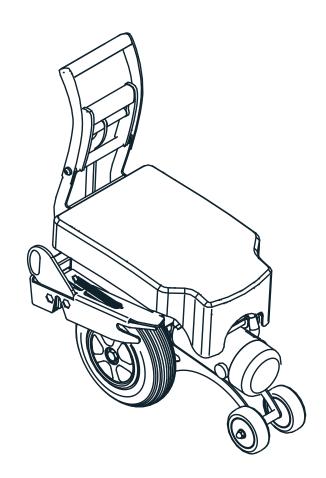


E-Walk User manual







EU Declaration of Conformity

The undersigned, representing the following manufacturer

Decon Wheel AB Org.No. 556618-9006 Södra Ekeryd 119, 314 91 Hyltebruk Sweden

hereby declares that the product

E-Walk

with the basic UDI-DI 735001014MCGB3

and the following references

MCG4055 MCG4755

is in conformity with the Medical Device Regulation (MDR) 2017/745 as a class 1 medical device based on Annex VIII.

Intended purpose: The device is an electric drive unit for manual wheelchairs with the intention to provide mobility and flexibility to persons who are unable to walk or have restrictions on walking. The device is intended for indoor and outdoor use und is to be operated by an accompanying person.

This EU declaration of conformity is issued according to Annex IV in MDR and under sole responsibility of the manufacturer.

Hyltebruk, 2024-10-01

Benny Andersson

COO





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Safety

General regulations

The user manual applies to E-Walk.

The user manual is written for users of E-Walk.

Read the user manual and familiarize yourself with E-Walk before using it.

Manuals for the visually impaired

Contact your local dealer if you have difficulty reading this user manual. Your local dealer can supply a digital copy of this manual. This allows the manual to be enlarged or read aloud from your reading software.

Purpose and intended use

E-Walk is an electric drive unit for manual wheelchairs that is intended for use both outdoors and indoors. E-Walk is exclusively intended for transport with the help of another person.

E-Walk helps the accompanying person push and brake the wheelchair. With E-Walk you can handle longer excursions. It is appropriate to use E-Walk when the wheelchair user cannot move on their own and the accompanying person is not strong enough to push the wheelchair. The companion must be intellectually and physically able to handle E-Walk safely in all situations.

Information on which wheelchair models E-Walk can be mounted on, see Decon's website, www.decon.se

Not intended use

Any use that does not correspond to the description in this user manual. This also includes the technical specification, i.e. maximum user weight, maximum hill climbing ability etc.

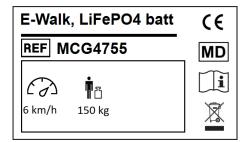
Safety



Markings

The model plates are located on the top of the base unit under the cover.





The symbols used on the label of E-Walk are explained below:



Observe the instructions for use!



Maximum weight of person: 150 kg



Maximum speed of the device: 6 km/h



Medical device



Serial number of the device



Indication of the date of manufacture



Name and adress of the manufacturer



Catalogue number of the device



Recycled as electronic waste. E-Walk and its accessories are subjected to the European WEEE Directive.



Symbols



WARNING!

Risk of serious injury or death.

An operation which, if not performed correctly, could result in injury to the operator or other persons.



CAUTION!

Risk of damage to property.

An operation that, if not performed correctly, may lead to damage to property.



INFO

Highly important or explanatory information.

Warnings

Before using E-Walk



WARNING!

The user must have read and understood the user manual and have an understanding of the various controls and user interfaces that E-Walk is equipped with.



WARNING!

Tipping guards must always be on the wheelchair when driving with E-Walk and these must be folded down.



WARNING!

To mount E-Walk to a wheelchair, a mounting set is required, which is ordered separately and is not included in deliveries of E-Walk. The mounting set must be assembled by a trained technician.



WARNING!

Be careful not to pinch your hand or fingers when using the handle to lower or raise the drive wheel. Hold onto the handle throughout the movement.



WARNING!

The wheelchair's castor wheels must have a diameter of at least 150 mm to minimize strain on them when E-Walk is used.



WARNING!

Before the patient takes a seat in the wheelchair or leaves the wheelchair, the wheelchair brakes must be activated and E-Walk must be switched off so that the wheelchair cannot roll away.





WARNING!

E-Walk must under no circumstances be controlled by the patient sitting in the wheel-chair.



WARNING!

Practice driving E-Walk safely on level ground before driving uphill or downhill.



CAUTION!

More advanced wheelchairs with seat/back tilt functions can sometimes not be fully utilized as the tilt functions can be hindered by E-Walk. Use caution when using these features to avoid damaging E-Walk.

Driving



WARNING!

Start with a low speed that feels safe for both you as the user and the patient. Then slowly increase the speed to the desired walking speed.



WARNING!

It is not permitted to drive E-Walk on slopes or ramps with a higher slope than 6 degrees (11.5%) with a user weight of 150 kg.



WARNING!

Avoid driving where the surface is soft or uneven (eg sand, mud, snow, ice or through deep puddles). We recommend that E-Walk is only used on smooth and firm ground.



WARNING!

When driving or parking on slippery surfaces or in sloping terrain, E-Walk's wheels can slip.



WARNING!

Do not hang objects (bags, backpacks etc.) near the steering control! If these objects come into contact with the controller's throttle control, E-Walk may unintentionally start moving.



WARNING!

Do not use E-Walk near devices that generate strong radio waves. If E-Walk is near a radio wave source and begins to operate abnormally, immediately turn off the power, and move away from the current location. If a mobile phone is to be used in direct connection to the wheelchair, E-Walk must be switched off.

The weak electromagnetic waves emitted by E-Walk can affect other electronic devices, such as automatic doors and anti-theft systems of the type used in stores. In this case, turn off E-Walk and drive the wheelchair manually.



CAUTION!

At landings and high curbs (>8cm), E-Walk must be switched off and folded up. On lower steps or curbs, reduce speed and tilt the chair up before driving up.

Storage and transport



WARNING!

Do not store E-Walk where it may get wet from rain or in places with high humidity.



WARNING!

Avoid storage in direct sunlight or high temperatures.



WARNING!

E-Walk can be transported connected to the wheelchair, then use the marked load securing points to secure E-Walk during transport. The wheelchair must be secured for transport in its own load securing points, see the wheelchair manufacturer's instructions.

Rengöring



CAUTION!

Never rinse E-Walk with a water hose or high pressure washer. Do not use a steam cleaner to clean E-Walk. The electronic devices can be damaged, which can lead to serious malfunctions.

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CAUTION!

Do not clean with solvents such as benzine or thinner. This can damage the paintwork and plastic parts of E-Walk.



A cloth and alcohol-based sanitiser is suitable to disinfect E-Walk.



Warranty

The warranty period for E-Walk is 2 (two) years from the date of purchase.

If there is a material or manufacturing defect in your copy of E-Walk during this warranty period, the defective parts will be replaced or repaired free of charge. The warranty covers the base unit, controller and charger. Consumable parts such as batteries and tires are excluded from this warranty.

This warranty does not cover faults caused either by intentional misuse by the user or careless use, for example faults caused by use other than that specified in this user manual. This warranty also does not cover defects resulting from modification of the unit or continuous use under conditions other than the specified conditions, for example, exceeding the maximum weight of person, etc.

Scratches, matting and dirt on the surface of the product resulting from normal use are not covered by the warranty.

If warranty repairs are necessary, contact the retailer where you purchased the device.

Expected lifetime of the complete product (not wearing parts) is 5 years from the date of sale.

Product safety and recall information

Contact the retailer where the device was purchased or the manufacturer of E-Walk for information on product safety and possible recalls.



Product description

Technical data

Motor 200W

Battery type Lead (gel) 24V, 12Ah

LiFePO4 24V, 15Ah

Total dimensions (WxLxH) 316x474x362mm

Weight Base unit 15,4 kg

Battery LiFePO4 3,95 kg

Battery Lead (gel) 8 kg

Tires 200x50, Solid Speed 0-6 km/h $^{1)}$ Maximum mileage from fully charged batteries 22 km $^{2)}$ Maximum user weight 150 kg Maximum gradient 6 degrees $^{3)}$

CE-marking According to EU Regulation 2017/745 (MDR)

Battery charger 100-240 V AC, 50/60Hz

Charging time Normal charging about 3 hours (LiFePO4)

Operating conditions environment Indoor and outdoor

temperature -15°C till 40°C humidity No condensation

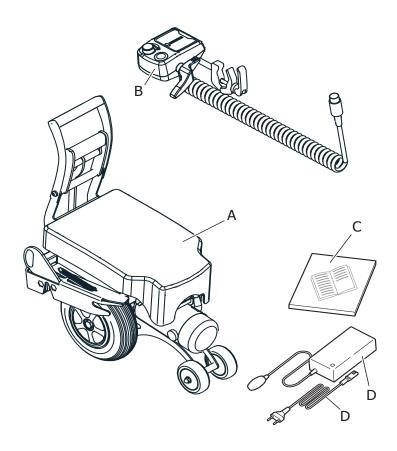
- 1. Maximum speed is set via controller
- 2. With LiFePO4 battery. Driving style, surface and user weight affect the maximum driving distance.
- 3. Maximum gradient can be affected by the surface on which E-Walk is driven.



Scope of delivery

The delivery of E-Walk includes the following:

- A E-Walk base unit
- B E-Walk controller
- C User manual
- D Charger incl. cables



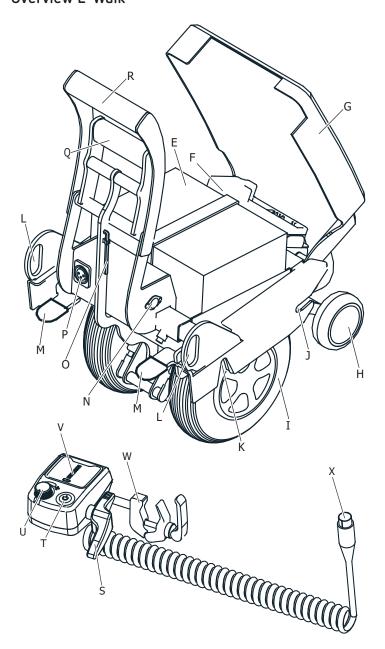
Mounting set



To mount E-Walk to a wheelchair, a mounting set is required, which is ordered separately and is not included in deliveries of E-Walk.



Overview E-Walk



- E Battery
- F S-Drive motor controller
- G Battery cover
- H Front pair of wheels
- I Drive wheel
- J Front attachment
- K Rear attachment
- L Anchor point during transport
- M Release pedal
- N Controller socket

- O Allen key
- P Charging socket
- Q Lower handle
- R Upper handle
- S Throttle
- T Main switch
- U Speed regulator
- V Battery indication
- W Fastening clamp
- X Controller connector



Using E-Walk



WARNING!

The wheelchair's castor wheels must have a diameter of at least 150 mm to minimize strain on them when E-Walk is used.



WARNING!

Tipping guards must always be on the wheelchair when driving with E-Walk and these must be folded down.



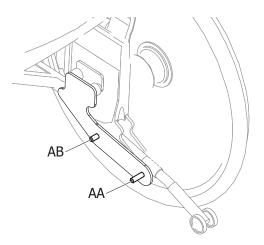
CAUTION!

More advanced wheelchairs with seat/back tilt functions can sometimes not be fully utilized as the tilt functions can be hindered by E-Walk. Use caution when using these features to avoid damaging E-Walk.

Mounting set

It is required that the wheelchair is equipped with a mounting set for E-Walk in order to mount E-Walk to the wheelchair.

The assembly set consists of two side plates with associated fastening material. On the side plates are pins [AA&AB] that the base unit attaches to. Assembly instructions for each mounting set must be followed, information on which wheelchair models E-Walk can be mounted on can be found on Decon's website, www.decon.se





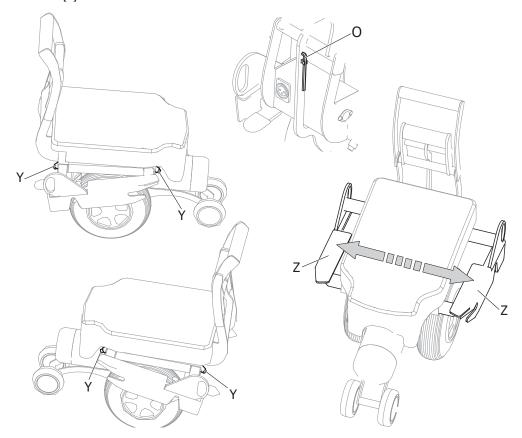
WARNING!

To mount E-Walk on a wheelchair, a mounting set is required, which is ordered separately and is not included in deliveries of E-Walk. The mounting set must be assembled by a trained technician.



Width adjustment

E-Walk base unit can be adapted to different widths of wheelchairs. Allen key [O] for width adjustment is mounted on the base unit. Adjustment to different widths of wheelchairs is done by loosening the set screws [Y] using the Allen key [O] for width adjustment and then adjusting the side pieces [Z]. When adjusting, place E-Walk's base unit between the side plates of the wheelchair and then adjust the side pieces [Z] so that they rest against the side plates of the wheelchair. Check that E-Walk base unit is centered between the side plates, then tighten all set screws [Y].



The side pieces [Z] are available in the following versions:

Mounting dimensions: 292-440mm

Mounting dimensions: 407-560mm

Mounting dimensions: 527-680mm

Mounting dimensions: 256,5-416mm

Mounting dimensions: 254-416mm*

Article number: 350165A

Article number: 350165C

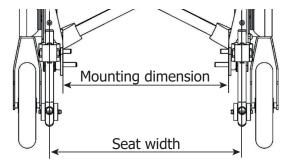
Article number: 391165

* To achieve attachment dimensions of 254mm, the front attachment pin [AB] must not be longer than 9mm.



NFO

The attachment dimension is calculated by taking the seat width of the wheelchair minus 90mm.

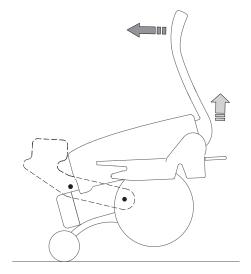




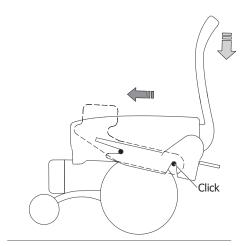
Attaching the base unit to the wheelchair

The base unit can be attached to the wheelchair in a few simple steps without the use of tools. This is done in the following steps.

- 1. Activate the wheelchair's parking brakes
- 2. Grasp the upper handle [R] and roll the base assembly of the front pair of wheels [H] under the wheelchair so that the front attachment [J] goes past the rear pins [AA] of the mounting plates.



3. Make sure the front attachment [J] of the base unit grips the front pins [AB] of the mounting plates and lower the base unit over the rear pins [AA] so that the rear attachment [K] of the base unit grips the rear pins [AA] and a *click* is heard.

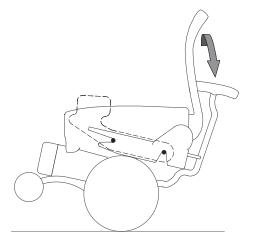


4. Lower the base unit drive wheel [I] by grasping the lower handle [Q] and folding it down.



WARNING!

Be careful not to pinch your hand or fingers when using the handle to lower or raise the drive wheel. Hold onto the handle throughout the movement.





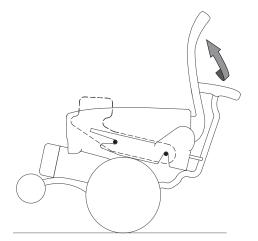
Removing the base unit from wheelchair

The base unit can be detached from the wheelchair in a few simple steps without the use of tools. This is done in the following steps.

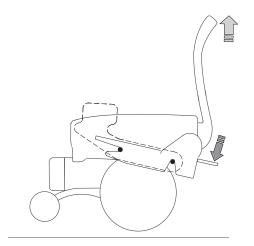
- 1. Activate the wheelchair parking brakes
- 2. Raise the base unit drive wheel [I] by grasping the lower handle [Q] and lifting it up.



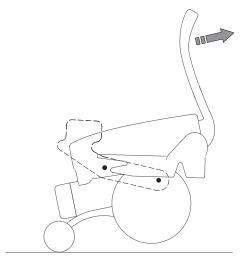
Be careful not to pinch your hand or fingers when using the handle to lower or raise the drive wheel. Hold onto the handle throughout the movement.



3. Depress one of the release pedals [M] and lift the base unit using the upper handle [R] so that it detaches from the rear pin [AA] of the mounting plate.



4. Now pull the base unit out of its bracket from the wheelchair.



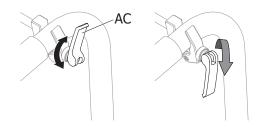


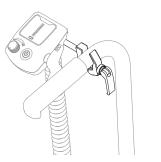
Attachment of contoller

General

The controler can be mounted on the wheelchair's handle or frame in just a few simple steps without the use of tools. The clamp [W] is opened and closed by screwing on the eccentric tensioner [AC] with its handle folded up. To tighten the clamp [W] on the wheelchair's driving handle, screw the eccentric tensioner clockwise and finish by folding down the handle of the eccentric tensioner [AC].

The clamp [W] can be mounted both upwards and downwards depending on whether, for example, the wheelchair is equipped with a brake handle, see image for example of the various mounting options. As standard, the controller is assembled to be mounted on the wheelchair's right side handle.

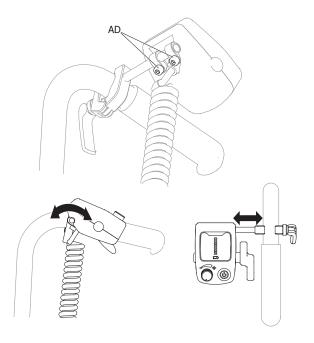






Adjustment

The position of the controller can be adjusted both in angle and side to suit the current wheelchair model and user. Both settings are made by loosening the screws [AD] located on the underside of the controller, use the Allen key [O]. After the adjustment is complete, tighten the screws.





WARNING!

When installing the steering control, check that its throttle operates freely and does not touch or rest against any part of the wheelchair. If the throttle grips or rests against any part, this can lead to the throttle sticking and an accident can occur.



Running E-Walk



WARNING!

The user must have read and understood the user manual and have an understanding of the various controls and user interfaces that E-Walk is equipped with.



WARNING!

Before the patient takes a seat in the wheelchair or leaves the wheelchair, the wheelchair brakes must be activated and E-Walk must be switched off so that the wheelchair cannot roll away.



WARNING!

E-Walk must under no circumstances be controlled by the patient sitting in the wheel-chair.

In order to drive E-Walk, you must have first connected E-Walk's base unit to the wheelchair according to the paragraph "Attaching the base unit to the wheelchair" and mounted the controller according to the paragraph "Attachment of controller".

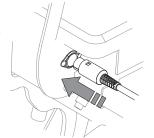
- 1. Activate the wheelchair's parking brakes
- 2. Plug the controller into the socket [N] of the base unit.



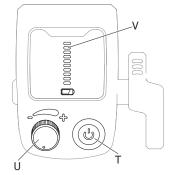
INFO

In the connector on the controller there is a recess [AE], this should point downwards.

- 3. Press the main switch [T] on the controller. The light in the main switch and the battery indicator [V] now lights up.
- 4. Maximum speed is controlled using the speed regulator [U]. This is turned towards "+" to increase maximum speed and towards "-" to decrease maximum speed.







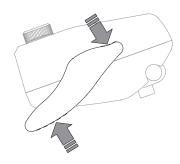


WARNING!

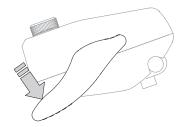
Start with a low speed that feels safe for both you as the user and the patient. Then slowly increase the speed to the desired walking speed.



- 5. Release the wheelchair parking brakes.
- 6. Driving forward is done by turning/ pressing the throttle [S] clockwise. There are two points on the throttle that can be used either individually or simultaneously for forward driving.



7. Driving backwards is done by turning/pressing the throttle [S] counterclockwise on the rear part of the throttle.





WARNING!

Do not hang objects (bags, backpacks etc.) near the steering control! If these objects come into contact with the controller's throttle control, E-Walk may unintentionally start moving.



WARNING!

It is not permitted to drive E-Walk on slopes or ramps with a higher slope than 6 degrees (11.5%) with a user weight of 150 kg.



WARNING!

Avoid driving where the surface is soft or uneven (eg sand, mud, snow, ice or through deep puddles). We recommend that E-Walk is only used on smooth and firm ground.



WARNING!

When driving or parking on slippery surfaces or in sloping terrain, E-Walk's wheels can slip.



WARNING!

Do not use E-Walk near devices that generate strong radio waves. If E-Walk is near a radio wave source and begins to operate abnormally, immediately turn off the power, and move away from the current location. If a mobile phone is to be used in direct connection to the wheelchair, E-Walk must be switched off.

The weak electromagnetic waves emitted by E-Walk can affect other electronic devices, such as automatic doors and anti-theft systems of the type used in stores. In this case, turn off E-Walk and drive the wheelchair manually.



Transport and storage of E-Walk



WARNING!

E-Walk can be transported connected to the wheelchair, then use the marked load securing points to secure E-Walk during transport. The wheelchair must be secured for transport in its own load securing points, see the wheelchair manufacturer's instructions.

Transport of E-Walk

- 1. Turn off the power to E-Walk.
- 2. Remove the battery from E-Walk to prevent sudden power-on during storage or transport.
- 3. Load E-Walk into car.
 - a. Lift E-Walk by the upper handle [R] and the front pair of wheels [H] when loading.
 - b. Be careful not to damage the base unit when loading.
- 4. Secure E-Walk.
 - a. Secure E-Walk in its transport brackets [L] to prevent it from moving while traveling and hitting surrounding objects.

Tips for transport

- The product contains sensitive electronic parts. Do not subject the product to strong, directed shocks or blows.
- Load as upright as possible.
- If you load E-Walk lying down, make sure that the parts of the base unit cannot be damaged before securing.



Tips secure E-walk

Secure E-Walk with straps and place shock-absorbing material under and around E-Walk.

Boarding an aircraft

When you book a flight, you should always inform the airline in advance that you are bringing an electric drive unit for a wheelchair and follow their instructions. Give the airline detailed information about this at the time of booking. When flying, the Lead (Gel) battery must be used with following specifications:

Benämning: Blybatteri E-Walk
Artikelnummer: MCG201-1
Spänning: 24 V (2X12V)
Kapacitet: 12 Ah (288 Wh)

Typ: Gel



Storage of E-Walk

- 1. Turn off the power to E-Walk.
- 2. Store E-Walk in a place with normal indoor temperature and low humidity.
- 3. To wipe off dirt or stains before storage, use a tightly wrung-out towel.

If E-Walk is not to be used for an extended period of time, check that E-Walk is working properly every month.

After storing E-Walk, the following must be checked and carried out before putting it into use:

• Battery status, charge if needed.



WARNING!

Do not store E-Walk where it may get wet from rain or in places with high humidity.



WARNING!

Avoid storage in direct sunlight or high temperatures.



Battery and charger

As standard, E-Walk is equipped with a LiFePO4 24V/15Ah battery. As an alternative, E-Walk can be purchased with maintenance-free gel-type lead batteries 24V/12Ah (2x12V).

Ambient temperatures for the battery

When used on E-Walk	-15°C – 40°C
For storage, removed from E-Walk	10°C – 25°C
When charging	5°C – 30°C

Charging the battery for E-Walk takes place with the battery placed in the base unit.

The charger for E-Walk is equipped with a light to show the charging status. When the charger is connected to the wall socket and the lamp shows green light, the charger can be connected to the charging socket. When the charger is connected to the charging socket and the battery is being charged, the charger shows a red light.

When the battery is fully charged, the lamp lights up green. A fully discharged battery can take up to 4 hours to charge to full capacity.

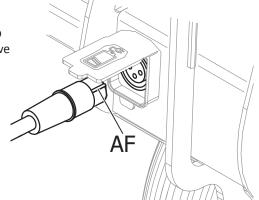
Charging E-Walk battery

- 1. Connect the charger to a wall outlet.
- 2. Check that the lamp on the charger lights up green.
- 3. Open the protective cover of the charging socket on the base unit and connect the charger to the socket. Make sure that the tab of the cable connector [AF] fits into the groove of the socket.



Check that the light on the charger lights up red. This indicates that charging is in progress.

4. When charging is complete, disconnect the charger from E-Walk and from the wall outlet.



Battery storage

Store the batteries in a cool and dry place (a place with a temperature between 10-25°C is optimal for storage). If you plan not to use E-Walk for an extended period of time (a month or more), charge the battery until six bars are displayed on the controller's battery indicator [V] before storing it. Check every 3 months that the voltage in the battery has not dropped to too low a level. If one or no battery bars are displayed, recharge the battery to six bars again.



Avoid storage in direct sunlight or high temperatures.



Care

Cleaning

If E-Walk becomes dirty due to normal use, clean E-Walk with a damp, tightly wrung out towel. If E-Walk is heavily soiled, use a towel and a neutral detergent. Make sure that no detergent remains on E-Walk after cleaning.

CAUTION!

Never rinse E-Walk with a water hose or high pressure washer. Do not use a steam cleaner to clean E-Walk. The electronic devices can be damaged, which can lead to serious malfunctions.

CAUTION!

Do not clean with solvents such as benzine or thinner. This can damage the paintwork and plastic parts of E-Walk.



A cloth and alcohol-based sanitiser is suitable to disinfect E-Walk.

Corrosion

All parts of E-Walk that can be exposed to corrosion are made of aluminum, stainless steel or steel. The materials and the transitions between the materials have been surface treated, therefore there is no increased risk of corrosion. Regardless of this, you should always wipe wet or damp surfaces of E-Walk with a cloth after use.

Repairs

- The user must not repair or service E-Walk himself
- The user must not personally remove and send parts of E-Walk to the dealer for repair.
- If repair is necessary, contact your dealer, even if the fault is of a minor nature.
- If parts are damaged or missing, contact your dealer immediately. Return E-Walk to the dealer to have parts replaced or repaired.
- For normal maintenance, repair or service always contact the dealer. If E-Walk is not repaired or all parts are not used during assembly, the user, bystanders or property may be injured.
- To carry out repairs and service, the dealer uses the service manual, spare parts catalog and other documentation. This documentation is not available to the user and the public.



Fuse replacement

There are two replaceable fuses on E-Walk. One is a 25A main fuse which is located near the battery connector under the battery cover [G]. The second fuse for the controller is located on top of the S-drive motor control [F] and is rated at 2A.

Reuse

When E-Walk is to be handed over to a new user, all technical documentation must also be handed over. The product must be professionally cleaned, disinfected and serviced.

Waste disposal

When E-Walk has reached its end of life and is to be scrapped, contact your local authorities for recycling information and follow their instructions.

Alternatively, you can contact your dealer for recycling of your used E-Walk with the associated battery.

User checks

Check that the tires are undamaged **before each ride**, there should be at least 1mm tread depth. Defective or worn tires must be replaced by the dealer.

Check (the base unit) at least once a month for play or wear in the lower handle [Q] and its mechanism. Worn parts must be replaced by the dealer.

Check (base unit) screws and nuts at least **once a year or as needed** and tighten if loose.

Lubrication of joints and wheel axles must be done with suitable grease at least once a year or as needed.

Troubleshooting

If the system is not responding:

- 1. Check that the connector for the controller is correctly mounted in the base unit
- 2. Check the On/off button
- 3. Check that the battery is charged
- 4. Check the fuses



Error codes

000000000	The battery must be charged or the connection to the battery is bad.
	Check the connection to the battery. If it is good, you can try charging the battery.
	The connection to the motor is bad.
••••••	Check all connections between the motor and the control unit.
	There has been a short circuit between the motor and the battery.
	Contact the service representative.
	Not in use
	Not in use
••••••	
000000000	The control unit is prevented from driving E-Walk. This may be due to the battery charger being plugged in.
000000000	There is something wrong with the throttle signal. Make sure the throttle is off before starting E-Walk.
000000000	There is something wrong with the throttle. Make sure all connections are tight.
000000000	The parking brake is poorly connected. Check the connection between the parking brake and the motor, and make sure that the connections to the control unit are secure.
	The controller has been subjected to excessive voltage. It is usually caused by poor battery connection. Check the battery connections. The controller is not in its "zero position" when the switch is turned on.

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