

en

Electric wheelchair
Model 2.322 OPTIMUS 2

Operating manual



CE

MEYRA®

Contents

Meaning of the applied markers	7
Introduction	7
List of models	7
Indications / contraindications	8
Acceptance	8
Intended purpose	8
Use	9
Adjustment	9
Combination with manufacturer foreign products	10
Reinstallation	10
Life span	10
Base position	10
Overview	11
Model 2.322	11
Handling the electric wheelchair	12
Securing the electric wheelchair	12
Functional checks	12
Driving	12
Brakes	12
Service brake	12
Braking the wheelchair	12
Emergency braking	12
Parking brake	12
Drum Brake	13
Locking the brakes	13
Releasing the brakes	13
Drive-/push mode	14
Selecting the push mode	14
Selecting the motor mode	14

Selecting the operation	15
Pre-operation checks	17
Battery charging procedure	17
Positioning the operating module	18
Function description	18
Adjusting the distance to the padded arm support	18
Removing the operating module	18
Inserting the operating module	18
Swivelling the operating module	19
Height adjustment of the operating module	19
Leg supports	20
Calf belt	20
Removing the calf belt	20
Attaching the calf belt	20
Length adjustment of the calf belt	20
Lower leg support	21
Footplates	21
Footboard	21
Leg support upper part	22
Turning the leg supports to the side	22
Swivelling in the leg supports	23
Removing the leg supports	23
Attaching the leg supports	23
Mechanically height-adjustable leg supports	24
Lifting/lowering the leg support	24
Electrically height-adjustable leg support	25
Height adjustment	25
Removing the electrically height adjustable leg support	26
Hanging the electrically height adjustable leg support into place	26

Arm supports	27
Arm supports, code 106	27
Removing the arm support	27
Inserting the arm support	28
Arm supports code 24 - Ergostar seat	28
Swivel up the arm supports	28
Adjusting the angle of the arm support	28
Seat	29
Swivelling up the seat	29
Electrical seat-angle adjustment	29
Seat Ergostar	30
Adjustment of the back support angle	30
Lordosis adjustment	30
Ergo Seat	31
Folding down the back support	31
Unfolding the back support	31
Adjusting the back support angle	31
Electrically adjustable back support	32
Folding down the electrically adjustable back support	32
Unfolding the back support	32
Head support	33
Seating system ERGO Seat	33
Retaining strap	34
Rear-view mirror	35
Removing the rear-view mirror	35
Attaching the rear-view mirror	35
Adjusting the rear-view mirror	35
Walking aid holder	35
Lighting	36

Loading and transportation	37
Loading	37
Ramps and lifting platforms	37
Transport of people inside a motor vehicle	37
Transport security	38
Tyres	39
Maintenance	39
Maintenance	39
Maintenance schedule	40
Fuses	42
Replacing the fuses	42
Lighting	43
Adjusting the headlights	43
Fault correction	44
Basic safety information	45
Accompanying person	45
Transfer out of the electric wheelchair	45
Reaching for objects	46
Driving on falling, rising or transverse gradients	46
Crossing obstacles	46
Electrical system	47
Transport in public methods of transportation	47
Driving on public highways	48
Cleaning	48
Finish	49
Disinfection	49
Repairs	50
Repairs	50
Customer Service	50
Spare parts	50
Information for extended pauses of use	50
Disposal	50

Technical data	51
Tyre pressure of pneumatic tyres	51
Maximum range	51
Hill climbing ability	52
Applied norms	52
Values acc. to ISO 7176-15 for model 2.322	53
Further technical data for model 2.322	54
Dimensions with Ergoseat (Code 948 / 950 without head support):	56
Dimensions with seat Ergostar (Code 961 without head support):	57
Meaning of the symbols on the washing instruction	58
Meaning of the labels on the electric wheelchair	59
Meaning of the symbols on the type plate	60
Inspection certificate	61
Warranty / Guarantee	62
Warrantee / Guarantee section	63
Inspection certificate for transfer	63

MEANING OF THE APPLIED MARKERS

Safety instructions with a coloured background are mandatory and need to be observed under any circumstance!

-  This symbol indicates tips and recommendations.
- [] Reference to a picture number.
- () Reference to a function element within a picture.

INTRODUCTION

Read and observe this manual before first operation.

Children and juveniles should read this documentation together with their parents respectively a supervisor or accompanying person before first use.

This operating manual is to help you get accustomed to the handling of the electric wheelchair as well as to prevent accidents.

-  Please note that the illustrated equipment variants can deviate from your model.

We have therefore also listed chapters with options that might not be applicable for your individual electric wheelchair. A list of the available options and accessories can be viewed in the order form of your electric wheelchair.

Users with visual impairments can find the PDF-files together with further information on our website:

< www.meyra.com >.

-  Contact your specialist dealer when required.

Alternatively users with visual impairments can have the documentation read out by a helper.

Inform yourself regularly about product safety and possible recalls of our products in the < *Information center* > on our website: < www.meyra.com >.

We have developed an electric wheelchair that complies with the technical and governmental regulations of medical devices. For information about a severe accident that can still not be ruled out completely, please use our E-mail address < info@meyra.de > and inform the responsible governmental agency of your country.

LIST OF MODELS

This operating manual applies to the following models:

Model 2.322

INDICATIONS / CONTRAINDICATIONS

In case of allergic reactions, skin rashes and/or pressure sores during the use of the electric wheelchair sores contact a doctor immediately.

In order to prevent contact allergies, we recommend to use the electric wheelchair only when wearing clothes.

The functional diversity of your wheelchair permits application in situations with extreme to fully pronounced limitations in mobility/walking in case of structural and/or functional damages to the lower extremities (u.o. amputation, after-effects of injuries, musculoskeletal/neuromusculoskeletally caused motion disorders e.g. through:

- paralysis,
- loss of limbs (leg amputation),
- defective/deformed limbs,
- joint contractures/-damages,
- other diseases.

Also to be observed for individual provision are the physical and psychological state, age of the handicapped person as well as the personal living condition and private environment.

Every provision, case by case should be checked, tested and aligned to the individual ability limitations caused by the defined disability through an educated person (medical device consultant, rehabilitation consultant u.o.). This also includes that people that show a counter indications to the named problems in some cases need to give proof of the cognitive, mental and moral ability to operate one of the models shown in the list of models.

The electric wheelchair may not be used in cases of:

- Cognitive limitations and mental retarding, that rule out the independent use of the electric wheelchair.
- Limited eyesight, which cannot be compensated through glasses or other aids and that lead to limitations in the day to day.
- Influence of impairing medications (ask your doctor or pharmacist).
- Circumstances that prevent the individual use of the control device.
- Extreme limitations in balance and/or disorders in perception.
- Disability to sit.
 - ☞ To these and other possible risk concerning your electric wheelchair ask your doctor, therapist or specialist dealer.

ACCEPTANCE

All products are checked for faults in the factory and packed in special boxes.

- ☞ However, we request that you check the electric wheelchair for possible transport damage immediately on receipt – preferably in the presence of the carrier.
- ☞ The packaging of the electric wheelchair should be stored for a further transport that might become necessary.

INTENDED PURPOSE

The electric wheelchair serves to improve independent mobility outdoors.

USE

Never use the electric wheelchair without the leg supports and arm support units mounted!

The electric wheelchair serves solely for transporting **one** sitting person. – Other pulling or transporting uses do not comply with its intended purpose.

The electric wheelchair is applicable on level, firm surfaces and can be used as follows:

- for indoors (e.g. apartment, day care),
- outdoors (e.g. paved paths in parks).
- Never expose the electric wheelchair to extreme temperatures and damaging environmental conditions, such as sunlight, extreme cold or salty water.
- Sand and other dirt particles can seize on moving parts and render them without function.

The electric wheelchair offers manifold adjustment possibilities to individual vital statistics.

National regulations might prevent the use on busses, trains or in aircraft.

- ☞ Inform yourself at the transportation companies concerning limitations.
- ☞ Before going on a flight clarify the specific transport conditions with your flight agency and also the legal regulations concerning transport in a plane in your country of residence as well as at your destination.

Only apply the electric wheelchair within the scope of the specifications and limitation described in chapter *Technical data* on page 51.

ADJUSTMENT

Always have adaptation, adjustment or repair work carried out by a specialist dealer.

The electric wheelchair offers manifold adjustment possibilities to individual vital statistics. Before first use an adaptation of the electric wheelchair and a practical instruction in the functionalities of your electric wheelchair should be carried out by your specialist dealer. The adaptation will take into account the driving experience, the physical limits of the user and the main place of use of the electric wheelchair. Before first use, check the functionality of your electric wheelchair.

Should your specialist dealer carry out a revision/reconditioning or make fundamental changes to your electric wheelchair, without the use of original spare parts, this under certain conditions may result in a re-marketing of your electric wheelchair. This will further entail that your specialist dealer might need to conduct new conformity assessments and tests.

- ☞ We recommend a regular inspection of the electronic wheelchair adjustment in order to ensure a long-term optimal provision even with changing illness/handicap patterns of the user. Especially for juveniles an adjustment every 6 months is recommendable.
- ☞ We recommend regular medical exams in order to ensure safety for active participation in traffic.

COMBINATION WITH MANUFACTURER FOREIGN PRODUCTS

Any combination of your electric wheelchair with components not supplied by us generally results in an amendment to your electric wheelchair. Please inquire with us if there is a valid combination clearance/release.

REINSTALLMENT

The electric wheelchair is suited for reinstallation. With the building block system the electric wheelchair can be fit to accommodate different handicaps body sizes. Before reimplementation the electric wheelchair is to undergo a complete inspection.

- ✎ Hygienical measures required for reinstallation are to be carried out according to a validated hygienic plan and must include disinfection.

The service manual, intended for the specialist dealer provides information to the reinstallation and reinstallation frequency of your electric wheelchair.

LIFE SPAN

We expect an average life span of about 5 years for this product, as far as the product is applied for its designated purpose and all maintenance and service guidelines. The life span of your product depends upon the frequency of use, the application environment and care. The implementation of spare parts can prolong the life span of the product. As a rule spare parts are available up to 5 years after production is discontinued.

- ✎ The indicated lifespan does not constitute additional guarantee.

BASE POSITION

Only drive on slopes, inclines and obstacles in the basic position of the seat rising function, back inclination and seat angle.
– Danger of overturning!

Basic position is to be understood as:

- Seat height adjustment in the lowest position.
- Back inclination in upright position.
- Seat inclination in horizontal position (but max 10°).

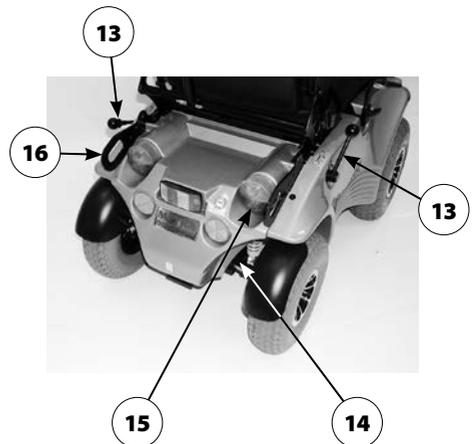
OVERVIEW

Model 2.322

The overview shows the most important components and operating devices of the electric wheelchair.

Pos. Description

- (1) Back support
- (2) Arm support
- (3) Seat
- (4) Leg support
- (5) Seat lock
- (6) Calf belt
- (7) Footplate
- (8) Headlights
- (9) Driving wheel
- (10) Steering wheel
- (11) Front indicator
- (12) Operating module
- (13) Selection lever drive/push mode resp. brake lever
- (14) Type plate
- (15) Direction indicator light / back light
- (16) Rear transport attachment



HANDLING THE ELECTRIC WHEELCHAIR

Securing the electric wheelchair

The electric wheelchair is to be secured as follows to prevent it from rolling off unintentionally:

1. Swivel the selection lever drive- / push mode to drive mode.
2. Switch off the operating module.

Functional checks

The functions and safety of the electric wheelchair must be checked before the start of each journey.

- 🗨️ For this observe chapter < *Inspections before starting to drive* > in the accompanying documentation.

Driving

You define the speed and direction yourself with the joystick movements (driving and steering lever) while driving as well as the preadjusted maximum final speed of your electric wheelchair.

BRAKES

Brake the electric wheelchair down carefully and in time. This is especially the case when driving in front of people and while driving downhill!

Service brake

The motor works electrically as an operating brake and decelerates the electric wheelchair softly and jerk-free to a standstill.

Braking the wheelchair

For allotted braking of the wheelchair slowly guide the joystick (steering and driving lever) back to the centre position (zero-setting).

Emergency braking

- 🗨️ The electric wheelchair stops in shortest distance after releasing the joysticks.

Parking brake

The parking brake only has effect when the brake lever of the drum brake is swivelled backwards.

Drum Brake

For optimal braking effect the drum brake is to be kept free of grease, oil, gunge and dust. – Danger of accidents!

The brake performance reduces with the wear on the brake pads.

Any decrease in braking performance must be repaired immediately by your specialist workshop.

The optional drum brake only serves as a parking brake, resp. emergency brake.

The brake lever to engage the drum brake is located on the same side as the operating module.



Locking the brakes

The electric wheelchair may not let itself be pushed when the brake is activated.

In order to engage the brakes, swivel the brake lever toward the back as far as possible [1].



Releasing the brakes

Only transfer into or out of the electric wheelchair when the electric wheelchair is switched off and the selection lever drive-/push mode on both sides is in drive mode!

An unintentional movement of the joysticks (driving and steering lever) can otherwise lead to an uncontrolled start of the electric wheelchair! – Danger of accidents!

In order to disengage the brakes, swivel the brake lever toward the front as far as possible [2].

Drive-/push mode

Only switch the electric wheelchair to push mode when it is standing still for positioning or in case of emergencies, but not on slopes/hills.

When establishing drive-/push mode, watch for jamming areas!

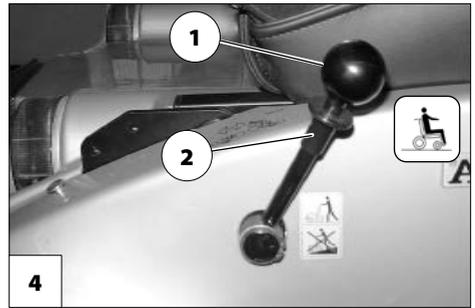
The selection lever drive/push mode is located on the side opposite to the operating module.

- ☞ The electromagnetic brake is switched off when push mode is activated.
 - Then the electric wheelchair can only be braked by switching to drive mode or by activating the drum brake.
- ☞ For shunting the electric wheelchair grab hold on the push bar of the back support or the back support itself.

Selecting the push mode

1. Switch off the operating module because the pushing will otherwise be made difficult by the electric system.
- ☞ Therefore observe operation manual < *Operating module* >.
2. First pull up the locking sleeve (2) on the selection lever drive/push mode, then guide the selection lever toward the back [3].
 - ☞ Therefore observe chapter *Releasing the brakes* on page 13.

The electric wheelchair can now be pushed.



Selecting the motor mode

1. Guide the selection lever drive/push mode forward and let it audibly lock into place [4].
 - ☞ Therefore observe chapter *Releasing the brakes* on page 13.
2. Switch the operating module on.
 - ☞ Therefore observe operation manual < *Operating module* >.

The electric wheelchair is now ready for use again.

SELECTING THE OPERATION

In order to obtain operational readiness of the electric wheelchair the following directions are to be carried out in the indicated order.

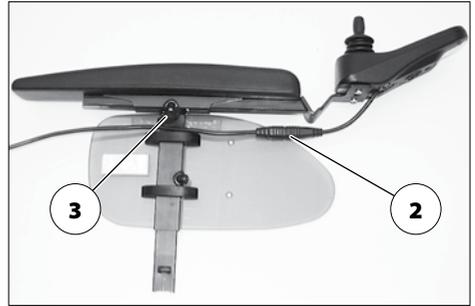
- ☞ Charge the drive batteries via the operating module before the first journey.
1. Establish drive mode [1].
 - ☞ Therefore observe chapter *Technical data* on page 51.
 2. Loosen the drum brake [2].
 - ☞ Therefore observe chapter *Drum Brake* on page 13.



3. Position of the operating module

The maximum extension reached, when a mark becomes visible in the receptacle tube of the operating module.

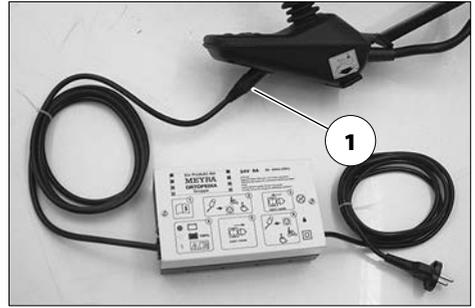
- ☞ The operating module should be positioned in such a way that you can comfortably and safely steer the electric wheelchair.
 - ☞ The distance of the operating module to the padded arm supports can be adjusted after loosening the clamping screw (3).
4. After the adjustment retighten the clamping screw.
- ☞ For this observe chapter *Positioning the operating module* on page 18.
5. Switch the operating module on
- ☞ Press the On/Off-key (4) on the control panel of the operating module.
 - ☞ Therefore observe operation manual *< Operating module >*.



Pre-operation checks

Before starting to drive, the following should be checked:

- ☞ the battery charging condition,
 - ☞ the setting of the preselected final speed.
- For this observe the operating manual < *Operating module* >.



Battery charging procedure

Do not insert any objects other than the battery charger plug into the battery charging socket. – Danger of short circuit!

Only charge the batteries in well aired, dry rooms.

Protect the charger from heat, dampness, drop and spray water and jamming since it contains voltage. – Short circuit- and mortal danger!

Ensure a good ventilation of the charger during the charging (do not cover) in order to dissipate the heat generated by the charger. – Danger of fire!

Place the battery on a firm surface for charging.

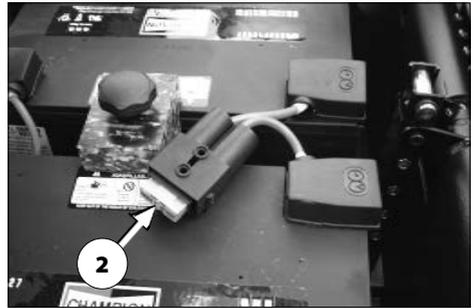
Do not put the charger on the seat of the electric vehicle for charging.

Do not smoke and avoid open flame or sparking when handling cables and electric devices. The charging gases that can be produced by the charging are always explosive.

Avoid spark build up through electrical static (for example caused by synthetic floor covers).

- ☞ For the battery charging procedure also observe the operating manual of the battery charger.

1. Lock the electric wheelchair.



- ☞ Therefore observe chapter *Securing the electric wheelchair* on page 12.
2. Insert the charger plug into the battery charging socket (1) of the operating module.
 3. Switch the battery charger on, resp. insert the main plug of the battery charger into the corresponding power socket.
 - ☞ The charging procedure is initiated.
 - ☞ The charging procedure only runs with an intact mains/battery fuse (2)!
 4. After a completed charging procedure disconnect the battery charger from the socket and remove the battery charging plug from the battery charging socket.

Positioning the operating module

Switch off the operating module before adjusting/removing it.

Function description

You will find a detailed description of the keys and symbols in the operating manual for < *Operating module* >.

The position of the operating module can be adjusted to suit the individual size of the user. The operating module can also be removed for transportation or storage and can be laid on the seat or stored separately.

Adjusting the distance to the padded arm support

Switch off the operating module before adjusting/removing it.

The maximum extension reached, when a mark becomes visible in the receptacle tube of the operating module.

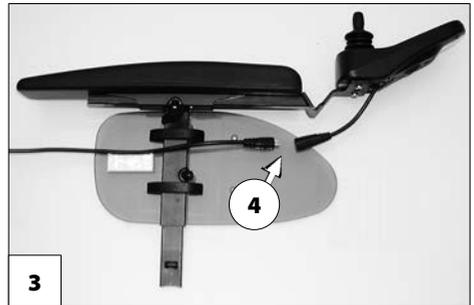
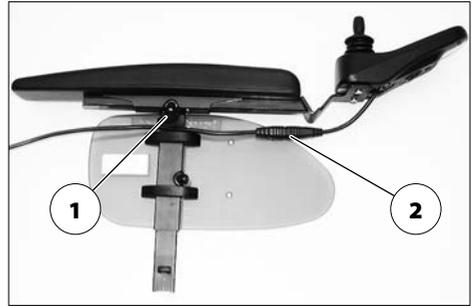
Slacken the clamping screw distance adjustment (1). Afterwards slide the operating module into the desired position. In doing so carefully guide the cable and retighten the clamping screw (1) securely.

Removing the operating module

In order to remove the operating module loosen the clamping screw (1) and disconnect the plugged connection (2) (4).

- ⚠ Do not pull on the cable while doing so.

Afterwards pull out the operating module toward the front out of the arm support tube.



Inserting the operating module

Watch for possible jamming areas when plugging in the operating module..

For drive mode insert the operating module from the front into the arm support tube [3] and adjust the distance to the padded arm support.

- ⚠ Therefore observe chapter *Adjusting the distance to the padded arm support* on page 18.

Afterwards re-establish the plugged connection (4) (2).

- ⚠ The plugged connection must audibly lock into place. – Afterwards check the function of the operating module.

Swivelling the operating module

Do not grab into the area of the cross brace. – Danger of squashing!

With the optional swivel away operating module adapter [1] the operating module can be swivelled back to the side (2) so that it is located parallel to the arm support. This makes it possible, for example:

- to drive closer to a table,
- remove the operating module more easily.

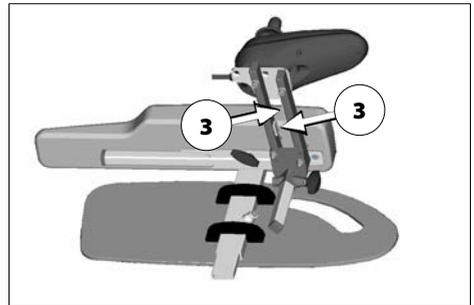
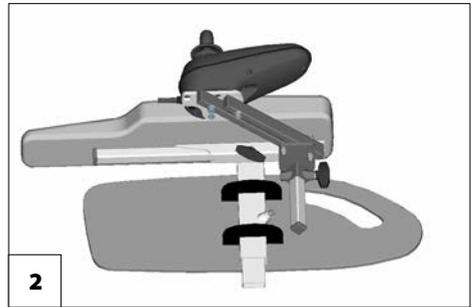
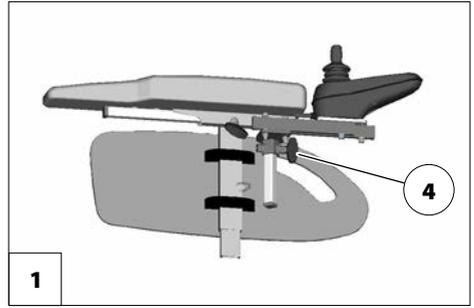
For regular drive mode the operating module can be swivelled back toward the front until it engages back into the magnetic lock [1].

- ☞ The power of the magnets (3) can be reduced, for example with tape on top of the magnets, for easier swivelling of the operating module.
- ☞ Should the operating module be positioned too close to the arm support, move it forward before swivelling.

Height adjustment of the operating module

Loosen the clamping screw (4) to adjust the height of the operating module.

- ☞ After the adjustment retighten the clamping screw.



LEG SUPPORTS

Before any actions on the leg supports the electric wheelchair is to be secured against unintentional rolling motions.

- Therefore observe chapter *Securing the electric wheelchair* on page 12.

Calf belt

Do not drive without the calf belt. – Danger of accidents!

The removable calf belt (1) prevents the feet from sliding off the back of the footplates.

- The calf belt must be removed in order to swivel away the leg supports [2].
- The calf belt is omitted for height adjustable leg supports and is replaced by a calf pad.

Removing the calf belt

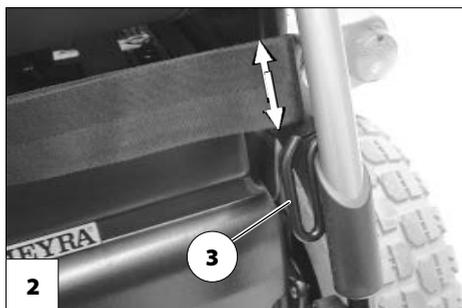
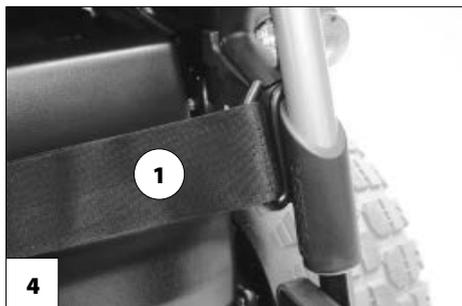
For removal the calf belt is to be pulled from the attachment pins (3).

Attaching the calf belt

For attachment both loops of the calf belt are slid over the attachment pins [4].

Length adjustment of the calf belt

For length adjustment, the calf belt is guided around the special attachment pins (3) and adjusted in length with a velcro fastener.



Lower leg support

The footplates, resp. footboard needs to be folded up before entry or exit [1].

☞ Check the locking points!

1. Remove both feet from the footplates.
2. Fold both footplates up toward the side [1].

☞ Before starting to drive the footplates resp. the footboard is to be folded down again [2]+[3].



Footplates

The footplates can be folded outward and up [1] resp. inward and down [2].

Footboard

Fold the footboard up before swivelling away and removing the upper leg support.

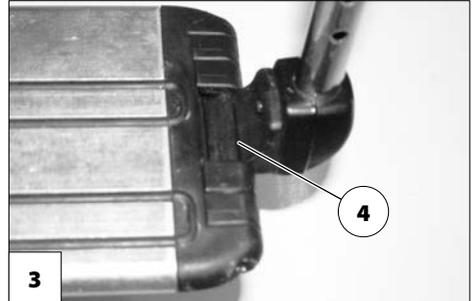


Folding up the footboard

In order to fold up the footboard lift the loose end of the footboard (4) as far as possible.

Folding the footboard down

In order to fold down the footboard, lower the loose end of the footboard (4) as far as possible down onto the footboard bracket [3].



Leg support upper part

The upper leg support with an inserted lower leg support is termed leg support.

Turning the leg supports to the side

Leg supports turned to the side are released automatically and can easily come off. Note this when handling (e.g. transport).

When the electrically height adjustable leg supports are removed the electric contact (4) needs to be protected from dampness, water and dust or dirt (e.g. for longer storage).

⚠ Possible function error of the electrical adjustment.

To reduce the length of the electric wheelchair the leg supports can be swivelled inward/outward [1]+[2].

⚠ Remove the calf belt before swivelling away the leg supports.

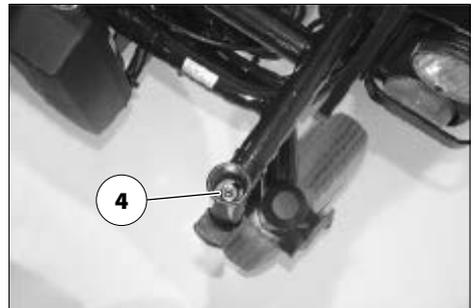
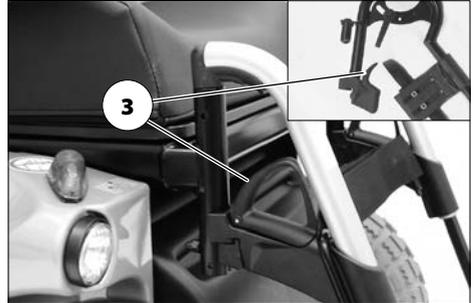
⚠ Therefore observe chapter *Removing the calf belt* on page 20.

Fold up the footplates resp. footboard in order to swivel away the leg supports.

⚠ Therefore observe chapter *Lower leg support* on page 21.

Afterwards pull or press the respective locking lever (3) backward and swivel the corresponding leg support outward.

⚠ Watch for possible jamming areas!



Swivelling in the leg supports

For inward swivelling, let the leg supports swivel forward until the lock audibly engages [1].

- After audibly swivelling the leg supports inward check the respective locking device.
- Afterwards observe chapter *Lower leg support* on page 21.
- Conduct a function check, especially on the electrically height adjustable leg support.

Removing the leg supports

For easy transfer into and out of the electric wheelchair as well as a reduced wheelchair length (important for transport) the leg supports can be removed [2].

- Remove the calf belt before swivelling away the leg supports.
 - Therefore observe chapter *Calf belt* on page 20.

For removal first swivel the leg support sideways and then remove them toward the top [1].

- Therefore observe chapter *Turning the leg supports to the side* on page 22.
- Watch for possible danger of jamming!

Attaching the leg supports

For inserting press the leg supports, swivelled to the side, parallel to the front frame tube and lower it into place [3]. – In doing so the holding pin must slide into the frame tube.

- After attachment swivel the leg supports inward [1].



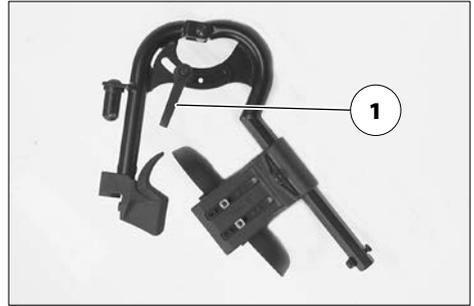
- Therefore observe chapter *Swivelling in the leg supports* on page 23.

Mechanically height-adjustable leg supports

Never put the free hand into the adjustment mechanism while adjusting the height adjustable leg support. – Danger of jamming!

Do not let the leg support drop on its own weight. – Danger of injury!

☞ If necessary have an accompanying person help during the adjustment procedure.



Lifting/lowering the leg support

1. Before lifting/lowering relieve the leg support by an accompanying person by slightly lifting it up.
2. Afterwards loosen the clamping lever (1) and have the leg support lifted/lowered slowly to the desired level by an accompanying person.
3. After the adjustment retighten the clamping lever (1).

Electrically height-adjustable leg support

Never put the free hand into the adjustment mechanism while adjusting the height adjustable leg support. – Danger of jamming!

The electrically height adjustable leg support [1]+[2] automatically receives electric contact when hooked on.



Height adjustment

For height adjustment, raise or lower the leg support to the desired height via the operating module [1]+[2].

- ☞ Therefore observe operation manual < *Operating module* >.



Removing the electrically height adjustable leg support

When the electrically height adjustable leg supports are removed the electric contact (3) needs to be protected from dampness, water and dust or dirt (e. g. for longer storage)!

- ☞ Possible function error of the electrical adjustment.
- ☞ For protection you can for example use the optional cover cap.

In order to remove the leg support, depending on version, first pull the locking lever (1) back, press it in or fold it up or down.

Afterwards swivel the leg support sideways and remove it toward the top [2].

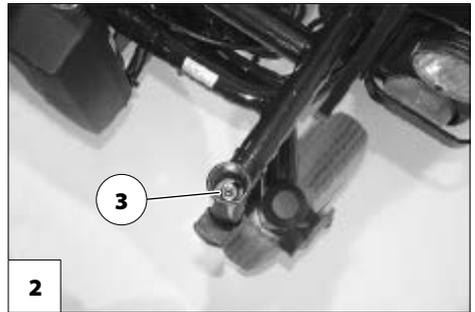
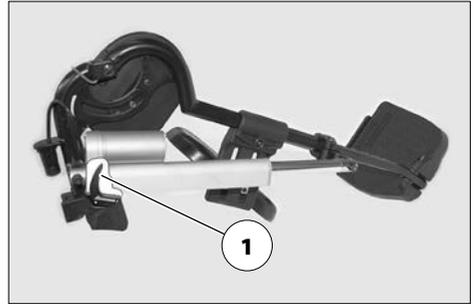
- ☞ Therefore observe chapter *Turning the leg supports to the side* on page 22.

Hanging the electrically height adjustable leg support into place

- ☞ After attachment swivel the leg supports inward.
- ☞ Therefore observe chapter *Swivelling in the leg supports* on page 23.

Press the leg supports, swivelled to the side, parallel to the front frame tube and lower it into place. – In doing so the holding pin must slide into the frame tube (3).

- ☞ Conduct a function test on the electrically height adjustable leg support!



ARM SUPPORTS

Do not use the arm supports [1] to lift or carry the electric wheelchair.

Do not drive without the arm supports!

Ensure the tight fit of the clamping screw (3) in order to prevent the arm support from sliding down.

Arm supports, code 106

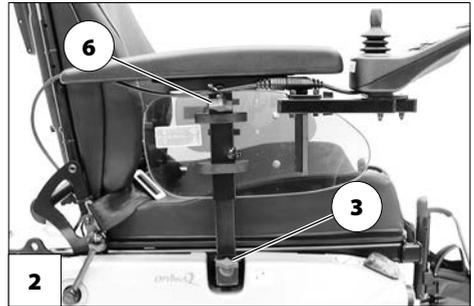
The removable arm supports [1]+[2] can be adjusted in height to the demands of the user.

- ⚠ Danger of jamming when adjusting the height of the arm supports if the cushions are in a deep setting!

Removing the arm support

To remove the arm support, loosen the clamping screw (3) first and then pull out the arm support toward the top [4].

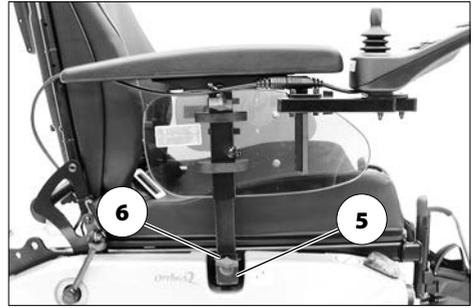
- ⚠ The operating module must be removed first if the arm support on the control side is to be removed [4].
- ⚠ Therefore observe chapter *Removing the operating module* on page 18.



Inserting the arm support

For inserting the arm support, first slide the arm support as far as possible into the bracket (5) and then tighten the clamping screw (6).

- For inserting the operating module observe chapter *Inserting the operating module* on page 18.



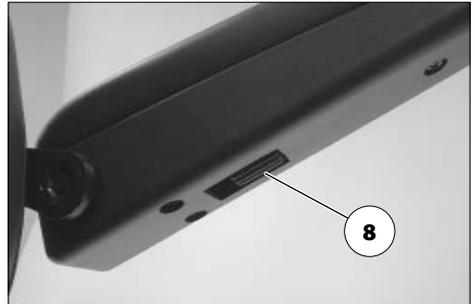
Arm supports code 24 - Ergostar seat

Swivel up the arm supports

The arm supports can be swivelled up for an easier transfer to/from the seat [7].

Adjusting the angle of the arm support

By turning the adjustment wheel (8) the angle of the arm support can be adjusted.



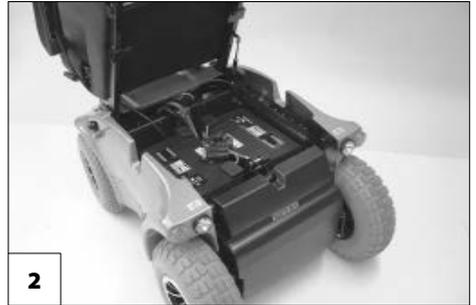
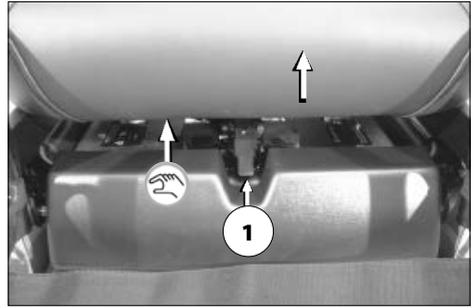
SEAT

Swivelling up the seat

Do not hold onto the leg supports to swivel the seat up.

- Remove the leg supports if necessary.
- Always remove the electrical leg supports.
- Grab under the front edge of the seat pad for upward swivelling.

To swivel the seat upward, first press the seat locking lever upward (1) the swivel the seat unit toward the back and up [2].



Electrical seat-angle adjustment

Adjust the seat inclination only when the electric wheelchair is standing on a horizontal, level surface. A danger of tipping over exists on gradients.

The seat-angle adjustment is not linked with an automatic speed reduction function.

An increased danger of tipping over exists with a reclined back support.

Before driving make sure that you have not adjusted a negative seat inclination, resp. that the seat inclination ensures a safe sitting position even while driving on hills/slopes.

Do not grab into the adjustment area.
– Danger of jamming!

- For the electrical seat angle adjustment also observe the operating manual < Operating module >.

Seat Ergostar

Adjustment of the back support angle

To adjust the angle of the back support the locking lever (2) must be pressed downward.

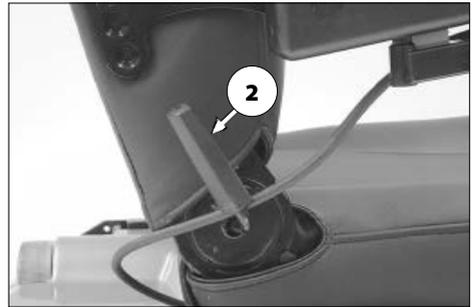
Let the locking lever latch at the next latching position after having adjusted the back support angle [1].

- ☞ Check the lock of the back support.
- ☞ Watch for possible jamming areas!

Lordosis adjustment

To adjust the lordosis support turn the handwheel (3) counter-clockwise into the desired position.

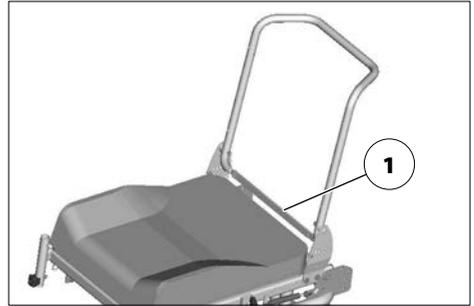
- ☞ Watch for possible jamming areas!



Ergo Seat

The back support can be folded down for storage or transport.

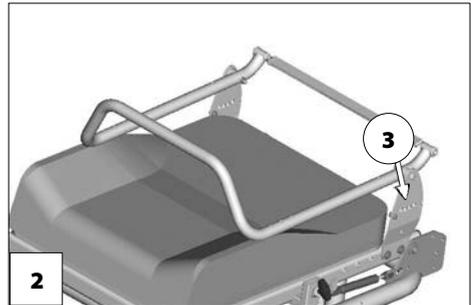
- ☞ For better demonstration of the wire cable (1) the back support is shown without cushion.



Folding down the back support

- ☞ If required remove the seat pad (velcro fastener).

Disengage the back support by pulling or pressing the wire cable (1) at its centre and fold it onto the seat [2].



Unfolding the back support

For this raise the back support and pull the pressure bolts inward by pulling or pressing on the wire cable (1).

- ☞ Watch for possible jamming areas!

Release the wire cable in order to lock the back support in the desired position (3).
– Slide the back support until the pressure bolts audibly click into place.

If required replace the seat pad.

- ☞ The greasing of the thrust bolts is recommended for an easier latching of the backrest.
- ☞ Check the secure locking in of the back support.

Adjusting the back support angle

Unlock the back support by pulling or pressing the centre of the wire cable (1).

Release the wire cable in order to lock the back support in the desired position (3).
– Slide the back support until the pressure bolts audibly click into place.

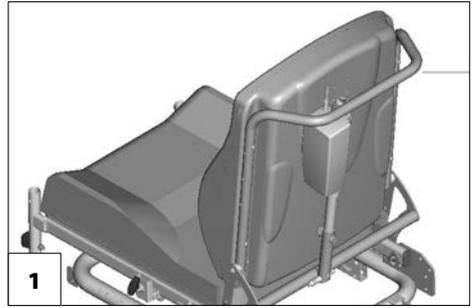
- ☞ Check the secure locking in of the back support.

Electrically adjustable back support

Only adjust the back support when the electric wheelchair is standing on a level surface. A danger of tipping over exists on gradients!

The back support [1] is electrically adjustable.

- ☞ Herefore view the operating manual < *Operating module* >.



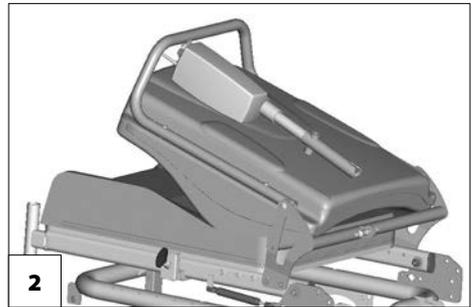
Folding down the electrically adjustable back support

To fold the electrically adjustable back support [2] down, first press the release button (3), then remove the pin (4).

- ☞ Keep the back support in position with one hand at the push bar.

Afterwards fold the back support down [2].

- ☞ Reinsert the pin (4) in order to prevent loss.

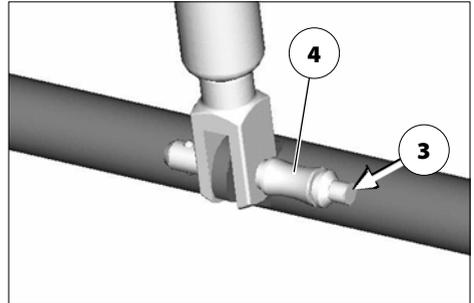


Unfolding the back support

After raising the back support [1] remove the pin (4), lift the gas pressure spring and hang it into place. The reinsert the pin (4).

- ☞ Check the locking device after raising the back support up and reinserting the pin.

- ☞ Keep the pin clean at all times for flawless function.



HEAD SUPPORT

Always adjust the upper edge of the head support close to the back of the head and at about eye level.

Do not position the head support at neck height.

We recommend the fitting of two rear-view mirrors for driving with a head support.

Pull the head support out of the bracket maximally up to the marking.

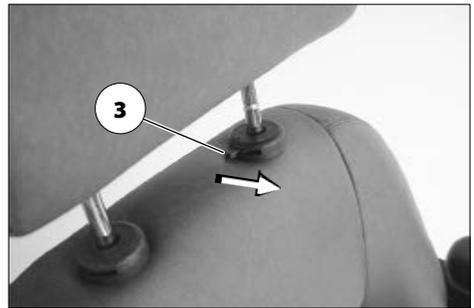
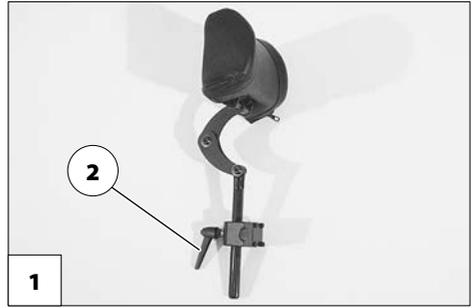
The head support solely serves to support the head during regular use, but it cannot replace a head support firmly mounted into an automobile during passenger transport.

When adjusting the head support watch for possible danger of jamming in the area of the adjustment devices.

The head support is swivel/proof, height- and depth adjustable and removable.

Seating system ERGO Seat

For height adjustment and removal of the head support [1] loosen the clamping screw (2).



RETAINING STRAP

Make sure that no objects are trapped between belt and the body! – Thus you avoid painful pressure points.

The retrospective assembly of a retaining strap is only to be carried out by a specialist workshop!

The retaining strap is not part of the retaining system for the electric wheelchair and/or the driver during transport in motor vehicles.

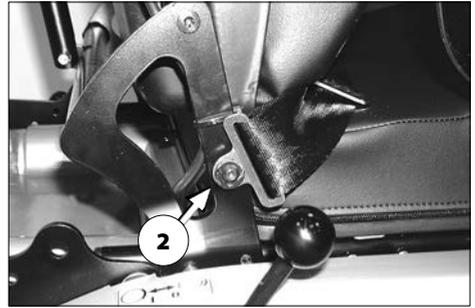
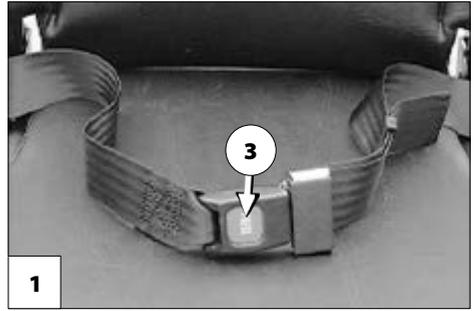
The retaining strap [1] is screwed onto the respective back frame tube (2).

The retaining strap serves to stabilise the sitting position and prevents falling forward out of the electric wheelchair.

To fasten the retaining strap, pull both ends forward and audibly let the buckle click into place [1].

To open the retaining strap, press down the release button (3) and pull the two ends of the strap apart.

- ⚠ The retaining straps can be adjusted in length and should not be pulled too tight.



REAR-VIEW MIRROR

Removing the rear-view mirror

To remove the rear-view mirror loosen the clamping screw (1) and pull the rear-view mirror forward out of the arm support tube.

- ☞ Carefully place the rear-view mirror down and protect the mirror glass from strain or other objects.
- ☞ The rear-view mirror is to be kept clean at all times.

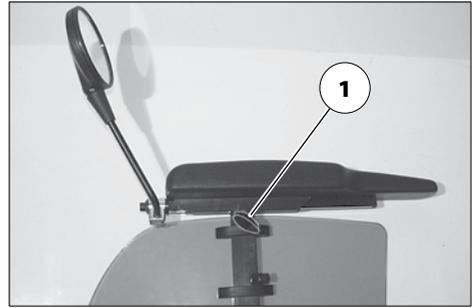
Use common glass cleanser to clean the mirror. In doing so the manufacturers instructions are to be observed.

Attaching the rear-view mirror

For drive mode insert the rear-view mirror from the front into the arm support tube and tighten the clamping screw (1).

Adjusting the rear-view mirror

1. Preadjust the rear-view mirror by turning the clasp.
2. Turn the rear-view mirror on the attachment rod and ball joint until you reach the desired angle.



- ☞ Check the secure clamping hold of the walking aids.

WALKING AID HOLDER

The walking aids may, depending on the adjusted length of the walking aids, protrude over the contour of the electric wheelchair!

- ☞ Special caution is required when driving.

The walking aid holder serves for safe transport of two walking aids [2].

To carry along walking aids, these are to be pressed into two clips each of the walking aid holder.

LIGHTING

The electric wheelchair is equipped with lighting equipment.

The lighting is activated over the operating module for the driver.

- ☞ Observe the operating manual < *Operating module* >!
- ☞ Always switch on the lighting system in poor visibility conditions and especially during darkness in order to see better and be better seen by others.
- ☞ Ensure that headlights, turn signals and taillights as well as reflectors are not covered by clothes or other objects attached to the electric wheelchair.



LOADING AND TRANSPORTATION

Do not use the back support, leg supports, arm supports or restraints to lift the electric wheelchair!

The electric wheelchair must be switched off before lifting!

The parts detached for loading must be carefully stowed and carefully attached again before the next journey.

No special carrying points are allocated for carrying detachable components.

The following procedures may be necessary due to lack of space for the transport in vehicles:

- Remove the leg supports.
- Remove the arm supports.
- Folding over the back support.

Loading

The weight of the electric wheelchair is reduced when you remove detachable components.

The electric wheelchair can be loaded with the aid of ramps or lifting platforms.

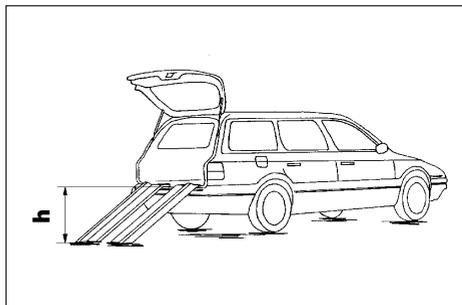
Ramps and lifting platforms

Observe the operating manual for the ramp or lifting platform.

Observe the manufacturer's information for the ramp or lifting platform.

The maximum bearing height specified for the ramp must be greater than the height 'h' from the ground to the loading surface, e.g. of the car.

The load capacity of the ramp or lifting platform must be higher than the overall permitted weight of the electric wheelchair.



There is a danger of tilting when driving backwards on ramps!

Transport of people inside a motor vehicle

To determine if your electric wheelchair is approved as a seat for person transport inside a motor vehicle, please look at the type plate of your wheelchair.

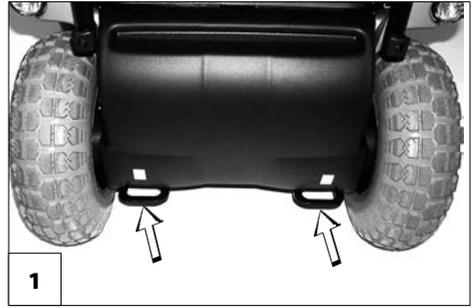
- ☞ Therefore view chapter *Meaning of the symbols on the type plate* on page 60.
- ☞ Electric wheelchairs that are not suited for use as a seat for transport in a motor vehicle are marked with an additional label. – For this observe chapter *Meaning of the labels on the electric wheelchair* on page 59.
- ☞ Observe the guideline < *Safety with Meyra-wheelchairs, also during transport in motor vehicles* >! – This document and further information can be accessed on our website < www.meyra.com > in the < *Download Archive* >.

Transport security

All regulations and directions of the respective transport company are to be observed. – Ask for these before the transport.

The electric wheelchair is only to be secured through the securing points [1] and [2].

- ☞ The four anchor positions are marked with a "hook"-symbol.
- ☞ For this also observe chapter *Meaning of the labels on the electric wheelchair* on page 59.
- ☞ The procedure for securing the electric wheelchair can be read in the document *< Safety and general handling instructions electric vehicles >* chapter *< Transport in motor vehicles or with conveyors >*. – This document and further information are available in the *< Information center >* on our website *< www.meyra.com >*.



TYRES

Tyres are made of a rubber mixture and can leave permanent or difficult-to-remove marks on some surfaces (e.g. plastic, wooden or parquet flooring, carpets, mats). We cannot accept liability for damages on surfaces caused by wear or chemical processes of the tyres.

MAINTENANCE

An incorrect or neglected cleaning and maintenance of the electric wheelchair results in a limitation of the product liability.

Maintenance

The following maintenance Instruction gives you a guide for carrying out the maintenance work.

- ✎ This maintenance schedule does not give information about the actual extent of work required on the electric wheelchair.

Maintenance schedule

WHEN	WHAT	REMARK
Before starting out	General Test for faultless operation.	Carry out test yourself or with a helper.
	Checking the magnetic brake 1. Move the selection lever for the drive/push mode into the drive mode and release the drum brakes. 2. Lock the drum brakes and move the selection lever for the drive/push mode into push mode.	Carry out test yourself or with a helper. If the electric wheelchair can be pushed, have the brakes repaired immediately by the specialist workshop. – Danger of accidents!
Especially before driving in the dark	Lighting Check the lighting equipment and reflectors for flawless functioning.	Carry out test yourself or with a helper.
Every 2 weeks (depending on distance covered)	Check air pressure of the tyres Tyre filling pressure:  View <i>Technical data</i> on page 51.	Carry out test yourself or with a helper. Use a tyre gauge.
	Adjustment screws Screws and nuts are to be checked for tight fit.	Carry out test yourself or with a helper. Retighten the loosened adjustment screws. Contact specialist workshop upon demand.

WHEN	WHAT	REMARK
<p>Every 6-8 weeks (depending on distance covered)</p>	<p>Wheel attachments Wheel nuts or screws are to be checked for tight fit.</p>	<p>Do it yourself or with the aid of a helper. Securely tighten any loosened wheel nuts or screws and retighten again after 10 operating hours or resp. 50 km. Contact specialist workshop upon demand.</p>
<p>Every 2 months (depending on distance covered)</p>	<p>Check tyre profile Minimum tread = 1 mm</p>	<p>Carry out a visual check yourself or with a helper. If the tyre profile is worn down or if the tyre is damaged, consult a specialist workshop for repairs.</p>
<p>Every 6 months (depending on frequency of use)</p>	<p>Check</p> <ul style="list-style-type: none"> - Cleanness. - General condition. 	<p>View chapter <i>Cleaning</i> on page 48.</p>
<p>Manufacturer recommendation: Every 12 months (depending on frequency of use)</p>	<p>Maintenance jobs</p> <ul style="list-style-type: none"> - Electric wheelchair. - Battery charger. 	<p>To be carried out by the specialist dealer.</p>

Fuses

Replacing the fuses

Only replace the safety fuse with a safety fuse of the same type. – *Technical data* on page 51 to be observed.

Before replacing fuses, park the electric wheelchair on a level surface and secure it from rolling away.

☞ Therefore observe chapter *Securing the electric wheelchair* on page 12.

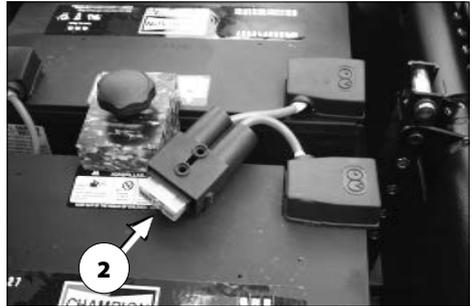
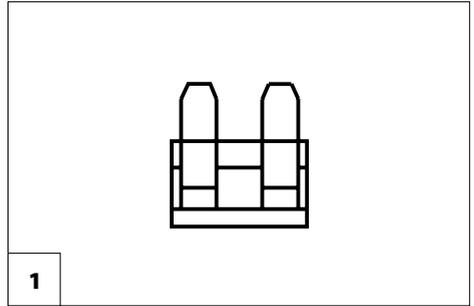
New fuses can be obtained for example at petrol stations.

☞ If the safety fuse blows again, take the battery to a specialist dealer for repair.

Fuse

Mains-/battery fuse [1]

The flat fuse for the main / battery current is located in the fuse holder under the seat, on top of the batteries (2).



Lighting

Have a defective lamp repaired immediately.

When replacing always use bulbs with the same performance data.

- ☞ If a turn-signal bulb is defective, the remaining one blinks at double frequency.



Adjusting the headlights

The housing of the light (1) must be adjusted so that the light cone is visible on the driving surface. The lower edge of the light cone should be set at distance of 3 meters to the front of the electric wheelchair.

- ☞ The lighting case might need to be re-adjusted after adjustment of the seat inclination.
- ☞ If needed go to a specialist workshop for adjustment.



Press down the dispersion disc [1] at the upper or lower edge in order to adjust the headlights.

Fault correction

Fault	Cause	Remedy
Battery indicator on the operating module does not light up after the switch-on.	Battery fuse is defective or not correctly inserted.	Replace defective fuse or clean contacts and insert correctly.
	Plug connection of the power supply without contact.	Check the plug connections.
The battery gauge blinks after the switch-on.	Drive switched to push mode.	Swivel the selection lever drive- / push mode to drive mode.
	Plugged connection on the drive misses contact.	Check plugged connection.
	Malfunction in the electronics.	Have it repaired by the specialist workshop. (Push mode). Selection lever in driving mode position.
	Not listed faults.	View < <i>Error diagnostics</i> > in the operating manual for the operating module.
Lighting not active.	Filament bulb defective.	Replace light bulb or have it repaired, resp. replaced in a specialist workshop.
	Lighting fuse or drive electronics defective.	Let it be repaired or replaced by a specialist workshop.

BASIC SAFETY INFORMATION

This safety information is an extract of the *Safety and general handling instructions*, that can be found on our website: < www.meyra.com >.

Do not insert fingers into open frame tubes (for example after removing the arm supports or leg supports). – Danger of injury!

A stable sitting position is to kept while using the electric wheelchair, even when not in motion and especially on hills and slopes. – Danger of accidents!

In a safe sitting position the back of the user lies directly on the back support upholstery and the hip of the user is at the back end of the seat.

Transit out of the electric wheelchair on hills/slopes may only be carried out in emergencies and with the aid of an accompanying person and/or helper! – Danger of accidents!

Adjust the seat inclination only when the electric wheelchair is standing on a horizontal, level surface. A danger of tipping over exists on gradients!

Increased danger of tipping over when using the angle adjustable back support.

Before starting to drive make sure that no negative seat inclination has been adjusted, respectively that a safe seating position is ensured.

You should not smoke while using the electric wheelchair.

Exposure to direct sunlight can cause seat covers/upholstery, arm support pads, leg supports and handles to heat up to over 41 °C. – Contact with exposed skin can result in injury! Prevent such heating by parking the electric wheelchair in a shaded area.

Special receptacle point for the attachment of carry-along items is the optional baggage rack.

Only transfer into or out of the seat when the electric wheelchair is switched off and the selection lever drive-/push mode on both sides is in drive mode!

Inadvertently knocking the joystick will set the electric wheelchair in motion without control! – Danger of accidents!

Accompanying person

The accompanying person must be made aware of all possible danger situation before the start of his/her supportive involvement. The parts of your electric wheelchair that are held onto by the accompanying person are to be checked for tight fit.

Transfer out of the electric wheelchair

Drive with the electric wheelchair as closely as possible to the spot where you want to switch out of the wheelchair.

- ☞ Herefore additionally observe chapters *Securing the electric wheelchair* on page 12, *Lower leg support* on page 21 and *Removing the arm support* on page 27.
- ☞ We recommend to conduct the transfer from the electric wheelchair together with an aid.

Reaching for objects

Avoid an extreme forward or backward inclination of the upper body when picking up or placing heavy objects. – Danger of electric wheelchair tipping over, especially in the case of narrow seat widths and high seat heights (seat cushion)!

Driving on falling, rising or transverse gradients

For safety reasons, the maximum permitted gradient is limited because the tip-over stability and the braking and steering behaviour are impaired by a reduced floor/road.

🗨️ Observe chapter *Technical data* on page 51.

Never lean towards the downhill direction when driving on rising, falling or transverse gradients.

Avoid jerky changes of the driving condition (especially with critically adjusted driving parameters as for example high delay values).

Always drive with a low speed on rising/falling gradients.

Extreme inclinations or slopes are to be driven on with adequate final speed.

Never switch to push mode on gradients. The automatic brakes are inoperative in the push mode.

Do not push the vehicle on gradients.

While driving in curves and when turning on inclinations and slopes there is a danger of tilting.

Avoid driving on inclinations or slopes with insufficient surface condition. Even with only on sided existence of ice, water, moss or similar on the ground, there is a danger that the electric wheelchair will lose traction and begin to slide out of control. If re-

quired immediately bring the joystick back into the neutral position.

Never drive faster than walking speed.

The braking force transferred to the driving surface is much less on a downward slope than on a level driving surface and is further reduced by poor road conditions (e.g. rain, snow, grit, dirt). A dangerous slipping of the wheels due to excessive braking and an associated unwanted course deviation must be avoided by way of a careful dosed braking.

At the end of the downward slope, take care that the foot plates do not make contact with the ground and endanger you through a sudden braking effect.

Transverse surfaces to the driving direction (e.g. transversely sloped pavements) effect a turning of your electric wheelchair in the downhill direction. You or an accompanying person must compensate for this drift by a counter-steering.

Crossing obstacles

The obstacle crossing capability depends on the driving surface gradients, the adjustment of the leg supports and other factors.

Each crossing of obstacles involves a risk! – tilting danger of the electric wheelchair.

The crossing of obstacles is a special danger situation in which a combination of the safety advice in the sections headed uphill driving, downhill driving and driving transverse to a slope must be observed in addition to other safety advice.

Keep well clear of obstacles like ruts, rails and gully covers or similar sources of danger.

Always drive slowly and at a right (90°) angle towards small obstacles, e.g. curbs/edges.

Cross the obstacle forwards with about 0.5 m approach and simultaneously with both front- resp. rear wheels. Otherwise your electric wheelchair could tilt diagonally and you could fall out of the electric wheelchair.

Always maintain a safety distance between the wheelchair and drops, stairs and similar obstacles sufficient for reaction, braking and turning.

If possible, let one or more helpers lift you out of the electric wheelchair and carry you to the destination point.

You can easily fall out of the electric wheelchair when driving down a step (e.g. pavement curb) if the footplates or leg supports land on the driving surface []. The crossing of rails or ruts requires increased attention.

– Unwanted course deviation!

Safe travelling on stairs is not possible.

Electrical system

An incorrect and/or inappropriate modification of the driving behaviour can impair the safety of the electric wheelchair and the electric wheelchair user. – Danger of accidents!

The electronic control system of the electric wheelchair must not be modified.

Should the electric wheelchair react in an unaccustomed manner or fulfil uncontrollable manoeuvres, the joystick/director is to be brought back into the neutral position/initial position immediately and/or the electric wheelchair to be switched off at once.

Transport in public methods of transportation

Your electric wheelchair is not designed for user transport in public transportation vehicles. Limitations may occur. We recommend use of one of the firmly built in seats of the public vehicle.

Should it nevertheless become necessary to carry out the transport while sitting in the electric wheelchair, the following needs to be observed:

- Use the space designated by the public transportation services for parking.
- Observe the regulations of the transport company before parking the electric wheelchair.
- Park your electric wheelchair opposite to the driving direction in the reserved space.
- The electric wheelchair is to be placed so that the back support it will be supported by the border of the parking space.
- One side of the electric wheelchair must also lie against the border of the parking space, so that the electric wheelchair cannot slide away in case of an accident or sudden braking manoeuvre.
- Additionally activate the parking brakes.

Driving on public highways

Observe the valid regulations for public traffic of your country and if necessary ask your specialist dealer for required accessories.

Your electric wheelchair has been equipped with lighting equipment. The lighting equipment consists of:

- Headlights
- Rear reflectors.

With limited visibility and especially in the dark we recommend to mount active lighting equipment and to turn it on in order to see better and be seen.

- ☞ When participating in public traffic the user is responsible for the functional and operationally safe condition of the electric wheelchair.
- ☞ The valid traffic regulations must be observed and abided when participating in public traffic.
- ☞ Wear light-coloured and conspicuous clothing when driving in darkness.
- ☞ When driving in the dark avoid using the road or bicycle lanes.
- ☞ Observe that the lighting equipment is not covered by clothes or any other objects attached to the electric wheelchair.
- ☞ In case of physical limitation, such as blindness, a driving ability certification for independent driving of the electric wheelchair is required.

CLEANING

The plastic panelling is attacked through non-ionic tensides as well as solvents and especially alcohol.

Do not clean the electric wheelchair with a high-pressure cleaner! – Danger of short circuit!

The cushions and covers are normally fit with care instructions (instruction for care).

- ☞ For this observe chapter *Meaning of the symbols on the washing instruction* on page 58.

In all other cases the following information is true:

- ☞ Clean the upholstery with warm water and hand washing liquid.
- ☞ Remove spots with a sponge or a soft brush.
- ☞ Wash off persistent dirt with commercial fine detergent.
- ☞ Do not soak! Do not machine wash!

Follow-up with clean water and allow to dry.

The chassis and wheels can be cleaned damp with a mild detergent. Afterwards dry off well.

- ☞ Check the chassis for corrosion damages as well as other damages.
- ☞ Only clean the plastic parts with warm water and neutral detergent or soft soap.
- ☞ When using commercial plastic cleansers the manufacturers application instructions are to be observed.

Keep the lighting components clean at all times and check for correct functioning before each journey.

- ☞ Keep water and moisture away from electrical components and cabling!

- Danger of damage to the electric and the operating keyboard through water jets.

Silicone free water based cleaning agents and care products should be used for the care of the vehicle.

- ☞ In doing so the manufacturers instructions are to be observed.

Do not use aggressive cleaning agents e.g. solvents, or hard brushes etc.

Further information to cleaning can be found in the < *Information center* > on our website:

< www.meyra.com >.

Finish

The high quality finish ensures an optimum of protection against corrosion.

- ☞ Should the coating be damaged with scratches or similar, these areas can be touched up with our paint pen available at the specialist dealer.

Slight lubrication of moving parts will ensure for their long functioning.

Disinfection

If the product is used by more than one person (for example in a care centre), the use of a commercial disinfectant is mandatory.

- ☞ Before disinfection the upholstery and handles are to be cleaned.
- ☞ A spray- or wiping disinfection is permitted with tested and accredited disinfectants.

You can get information on tested and permitted disinfectants and procedures at your national facility for health protection.

- ☞ During the use of disinfectants it can happen that surfaces might be affected in such a fashion that the long term functionality of parts can be limited.
- ☞ In doing so the manufacturers instructions are to be observed.

REPAIRS

Repairs are generally to be carried out by a specialist dealer.

Repairs

Trustingly contact your specialist dealer for maintenance work. He has been introduced to the maintenance.

Customer Service

In case you have any questions or need help please contact your specialist dealer who can assume counselling, customer service and repairs.

Spare parts

Spare parts can only be ordered from specialist dealers. In case of repair work, only original spare parts are to be used!

- ☞ Spare parts from other manufacturers can cause malfunctions.

The spare parts list with the respective part numbers and drawings is available at the specialist dealer.

In order to ensure the correct delivery of a spare part, always quote the corresponding serial number (SN) of the electric wheelchair! You will find this on the type plate.

Whenever repair work on the electric wheelchair is carried out by the specialist dealer, the supplementary information, e.g. assembly/operating instructions must be attached to the operating manual of the electric wheelchair, the date of the modification must be recorded and stated when ordering spare parts.

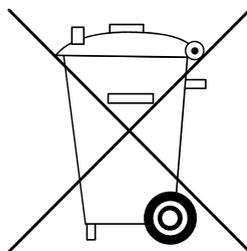
This should prevent wrong order details on future spare parts orders.

Information for extended pauses of use

In case of longer periods without use, the following measures are required:

- ☞ Charge the batteries at least once a month for a period of more than 16 hours.
- ☞ The storage temperature is to be observed.
 - ☞ For this observe chapter *Technical data* on page 51.

DISPOSAL



The disposal must comply with the respective national law.

Please enquire about local disposal arrangements at your municipal authority.

TECHNICAL DATA

All data given in the < *Technical data* > refers to the standard version.

Dimensional tolerance ± 15 mm, $\pm 2^\circ$.

Calculation of the max. user weight:

The maximum total load is calculated on the basis of the unloaded weight of the electric wheelchair and the maximum passenger weight.

Additional weight due to subsequent additions or luggage reduce the maximum permissible passenger weight.

Example:

A driver wishes to take luggage with a weight of 5 kg. Thus, the maximum user weight is reduced by 5 kg.

Tyre pressure of pneumatic tyres

Maximum tyre pressure is printed on the tyres on each side.

Full tyre pressure – steering wheel

Standard:

2.5 - 3.5 bar = 36 - 50 psi

Full tyre pressure – drive wheel

Standard:

3.0 - 4.0 bar = 44 - 58 psi

Ultra-light running tyres:

6 bar = 87 psi

High pressure:

8 bar = 116 psi

Maximum range

The nominal values indicated by are reasonable in compliance with ISO 7176-4.

The maximum range depends to a large extent on the following factors:

- battery condition,
- weight of the driver,
- driving speed,
- driving style,
- road surface condition,
- driving conditions,
- ambient temperature.

The maximum range is greatly reduced by:

- frequent driving upwards on ramps,
- insufficient charging condition of the drive batteries,
- low ambient temperature (e.g. in winter)
- frequent starts and stops (e. g. in shopping malls),
- aged, sulphated drive batteries,
- frequently necessary steering manoeuvres,
- reduced driving speed (especially at walking speed).

In practical use, the maximum range under 'normal conditions' is then reduced to approx. 80 – 40 % of the nominal value.

Hill climbing ability

Gradients in excess of the permitted values (e.g. ramps) should for safety reasons only be driven when the wheelchair is empty!

Applied norms

The electric wheelchair complies with the norm:

- EN 12184: 2014
- ISO 7176-8: 2014
- ISO 7176 -19: 2008
 - ✎ Assessment of the Crashtest, in which the electric wheelchair is attached to the retaining system of the vehicle, has been carried out according to the testing methods of annex D.

The model Optimus 2 has been assigned the 'Use Class C' as per the EN 12184 standard.

The applied parts and components we use are in compliance to EN 1021-2 for resistance against inflammation.

Values acc. to ISO 7176-15 for model 2.322

	min	max
Overall length with leg support	1190 mm	1250 mm
Overall width	680 mm	700 mm
Overall dimensions, values in () for 15 km version	– kg	330 (300) kg
User measures (incl. addtl. load) , values in () for 15 km version	– kg	150 (120) kg
Weight of the heaviest part	4.5 kg	– kg
Actual seat depth	420 mm	530 mm
Actual seat width	380 mm	550 mm
Folding length	– mm	– mm
Folding width	– mm	– mm
Folding height	– mm	– mm
Seat height at front edge	580 mm	650 mm
Seat angle	5°	20°
Back support angle	-10°	50°
Back support height	580 mm	640 mm
Foot support to seat (lower shank length)	380 mm	550 mm
Static stability downhill	–°	15,5°
Static stability uphill	–°	15,5°
Static stability lateral	–°	15,5°
Dynamic stability uphill	–°	10°
Angle leg support - seat surface	110°	180°
Arm support height from seat surface	190 mm	280 mm
Back support to front edge of arm support	280 mm	420 mm
Possible obstacle height depending on lower shank length	mm	110 mm
Minimal turning radius	1200 mm	–
Forward top speed (depending on equipment)	6 km/h	15 km/h
Minimum breaking distance from top speed	1000 mm	4500 mm
Range (at 6 km/h) , values in () for 15 km version	50 (50) km	85 (60) km
Axle horizontal position	– mm	– mm

Further technical data for model 2.322

	min	max
Sound level		< 70 dB(A)
Protection class		IP X4
Turning area	1400 mm	
Drive controller	A	24 V / 100 A
Engine output		950 W
Main fuse		100 A
Lighting		6 V / 12 V
Additional load	- kg	10 kg
Axle load front, permitted with 6 km/h and 10 km/h values in () for 15 km version	- kg	210 (190) kg
Axle load rear, permitted with 6 km/h and 10 km/h values in () for 15 km version	- kg	140 (130) kg
Ground clearance drive		110 mm
Ground clearance battery tub		140 mm
Empty weight (with drive batteries)	120 kg	152 kg
Empty weight (without drive batteries)	72 kg	
Overall height	1100 mm	1300 mm

Transport dimensions

Length (without leg supports)	1030 mm	1340 mm
Width (without arm supports)		680 mm
Height (Back support folded forward onto the seat)	780 mm	950 mm

Climatic data

Ambient temperature		-25 °C to +50 °C
Storage temperature with drive batteries		-25 °C to +50 °C
Storage temperature without drive batteries		-40 °C to +65 °C

	min	max
<u>Steering wheel</u>		
4.00 – 5 (12,5") ø 320 mm	pneumatic 2.5 bar (35 psi)	
<u>Driving wheel</u>		
5.30/4.50 – 6 (14") ø 360 mm	pneumatic 2.5 bar (35 psi)	
<u>Drive batteries</u>		
2 x 12 V 70 Ah (5 h) / 79 Ah (20 h)	sealed, maintenance free	
2 x 12 V 80 Ah (5 h) / 97 Ah (20 h)	sealed, maintenance free	
2 x 12 V 105 Ah (5 h) / 120 Ah (20 h)	sealed, maintenance free	
Max. battery dimensions (LxWxH)	345 x 174 x 262 mm	
Charging current	6 A	12 A

Dimensions with Ergoseat (Code 948 / 950 without head support):

	min	max
Length of footplates		1190 mm
Width general		680 mm
Height		1100 mm
Seat depth	450 mm	490 mm
Seat width with code 43	380 mm	500 mm
Seat width with code 48	480 mm	560 mm
Seat height	– mm	580 mm
Seat inclination	5°	20°
Back support height		540 mm
Arm support height from upper edge of seat	170 mm	270 mm

Transport dimensions (without leg supports, without head support):

Length	– mm	1030 mm
Width		680 mm
Height (Back support folded forward onto the seat)	– mm	780 mm

Dimensions with seat Ergostar (Code 961 without head support):

	min	max
Length of footplates		1190 mm
Width general		680 mm
Height		1170 mm
Seat depth	– mm	500 mm
Seat width with code 24	– mm	500 mm
Seat width with code 106	430 mm	560 mm
Seat height	– mm	590 mm
Seat inclination	7°	22°
Back support height		640 mm
Arm support height from upper edge of seat (code 24)	210 mm	250 mm
Arm support height from upper edge of seat (code 106)	150 mm	250 mm

Transport dimensions (without leg supports, without head support):

Length (back support to front)	– mm	1030 mm
Length (back support to rear)	– mm	1340 mm
Width		680 mm
Height (back support to front)	– mm	950 mm
Height (back support to rear)	– mm	720 mm

Meaning of the symbols on the washing instruction

(the symbols correspond to European standard)



Wash as delicates with the indicated maximum temperature in °C.



Wash as regular laundry with the indicated maximum temperature in °C.



Hand wash only



Do not bleach.



Not suited for the dryer.

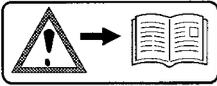


Do not iron.



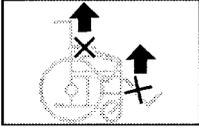
Do not dry-clean.

Meaning of the labels on the electric wheelchair



Attention!

Read the operating manuals and other provided documentation.



Do not lift the electric wheelchair at the arm supports or leg supports.
Removable parts are not suitable for carrying.



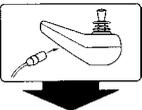
Drive mode



Push mode



Push only on level surfaces.



Indication for charging socket.



The electric wheelchair is **not** approved as a seat within a motor vehicle.



Indication for danger of jamming. – Do not reach in here.



Operation in moving transport vehicles. – Switch off or switch to driving program 3.

Meaning of the symbols on the type plate



Manufacturer



Order number



Serial number



Production date



Permitted user weight



max. permissible total weight



Permitted axle weights



Max. permissible rising gradient



Max. permissible falling gradient

max. ... km/h

Permitted maximum speed



The product is approved as a seat within a motor vehicle.



Max. permitted user weight if the product is approved as a seat within a motor vehicle.



The product is **not** approved as a seat within a motor vehicle.



Medical device

INSPECTION CERTIFICATE

Electric wheelchair data:

Model:

Delivery note no.:

Serial-no.(SN):

Recommended safety inspection 1st year (at least every 12 months)

Stamp of specialist dealer:

Signature: _____

Place, date: _____

Next safety inspection in 12 months

Date: _____

Recommended safety inspection 2nd year (at least every 12 months)

Stamp of specialist dealer:

Signature: _____

Place, date: _____

Next safety inspection in 12 months

Date: _____

Recommended safety inspection 3rd year (at least every 12 months)

Stamp of specialist dealer:

Signature: _____

Place, date: _____

Next safety inspection in 12 months

Date: _____

Recommended safety inspection 4th year (at least every 12 months)

Stamp of specialist dealer:

Signature: _____

Place, date: _____

Next safety inspection in 12 months

Date: _____

Recommended safety inspection 5th year (at least every 12 months)

Stamp of specialist dealer:

Signature: _____

Place, date: _____

Next safety inspection in 12 months

Date: _____

WARRANTY / GUARANTEE

Failure to observe the instructions in the operating manual, improperly carried out maintenance work and, especially, technical changes and additions (add-ons) carried out without our prior consent will lead to a general loss of guarantee and product liability.

We accept legal liability for this product within the scope of our general terms and conditions and warranty and in certain cases other verbal resp. agreed upon guarantees. For warranty and guarantee demands please contact your specialist dealer with following Warranty/Guarantee section and the there included information on model description, delivery note number with delivery date and serial number (SN).

The serial number (SN) can be read off of the type plate.

Precondition for the acceptance of liability in any case is the intended use of the product, the use of original spare parts by authorised dealers as well as maintenance and inspections in regular intervals.

Guaranty is not granted for surface damages, tyres of the wheels, damages due to loosened screws or nuts as well as worn out attachment holes due to frequent assembly work.

Furthermore, damage to the drive and electronics caused by improper cleaning using steam cleaning equipment or the deliberate or accidental flooding of the components are also excluded.

Interferences through radiation sources such as mobile phones with high transmission power, HiFi-equipment and other extreme interference radiators outside of norm specifications cannot be declared as warranty or guarantee claims.

This operating manual as a part of the product is to be handed out in case of a change of owner.

For evaluation of our products you can use our < *Information center* > sector < *PMS* > on our website < www.meyra.com >.

We reserve the right to make technical improvements.



This product is conform with the EC-Directive 93/42 EEC and fulfills the requirements of the from May 25th 2021 valid regulation (EU) 2017/745 for medical devices.

Warranty / Guarantee section

Please fill out! Copy if necessary and send the copy to the specialist dealer.

Warranty / Guarantee

Model designation:

Delivery note no.:

SN (view type plate):

Date of delivery:

Stamp of the specialist dealer:

Inspection certificate for transfer

Electric wheelchair data:

Serial-no.(SN):

Model:

Delivery note no.:

Stamp of specialist dealer:

Signature: _____

Place, date: _____

Next safety inspection in 12 months

Date: _____

Your specialist dealer

MEYRA GmbH

Meyra-Ring 2



32689 Kalletal Kalldorf
GERMANY



Tel +49 5733 922 - 311
Fax +49 5733 922 - 9311



info@meyra.de

www.meyra.de
