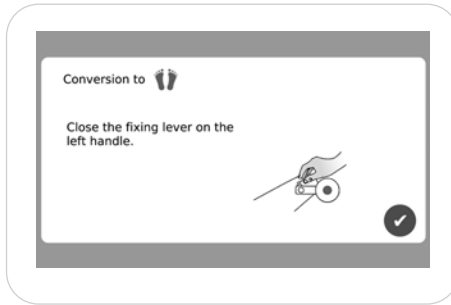


Fig. 5.18

The training starts after the countdown (5 seconds) and the foot shells slowly start moving at the set passive speed.

CAUTION Risk of injury due to rotating pedal cranks



Do not touch the handles while the pedal cranks are rotating.

You can adjust the optimal height of the handles using the menu. The arm/upper body cranks are locked in the holding position. Then the drive is switched to leg training and the training can be started. If necessary, you first insert your legs by using the foot insertion aid. The foot shells will now slowly start moving at the set passive speed.

Active/passive training

After the warm-up phase, you can continue to move passively (passive training) with the motor, or you can start to move actively (active training).


Motor speed


In passive training mode you can change the speed from 1–60 rpm, for the Parkinson's models loop p from 1–90 rpm. The speed changes slowly, linearly.

Resistance

In training mode, you can change the resistance from 0–20.

see Fig. 5.1 You can interrupt your training at any time by pressing the red Stop button ③.

You can access the home screen by pressing the operating button .

You can go back one step by pressing the control button .

Pedal radius

The leg trainer on your MOTOMed has a 2-step pedal radius adjustment:

Level 1: 7 cm (Standard) Level 2: 12.5 cm

The pedal radius setting on the arm trainer is 10 cm.

CAUTION



Risk of injury!

The pedal radius may only be adjusted when the MOTOMed is switched off and the legs have not been inserted.

CAUTION



Risk of damage to the MOTOMed!

Avoid scratches and damage when using tools. Do not drop the safety foot shells.

see Fig. 5.19, 5.20 To change the pedal radius, release the hexagon socket screw with the supplied Allen key SW4 ①.

Remove the safety foot shell ② from the opening in the pedal rod ④ and remove the black plastic cover ③ from the opening. Insert the safety foot shell ② into the free opening of the pedal rod ④ and attach the plastic cover ③ to the now free opening. Re-tighten the hexagon socket screw ①.

Repeat the process with the other safety foot shell. Make sure that the socket head cap screws are tight on both sides.

Note:

Make sure that the same pedal radius is set on both sides to ensure a harmonious movement.

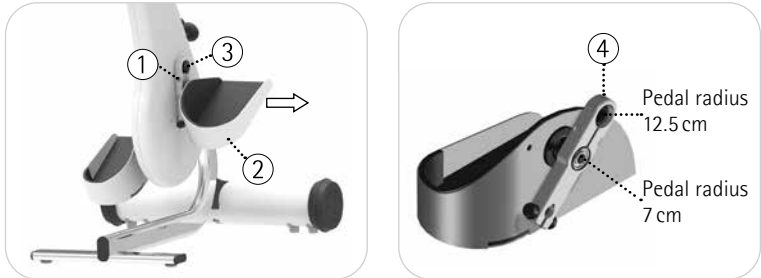


Fig. 5.19, 5.20



The hexagon socket screw on the ball bearing clamping ring must be tight enough that the safety foot shell cannot come loose from the ball bearing clamp ring.

However, the hexagon socket screw must only be tightened to a degree that allows the safety foot shell to rotate easily.

Check this as follows: Keep the safety foot shell in a horizontal position and release it. If the safety foot shell oscillates about 1–2 times and stops, the hexagon socket screw is properly tightened.

If the hexagon socket screw is too tight, it is possible that the ball bearing clamp ring presses too strongly on the ball bearing of the safety foot shell and these can no longer, or only slightly, move and rotate.

Alternatively use a torque wrench and tighten the screws to 9 Nm. Incorrectly tightened hexagon socket screws on the ball bearing clamp ring are not subject to warranty by RECK-Technik GmbH & Co. KG.

Leg training

Select the button for leg training on the home screen.
 Page 41, 43 If necessary, wait until the MOTOMed automatically switches to leg training.

CAUTION



Risk of injury due to rotating pedal cranks

Do not touch the handles while the pedal cranks are rotating.

Seat distance

Choose the seat distance to the MOTOMed so that your legs are always slightly bent. Sit in a wheelchair or on a sturdy chair close enough to the MOTOMed so that the knee joints are not fully stretched when training (when the safety foot shells ② are at the furthest distance from the body).

During leg training, you can use the locked handles or handles ① to hold tight.

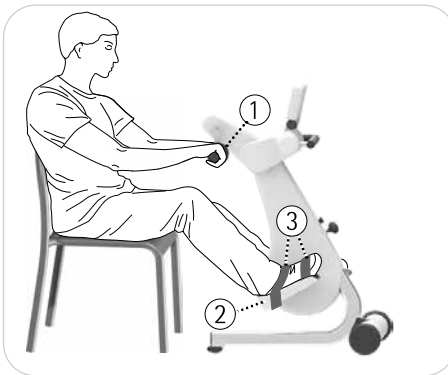


Fig. 5.21

see Fig. 5.22 If your chair has an adjustable backrest, you can use the MOTOMed to train in a comfortable, semi-reclining position. To do so, bring the MOTOMed ① into an upper position and fold the backrest ② of the chair backwards. Also make sure that the knee joints are not fully stretched.

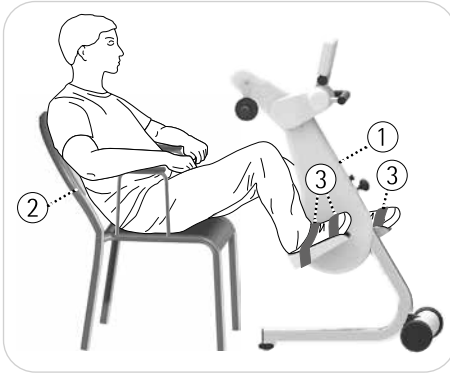


Fig. 5.22

Foot insertion aid

This function allows you to position the safety foot shells so that you can comfortably put your legs in the lower pedal position one after the other.

Select the 'insertion aid' button ① on the home screen.



Fig. 5.23

see Fig. 5.24 Press the corresponding button for the desired direction. The safety foot shells are moved to the desired position at slow speed. When you reach the desired position, release the button.

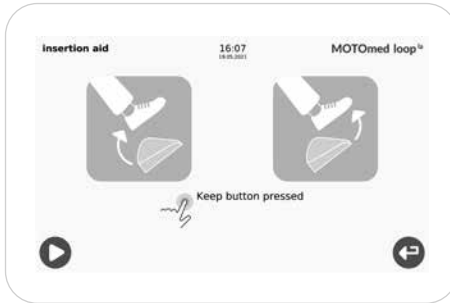


Fig. 5.24

see Fig. 5.21, 5.22 Now fix your feet with the fastening straps ③.

Arm/upper body training

Page 41

Select the control button for the arm/upper body training on the home screen. If necessary, wait until the MOTOMed automatically switches to arm/upper body training.

For a separate arm/upper body training, remove the legs from the safety foot shells.

Move the handles to opposite positions.

To do so, open the pedal lock ② on the left handle ① and turn the handle 180° ③ so it is in an offset position to the right handle ④.

Then close the pedal lock ② again.

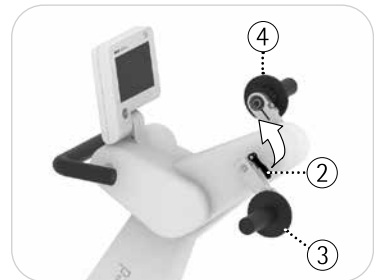
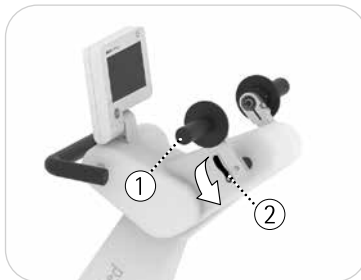



Fig. 5.25, 5.26

Application notes for automatic SpasmControl

In case of cramps (spasticity), a slow and even movement with the MOTMed is recommended.

Train at low speed, especially at the beginning. This setting is particularly suitable for relaxing the muscles. You will notice that cramps will occur less frequently.

The MovementProtection system with SpasmControl should always be switched on in case of cramps (spasticity) or in case of sensitive tendons, joints and ligaments (symbol  ①).

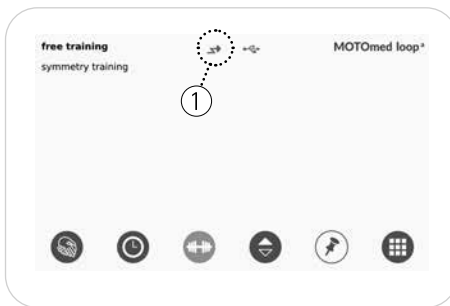


Fig. 5.27

If cramping (spasticity) or other resistance occurs, the MovementProtection system will automatically stop the motor, depending on the set motor power level.

Then the pedals turn in the opposite direction and the SpasmControl uses the therapeutic principle (antagonistic inhibition) to find the direction of movement in which the cramping (spasticity) can be released. This relieves muscles and eases cramps. This process is repeated maximum 15 times until the cramps (spasticity) are relieved and can subside. The message *"too much spasticity"* appears.

For better fixation of the legs in case of cramps (spasticity), the *leg guides with calf shells* are essential accessories. These provide secure and firm support for the legs, ensure secure positioning of the lower legs and allow a physiological leg position during movement.

max. motor power, low: e.g. in osteoporosis

max. motor power, high: e.g. in case of sluggishness due to high muscle tone or rigour (with Parkinson's)

Please consult this with your doctor and therapist before starting training.

Setting motor power or resistance

Passive training

In passive training, the 'motor power' acts as the driving torque. This can be adjusted in 10 steps.

Press the 'settings' button ① on the home screen.

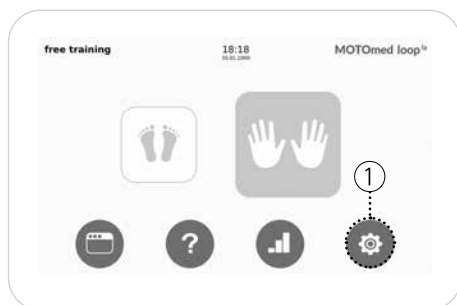


Fig. 5.28

see Fig. 5.29, 5.30 Select the button 'motor control' ② and then the button 'motor power' ③ in succession.

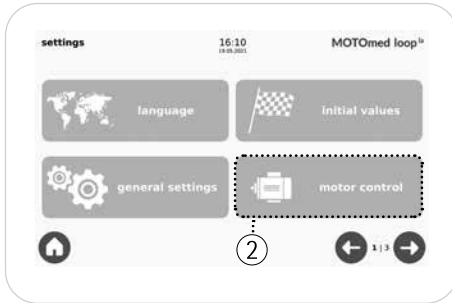


Fig. 5.29



Fig. 5.30

Now set the desired level.

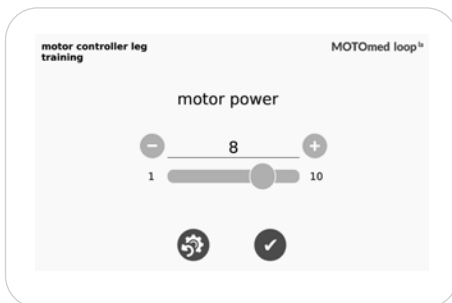


Fig. 5.31

Active training

In active training, the ‚resistance‘ of the person exercising acts as a braking torque.

The resistance can be changed from 0–20.

see Fig. 5.32 Press the ‚weight‘ button ① during active training.

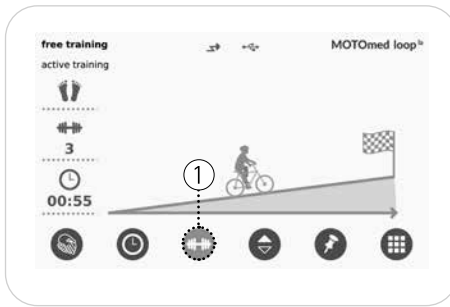


Fig. 5.32

Now set the desired resistance.

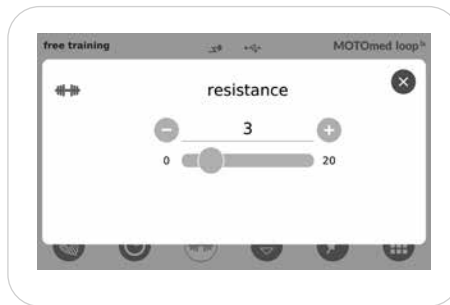


Fig. 5.33

Setting the SpasmControl

Press the 'settings' button ① on the home screen.



Fig. 5.34

Select the 'sensors' button ② and then the 'spasm detection' button ③ in turn.

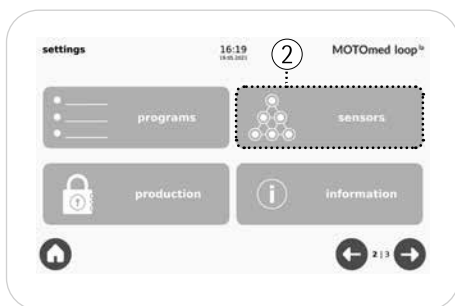


Fig. 5.35

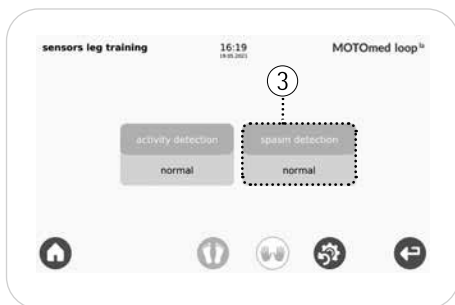


Fig. 5.36

- 59 **Soft Grip safety foot shells**
Order No. 265.400

- 59 **Plastic-coated safety foot shells**
Order No. 265.421 with fastening straps
Order No. 265.460 Pediatric safety foot shells with fastening straps
Order No. 265.441 with disinfectable fastening straps
Order No. 265.480 Pediatric safety foot shells with disinfectable fastening straps

- 60 **Leg guides with calf shells**
Order No. 302.000

- 61 **Leg guides with plastic-coated calf shells**
Order No. 303.000 with fastening straps
Order No. 186.000 with disinfectable fastening straps
Order No. 170.100 Pediatric leg guides with fastening straps

- 61 **Foot fastening system »QuickFix«**
Order No. 265.004

- 62 **Pedal radius quick adjustment (leg trainer)**
Order No. 507.020 with fastening straps
Order No. 507.021 with disinfectable fastening straps

- 63 **Handles with quick release system**
Order No. 265.110 Soft Grip handles
Order No. 265.120 Plastic-coated handles

- 63 **Tetra handles with quick release system**
Order No. 555.200

- 64 **Vertical handles with quick release system**
Order No. 557.200

- 64 **Ergo handles with quick release system**
Order No. 372.200

- 65 **Forearm shells with quick release system**
Order No. 356.200 plastic-coated with disinfectable fastening straps
Order No. 556.003 with arm cuff size XS
Order No. 556.004 with arm cuff size S
Order No. 556.005 with arm cuff size M
Order No. 556.006 with arm cuff size L
Order No. 556.007 with arm cuff size XL

- 66 **Hand fixation by wrist cuff**
Order No. 562.020 Size S
Order No. 562.030 Size M
Order No. 562.000 Size L

Soft Grip safety foot shells

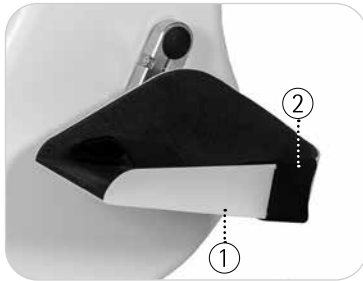


Fig. 6.1

The Soft Grip safety foot shells ① are softly padded and have a circumferential safety rim with a special high inside to protect the ankles and legs. For safe and simple fixation of the feet, the safety foot shells are equipped with fastening straps ② around the ankle joint.

6

Plastic-coated safety foot shells



Fig. 6.2, 6.3

The plastic-coated safety foot shells ① are encased in disinfectable soft PVC. They have an all-round safety border with a particularly high inner surface to protect the ankles and legs. For safe and easy fixation of the feet, the safety foot shells ① are equipped with fastening straps ②. Optionally, the plastic-coated safety foot shells ① are available with disinfectable fixing straps ③.

If a stronger fixation is required, the safety foot shells can be equipped with the *Foot fastening system »QuickFix«*.

Leg guides with calf shells

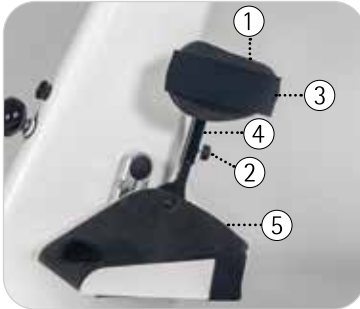


Fig. 6.4

The leg guides (4) with calf shells (1) are shaped for easy donning. Due to their flexible shape, the calf shells (1) can adapt to the lower legs.

For optimal guidance and support of the legs, the calf shells (1) must lie against the lower legs.

Open the wing screws (2) and adjust the height of the leg guides (4). Tighten the thumbscrews (2) in the selected position.

CAUTION



Pay attention to the minimum insertion depth of the leg guides (4) of 3 cm.

First fix your feet in the safety foot shells (5) and then fix your lower legs to the calf shells (1) with the fastening straps (3).



Any noise that may occur can be eliminated by tightening the wing screws (2).

Leg guides with plastic-coated calf shells



Fig. 6.5

Optionally, the leg guides are available with plastic-coated calf shells with disinfectable fastening straps.

Page 60 Functionality see *leg guides with calf shells*.

Foot fastening system »QuickFix«

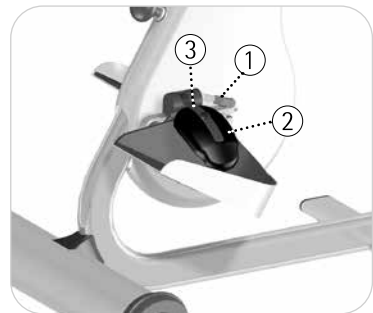
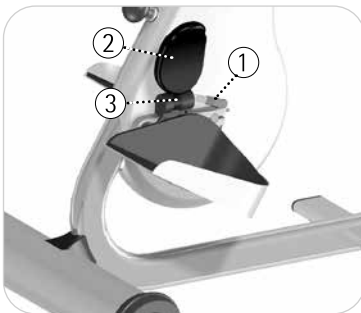


Fig. 6.6, 6.7

With the »QuickFix«, you can fix your feet independently and quickly in the safety foot shells and release them again.

Open the »QuickFix« by pushing down or pulling up the control lever

① and insert the feet. Press down on the foam pad ② by hand until you reach a position with comfortable pressure on the foot.

The padded bar ③ engages audibly at short intervals and is securely fixed to each of these locking positions.

At the end of the training, open the »QuickFix« by pushing down or pulling up the control lever ①.

Pedal radius quick adjustment (leg trainer)

With the pedal radius quick adjustment, you can precisely set the extent of movement, i.e. the pedal radius. You can adjust the pedal radius either in 4 steps (5.0 / 7.5 / 10.0 / 12.5 cm) or steplessly on both sides.

WARNING



Risk of injury!

The pedal radius may only be adjusted when the MOTOMed is switched off and the legs have not been inserted.

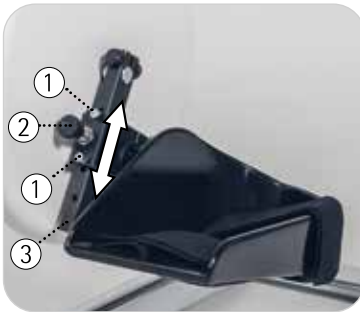


Fig. 6.8

To change the pedal radius, release the hexagon socket screw with the supplied SW4 Allen key ①.

By pulling up the locking knob ② the safety foot shell can be moved on the pedal rod ③ and precisely adjusted in 4 steps.

For stepless adjustment, you can fix the safety foot shell at any desired position on the pedal rod ③ using the two hexagon socket screws ①.

Repeat the process with the other safety foot shell.

Note:

Make sure that the same pedal radius is set on both sides to ensure a harmonious movement.



Any noises that may occur (play between the locking bolt of the lock knob and the pedal rod) can be eliminated by tightening the two hexagon socket screws ①. Tighten the hexagon socket screws regularly.

Handles with quick release system



Fig. 6.9

The Soft Grip handles (1) are softly padded and non-slip.

The plastic-coated handles are covered with disinfectable soft PVC.

The quick release system (2) enables easy, tool-free exchange of the handles. Open the bracket (3) and remove the handle. Insert the desired handle and close the bracket completely (4).

Tetra handles with quick release system

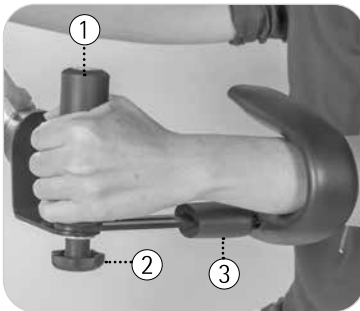


Fig. 6.10

The Tetra handles (1) allow easy and independent insertion of the arms. The forearm support (3) can be flexibly adjusted with the adjustment screw (2).

see Fig. 6.9 For the function of the quick release system, *see Handles*.

Vertical handles with quick release system

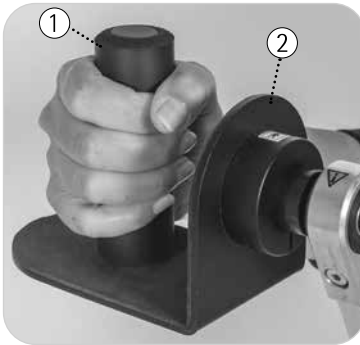


Fig. 6.11

The vertical handles ① are suitable for users who can hold on to something but need a hand support. The vertical handles are equipped with an anti-slip device ② towards the inside.

see Fig. 6.9 For the function of the quick release system, see *Handles*.

Ergo handles with quick release system



Fig. 6.12

The Ergo handles ① allow an individual hand position without conversion. The user can choose from 3 handle holding positions.

see Fig. 6.9 For the function of the quick release system, see *Handles*.

Forearm shells with quick release system

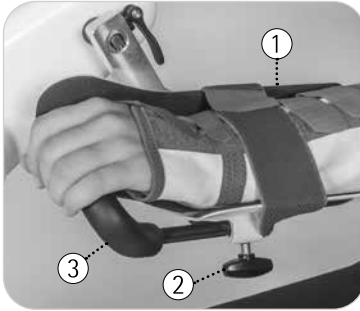


Fig. 6.13

The forearm shells ① allow attachment and fixation of the arms in severe paralysis. The forearm shells ① can be swivelled horizontally to allow the forearms to move sideways in the same direction. Open the thumbscrew ② on the underside of the forearm shell ① and adjust the cross handle ③ in the desired direction. Tighten the thumbscrew ② in the selected position.

CAUTION



Pay attention to the minimum insertion depth of the cross handle ③ of 2.5 cm.

CAUTION



Make sure that hands (and fingers) are fixed so that they cannot touch the pedal rods. Training with arms and hands inserted and fixed in the forearm shells may only be carried out under supervision.

see Fig. 6.9 For the function of the quick release system, see *Handles*.

Hand fixation by wrist cuff



Fig. 6.14

The wrist cuff ① for hand fixation enables simple and quick fixation of the paralysed (weak) hand to the arm trainer, the handles or the various handles.

- 68 **Safety requirements for troubleshooting**
- 68 **The MOTMed does not run or the operating panel does not respond**
- 68 **The MOTMed runs unevenly**
- 69 **Possible effects of electromagnetic interference on the MOTMed**

Safety requirements for troubleshooting

WARNING



Only authorised qualified personnel is allowed to carry out repair works on the MOTOmed.

For safety reasons, it is essential to disconnect the power plug from the socket before carrying out any maintenance work in order to interrupt the power supply.

Page 79

If a malfunction has occurred that cannot be resolved and is not listed below or if you have questions, please contact the service centre of RECK or an authorised partner.

The MOTOmed does not run or the operating panel does not respond

Page 35

Make sure the power supply cable is correctly plugged into the mains socket and the IEC connector in the wheel hub of the MOTOmed. Check that the green LED on the operating panel lights up. Also check the function of the mains socket (by plugging in another electrical device).

The MOTOmed runs unevenly

Please check the following points:

1. Is the pedal radius on both sides of the MOTOmed set to the same level?
2. Is the pedal radius possibly set too high for your agility?
This leads to an uneven user-related run.
3. Position and posture of the user.
You should sit safely and aligned to the MOTOmed. The distance should be chosen so that the knees are not stretched when pedalling.
4. In stroke patients, differently affected body sides may cause the device to run unevenly (especially if the braking resistance is low).
5. If the uneven movement continues when the legs are not inserted, a check must be carried out by qualified personnel.

Possible effects of electromagnetic interference on the MOTOMed

Possible effects	Corrective action
The training session stops	Start training again
The MOTOMed switches off	Switch MOTOMed back on
Arm trainer lock is enabled	Stop training and then start again
Arm trainer lock is disabled	Stop training and then start again
Selected training switches to a different training mode	Stop training and start the desired training again
The training speed changes	No action required, automatic recovery after fault end
Acoustic error signals	No action required, automatically rectified after the end of the fault
Visual error signals	No action required, automatically rectified after the end of the fault

Cleaning, maintenance, reuse, recycling

Cleaning

WARNING



Danger of injury due to electrical voltage!

For safety reasons, the power supply of the MOTOMed movement therapy device must be disconnected by removing the power plug before cleaning and disinfection!

The MOTOMed may only be cleaned or disinfected using suitable wipes.

CAUTION



Risk of damage to the MOTOMed!

Spray disinfection and disinfectant showers are not allowed due to the sensitive electronic connections and the unsealed moving parts!

Basically, no fixed cleaning interval is prescribed.

The cleaning takes place according to needs and hygiene requirements. In areas where multiple users use the MOTOMed, application parts and other parts that could come into contact with injured parts of the user's body (e.g. open wounds or decubitus ulcer) should be cleaned after each use and disinfected with a suitable disinfectant.

Do not use harsh, corrosive, solvent or active chlorine cleaning agents. When cleaning, pay particular attention to all stickers affixed to the MOTOMed so that they are not damaged.



Recommended disinfectants are for example

- Meliseptol surface disinfectant
- Sagrotan all-purpose cleaner

Maintenance

Page 21 The MOTOMed does not require regular maintenance/servicing. Before the training session, a visual inspection in accordance with section 3 must be carried out. Worn wear parts (e.g. foot shell linings, handles, expander) must be replaced.

Reuse

Page 21 The MOTOMed can be reused by other patients. The instructions in section 3, 'Visual inspection' and in this section must be observed.

Recycling

Page 79 The MOTOMed is made in high-quality all-metal construction: It is durable, environmentally friendly and recyclable. Please dispose of the device according to the Waste Electrical and Electronic Equipment Directive 2012/19/EU.
If you have any questions, please contact the MOTOMed consulting team.

Technical data, signs

Dimensions and weight

MOTOmed model	Dimensions (External dimensions in min/max cm.)			Weight (in kg)
	Length	Width	Height	
loop.l	70	60	107/122	35
loop.a	70	60	107/122	31
loop.la	70	60	107/122	36
loop.la prof	70	60	107/122	39
loop p.l	70	60	107/122	35
loop p.la	70	60	107/122	36
loop light.l	70	60	107/122	33
loop light.a	70	60	107/122	30
loop light.la	70	60	107/122	36
loop kidz.l	70	60	107/122	35
loop kidz.a	70	60	107/122	31
loop kidz.la	70	60	107/122	36

Pedal radius

MOTOmed model	Pedal radius (in cm)	
	Leg trainer	Arm/upper body trainer
All models	7/12.5	10

Rev range

MOTOmed model	Rev range (rpm, passive/active)	
	Leg trainer	Arm/upper body trainer
All loop models	0-60/5-120	0-60/5-120
All loop light models	0-60/5-120	0-60/5-120
All loop kidz models	0-60/5-120	0-60/5-120
All loop p models	0-90/5-120	0-90/5-120

Adjustable torque

MOTOmed model	Max. torque (in Nm)	
	Leg trainer	Arm/upper body trainer
All loop models	1–13	1–6
All loop light models	1–13	1–6
All loop kidz models	1–13	1–6
All loop p models	1–10	1–6

Spasm control setting range

MOTOmed model	Spasm control setting range		
	Sensitive	Normal	Insensitive
All models	after approx. 0.3 sec. blockade (leg and arm)	after approx. 0.6 sec. blockade (leg and arm)	after approx. 1.8 sec. blockade (leg) after approx. 2.4 sec. blockade (arm)

The following information applies to all product variants:

Connected values (mains voltage, mains frequency)

100–240V~/max. 120VA

47–63 Hz

All-pole shutdown of the MOTOmed is ensured by pulling the mains plug.

Power input

In Stand-by <1 W

Environmental conditions for operation

Temperature	+5 °C to +40 °C
Humidity	15 % to 90 % relative humidity, non-condensing, but without the required vapour partial pressure of more than 50 hPa
Air pressure	>783.8 hPa to 1060 hPa
Operating altitude	<2000 m above sea level

Environmental conditions for storage and transport

Temperature	-25 °C to +70 °C
Humidity	relative humidity of up to 90 %, without condensation at +5 °C to +35 °C water vapour pressure up to 50 hPa at >+35 °C to +70 °C
Air pressure	not specified

Protection class IP21

Classification protection class II, type BF

Classification according to Regulation (EU) 2017/745

MDR classification IIa, Annex VIII, Rule 9

Classification according to Directive 93/42/EEC

MDD classification IIa, Annex IX, Rule 9

GMDN Code 36313

NBOG Code MD 1108

FDA product code BXB - exerciser powered

Maximum permissible user weight

135 kg

Recommended height 140–200 cm

Used materials (RoHS compliant)

Steel (painted, galvanized, chrome-plated,
PVC plastic-coated)
Aluminium
Plastics: PA6.6, PC-ABS

General signs and symbols



With rotating pedal cranks, be careful not to insert your fingers between the housing and the pedal crank.



Device of protection class II



Application parts of type BF
Application parts are components which – when the device is used as intended – have contact with the user and must therefore comply with special safety criteria.

The following application parts (type BF) can be mounted on the MOTOmed and must be checked regularly:

- operating panel
- handles
- foot shells
- leg guides with calf shells

IP21

The MOTOmed complies with IP21 protection class:
Protected against the penetration of solid foreign parts and vertically dripping liquids.



Follow the instructions for use.



The MOTOMed complies with the Medical Devices Directive 93/42/EEC.



Year of construction, in which the MOTOMed was manufactured (e.g. 2020).



Indicates the manufacturer of the medical device



Weight including safe workload in kilograms



Observe appropriate disposal
WEEE-Reg.-Nr. DE 53019630.



Serial number of the device



Do not push, lean on, or pull the MOTOMed sideways.



Do not step inside the MOTOMed and do not train in a standing position.

Expected service life

The expected service life cannot be generally indicated because it is determined by the operating environment, the frequency of use and the type of use.

The expected service life is therefore considered to be the period during which the device is to maintain operational readiness since initial start-up. This service life is fixed at 10 years, unless otherwise specified in the technical specifications of the variants and accessories.

Service

We are of course available if you have any questions. Please call us – your questions and suggestions are very welcome. We are also happy to call you back. Please always give us the serial number (SN). This can be found on the nameplate on the large device stand of the MOTOmed.

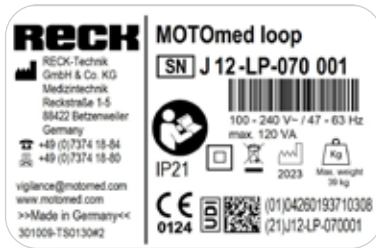


Fig. 10.1

Your service contacts for Germany

Phone 07374 18-84
Fax 07374 18-80
E-mail service@MOTOmed.de

Or call us toll free at 0800 6 68 66 33

Your international service contacts

Phone +49 7374 18-85
Fax +49 7374 18-480
E-mail service@MOTOmed.com

- 82 **Manufacturer's Declaration –
Electromagnetic emissions**
- 83 **Manufacturer's Declaration –
Electromagnetic immunity**
- 84 **Recommended safety distances**

The manufacturer declares compliance with the requirements of EN 60601-1-2:2016-05 for the mains connection cable of the MOTOMed.

The use of accessories and wiring other than those specified or provided by the manufacturer of this equipment may result in increased electromagnetic emissions or reduced electromagnetic immunity of the equipment and may result in incorrect operation.

Manufacturer's Declaration – Electromagnetic emissions


The MOTOMed is intended for use in the electromagnetic environment specified below. The customer or the user of the MOTOMed should ensure that it is used in such an environment.

Disturbance emission measurements	Compliance	Electromagnetic environment – guidelines
RF emissions according to CISPR 11	Group 1	The MOTOMed uses RF energy only for its internal function. Therefore, its RF transmission is very low and it is unlikely that neighbouring electronic devices will be disturbed.
RF emissions according to CISPR 11	Class B	The MOTOMed is intended for use in all types of facilities, including residential areas, which are directly connected to a public power grid that also supplies buildings used for residential purposes.
Harmonics emissions according to IEC 61000-3-2	Class A	
Emission of voltage fluctuations/flicker according to IEC 61000-3-3	met	

Manufacturer's Declaration – Electromagnetic immunity

The MOTOMed is intended for use in the electromagnetic environment specified below. The customer or the user of the MOTOMed should ensure that it is used in such an environment.

Immunity tests	IEC 60601 test level	Electromagnetic environment – guidelines
Static electricity discharge (ESD) according to IEC 61000-4-2	±8 kV contact discharge ±15 kV air discharge	Floors should be wood, concrete or ceramic tile. If the floor is covered with synthetic material, the relative humidity must be at least 30%.
Fast transient electrical interference/ bursts according to IEC 61000-4-4	±2 kV 100 kHz repetition frequency	The quality of the supply voltage should be that of a typical business or hospital environment.
Surges according to IEC 61000-4-5	±0,5 kV, ±1 kV Line against line	The quality of the supply voltage should be that of a typical business or hospital environment.
Voltage dips, short-term interruptions and fluctuations in the supply voltage according to IEC 61000-4-11	0% UT; ½ period at 0, 45, 90, 135, 180, 225, 270 and 315 degrees 0% UT; 1 period Single phase: at 0 degrees 70% UT; 25/30 periods Single phase: at 0 degrees 0% UT; 250/300 periods	The quality of the supply voltage should be that of a typical business or hospital environment. If the user of the MOTOMed requires continued operation even in the event of power interruptions, it is recommended that the MOTOMed be powered from an uninterruptible power supply or a battery.
Magnetic field at the supply frequency (50/60 Hz) according to IEC 61000-4-8	30 A/m	Magnetic fields at the mains frequency should correspond to the typical values found in commercial and hospital environments.
Note: UT is the mains AC voltage before the application of the test levels.		

Immunity tests	IEC 60601 test level	Electromagnetic environment – guidelines
<p>Conducted RF interference according to IEC 61000-4-6</p> <p>Radiated RF interference according to IEC 61000-4-3</p>	<p>3V_{eff} 0.15 MHz to 80 MHz</p> <p>6V_{eff} in ISM and amateur radio frequency bands between 0.15 MHz and 80 MHz 80% AM at 1 kHz</p> <p>10V/m 80 MHz to 2.7 GHz 80% AM at 1 kHz</p>	<p>Use of this device immediately adjacent to other equipment should be avoided, as this could result in improper operation. If it is nevertheless necessary to use in the manner described above, observe this device and the other devices to make sure they are working properly.</p> <p>The field strength of stationary radio transmitters should be lower than the test level at all frequencies, in accordance with an on-site survey^a. Interference is possible in the vicinity of devices that carry the following icon. </p>
<p>Note: These guidelines may not be applicable in all cases. The spread of electromagnetic quantities is influenced by absorption and reflection of buildings, objects and people.</p>		
<p>a) The field strength of stationary transmitters, such as base stations of radio telephones and land mobile radios, amateur radio stations, AM and FM radio and television stations cannot be theoretically predicted exactly. In order to determine the electromagnetic environment with respect to the stationary transmitters, a study of the location should be considered. If the measured field strength at the location where the MOTOMed is used exceeds the above compliance levels, the MOTOMed should be observed to verify proper function. If unusual features are observed, additional measures may be required, such as changing the orientation or location of the MOTOMed.</p>		

Recommended safety distances between portable and mobile HF telecommunications equipment and the MOTOMed

The MOTOMed is intended for use in an electromagnetic environment in which the RF interference is controlled.

Portable RF communications equipment (radio devices) (including their accessories such as antenna cables and external antennas) should not be used more than 30 cm (or 12 inches) away from the MOTOMed parts and wiring specified by the manufacturer. Failure to do so may result in a reduction in the performance of the device.

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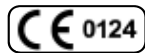
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100.020.484 en 20231207

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