

Q50 R

**Instructions for Use** 







Wheelchair Components EN

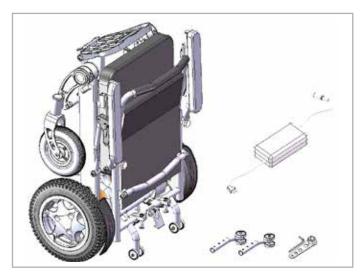
We at SUNRISE MEDICAL have been awarded the ISO-13485 certificate, which affirms the quality of our products at every stage, from R & D to production. This product complies with the standards set forth in EU and UK regulations. Options or accessories shown are available at extra cost.



## 1. Quickstart Guide

#### 1. Frame body and spare parts list

1. Frame	x1	
2.Charger	x1	
3.Anti-rolling wheel (Removable)	x2	
4. Toolbox	x1	

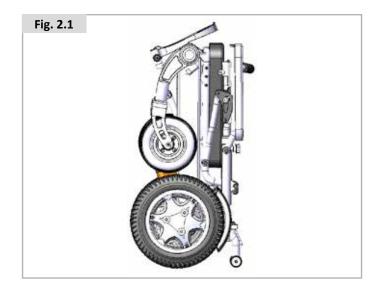


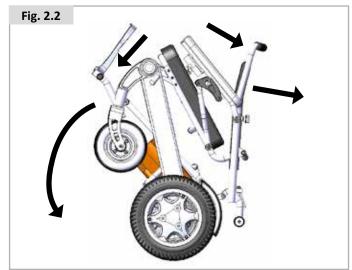
After receiving the product, you need to check whether the part is missing or damaged according to the above picture. If you have any questions, please contact with Sunrise Medical or the dealer in time.

## 2. Installation steps

#### Step 1. Unfold frame

Take the Power wheelchair out of the box and pull the backrest back in the direction shown until it is fully extended (Fig 2.1 -2.3).

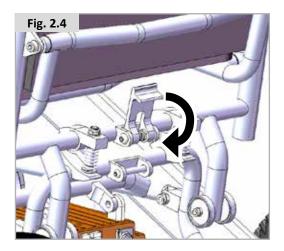


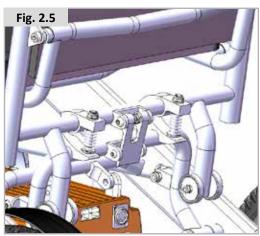




# Step 2. Buckle up

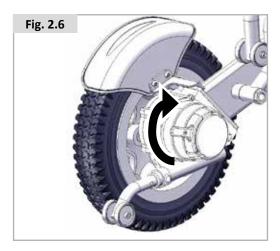
Flip the lock down and press it firmly into the lock pin. Check that it is firmly fitted in place.

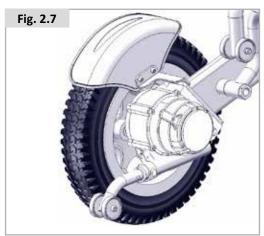




#### Step 3. Brake lever switch

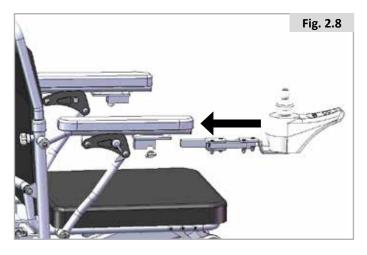
Turn the brake handle to the Drive Mode. For details, please refer to 4. Instruction Manual-2. Electromagnetic Brake Handle.

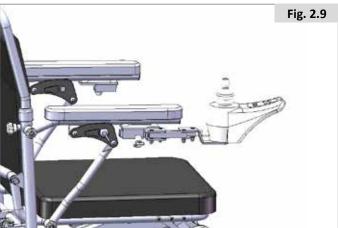


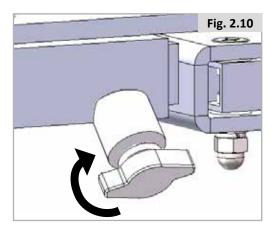


#### Step 4. Install the Controller

Take the controller out of the packaging and position it as shown in Fig. 2.8-2.9.

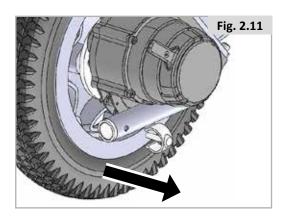


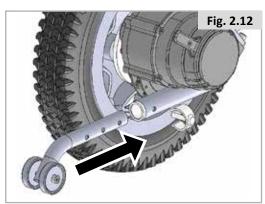


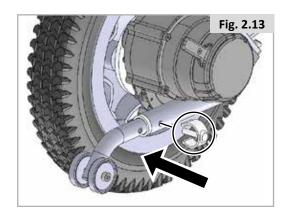


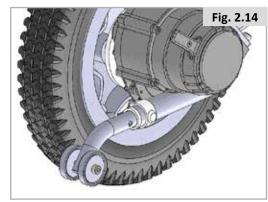
#### Step 5. Install anti-roll tube

Pull out the C-shaped clip-pin, insert the anti-tilt pipe according to the direction shown in the figure, align the corresponding holes on the frame, and then insert the C-shaped buckle to check whether it is secure.









#### **User Information**

#### Intended purpose power wheel chairs:

Power wheelchairs are exclusively for a user who is unable to walk or has limited mobility, for their own personal use in- and outdoor.

When an Attendant Control Module is fitted, the Power Wheelchair may be operated by an assistant on behalf of the user. When a Dual Control Module is fitted the Power Wheelchair may be operated by the user, or control may be switched to an assistant to operate on behalf of the user. The maximum weight limit (includes both the user and any weight of accessories fitted to the wheelchair) is marked on the serial number label, which is affixed to the chassis of the chair.

In the chair packaging there is an additional chair serial number this can be affixed to the front page of the owner's manual supplied with the wheelchair.

Warranty can only be taken on if the product is used under the specified conditions and for the intended purposes.

The intended lifetime of the wheelchair is 5 years. Please DO NOT use or fit any 3rd party components to the wheelchair unless they are officially approved by Sunrise Medical.

#### NOTE:

#### General user advice.

Not following these instructions may result in physical injury, damage to the product or damage to the environment!

Notice to the user and/or patient: Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

#### **B4Me special adaptations**

Sunrise Medical strongly recommends that in order to ensure that your B4Me product operates, and performs as intended by the manufacturer; all the user information supplied with your B4Me product is read and understood, before the product is first used.

Sunrise Medical also recommends that the user information is not discarded after reading it, but it is kept safely stored for future reference.

#### **Medical Device Combinations**

It may be possible to combine this Medical device with one or more other Medical Device or other product. Information on which combinations are possible can be found at www. SunriseMedical.co.uk. All combinations listed have been validated to meet the General Safety and Performance Requirements, section 14.1 of the Medical Device Regulation 2017/745.

Guidance on the combination, such as mounting, can be found at www.SunriseMedical.co.uk.

#### **Indications**

The varieties of fitting variants, as well as the modular design, mean that it can be used by those who cannot walk or have limited mobility because of:

- Paralysis
- Loss of extremity (leg amputation)
- · Extremity defect deformity
- Joint contractures/joint injuries
- Illnesses such as heart and circulation deficiencies, disturbance of equilibrium or cachexia as well as for elderly people who still have strength in the upper body.

#### Contraindications

The wheelchair shall not be used in case of:

- Perception disorder
- Imbalance
- · Seating disability

#### NOTE:

Please note that driving a wheelchair requires sufficient cognitive, physical and visual skills. The user must be able to assess the effects of actions during the operation of the wheelchair and, if necessary, to correct them. These capabilities and the safe use of the additionally attached components cannot be assessed by Sunrise Medical as a manufacturer. We cannot accept any liability for any damage resulting from this.

Please refer to the operating instructions of the wheelchair and the additionally mounted components. Instruct the user in the safe use of the wheelchair and the additionally mounted components. Inform users of specific warnings that need to be read, understood, and respected.

INTCO is ISO 9001 certified, which ensures quality at all stages of the development and production of this wheelchair.



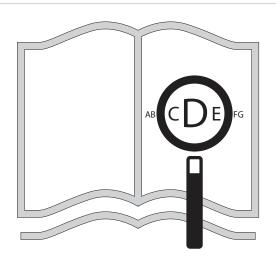
# **⚠** WARNING!

Do not use your wheelchair until this manual has been read and understood.

INTCO declares under its sole responsibility that this product is a Class 1 device, and that it complies with the requirements of the EU Medical Device Regulation (EU) MDR 2017/745.

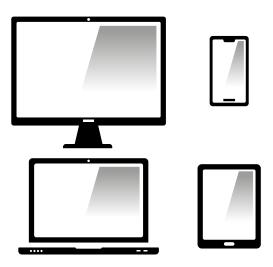
As the manufacturer, INTCO, declares that the product conforms to the UK Medical Devices Regulation 2002 No. 618.

The serial number and other important information can be found on the nameplate located on the left side of the product frame



If you are visually impaired, this document can be viewed in PDF format at

www.SunriseMedical.co.uk



or alternatively is available on request in large text.



#### **Q50R Features**





- 1. Joystick & power module VSI
- 2. Push handle
- 3. Armrest & armrest pad
- 4. Rear wheel
- 5. Frame
- 6. Battery box

- 7. Caster
- 8. Footrest plate
- 9. Fork
- 10. Backrest
- 11. Motor

As part of a continuous product improvement initiative, INTCO reserves the right to change specifications and model without notice. In addition, some functions and options available are not compatible with all chair configurations.

All following dimensions are approximate and subject to change.

#### **Contents**

1. Quickstart Guide	
1. Frame body and spare parts list	3
2. Installation steps	3
Step 1. Unfold frame	
Step 2. Buckle up	
Step 3. Brake lever switch	
Step 4. Install the Controller	
Step 5. Install anti-roll tube	
User Information	6
Q50R Features	8
1.0 Safety	<u>9</u>
1.1 Safety guide	9
2.0 Product description	
2.1 Power Wheelchair Nameplate	
3.0 User Instruction	
3.1. Controller	
3.3. Electromagnetic brake	
3.4. Controller adjustment lever:	
3.5 Anti-tips	
3.6 Armrest	
3.7 Charging steps	
3.8. Transfer	
4.0 Transport	24
4.1 Protective measures for severe weather	
4.2 Air Travel	24
5.0 Maintenance & cleaning	24
5.1 General guidance	
5.2 Product Check	
5.2.1 Daily check:	
5.2.2 Weekly check	
5.3 Medium to long term storage:	
5.4 Cleaning your Powerchair	
6.0 Machine Fault Repair Guide	28
7.0 EMC Guidelines	30
7.1 Safety: Electromagnetic radiation	
8.0 Disposal and recycling	32
9.0 Service advice-service history	33
10.0 Cuarantas	2/

#### 1.0 Safety

If you follow the instructions given in this manual, you will enjoy many trouble-free years of use.

# **⚠** WARNING!

Failure to heed the warnings in this manual may cause personal injury and damage to this Power wheelchair;

# **⚠** NOTE!

Prompt the user to pay attention to matters, failure to pay attention to these matters may cause damage to your Power wheelchair;

# **⚠** PROMPT!

Prompt the user for possible phenomena during operation, so that the user can master the operation skills of this Power wheelchair as soon as possible.

#### 1.1 Safety guide

#### Overview:

This product is designed for people with reduced mobility for daily travel and is easy to fold and transport. We recommend either a professional installer completes the assembly of the Power wheelchair according to the provided process description, or the authorized distributor of this product has provided the process description. If the assembly is not completed correctly and this result in a problem is caused by the use part or the care part, INTCO is not responsible for this. The user must practice using the product under the supervision of trained personnel.

Here are some safety tips to help users use this product safely. Sunrise Medical recommends that you check whether the wheelchair works smoothly and safely before each use. For detailed information on how to perform the inspection, please read "6. Maintenance".

Please check the following before using this product: Check the connection between the controller and the battery box to ensure safety and correctness;

- Check the battery level;
- Check the firmness of the Lap belt;
- Check the brake system.

Before you use it, if any problem occurs, please contact your authorized dealer as soon as possible.

#### Weight capacity-

The maximum weight capacity of this product is 136KG.

# **⚠** WARNING!

Sunrise Medical will not be responsible for personal injury and vehicle damage caused by overweight.

#### Slope information:

Some buildings have slopes, some slopes may also include a turn. Negotiating a turn on a slope requires you to have good skills in using this product.

When driving up slopes, try to keep the product moving. If you want to stop and restart, adjust the speed so you start-off slowly. When going downhill, set the speed to the slowest speed and drive forward. If the speed of the product is going downhill faster than preset or envisaged, then lower the lever to stop the wheelchair, and then slowly push the lever forward.

# **⚠** WARNING!

Do not drive on potentially dangerous slopes (such as snow-covered ground, grass, and slopes covered with damp leaves).

# **⚠** WARNING!

When climbing a hill, you must drive straight up the inclined surface, which will greatly reduce the possibility of overturning. When climbing a hill, be sure to watch out for extreme heights. Do NOT drive backwards when going uphill or downhill, this could lead to personal injury.

The safe climbing angle of our wheelchair is 8  $^{\circ}$ , see Figure 1-1 and Figure 1-2.

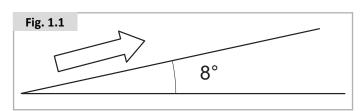
# **⚠** WARNING!

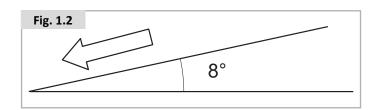
Any attempt to drive on a slope exceeding 8 ° may cause the product to tip over, which may cause personal injury or damage to the product.

The safe climbing angle of our wheelchair is 8  $^{\circ}$ , see Fig. 1.1 and Fig. 1.2.

Fig. 1.1 Maximum degree of uphill slopes

Fig. 1.2 Maximum degree of downhill slopes





#### Requirements for outdoor driving:

This product can be driven on conventional cement or asphalt pavement. When choosing a pavement, pay attention to the following:

- Slow down on unknown terrain or soft soil
- Avoid driving on wet grass, tyres may slip
- Avoid driving on soft gravel and beaches

If you are unsure about the condition of the surface, try to avoid driving on it.

#### Manual mode:

This product is equipped with a Free-wheel Mode that allows an attendant to manually push the wheelchair. For more detailed information about manual mode, please refer to "5. Instructions for use ----3. Electromagnetic brake".

# **⚠** WARNING!

The use of Free-wheel mode is only allowed with an attendant holding the product behind, otherwise the product may run away uncontrolled and result in personal injury.

WARNING! When you are sitting in the wheelchair, do not move the position by yourself as you may lose control and this may lead to personal injury. Ask your attendant for help.

# **⚠** WARNING!

It is forbidden to place a wheelchair in Free-wheel mode on a slope. The wheelchair may roll uncontrolled and cause personal injury.

#### Fixed obstacles (stairs, curbs, etc.).

# **⚠** WARNING!

Do not attempt to drive backwards over any steps, curbs, or other obstacles, as this could tip the product over and cause injury.

#### Roads and parking:

# **⚠** WARNING!

It is forbidden to drive this product in the motorway. You must know that it is not easy to be seen by others when you are sit in a wheelchair. Please observe local traffic regulations. You should still drive carefully when there are no road obstacles on the road.

#### Stairs and escalators:

Power wheelchairs are not designed to have the function of ascending or descending stairs or escalators, but can use elevators.

# **⚠** warning!

Do not use this product to go up and down stairs or escalators. Doing so will cause injury to you and others, and may cause damage to this product.

#### **Electromagnetic field:**

Radio waves can interfere with Power wheelchairs. Radio waves are a type of electromagnetic energy. When this energy has a negative impact, we call it electromagnetic interference or radio interference.

Your wheelchair may be affected by mobile phones or other transmitting antennas during use within range, your wheelchair use may be affected by them.

Do not use a high-power handheld radio transmitter or receiver when the power switch is on. Use personal communications devices such as mobile phone should use qualified products (note: such qualified electronic products are according to the relevant standard tests and conform to the requirements of the electromagnetic compatibility, not interfering the normal work of this wheelchair).

Be aware of nearby radio transmitters, such as radio or television transmitters, to avoid proximity to them or drive carefully.

It may be caused by electromagnetic interference for the braking failure and the driving uncontrolled of the Power wheelchair, if you are in safety, turn off the power as soon as possible.

#### Sitting or leaving a Power wheelchair-

Sitting or leaving a Power wheelchair requires a good sense of balance. When practicing getting in and out of a wheelchair, be sure to have someone supporting you.

In order to avoid injury, it is recommended that users who use this product for the first time be assisted by trained personnel. Before using a wheelchair, please complete the following operations:

Make sure that the controller is off and that the product is in electric mode. Refer to "IV. Instructions for use: motor clutch".

Make sure the armrests are turned up or the footplates are turned up. This will help your feet not touch the footplate. WARNING! Before getting on or off the Power wheelchair, you must ensure that the power is turned off.

Otherwise, you may run into the wheelchair and cause serious personal injury.

# riangle warning!

It is forbidden to stand on the footplates, otherwise it will cause the wheelchair to fall over and cause personal injury.

#### **Battery:**

In addition to following the warnings, you must also ensure compliance with other relevant operating requirements. See "4. Instruction" for more detailed information.

# **⚠** WARNING!

Do not disassemble, repair or modify the battery.

#### Prevent accidental wheelchair movement

# **⚠** WARNING!

If you intend to stay in a fixed position for a while, please turn off the power to prevent accidental movement caused by accidentally touching the controller's operating lever, or even cause personal injury.

#### **User restrictions:**

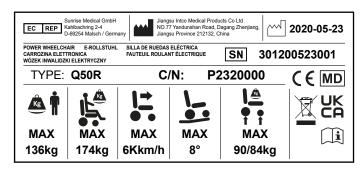
Wheelchairs are prohibited in the following cases:

- Users do not have the physical strength, intelligence or strain force to operate the power wheelchair safely.
- Persons with visual or intellectual disabilities, please seek advices from a medical care professional.
- Users must have the ability to maintain the upper body balance while operating and to withstand bumps caused by bumps on the road surface.

#### 2.0 Product description

Product name	Power wheelchair
Model	Q50R
Manufacturer	Jiangsu Intco Medical Products Co.,Ltd.
Registered address	NO.77 Yandunshan Road, Dagang Zhenjiang, Jiangsu Province 212132 P.R. China
Production address	NO.77 Yandunshan Road, Dagang Zhenjiang, Jiangsu Province 212132 P.R. China
Distributor	Sunrise Medical
EC Representative	Sunrise Medical GmbH
Main structure	This product consists of two parts: the electrical part and the wheelchair main body. The electrical part includes motor, battery box, controller and charger. The main parts of the wheelchair include front wheels, rear wheels, frame, armrest, footplate, seat cushion and backrest.

#### 2.1 Power Wheelchair Nameplate



TYPE:	Product Name/SKU Number.
MAX max X*	Maximum safe slope with anti-tip tubes fitted, Depends on wheelchair setting, posture and physical capabilities of the user.
XXX kg	Maximum user weight.
XXX kg	Load Maximum.
XX km/h	Maximum speed.
MAX  DOX kg/XX kg	Maximum axle loading.
UK	UKCA Mark.
CE	CE Mark.
$\bigcap$ i	Consult instructions for use.
	Indicates electrical / electronic equipment must be disposed of in accordance with the WEEE regulation.
xxxx-xx-xx	Date of manufacture.
SN	Serial number.
MD	This symbol means Medical Device.
	Manufacturer's address.
ISO 7176-19:2008	Crash tested according to ISO 7176-19:2008.
	Importer's address
UK RP	UK Responsible Person
CH REP	Swiss Representative's address
EC REP	European Authorized Representative



ISO 7010-M002 Instruction manual/booklet must be read! (Blue Icon)

# **Specification sheets (EN 12184 & ISO 7176-15)** Maximum occupant mass: Q50R 136kg user.

The wheelchair Q50R conforms to the following standards:

- a. requirements and test methods for static, impact and fatigue strengths (ISO 7176-8)
- b. power and control systems for electric wheelchairs requirements and test methods (ISO 7176-14)
- c. climatic test in accordance with ISO 7176-9
- d. the product is specified as a Class B power chair
- e. Electro Magnetic compatibility (7176-21, IEC 60601-1-2:2014)

ISO 7176-15	Min.	Max.	Comments
Overall length (with legrest)	-	1030mm	
Overall width	-	600mm	
Folded length	-	800mm	
Folded height	400mm (flat)	800mm (upright)	
Total mass (w/batteries)	-	37.5 kg	
Mass of the heaviest part	-	5.5kg	Battery
Static stability downhill	25.9°	26.7°	
Static stability uphill	22.7°	24.1°	
Static stability sideways	20.8°	22.7°	
Energy consumption (Max. range)	-	50km	
Dynamic stability uphill	-	10°	Least / most stable seat
Obstacle climbing	mm	50mm	
Maximum speed forward	-	6km/h	
Min. braking distance from max. speed	420mm	-	
Seat plane angle	-	2°	
Effective seat depth	-	450m	
Effective seat width	-	430mm	
Seat surface height at front edge	-	490mm	Cushion removed
Backrest angle	-	8°	
Backrest height	-	550mm	Cushion removed
Footrest to seat distance	-	400mm	
Leg to seat surface angle	-	100.5°	
Armrest to seat distance	-	280mm	Cushion removed
Minimum turning radius	609mm	-	
EN 12184	Min.	Max.	Comments
Maximum height of kerb safely descend	-	50mm	
Minimum width of corridor	1100mm	-	
Minimum ground clearance	80mm	-	
Speed control operation force	-	3,8 N	
Direction control operation force	-	2,5 N	

**NOTE:** Some of the options and measures may be not available in all countries.

#### 3.0 User Instruction

The operation steps of driving wheelchair are as follows:

- 1. Ensure the wheelchair is in Drive Mode
- 2. Turn on the power.
- 3. Adjust the speed.
- 4. Operate the controller handle as follows:

Wheelchair's motion mode	The operation method for joystick
Forward	Push the joystick forward.
Backward	Pull the joystick backward.
Right turn	Turn the joystick right.
Left turn	Turn the joystick left.
Stop	Release the joystick and the wheelchair will automatically stop soon.

#### 3.1. Controller

#### **Controller composition**

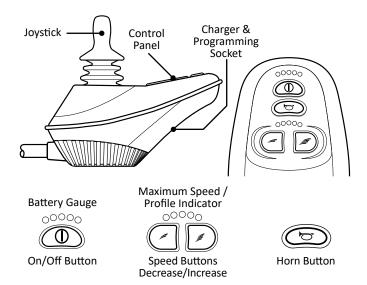
With the controller, you can operate the product. The controller can control the wheelchair, detect the battery level, control the working status and the status of the electronic system.

The controller includes:

- 1. Joystick;
- 2. Key panel;
- 3. Charging interface;
- 4. Power line connector;
- 5. Motor wire connection;

#### Joystick;

The joystick controls the direction and speed of the wheelchair. When you push the joystick, the wheelchair moves. The greater the lever push, the greater the wheelchair's operating speed.





If your wheelchair moves accidentally, release the lever immediately and the wheelchair will stop by itself.

#### On / off button

The on / off button is used to turn the controller on and off. Warning Do not use the on / off key to stop the wheelchair unless it is in an emergency, as this will cause the wheelchair to stop suddenly.

# **⚠** WARNING!

When your wheelchair is at rest, turn off the power to prevent accidental movement of the wheelchair.

#### **Battery level indicator**

The battery level indicator is located in front of the joystick. When the controller is working, it displays the battery level, controller status, and power system status. When all the lights on the display are on, the battery is fully charged. (All lights do not mean the battery is fully charged, please refer to the charger indicator when charging)

- 1. Only the red light is on or the red light is flashing: it means the battery is insufficient, please charge immediately;
- 2. All LEDs are flashing rapidly: The controller or power system has failed, or the drive motors are disengaged;
- All lights flash alternately: the joystick is not in the normal position when the controller starts. If this happens, turn off the controller, return the joystick to its original position, and then turn it on again.

**TIPS!** If the above still occurs, contact your dealer. Speed indicators

The speed indicator displays the maximum speed of the current setting. The right LED light indicates the current maximum speed setting. The speed limit mode refers to the maximum speed limit to a certain value set by the program.

The speed indicator has a 5-grade speed regulating function. When the speed indicator LED lights are all bright, the maximum speed is 5.4km/h (plus or minus 5%). The speed of the 4 LED lights is 4.7km/h (plus or minus 5%). The speed of the three LED lights is 4.1km/h (plus or minus 5%). The speed of the two LED lights is 3.5km/h (plus or minus 5%). The speed of light 1 LED lamp is 2.7km/h (plus or minus 5%).

**NOTE!** Before familiarizing yourself with the performance of a wheelchair, set it to low speed operation.

#### Guidance for locking the chair to prevent unauthorised use:

The chair is protected against unauthorized use with an electronic lock.

**To lock:** Unplug the charger if connected and just switch the chair on. Then press the on/off button until a beep sounds. After that, the joystick is deflected at 12 o'clock until a beep sounds and then at 6 o'clock until a further beep sounds. The chair is now locked and the electric drive does no longer work.

**To unlock:** The chair is turned on, then the joystick is deflected to the 12 o'clock-position until a beep sounds, and then deflected backwards until a beep sounds. Then the joystick is released and the chair is unlocked again.

#### Horn button

This button is used to control the horn. When there is a life obstacle in front, you can press the horn button to emit a siren sound to avoid accidents.

#### **Charging Port**

Use a separate charger to charge the wheelchair through the three-hole XLR socket on the front of the controller.

#### **Controller connection**



Incorrect connections will cause damage to the controller, charger, and connectors.

#### 3.2. Battery (Fig. 3.1)

The battery is fixed in the middle and rear part of the product, and has a power output port, an overload protector, and a charging hole.

**Output port:** connected to the controller and powers each system:

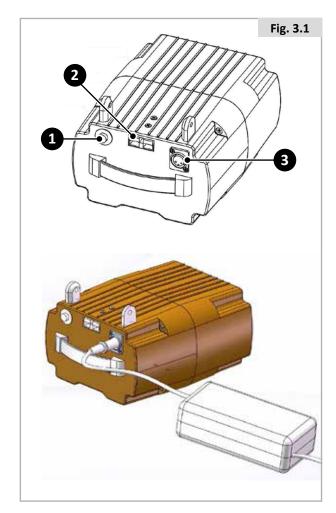
**Overload protector:** protect against power failure when overloaded;

**Charging port:** Remove the battery case from the wheelchair and use the charger to charge the battery.

This product uses a single 30Ah lithium battery and is sealed and maintenance-free.

# **⚠** WARNING!

You must use the charger provided with the wheelchair to charge the battery. DO NOT use other chargers.



- 1. Overload protector
- 2. Power supply
- 3. Charging hole

#### Safety instructions for the battery and charger



Read and observe the following safety instructions and precautions before activating the battery and before starting the charging process.

# ⚠ DANGER!

Failure to comply with the safety precautions and instructions may damage the product or result in electric shock, fire and/ or serious injuries. The lithium-ion battery contains chemical substances, which may cause hazardous reactions if the safety instructions specified here are disregarded.

# ⚠ CAUTION!

- The manufacturer accepts no liability for damage resulting from non-compliance with these instructions.
- Safety instructions and precautions on the use of the battery:
- Before using for the first time, the battery should be fully charged.
- The battery must only be used at temperatures between -20 °C and 60 °C.
- The battery must not be exposed to heat (e.g. radiators) or fire. External heat exposure can lead to the battery exploding.
- In the (unlikely) event of the battery overheating or catching on fire, you must ensure that the battery does not come into contact with water or other liquids. The only suitable extinguishing agent that is recommended by the cell manufacturers is sand.
- If possible, charge the battery after every use.
- For use for any other purpose than the one intended by Sunrise Medical, you will require the written authorisation of the manufacturer.
- The battery must not be opened or taken apart. Improper opening or willful destruction of the battery involves the danger of serious injury. In addition, opening the battery voids any warranty claim.
- Never connect the battery contacts in the charging socket to metallic objects, or ensure that the contacts never come into contact with metallic objects (for example with metal filings).
- If the charging socket is dirty, clean it with a clean and dry cloth.
- Never immerse the battery in water.
- The useful life of the battery depends, among other things, on its storage location. Consequently, never leave the battery in hot locations for prolonged periods. In particular, use the boot of a car parked in the sun only for transport rather than as a storage location.
- The battery must not be subjected to mechanical impact. However, if this should happen, the battery must be checked by the manufacturer. Contact your servicing agent. You must not continue to use a damaged battery.

- If damaged or defective, the battery must be singled out and checked. Please contact your specialist dealer and discuss with them the next steps with regard to return and repair. The defective/damaged battery must not be used again or opened.
- Always ensure that the battery is kept clean and dry.
- Charge battery on a fire-and-heat-resistant underground. Do not place easily flammable or flammable objects close to the battery.
- Mishandling can lead to overheating, fire or explosions.

# Safety instructions and precautions on how to store the battery:

- Protect the battery immediately upon separating from the battery charger or motor. Never allow any moisture or foreign particles (e.g. metal fragments, small nails, filings or other conductive metals) to get into the battery.
- Do not expose the battery to moisture of any kind during storage (water, rainwater, snow, etc.).
- Before storing it, charge the battery and check its charge status every 3 months.
- Store the battery in a cool and dry location where it is safe from damage and unauthorised access.
- To achieve the optimum battery service life, it should be stored at a temperature from 5°C to 25°C and at a humidity of 0% to 80%.
- Do not keep your battery in places where the temperature exceeds 45°C or is less than -20°C.
- Avoid direct sunlight.
- When the battery is not in use, recharge it at least every 12 weeks to prevent damage.

# Safety instructions and precautions on the charging process:

#### **Charging Methods**

Connect the input plug of charger to the standard power outlet and connect the output plug of charger to the controller socket for charging, or detach the battery for charging by connecting interface on the battery box.

# **⚠** WARNING!

- Please do not operate the wheelchair while charging.
- Do not leave the batteries/battery pack unattended while charging.
- Only charge the battery in a ventilated, dry and dust-free environment.
- Do not charge the battery in the presence or vicinity of flammable liquids or gases.
- Do not expose the battery to moisture of any kind during charging (water, rainwater, snow, etc.).
- Do not carry out the charging process in rooms where moisture may affect the battery.
- The battery must only be charged at temperatures between 0 °C and 40 °C. If you attempt to carry out a charging process outside of this temperature range, the battery mechanism automatically switches off the charging process.
- Only use the designated charger to charge the battery. Your specialist dealer can provide the relevant information.

# $oldsymbol{\Lambda}$ danger!

- Using an unsuitable battery charger can lead to malfunction and result in the battery having a limited service life. There is also a danger of fire and explosion.
- When the charging process is complete, disconnect the charger from the mains socket first before disconnecting it from the battery.
- Ensure adequate air circulation as soon as the battery is charged. In principle, only charge the battery under supervision.
- Damaged batteries must not be recharged or used any further.
- Damaged battery chargers (damage to the plug, housing, cable) must not be used.

# Safety information and precautions on how to transport and ship the battery:

- Lithium-ion cells are used in the battery. Transport and shipping of the battery are, therefore, subject to all applicable statutory requirements, which must be strictly observed. For instance, a defective battery must never be transported by plane.
- If your battery is defective, take it personally to your specialist dealer as shipping lithium-ion batteries by post or other carriers is subject to strict rules and regulations.
   Once again, we recommend that you contact your specialist dealer.
- As transport regulations may change annually, we strongly recommend that you consult your travel operator, airline or shipping line before you set out on your trip in order to learn about the current applicable regulations. A defective battery must not be taken on a plane or put in your luggage.

#### NOTE:

- If your battery is fitted to the pulling device when being transported, relaxed transport regulations apply in accordance with UN3171.
- Make sure you keep the packaging container of the battery in case you need to transport it.
- Discuss transportation with your specialist dealer prior to shipping.

#### Safety instructions and precautions on the charger:

## **⚠** WARNING!

- Before starting the charging process, read and follow all instructions and precautions enclosed with the charger and the following precautions and safety information.
- Only use the designated charger to charge the battery. Your specialist dealer can provide the relevant information.
- When the charging process is complete, we recommend disconnecting the charger from the mains socket first before disconnecting it from the battery.
- Do not expose the charger to moisture of any kind during charging (water, rain water, snow, etc.).
- Do not carry out the charging process in rooms where moisture may affect the charger.
- Be aware of condensation. If the charger is brought from a cold room into a warm room, condensation may form. In this case, refrain from using the charger until all condensation has dissipated. Please note that this may take several hours.
- Never carry the charger by its power cable or the charger cable.
- Never tug at the power cable to disconnect the charger from the mains socket.
- Never subject cable and plug to any pressure. Overstretching
  or bending the cable, pinching a cable between a wall and a
  window frame or placing heavy objects on a cable or a plug
  may result in electric shock or fire.
- Lay the power cable and the attached charging cable so that nobody can step on it or trip over it and so both cables are protected against any other harmful effects or stress.
- Do not operate the charger if the power cable, the charging cable or the plugs attached to the cables are damaged.
   Damaged parts must be replaced immediately by the authorised specialist dealer.
- Do not use or disassemble the charger when it has received a hard blow or was dropped or damaged in another way.
- The charger must not be used by children.
- Never attempt to disassemble or modify the charger.
- Do not cover the charger during the charging process or place any objects on top of the device.
- Never connect the terminals of the charging plug with any metal objects.
- Ensure that the plug is firmly inserted in the socket.
- Never touch plugs with wet hands.
- Do not use the plug of the charger and/or the mains plug if they are wet or dirty. Before inserting it, clean the plug using a dry cloth.

#### Battery case disassembly (Fig. 3.2 - Fig. 3.4)

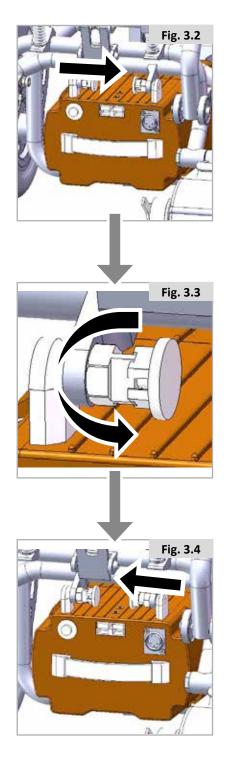
- 1. Un-plug the power connector.
- 2. Pull the lock pin at one end outward, and release it after rotating a certain angle, so that it is in the normally open position.
- 3. Grasp the handle of the battery case, and at the same time pull open the lock pin at the other end to remove the battery case.

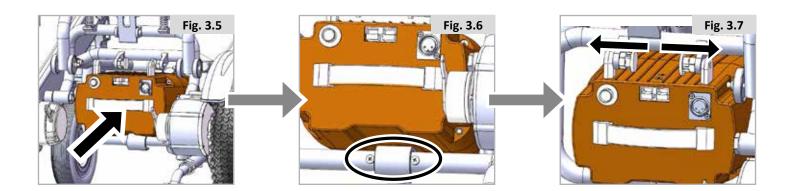
#### **NOTICE:**

Disconnect the electrical connection from the joystick and the motors beforehand

#### Install the battery case (Fig. 3.5 - Fig. 3.7)

- 1. Lift the battery case into the frame as shown.
- 2. Push the battery case forward to the end. Note that there are two screws on the frame for the limit of the battery case.
- 3. Align the mounting holes on the battery case with the lock pins on the frame, insert the lock pins, and check that they are secure.





#### 3.3. Electromagnetic brake

For convenience, this product is equipped with two modes:

#### (A) Manual mode and electric mode

- 1. Each motor has an electromagnetic brake release lever at the rear, (Fig. 3.8 & Fig. 3.9).
- 2. Push the handle down to the Free-wheel mode position
- 3. Push the handle up to the Drive Mode position.



It is forbidden to try to place your wheelchair in free-wheel mode while you are in a wheelchair, otherwise personal injury may be caused. Please ask your attendant for assistance.

## **⚠** WARNING!

When on an inclined surface, it is prohibited to set this product in free-wheel mode, otherwise the wheelchair will slide uncontrollably and cause personal injury.

# **⚠** WARNING!

Please keep in mind that when this product is in free-wheel mode, the brake system is disengaged, and this mode is prohibited when downhill.

# **⚠** WARNING!

In order to protect your personal safety and this product from accidental damage, please be careful to use the electromagnetic brake release lever.

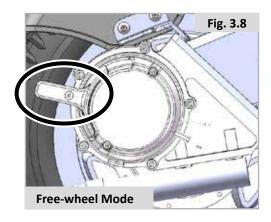
#### 3.4. Controller adjustment lever:

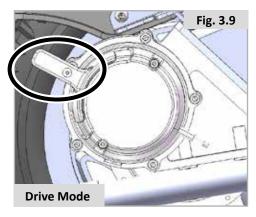
The joystick can be easily extended and shortened as follows (Fig. 3.10):

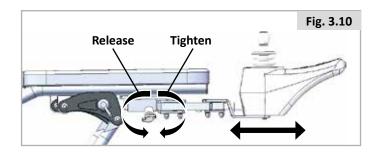
- 1. Turn the plastic screw clockwise (from top to bottom) to loosen the controller adjustment lever;
- 2. Pull the controller adjustment lever forward or backward to adjust to the desired position;
- 3. Turn the plastic screw counterclockwise until it is tightened.

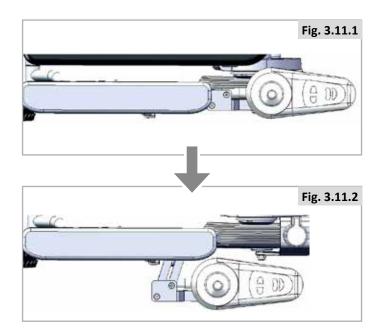
The controller can adjust the position as follows (Fig. 3.11.1-3.11.2):

- 1. Turn off the controller;
- 2. Pull the controller to the right and back.









#### 3.5 Anti-tips (Fig. 3.12.1 - 3.12.3)

The anti-tips are designed to enhance the stability of the wheelchair. This will reduce the possibility of a wheelchair overturning during uphill.

The anti-tips has three positions adjustable, as shown in the figure below, positions 1, 2, 3.

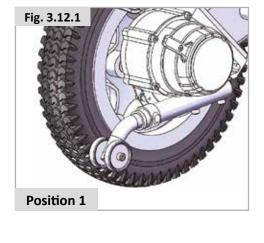
**Position 1:** When folding the wheelchair, adjust the anti-roll wheel to position 1 for easy folding.

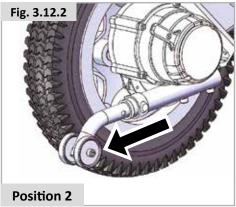
# **⚠** WARNING!

In position 1 the Anti-tip does NOT function as an anti-tip. When using a wheelchair, it is forbidden to adjust the anti-tip to this position.

**Position 2:** The position 2 is for use when using the wheelchair on flat surfaces, such as an indoor environment.

**Position 3:** The most effective anti-tip position, ALWAYS adjust to this position.



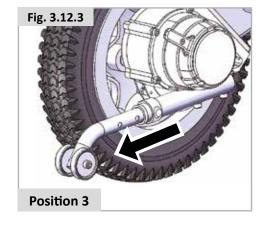


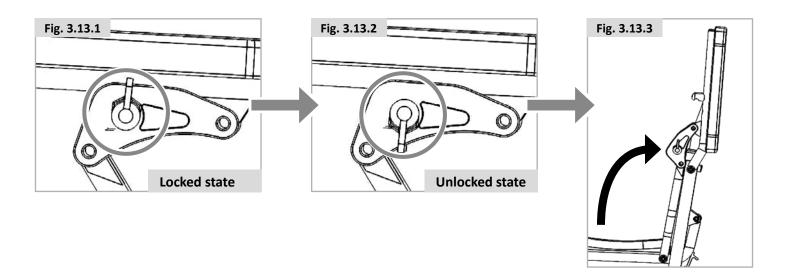
# 3.6 Armrest (Fig. 3.13.1 - 3.13.3)

In order to facilitate the user to move the wheelchair up and down from the side, the Q50R's armrest can be easily turned backwards. The specific operation method is as follows:

- 1. Turn the switch down to unlock it. At this time, the armrest can be lifted up and turned back.
- 2. Turn the switch to the right to lock it.

The chair is equipped with comfortable armrests with a soft upholstery made of PU foam and finished with a hygienic, easy to disinfect PU cover. The hardness is 50 +/- 5 Shore A. The dimensions of each arm pad are:  $330 \times 55 \times 27$  (L x W x H).





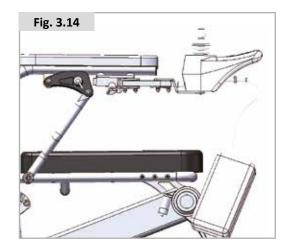
#### 3.7 Charging steps

- 1. Park this product in a place with a standard electrical power socket nearby, confirm that the controller is turned off and that this product is in drive mode;
- 2. Connect the three-pin XLR plug of the charger to the three-hole socket of the controller;
- 3. When the indicator light on the charger is red (orange), it means that it is charging, and when the indicator light is green, it means that the battery is fully charged.

#### **Charging frequency**

- 1. Daily use: If you use this product every day, please charge it after the end of the day, so that this product can be used for a whole day.
- 2. Occasional use: If you use it infrequently (once a week or less), you should charge it at least 6-8 hours per week.

If you do not use this product often, we recommend that you take care of the battery and charge it at least once a week. If you plan not to use the product for a longer period, you should charge the battery before storing. Unplug the cable and store the product in a warm, dry environment. Avoid extreme temperatures such as extreme cold and extreme heat. Do not charge frozen batteries.



#### 3.8. Transfer

When transferring between wheelchair and other seats, please turn off the power first. The wheelchair may sideslip under stress during the transfer. Make sure the precautionary measure must be taken in case of personal injury.

Attn.: For those users who are able to move and have upper body strength, this action could be done independently.

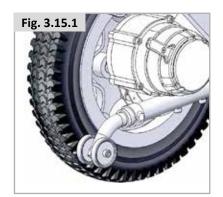
- 1. Move the wheelchair as close as possible to the side of the target seat.
- 2. After placing the wheelchair correctly, recheck the wheelchair is in Drive Mode.
- 3. Fold up the footplate.
- 4. Flip back the armrest near to the target seat.
- Move slowly from the front of wheelchair to the target seat.

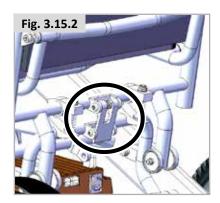
When transferring, the seat cushion shall be used less or not be used at all under the body. In addition, during the transferring, namely after leaving the seat cushion, please look out for side slipping. A longboard could be put above two chairs to assist the transfer, if possible.

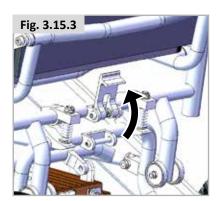
# 3.9. Folding (Fig. 3.15.1 - 3.15.6)

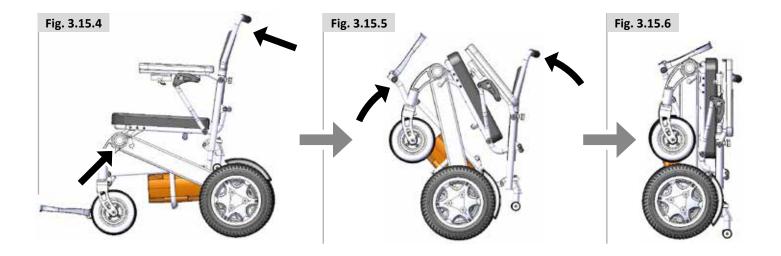
Folding the wheelchair can make better use of space and is convenient for storage and transportation. The specific methods are as follows:

- 1. Adjust the anti-tips to position 1 (refer to 3.5. Anti-tip)
- 2. Open buckle
- 3. Fold the wheelchair









#### 4.0 Transport

The Q50R is not approved to be used as an occupant seat in a vehicle. Therefore the user cannot be transported in a vehicle whilst seated in the wheelchair. Although this product is equipped with a lap belt, it is not designed for car transportation.

#### Transport the wheelchair in a car

Step 1: Fold the wheelchair

Step 2: Unplug the power connector.

Step 3: Put the wheelchair in the trunk of the car

## **↑** WARNING!

It is forbidden to carry the wheelchair by holding the adjustable or moving parts of the wheelchair, otherwise it may cause personal injury or damage to the wheelchair

# **⚠** WARNING!

It is forbidden to sit on your Power wheelchair while the car is moving, otherwise it may cause personal injury.

# **⚠** WARNING!

Be sure to ensure that your Power wheelchair is safe during transportation, otherwise it may cause personal injury or damage to the wheelchair.

#### 4.1 Protective measures for severe weather-

# **⚠** WARNING!

Do not expose this product to a humid environment (such as rain, snow, haze, flushing, etc.), otherwise it will damage your product, and the wet product must be dried before use.

#### 4.2 Air Travel

# **⚠** WARNING!

In order to comply with the IATA air travel approval, the Q50R can only be shipped on a passenger plane in the original shipping box, complete with battery installed. Air travel of power products can vary considerably depending on the carrier – in all cases Sunrise Medical recommend to contact the airline prior to any air travel to confirm their latest requirements.

#### 5.0 Maintenance & cleaning

This product is Power wheelchair that requires regular maintenance. Maintenance is very important, and if you follow the maintenance inspection instructions in this section, you can use this product easily and happily for years. You can do some routine checks yourself, while others are assisted by your dealer. For questions regarding maintenance or operation of this product, please contact the distributor of this product.

# **⚠** WARNING!

This product like most electrical or mechanical equipment, which is susceptible to the effects of the natural environment. In any case, avoid a humid environment, if contact with water or a wet environment directly may cause the electrical equipment or mechanical equipment of the wheelchair to malfunction. Water can cause corrosion of electronic components and rust of the frame!

If the product comes in contact with water, please perform the following maintenance:

- 1. Use a piece of cloth to dry as much moisture as possible and store in a dry place-
- 2. Perform all safety and operational tests before use;
- 3. If any abnormal situation occurs, please contact the distributor of this product.

#### 5.1 General guidance

- 1. Avoid knocking or hitting the controller, especially the joystick;
- Avoid prolonged exposure to harsh conditions, such as overheating, coldness or humidity, and keep the controller clean;
- Check all electrical connections to ensure that they are securely and securely connected, and check the cable connections of the charger.
- 4. When the lights of the battery status meter are all on, the battery has sufficient power and the controller and electrical system work normally;
- If the red light on the battery status table flashes slowly, it indicates that the battery is low and needs to be charged, but the controller and electrical system work normally;
- 6. If the battery status table flashes quickly, the controller has detected an error. Refer to the troubleshooting table;
- 7. Check all cable connections to make sure they are securely connected and free from corrosion;
- 8. All wheel bearings are lubricated and sealed, they do not need to add lubricant.
- Drive the wheelchair in each of the drive profiles, (if installed), to make sure the wheelchair performs as it did before
- 10. Visually inspect the wheelchair to make sure the leg-rests, armrests, etc are correctly positioned and attached to the wheelchair and all fasteners are sufficiently tightened

# **⚠** WARNING!

After performing any maintenance or repairs on the wheelchair you must make sure that it is functioning correctly before it is used.

#### 5.2 Product Check

#### 5.2.1 Daily check:

Turn off the controller, check the joystick, make sure it is not bent and broken, and make sure it returns to its original position when you release it. To check whether the rubber base of the joystick is damaged, you only need to visually inspect the base, do not handle or repair it. If you have questions, please contact your dealer; Visually inspect the controller cables to ensure that they are not cracked or broken or that the wires are bare. If there is any problem with the cable, please contact your dealer.

#### 5.2.2 Weekly check+

Disconnect the controller connector from the battery box, check the connection, and check for corrosion. If necessary, contact your dealer;

Check the brakes. This check must be carried out on a level surface and there must be enough open space around it.

#### Check the brakes-

- 1. Turn on the controller. After one second, check the power indicator to make sure the battery has power;
- Push the joystick forward slowly to guide you to hear the "click" sound of the brake. Release the joystick immediately. You must hear the sound of the brake operation after each push of the joystick for a few seconds;
- 3. Repeat the operation three times and push the controller to the back, left and right to check.

#### 5.2.3 Monthly check:

- 1. Check the wear of the front wheels and drive wheels. If maintenance is required, please contact your dealer;
- Check the front fork for wear and looseness. This may indicate the need for adjustment or the bearing needs to be replaced. Please contact the dealer for repair or replacement;
- 3. Keep this product clean and free of debris, such as hair, food, drinks, residues, etc.

#### Other related situations

Temperature (some parts of the wheelchair are susceptible to temperature)

- At extremely low temperatures, the battery may freeze.
   There are many factors that may cause freezing at special temperatures, such as charger type, usage, and battery composition (such as sealed lead acid batteries or gel batteries)
- Excessive temperature may slow down the wheelchair. The safety performance of the controller protects the motor and other electronic components from damage.

#### 5.3 Medium to long term storage:

When storing your wheelchair for long periods of time (in excess of one week), follow these simple instructions:

Fully charge the wheelchair for at least 24 hours.

Disconnect the charger.

Disconnect the batteries.

# **⚠** WARNING!

Never store your wheelchair:

- Outside.
- In direct sunlight, (plastic parts may discolour).
- Near a source of direct heat.
- In a damp environment.
- In a cold environment.
- With the batteries/battery boxes connected, (even if the controller is switched off).

Avoiding all of the above will minimise battery deep cycle discharge and extend battery lifetime.

When returning the wheelchair to use, please reconnect the batteries/battery boxes and charge the wheelchair for at least 24 hours before use.

#### 5.4 Cleaning your Powerchair

Proper cleaning and disinfection of your product is essential to extend its life and keep it looking new for longer; but it is also essential to prevent the spread of bacteria and viruses such as COVID-19.

#### Cleaning vs. Disinfection

The first thing to remember is that cleaning is not the same as disinfecting. By cleaning, we remove germs and dirt from surfaces, but we do not kill germs. Removing them only decreases the number of germs and risk of spreading infections.

On the other hand, by disinfecting a wheelchair we kill microorganisms like bacteria by using chemical products. This process does not necessarily clean dirty surfaces. Killing germs on the surface after cleaning has been done can further prevent the decrease of infectious diseases.

#### Cleaning and disinfection

The wheelchair or scooter should be wiped over once per week with a slightly damp, not wet, cloth and any fluff or dust that has accumulated around the motors should be blown or dusted away.

# ⚠ CAUTION!

Make sure that you dry all parts of your wheelchair if it becomes wet or damp after cleaning or if it is used in a wet or damp atmosphere.

Do not use a hose, a pressure washer or steam cleaner to clean your chair.

# **⚠** DANGER!

It is important that should the wheelchair be used by more than one person it is cleaned thoroughly to ensure there is no cross infection. Hygiene measures when being re-used: Prior to the wheelchair being re-used, it must be carefully prepared. Please pay attention to the manufacturer's instructions of the disinfectant you are using.

Inspect the upholstery/seating for tears, dents, wearing or slackening of upholstery particularly near to metal as this could result in poor posture or lower levels of comfort and pressure relief.

Prior to the wheelchair being re-used, it must be carefully prepared. All surfaces which come into contact with the user must be treated with a disinfection spray. To do this, you must use a disinfectant as authorized / recommended in your country, for rapid alcohol-based disinfection for medical products and medical devices, which must be disinfected quickly. Please be aware of the manufacturer's instructions for the disinfectant you are using. In general, a complete disinfection cannot be guaranteed on seams. We therefore recommend that you dispose of seat and back slings to avoid micro-bacterial contamination with active agents according to your local infection protection law.

# **A** CAUTION!

Do not use solvents, bleaches, abrasives, synthetic detergents, wax polishes or aerosols.

 Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are rinsed with clean water and dried thoroughly. Disinfect it using a special sanitizer for surfaces or disinfect with wipes that contain at least a 70% alcohol solution, or other approved store-bought solutions for disinfecting surfaces. These products are labelled as bactericidal and virucidal. The sanitizer must remain on the surface for at least 15 minutes. The surface should then be cleaned with a wipe and rinsed with an aseptic cloth.

# **⚠** WARNING!

Always read the label on any commercial or domestic cleaning substances. Always follow the instructions carefully.

#### Cleaning controls: & Controller

Should the control of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean. Be careful when cleaning the joystick, only do this with it switched off.

**Specialty controls;** where fitted Ensure that joysticks (all variants) are cleaned with a mild disinfectant and a cleaning cloth to avoid any cross infection possibilities.

Clean the control system and the keypad with a cloth dampened with diluted detergent. Be careful not to use excessive water or force when cleaning the control keypad. Make sure that water will not get into contact with the electrical connectors.

# **⚠** CAUTION!

Never use abrasive or spirit-based cleaners.

#### Cleaning seating:

All parts/accessories such as swing-away trays should be cleaned with a damp cloth. All lateral supports, headrest, armrests, side-guards, calf pads, lap belts and kneepads should be cleaned with a damp cloth.

# **⚠** CAUTION!

Sand and sea water (or salt in the winter) can damage the bearings of the front and rear wheels. Clean the wheelchair thoroughly after exposure.

# ⚠ CAUTION!

Excessive use of chemical or use of incorrect chemicals can lead to corrosion or degradation of materials used

 Body-fluids can lead to corrosion or degradation of materials used. Make sure to clean and disinfect all parts of the wheelchair after contact with body-fluids.

#### Hygiene measures when being re-used:

Prior to the wheelchair being re-used, it must be carefully prepared. All surfaces which come into contact with the user must be treated with a disinfection spray.

To do this, you must use a disinfectant as authorised/ recommended in your country, for rapid alcohol-based disinfection for medical products and medical devices, which must be disinfected quickly.

Please take into account the manufacturer's instructions for the disinfectant you are using.

In general, a complete disinfection cannot be guaranteed on seams. We therefore recommend that you dispose of seat and back slings to avoid microbacterial contamination with active agents according to your local infection protection law.

# 6.0 Machine Fault Repair Guide

Phenomenon	Possible Causes	Solution	Number of replacement parts	Method of obtaining
Short driving distance	A: Battery charging time is short B: The battery is aging and the energy storage is insufficient	A: Charge the battery overnight or ensure it is charged for 8 hours. B: Replace the battery.	A: B: Battery x 1	Contact an authorized reseller or Intco to purchase.
Battery cannot be charged	A: The charger is damaged B: The battery line is loose; or the battery fuse is damaged C: Charging power outlet is dead D: Charger, charger wire, plug, or bad internal wiring	A: Replace the charger B: Check all the wiring, connect the wiring; or replace the fuse. C: Replace with a new power outlet. D: It may be necessary to replace the charge and internal overhaul.	A: charger x1 B:/ C:/ D: charger x1	Contact an authorized reseller or Intco to purchase
Battery charging current is too large	The battery is damaged	Check the battery for a short circuit. Replace the battery if necessary.	Batteryx1	Contact an authorized reseller or Intco to purchase
The charge indicator will soon show a low battery charge after charging	A: The battery is aging and the charge cannot be saved B: circuit failure C: charger failure	A: Replace the battery. B: Please contact the dealer/ manufacturer. C: Replace the charger, please contact the dealer/manufacturer	A: Battery x1 B:/ C: Charger x1	Contact an authorized reseller or Intco to purchase
The battery indicator flashes immediately after recharging, showing low battery	A: Battery aging B: circuit failure C: charger failure	A: Replace the battery. B: Please contact the dealer/ manufacturer. C: Replace the charger	A: Battery x1 B:/ C:Charger x1	Contact an authorized reseller or Intco to purchase
Wheelchairs can't drive	A: power wheelchair in manual mode B: The battery needs to be charged C: Unplugged charger D: circuit failure	A: Turn the motor wrench to the power position. B: The battery is charged. C: Unplug the charger plug. D: Check and replace the battery positive fuse when necessary. Otherwise, internal inspection may be required.	A/ B/ C/ D/	Contact an authorized reseller or Intco to purchase
Abnormal noise or abnormal operation of the motor	Circuit failure	Please contact dealer/ manufacturer	/	Contact an authorized reseller or Intco to purchase
Only one wheel turns	A: Circuit failure B: One of the motor wrenches is in the manual position	A: Please contact your dealer/ manufacturer for maintenance. B: Move the motor wrench brake to the electric gear	A:/ B:/	Contact an authorized reseller or Intco to purchase
Controller error or no response	A: Circuit failure B: The controller program is incorrect	A: Please contact your dealer/ manufacturer for maintenance. B: The controller is reprogrammed	A:/ B:/	Contact an authorized reseller or Intco to purchase
Wheelchair does not respond to instructions	A: Bad connection of battery terminal connection	Clean the battery connection terminals. If the fault cannot be rectified, contact your dealer/manufacturer for maintenance.	/	Contact an authorized reseller or Intco to purchase
The power indicator is not displayed even after recharging	A: Circuit failure	Check if the battery is normal. Otherwise, contact your dealer/ manufacturer for service.		Contact an authorized reseller or Intco to purchase

**NOTE:** If the wheelchair needs to be replaced or disassembled, please consult the local authorized dealer or Intco for disposal. It is forbidden to dismantle and replace by yourself, so as not to cause damage to the wheelchair or personal injury.

Phenomenon	Possible Causes	Solution	Number of	Method of obtaining
			replacement	
			parts	

#### **Fault Self-Diagnosis**

All 5 LEDs in the battery display are flashing

This indicates a system trip in the new VSI has detected a problem somewhere in the wheelchair's electrical system. Please follow the following procedure.

- 1. Switch off the controller.
- 2. Make sure that all connectors on the wheelchair and the control system are mated securely.
- 3. If you can't find the problem, try using the self-help guide.
- 4. Switch on the controller again and try to drive the wheelchair. If the safety circuit operate again, switch off and do not try to use the wheelchair. Contact your service agent.

Times	Diagnosis	Solution
1	The battery needs charging or there is a bad connection to the battery.	Check the connections to the battery. If the connections are good, try charging the battery.
2	The left hand motor has a bad connection.	Check the connections to the left hand motor.
3	The left hand motor has a short circuit to battery connection.	Contact your service agent.
4	The right hand motor has a bad connection.	Check the connections to the right hand motor.
5	The right hand motor has a short circuit to battery connection.	Contact your service agent.
6	Not used.	/
7	A joystick fault is indicated.	Make sure that the joystick is in the center position before switching on the controller.
8	A controller fault is indicated.	Make sure that all connections are secure.
9	The parking brakes have a bad connection.	Check the parking brake and motor connections. Make sure the controller connections are secure.
10	A excessive voltage has been applied to the controller.	This is usually caused by a poor battery connection. Check the battery connections.

Other situations where a dealer's service is required:

- Excessive noise from the motor
- Severe cracks or ruptures in the joints
- Unable to run
- Tire wear and tear
- Generates severe jitter

#### 7.0 EMC Guidelines

#### 7.1 Safety: Electromagnetic radiation

The standard version of your Power wheelchair has been tested on the applicable requirements with respect to electromagnetic radiation (EMC) 7176-21 requirements. In spite of these tests it cannot be excluded that electromagnetic radiation may have an influence on the wheelchair, For example:

- Mobile telephony
- Large-scale medical apparatus
- Other sources of electromagnetic radiation

It cannot be excluded that the wheelchair may interfere with electromagnetic fields. For example:

- Shop doors,
- · Burglar alarm systems in shops,
- · Garage door openers

In the unlikely event that such problems do occur, we request that you notify your dealer immediately.

#### Below cables information are provided for EMC reference:-

Cable	Max. cable length, Shielded/unshielded		Number	Cable classification
AC Power Line	1.7m	Unshielded	1 Set	AC Power
DC Power Line	1.15m	Unshielded	1 Set	DC Power

# Important information regarding Electro Magnetic Compatibility (EMC)

POWER WHEELCHAIR needs special precautions regarding EMC and put into service according to the EMC information provided in the user manual; POWER WHEELCHAIR conforms to this IEC 60601-1-2:2014 standard for both immunity and emissions. Nevertheless, special precautions need to be observed: POWER WHEELCHAIR with no ESSENTIAL PERFORMANCE is intended used in Home healthcare environment.

# **⚠** WARNING!

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the POWER WHEELCHAIR, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result."

The use of accessories, and cables other than those specified by JIANGSU INTCO, with the exception of accessories and cables sold by JIANGSU INTCO of POWER WHEELCHAIR as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the POWER WHEELCHAIR.

## ⚠ WARNING!

WARNING: Use of this equipment POWER WHEELCHAIR adjacent to or stacked with other equipment should be avoided because it could result in improper operation."

When the AC input voltage is interrupted, the POWER WHEELCHAIR will stop battery charging and if the power supply restored, it should be recovered automatically, this degradation could be accepted because it will not lead to unacceptable risks and it will not result in the loss of basic safety or essential performance

Table 4– Input a.c. power Port

Diversion	Davis FAAC standard	Immunity test levels	
Phenomenon	Basic EMC standard	Home healthcare environment	
Electrical fast transients/burst	IEC 61000-4-4	±2 kV 100kHz repetition frequency	
Surges Line-to-line	IEC 61000-4-5	±0.5 kV, ±1 kV	
		3V, 0.15MHz-80MHz	
Conducted disturbances induced by RF fields	IEC 61000-4-6	6V in ISM bands and amateur radio bands between 0.15MHz and 80MHz	
		80%AM at 1kHz	
		0% UT; 0.5 cycle At 0º, 45º, 90º, 135º, 180º, 225º, 270º and 315º	
		0% UT; 1 cycle	
Voltage dips	IEC 61000-4-11	and	
		70% UT; 25/30 cycles	
		Single phase: at 0º	
Voltage interruptions	IEC 61000-4-11	0% UT; 250/300 cycles	

# Controller Left Motor Battery Right Motor

#### 8.0 Disposal and recycling

**NOTE:** If the pulling device has been made available to you as part of a charity or medical loans scheme, then it may not belong to you. If it is no longer required, then follow the instructions to return it as given by the organisation that made the pulling device available to you.

Electrical and electronic equipment need to be disposed of separately to general household waste at specific state-provided locations. The correct disposal and separate collection of used appliances serves to prevent potential damage to health and the environment. It is a requirement for the re-utilisation and recycling of used electrical and electronic equipment.

Detailed information on the disposal of your used equipment can be obtained from your local authority, your waste disposal service, the specialist dealer from which you purchased the product, or your sales contact.

This information only applies to equipment which is installed and sold in the countries of the European Union and which is subject to the European directive 2002/96/EC. In countries outside of the European Union, deviating conditions apply to the disposal of electrical and electronic waste.

#### **Materials Used:**

In the following section, there is a description of the materials used on the pulling device, in view of the disposal or recycling of the pulling device and its packaging. There may also be special local regulations in force with regard to disposal or recycling, these must be taken into account when disposing of your pulling device. (This can include the cleaning or decontamination of the pulling device prior to disposal).

Aluminium:	Wheels, steering tube, parts of the frame, main brake lever, handlebar, docking clamps	
Steel:	Frame and intermediate sub-frame, fork	
Plastic:	Handles, plugs, housing parts and tyres.	
Packaging:	Made of soft polyethylene, cardboard	
Battery:	Lithium-ion battery (hazardous product)	

Please see battery section for more detailed information.









#### 9.0 Service advice-service history

This section is designed to assist you in keeping a record of any service and repairs to your wheelchair. The service Agent will complete this section and return the manual to you.

**NOTE:** Please contact your local Sunrise medical approved servicing agent for any warranty, service or repair work required.

	1	2	3	4
Serial Number				
Year				
Service dates				
Controller				
On/Off switch				
Output plug				
Operation				
Dynamic braking				
Programmable configuration				
Batteries				
Physical Damage				
Connections				
Discharge tests				
Wheels/Tyres				
Wear				
Pressure				
Bearings				
Wheel nuts				
Motors				
Wiring				
Noises				
Connections				

	1	2	3	4
Brakes				
Brushes				
Freewheel Device				
Chassis				
Condition				
Steering				
Upholstery				
Seat				
Back				
Armrests				
Electric's				
Condition of loom				
Connections				
Test run				
Forward				
Reverse				
Emergency stop				
Left run				
Right run				
Up/Down slop				
Over obstacle				
Parking brake				

#### **Servicing Agents Only:**

Any parts required should be obtained from Sunrise Medical only either through our web site or by direct contact with our Customer Service or Service department. Do not used unauthorized parts or carry out unauthorized modifications.

#### 10.0 Guarantee

THIS GUARANTEE DOES NOT AFFECT YOUR LEGAL RIGHTS IN ANY WAY.

INTCO\* provides a guarantee, as set out in the warranty conditions, for products to its customers covering the following.

#### Warranty conditions:

- Should a part or parts of the product require repair or replacement as a result of a manufacturing and/or material fault within 24 months, then the affected part or parts will be repaired or replaced free of charge. The warranty will only cover manufacturing defects.
- 2. To enforce the warranty, please contact Sunrise Medical Customer Service with the exact details of the nature of the difficulty. Should you be using the product outside the area covered by the Sunrise Medical customer service agent, repairs or replacement will be carried out by another agency as designated by the manufacturer The product must be repaired by a Sunrise Medical designated Customer Service agent, (dealer).
- For parts, which have been repaired or exchanged within the scope of this warranty, we provide a warranty in accordance with these warranty conditions for the remaining warranty period for the product in accordance with point 1.
- 4. For original spare parts which have been fitted at the customer's expense, these will have a 12 months guarantee, (following the fitting), in accordance with these warranty conditions.
- 5. Claims from this warranty shall not arise, if a repair or replacement of a product or a part is required for the following reasons:
  - a. Normal wear and tear, which include but is not limited to the following parts where fitted; batteries, armrest pads, upholstery, tyres, brakes shoes, ferrules, etc.
  - b. Any overloading of the product, please check the EC label for maximum user weight.
  - c. The product or part has not been maintained or serviced in accordance with the manufacturer's recommendations as shown in the user instructions and/or the service instructions.
  - d. Accessories have been used which are not specified as original accessories.
  - e. The product or part having been damaged by neglect, accident or improper use.
  - f. Changes/modifications have been made to the product or parts, which deviate from the manufacturer's specifications.
  - g. Repairs have been carried out, before our Customer Service has been informed of the circumstances.
- 6. This guarantee is subject to the law of the country in which the product was purchased from Sunrise Medical"
- \* Means the Sunrise Medical facility from which the product was purchased.



Sunrise Medical S.r.l. Via Riva, 20 – Montale 29122 Piacenza

Italia

Tel.: +39 0523 573111 Fax: +39 0523 570060 www.SunriseMedical.it

Sunrise Medical AG Erlenauweg 17 CH-3110 Münsingen Schweiz/Suisse/Svizzera Fon +41 (0)31 958 3838 Fax +41 (0)31 958 3848 www.SunriseMedical.ch

Sunrise Medical AS
Delitoppen 3
1540 Vestby
Norge
Telefon: +47 66 96 38 00
Email: post@sunrisemedical.no
www.SunriseMedical.no

Sunrise Medical AB Neongatan 5 431 53 Mölndal Sweden Tel.: +46 (0)31 748 37 00 post@sunrisemedical.se www.SunriseMedical.se

MEDICCO s.r.o.

H – Park, Heršpická 1013/11d, 639 00 Brno Czech Republic Tel.: (+420) 547 250 955 Fax: (+420) 547 250 956 www.medicco.cz info@medicco.cz Bezplatná linka 800 900 809

Sunrise Medical Aps Mårkærvej 5-9 2630 Taastrup Denmark +45 70 22 43 49 info@sunrisemedical.dk Sunrisemedical.dk

Sunrise Medical Australia 11 Daniel Street Wetherill Park NSW 2164 Australia Ph: +61 2 9678 6600 E: enquiries@sunrisemedical.com.au www.SunriseMedical.com.au

Sunrise Medical North American Headquarters 2842 Business Park Avenue Fresno, CA, 93727, USA (800) 333-4000 (800) 300-7502 www.SunriseMedical.com EC REP







PRODUCTS Co., Ltd No. 77, Yandunshan Road, Dagang Zhenjiang, Jiangsu Province China









OM Q50R EU EN Rev.C 2024-01-08

Sunrise Medical GmbH Kahlbachring 2-4 69254 Malsch/Heidelberg Deutschland

Tel.: +49 (0) 7253/980-0 Fax: +49 (0) 7253/980-222 www.SunriseMedical.de

Sunrise Medical Thorns Road Brierley Hill West Midlands DY5 2LD England

Phone: 0845 605 66 88 Fax: 0845 605 66 89 www.SunriseMedical.co.uk

Sunrise Medical S.L.
Polígono Bakiola, 41
48498 Arrankudiaga – Vizcaya
España
Tel.: +34 (0) 902142434
Fax: +34 (0) 946481575

Sunrise Medical Poland Sp. z o.o. ul. Elektronowa 6, 94-103 Łódź Polska Telefon: + 48 42 275 83 38 Fax: + 48 42 209 35 23 E-mail: pl@sunrisemedical.de

www.Sunrise-Medical.pl

www.SunriseMedical.es

Sunrise Medical HCM B.V.
Vossenbeemd 104
5705 CL Helmond
The Netherlands
T: +31 (0)492 593 888
E: customerservice@sunrisemedical.nl
www.SunriseMedical.nl
www.SunriseMedical.eu
(International)

Sunrise Medical SAS ZAC de la Vrillonnerie 17 Rue Michaël Faraday 37170 Chambray-Lès-Tours Tel: +33 (0) 2 47 55 44 00 Email: info@sunrisemedical.fr www.sunrisemedical.fr