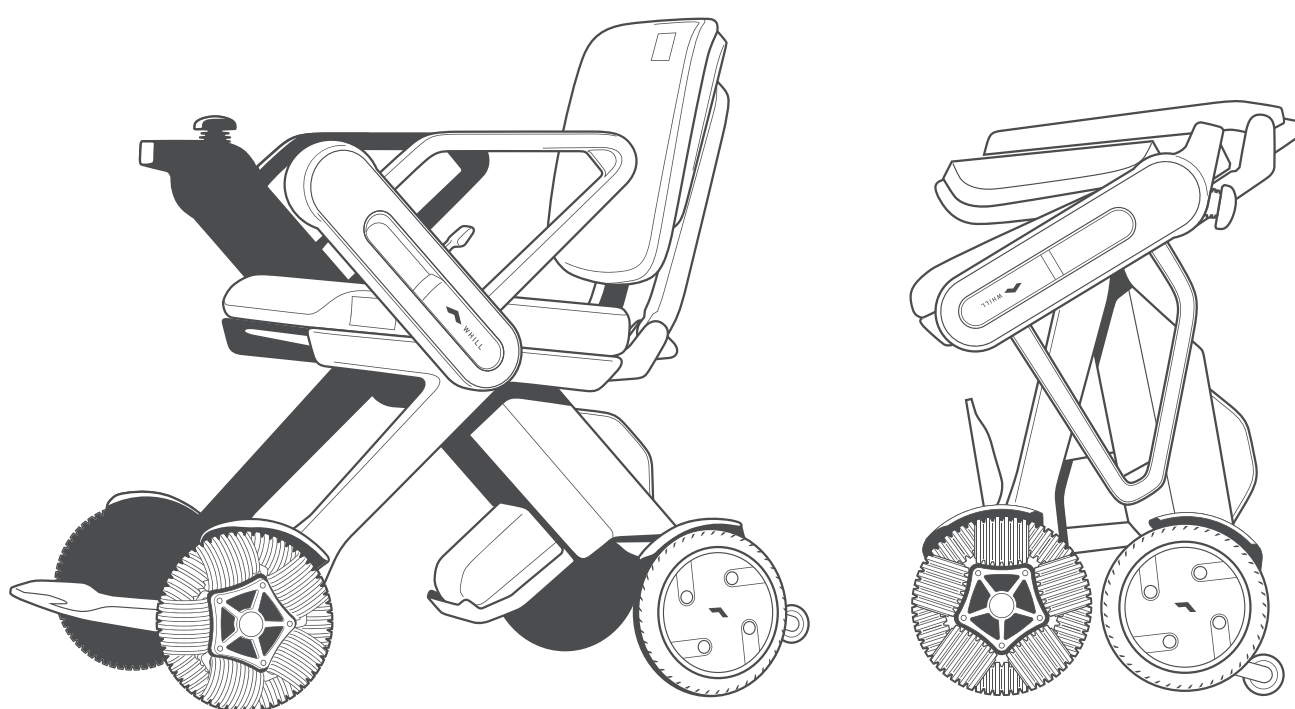




WHILL



User Manual

WHILL Model C Lite Series

en

Introduction

Thank you for your purchase of a WHILL Model C Lite Series device.

This device is intended to provide outdoor and indoor mobility to individuals who are comfortable with operating a powered wheelchair. The method of use of this device may differ according to country or region. Be sure to read this manual carefully before use, and use this device correctly and safely.

- This manual is intended for users of this device, and explains how to assemble and adjust the device, and how to use important functions such as the controller that controls speed and direction. It also explains basic inspections, troubleshooting, and maintenance procedures that can be performed by the user.
- This manual explains the various parts of this device by means of text, illustrations, and standard terms.
- Store this manual in a location where it can be referred to whenever needed.
- This manual contains information that is protected by patent rights and copyrights. It may not be reproduced in part or in whole without explicit written permission from WHILL.
- The contents of this manual may be changed without notice.
For the latest information about the device, visit the WHILL website (<https://whill.inc>).
- Every effort has been made to ensure the contents of this manual are correct. If you notice any inaccuracies or omissions in this manual, please contact your distributor or customer support.

Intended use/Intended purpose

The intended use of the WHILL Model C Lite powered wheelchair is to provide outdoor and indoor mobility to persons limited to a seated position that are capable of operating a powered wheelchair.

Manual overview

The symbols used throughout this manual are described below. Be sure to observe the instructions indicated by each symbol.

Symbol	Meaning
 WARNING	Indicates critical instructions to prevent an imminently hazardous situation that may result in a fatal accident or serious injury.
 CAUTION	Indicates instructions to prevent a potentially hazardous situation that may result in minor or moderate injury, property damage, or both.

	Indicates a required act.
	Indicates a prohibited act.

	Indicates precautions or reference information that must be read in order to prevent device malfunctions or failures, including helpful information to ensure comfortable use of the device.
	Indicates that the user should carefully read this manual before use and follow the instructions and procedures.

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1. Safety precautions

This device has been designed and manufactured with complete attention given to safety. However, there is a risk of injury, unexpected accident, or property damage if the precautions described in this manual are ignored or this device is used incorrectly.

The descriptions related to safety utilize the terms "WARNING" and "CAUTION" to indicate the magnitude or severity of injury or damage and the urgency level of the danger. "WARNING" indicates critical instructions to prevent an imminently hazardous situation that may result in a fatal accident or serious injury. "CAUTION" indicates instructions to prevent a potentially hazardous situation that may result in minor or moderate injury, property damage, or both.

This device is a powered wheelchair. Correctly understand the contents of this manual before using this device.

Persons who find it difficult to use a powered wheelchair should not use this device.

- **This device is designed for use on paved roads or indoors.**
- **This device is designed for use in pedestrian areas. A driver's license is not required. When driving, please use pedestrian paths and observe the traffic rules and manners expected of a pedestrian.**
- **If this device is being operated by an assistant to the occupant, the assistant must thoroughly read this manual and fully understand the precautions for use before operating it.**

1.1. When using this device

WARNING



- **If this device shows any abnormal signs, immediately discontinue use, and contact your distributor or customer support.**
Continuing to use this device when it is malfunctioning can potentially cause an injury or unexpected accident.
- **Before getting on the device, check that the device has been properly unfolded and that all components are correctly assembled. Check for any missing or broken components, and check that the brakes are locked.**
There is a risk of injury or accident. If components need to be replaced or repaired, stop using the device immediately and contact your distributor or technical support.
- **Carefully read the explanations in this manual regarding the battery and charger, and follow the instructions.**
There is a risk of fire or battery explosion when disassembling the battery or charger. Do not allow flames near the battery or charger, avoid getting the battery and charger wet or subjecting them to impact (dropping, penetrating with nails, or standing on them), etc.
- **When this device is not being used, turn the device power supply OFF.**
There is a risk of accidental contact with the controller that could cause unexpected movement of this device.
- **Unsafe in the Magnetic Resonance (MR) Environment.**
This device is MR Unsafe. The device presents a projectile hazard.



! WARNING

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- The maximum load-bearing capacity for this device is 136 kg (299.8 lbs.) including both the occupant and any luggage. Use this device without subjecting it to a load higher than this capacity.

Otherwise, there is a risk of damage to parts or unexpected accident.

- Do not lift up this device when there is a person on it.

There is a risk of injury to the occupant or damage to parts as a result of tipping over or falling.



- This device is not a play apparatus. Use this device only as a powered wheelchair. Do not use it for other applications.

Otherwise, there is a risk of unexpected accident.

- Do not jump, stand, or place an excessive load on the footrest.

There is a risk of damaging the footrest or causing the device to lift up and tip over.

- This device should not be used by people whose feet do not reach the footrest when on this device even if the footrest height is adjusted.

This device may tip over or fall, and there is a risk of unexpected accident.

- Do not apply an excessive load to the controller, such as leaning or sitting on it. Do not operate the joystick or buttons with excessive force or with a sharp object.

These parts might be damaged and become inoperable.

- Do not hang walking sticks, umbrellas, bags, baskets, or other objects on the controller or armrests.

Otherwise, there is a risk of damage to parts or unexpected accident.

- Do not attach stickers or paint on top of the controller display, the buttons, or the labels attached to this device, battery, charger, and other parts.

There is a risk that these indications may no longer be visible, resulting in incorrect operation and unexpected accident.

- Do not use this device as a seat in an automobile or other vehicle.

Otherwise, there is a risk of damage to parts or unexpected accident.

The symbol on the right indicates that this device is not intended to be used as a seat in a motor vehicle.



- This device is for one occupant only. It is not to be used by two or more people (including children or pets).

Otherwise, there is a risk of damage to parts or unexpected accident.

- Do not allow others to use this device without adequate instructions or explanation.

Otherwise, there is a risk of damage to parts or unexpected accident.

- Do not drive this device while holding onto a dog leash or leash for other pets.

This device may tip over or fall, and there is a risk of unexpected accident.

! CAUTION



- If this device is not used for a long period, fully charge the battery before storing. Charge the battery at least once a month.

There is a risk that the battery may get excessively depleted and cannot be charged.

CAUTION



- **Pay attention to the surface temperature of this device when it is in use.**
When the surface temperature of this device becomes extremely hot as a result of exposure to direct sunlight or an external heat source, there is a risk of burns. Do not leave this device in direct sunlight or near external heat sources.

1.2. When getting on and driving this device

WARNING



- **Turn the device power supply OFF when getting on and off the device.**
There is a risk of unexpected movement of this device caused by accidental contact with the controller.
- **When driving, fully check the surroundings and road conditions. Drive carefully at low speed particularly when driving in locations crowded with people, close to walls or other locations where there are obstacles nearby, and in narrow places or on uneven surfaces or slopes. Do not start or stop driving suddenly.**
When driving on wet inclines in particular, there is a risk that this device may lose stability, leading to an unexpected accident.
- **When approaching curbs, steps, slopes, and similar obstacles, approach at a right angle and drive over them carefully at low speed.**
There is a risk of tipping over or damaging parts.
- **Be sure to lower the footrest while driving. Also, keep your feet on the footrest, and prevent your feet from extending outside the width of the footrest.**
Otherwise, there is a risk that your feet may become caught in the front wheels.
- **Before driving at night or in places with poor visibility, check that the rear light is turned ON and is visible to the surrounding area.**
Otherwise, there is a risk of unexpected accident.
- **Release the brakes only when necessary. Before releasing the brakes, be sure to move to a flat and safe surface, and then turn the device power supply OFF. After moving this device manually, pull the brake release levers up to apply the brakes.**
There is a risk of unexpected accident because this device will move freely when the brakes are released.
- **Before operating this device, adjust the adjustable parts of the device to positions and angles that are easy to use.**
If the appropriate adjustments are not made, there is a risk of incorrect operation, or your posture may become unstable, leading to an accident such as falling or tipping over.
- **On downhill slopes, slow down sufficiently and drive carefully.**
This device may tip over or fall, and there is a risk of unexpected accident.
- **When driving this device, sit back in the seat so that your back is resting against the back support.**
This device may tip over or fall, and there is a risk of unexpected accident.

 WARNING


- **Do not drive the device in the following areas or under the following conditions.**
This device may tip over, and there is a risk of unexpected accident.
 - Escalators or stairs
 - Steps of 5 cm (2 in.) or more in height
 - Slopes with a gradient of 10° or more
 - Soft surfaces such as sand or mud
 - Puddles
 - Snowy or frozen paths
 - Diagonal driving on slopes that exceed 10° left and right
 - Gaps of 10 cm (3.9 in.) or more in width
 - Sudden turning or driving in a zigzag
 - Driving in reverse or at medium- to high-speed on downhill slopes
 - Bad weather such as rain, fog, or strong wind
- **Do not push the device manually with the brakes released, except in emergencies.**
There is a risk accidents may occur because the brakes do not work.
- **When you do not feel well, are under the influence of alcohol, or are taking medication, do not drive this device.**
There is a risk of serious accidents, as such circumstances may impair your judgment or slow down your ability to operate the device.
- **While riding this device, do not crouch down, lean outside, or shake your body.**
This device may tip over or fall, and there is a risk of unexpected accident.
- **Do not drive while holding something in your hand or with something placed on your lap.**
There is a risk of incorrect operation or tipping over.
- **Do not maneuver the device onto or off a curb or step that is higher than approximately 5 cm (2 in.).**
The battery frame may be damaged or the anti-tip rollers may get caught on the curb or step, making it impossible to drive the device.
- **While driving, do not operate a mobile phone or other device. Also, do not drive while wearing earphones or headphones that make it difficult to hear surrounding sounds.**
Otherwise, there is a risk of unexpected accident.
- **Prevent raincoats, scarves, and other long clothing from touching the wheels while driving.**
If clothing, scarves, or other objects get entangled in the wheels, there is a risk of injury and unexpected accident.



- This device is intended for use in pedestrian areas. A driver's license is not required. When driving, please use pedestrian paths and observe the traffic rules and manners expected of a pedestrian.
- Drive on sidewalks or paths for pedestrians, and use pedestrian crossings when crossing roads. On roads without sidewalks, travel along the road on the side normally used by pedestrians while paying particular attention to motor vehicles, bicycles, and the like.
- Do not drive hands-free and do not take your eyes off the route ahead. Otherwise, there is a risk of unexpected accident.

■ How to avoid an emergency situation

When this device no longer moves in an emergency or because of a malfunction or the like, it can be moved manually by pushing down the brake release levers located on the inner side of the rear wheels to release the brakes. When moving this device manually, move it to as flat a location as possible.

For the brake release procedure, refer to "5.7. Releasing the brakes" (Page 83).

1. Turn the power supply OFF.
2. Push the brake release levers down to release the brakes.
3. Move this device to a safe place manually.

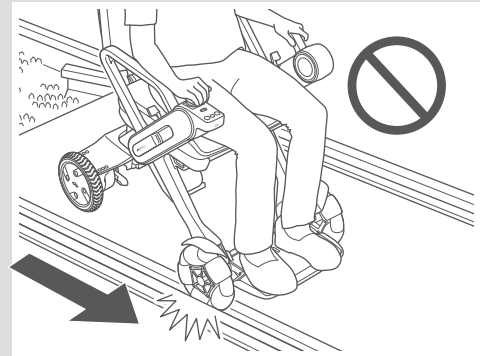
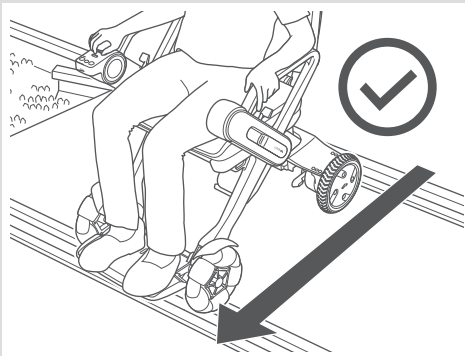
■ Precautions during driving (across level crossings or on streetcar tracks)

WARNING

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- In the event that this device gets stuck in the middle of a level crossing or on railway tracks, ask the assistant or people nearby for help to immediately evacuate from the level crossing or railway tracks. If this device is left in the middle of a level crossing or on railway tracks, immediately press the level crossing's emergency button.
There is a risk of serious accidents.
- Avoid using level crossings as much as possible, as there is a risk of getting stuck in the middle of the crossing. When it is absolutely necessary to cross a level crossing, pay attention to the following. Also pay attention to the following when crossing streetcar tracks.
Otherwise, there is a risk of unexpected accident.
 - Before crossing level crossings and railway tracks, check that the battery charge level is sufficient.
 - Have an assistant accompany you whenever possible.
 - In the case of wide level crossings and railway tracks that will take time to cross, make a detour.
 - When the level crossing alarm starts to sound or the level crossing barrier starts to drop, never enter the level crossing.
 - Cross level crossings with the wheels at a 90-degree angle relative to the railway tracks to prevent this device from getting caught in the gaps of the tracks.
 - Do not turn while on level crossings and railway tracks.



CAUTION



- Do not lift up this device when there is a person on it.
There is a risk of injury to the occupant or damage to parts as a result of tipping over or falling.



This device cannot be driven over steps of 5 cm (2 in.) or more in height or gaps of 10 cm (3.9 in.) or more in width. In these cases, either lift up this device or use a wheelchair ramp or the like. For details, refer to "7. Transporting the device" (Page 92).

1.3. Precautions when assembling or adjusting

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WARNING



- Assemble this device in the order described in this user manual. Do not perform any adjustment, repair, or modification that is not described in this manual.

There is a risk of injury and product safety risk due to damage to this device or its parts.

Performing any repair or modification that is not described in this manual will invalidate the warranty.

- Perform assembly on a flat and level surface.

Otherwise, there is a risk of unexpected accident.

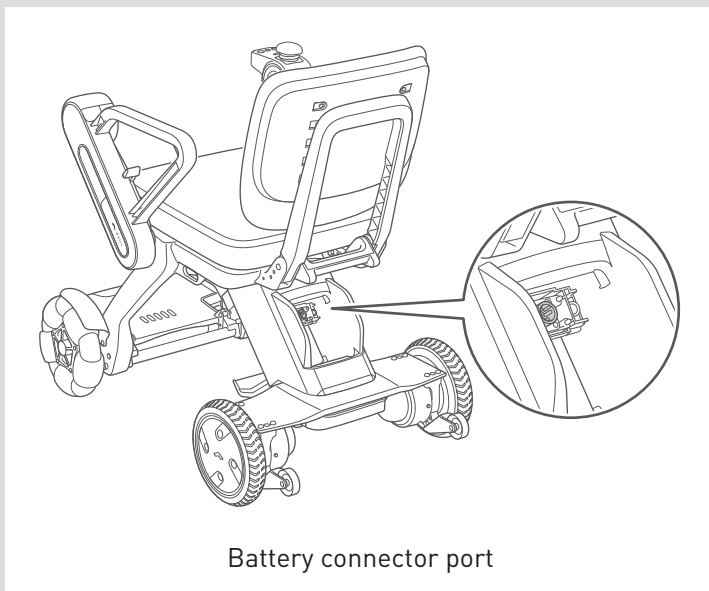
- Before performing adjustments, turn the power supply OFF, and apply the brakes on a flat and level surface.

Otherwise, there is a risk of unexpected accident.

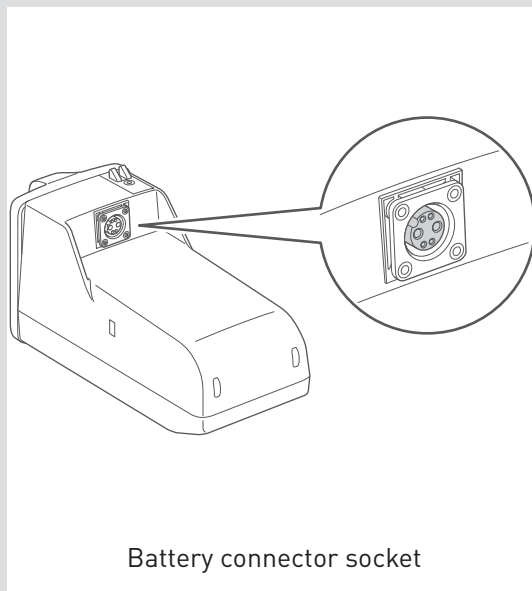


- Do not touch the battery connector socket or battery connector port directly, and make sure that they do not become wet or come into contact with foreign objects.

Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.



Battery connector port



Battery connector socket

- Do not touch the controller cable connector or main body cable connector directly, and make sure that they do not become wet or come into contact with foreign objects.

Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.

1.4. EMI (Electromagnetic Interference)

There is a risk of unintended movement of this device as a result of radio waves. Avoid driving in an area where strong electromagnetic waves are generated, such as areas around high-tension wires, high-voltage power lines, television towers, etc. Radio waves may interfere with the control functions of this device.

This device may also emit its own electromagnetic fields and may disturb the operation of other nearby devices. To reduce the chance of unintended device movement, which could result in serious injury, pay careful attention to the following instructions.

- Do not operate hand-held transceivers, such as citizens band (CB) radios, while the device power supply is turned ON.
- Look for nearby transmitters, such as radio or TV stations and towers, and try to avoid coming close to them.
- If this device moves or stops when the device controller is not operated, or if this device operates in a way different than intended, take the following actions.
- Turn the device power supply OFF as soon as it is safe.
- If this device moved in a way different from intended, note down how it was operated immediately beforehand.
- Note down the device operation that could not be activated using the controller.
- Note down the electronic devices in the immediate area that may be sources of radio waves near this device.

Based on these notes, consider the possible cause of radio frequency interference and remove it. If the problem is still not resolved, contact your distributor or customer support. At this time, keep your earlier notes at hand.



If radio frequency interference is suspected, turn the power OFF and disconnect the battery.

1.4.1. General Q&A on EMI and RFI

The following are general questions and answers to help you avoid the effects of EMI and RFI on this device as much as possible. Please use them as reference.

● Where do radio waves come from?

Radio waves are emitted by unidirectional or bidirectional radio devices. Such devices include transceivers, mobile phones, personal computers with communication capabilities, microwave generators, and radio call transmitters. Radio waves are a form of electromagnetic energy, and the strength of the energy increases at closer distances to the transmitting antenna. This electromagnetic field might cause problems for users of electric equipment.

● What kind of movements should I expect if a mobility device is affected by EMI or RFI?

EMI and RFI undergo extremely large dynamic changes and might affect a device depending on conditions such as the following.

- Radio wave frequency and strength

- Structure of the power supply equipment
- Inclination of this device (whether the ground is flat or slanted)
- Whether this device is turned ON and whether it is moving

If this device is affected, there is a possibility of abnormal movement. It may begin moving uncontrollably or stop suddenly. Strong EMI or RFI can also cause the control system to malfunction.

1.4.2. Important information regarding Electro Magnetic Compatibility (EMC)

Below cable information is provided for EMC reference.

Cable	Max. cable length, Shielded/unshielded		Number	Cable classification
AC Power Line	1.5 m	Unshielded	1 Set	AC Power
DC Power Line	1.2 m	Unshielded	1 Set	DC Power

This electrical medical equipment needs special precautions regarding EMC and should be used according to the EMC information provided in the user manual; The equipment conforms to this IEC 60601-1-2 standard for both immunity and emissions. Nevertheless, special precautions need to be observed:

- The equipment is intended for use in the home healthcare environment.
- If the essential performance of the equipment is lost or degraded due to electromagnetic disturbances, unintended acceleration, stop, or control may occur.
- **WARNING:** Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- The use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- **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 Model C Lite, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
- **WARNING:** If the use location is near (e.g. less than 1.5 km from) AM, FM or TV broadcast antennas, before using this equipment, please verify that it is operating normally to assure that the equipment remains safe with regard to electromagnetic disturbances throughout the expected service life.
- If the AC input voltage is interrupted, battery charging will stop. When the power supply is restored, charging will resume automatically. This behavior is normal and does not affect basic safety or essential performance.

During all immunity tests, a digital tachometer was used to monitor the rotating speed of the wheel and a clamp meter was used to monitor the output current of the battery charger to verify the performance of EUT.

EMI Compliance Table (Table 1)

Table 1 – Emission

Phenomenon	Compliance	Electromagnetic environment
RF emissions	CISPR 11 Group 1, Class B	Home healthcare environment
Harmonic distortion	IEC 61000-3-2 Class A	Home healthcare environment
Voltage fluctuations and flicker	IEC 61000-3-3 Compliance	Home healthcare environment

1

MS Compliance Table (Table 2-5)

Table 2 - Enclosure Port

Phenomenon	Basic EMC standard	Immunity test levels Home healthcare environment
Electrostatic Discharge	IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Radiated RF EM field	IEC 61000-4-3	20 V/m 26 MHz-2.5 GHz 80% AM at 1 kHz 10 V/m 80 MHz-2.7 GHz 80% AM at 1 kHz
Proximity fields from RF wireless communications equipment	IEC 61000-4-3	Refer to table 3
Rated power frequency magnetic fields	IEC 61000-4-8	30 A/m 50 Hz or 60 Hz
Proximity magnetic fields	IEC 61000-4-39	30 kHz, CW, 8 A/m 134.2 kHz, pulse modulation 2.1 kHz, 65 A/m 13.56 MHz, pulse modulation 50 kHz, 7.5 A/m

Table 3 - Proximity fields from RF wireless communications equipment

Test frequency (MHz)	Band (MHz)	Immunity test levels Home healthcare environment
385	380-390	Pulse modulation 18 Hz, 27 V/m
450	430-470	FM, ± 5 kHz deviation, 1 kHz sine, 28 V/m
710	704-787	Pulse modulation 217 Hz, 9 V/m
745		
780		
810	800-960	Pulse modulation 18 Hz, 28 V/m
870		
930		
1720	1700-1990	Pulse modulation 217 Hz, 28 V/m
1845		
1970		
2450	2400-2570	Pulse modulation 217 Hz, 28 V/m
5240	5100-5800	Pulse modulation 217 Hz, 9 V/m
5500		
5785		

Table 4 - Input a.c. power Port

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

Table 5 - Signal input/output parts Port

Phenomenon	Basic EMC standard	Immunity test levels Home healthcare environment
Conducted disturbances induced by RF fields	IEC 61000-4-6	3 V, 0.15 MHz-80 MHz 6 V in ISM bands and amateur radio bands between 0.15 MHz and 80 MHz 80% AM at 1 kHz

1

1.4.3. FCC and ISED information

The controller on the WHILL Model C Lite contains the following wireless communication modules that are regulated by the FCC (Federal Communications Commission) and the ISED (Innovation, Science and Economic Development Canada).

The controller is labelled with an FCC ID and an ISED certification number. The label is accessible without the use of tools by removing the controller as shown in Section “Switching the position of the controller”.

● FCC Information

This device complies with part 15 subpart B and C of the FCC rules. Operation is subject to the following two conditions.

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

RF Exposure Warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

● ISED Information

This Class B device complies with Canadian ICES-3 (B). This device contains licence-exempt transmitters/receivers that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe B est conforme à la norme NMB-3 (B) du Canada. L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) L'appareil ne doit pas produire de brouillage; (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the ISED radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been evaluated for and shown compliant with the ISED Canada RF Exposure limits under mobile exposure conditions (antennas are greater than 20 cm from a person's body).

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil sans fil est inférieure à la limite d'exposition aux fréquences radio d'ISDE Canada. Utilisez l'appareil sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce dispositif a été évalué et démontré conforme aux limites d'exposition aux RF d'ISDE Canada dans des conditions d'exposition à des appareils mobiles (antennes sont supérieures à 20 cm à partir du corps d'une personne).

1.5. Labels on this device

Warning labels are attached to this device in areas that require attention to safety when operating the device. Labels also indicate information about the device and other important information regarding its use.

There may be additional labels not described in this manual, depending on the sales area or model.

CAUTION



- Do not remove the labels.
The labels contain important information.

1.6. Reporting of serious incident

In the event that a malfunction occurs on this device, contact your distributor or customer support. For details on how to contact your distributor or customer support, refer to “Contact information” (Page 122).

2. About this device

This device is intended for use in pedestrian areas. A driver's license is not required. When driving, please use pedestrian paths and observe the traffic rules and manners expected of a pedestrian. Use this device only for its intended purpose. Do not use it as a play apparatus or for other applications.

2.1. Checking the condition of the package

Before unpacking this device, make sure that the packaging box is free of damage or signs of unpacking during transportation. In the event that there is damage or signs of unpacking during transportation, do not use this device, and consult your distributor or customer support.

2.2. Packaged items

The following items are packaged with this device. Before using this device, be sure to check that there are no missing items or damaged parts on this device. In the event that any items are missing or damaged, contact the distributor or customer support.

- Model C Lite
- Seat cushion
- Battery
- Charger
- User manual (this manual)
- Warranty
- App pairing ID/password label (only for devices that support the app functions)



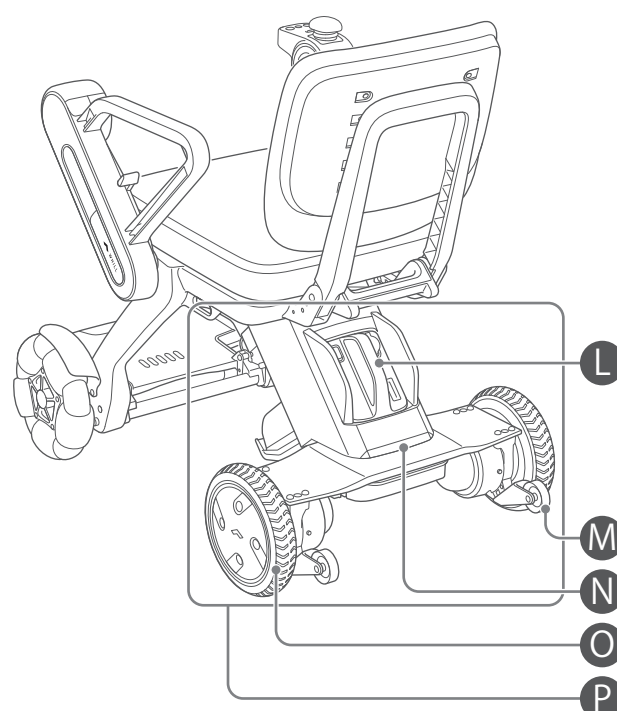
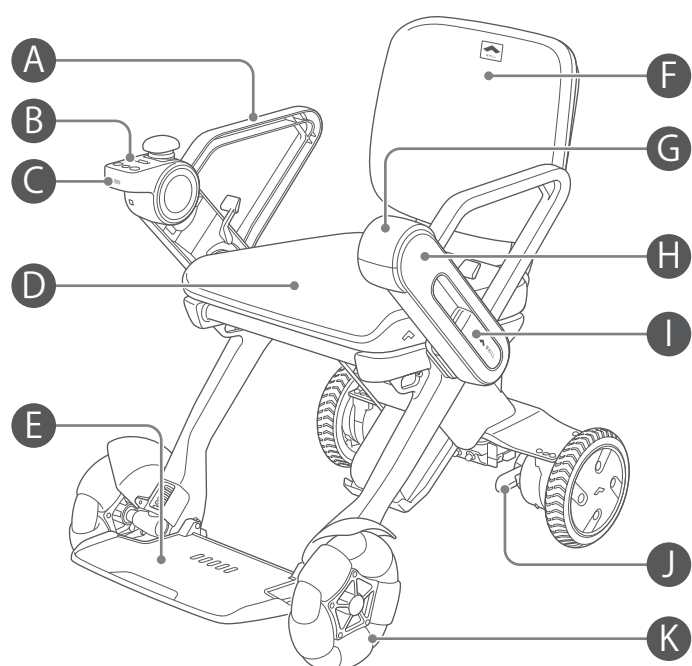
Be careful not to scratch the packaged items when opening packages.

* Depending on the countries and areas, a device with accessories such as calf straps, cloth guards, extra back support cushions, rear fenders, a front light and reflectors is designated as standard.

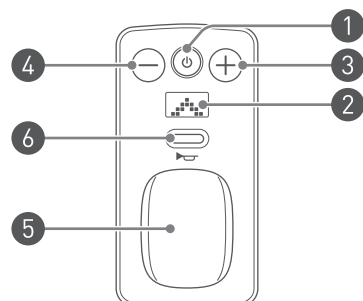
2.3. Names and functions of parts

■ Device

*The illustration is a model with the controller on the right side.



- A Armrest**
- B Controller**



- 1 Power button**
Turns ON/OFF the device.
- 2 Display**
- 3 Speed select button "+"**
Increases the maximum speed.
- 4 Speed select button "-"**
Decreases the maximum speed.
- 5 Joystick**
Controls the forward, backward, left, and right movements of the device. The degree of joystick inclination can also control acceleration and deceleration.
- 6 Horn button**
Turns ON/OFF the alarm tone emitted by the device.

- C Speaker**

- D Seat cushion**
- E Footrest**
- F Back support**
- G Arm**
- H Armcover**
- I Bolt cover**
- J Brake release lever**

This lever is for locking/unlocking the brakes when moving this device manually. For details, refer to "5.7. Releasing the brakes" (Page 83).

- K Front wheel**

- L Battery**

For details, refer to "4.1. Battery and charger" (Page 55).

- M Anti-tip roller**

- N Rear light**

Lights up simultaneously with power ON.

- O Rear wheel**

- P Main body**

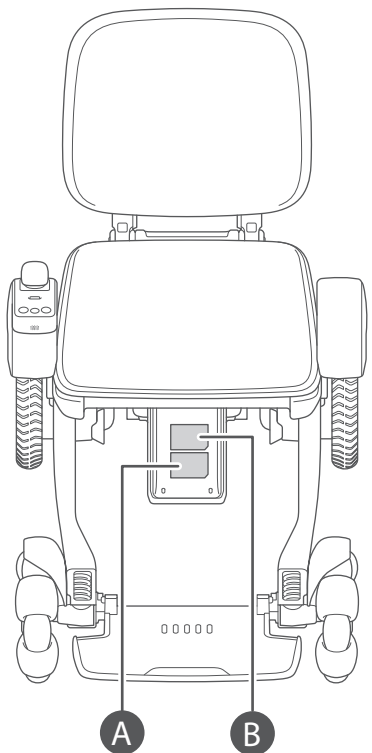
The main body consists of the major components that drive the device, including the battery, motor, suspension, brakes, and rear wheels.

■ **Charger**

For details, refer to “4.1. Battery and charger” (Page 55).

■ **Information labels**

2



A Primary identification label

Indicates the serial number and UDI (Unique Device Identifier). When contacting the distributor or customer support, check the serial number by referring to this label.



B Manufacturer information label

Indicates the manufacturer and manufacturer's address.



2.4. Accessories

Be sure to use only authentic or designated accessories.

For the accessories that can be installed onto this device, contact your distributor or customer support. Information on accessories can also be checked on the WHILL website (<https://whill.inc>).

3. Assembly and adjustment

This section explains how to assemble the device and how to adjust each part.

Assemble this device in the order described in this user manual.

WARNING



- **Take care not to drop the battery and charger when removing them from the box or installing them on this device.**
Otherwise, there is a risk of unexpected accidents such as injury or the battery being damaged or igniting.
- **Perform assembly on a flat and level surface.**
Otherwise, there is a risk of unexpected accident.
- **Before performing adjustments, remove the battery, and apply the brakes on a flat and level surface.**
Otherwise, there is a risk of injury or electric shock, or unexpected accident.



- **Assemble this device and adjust the parts in the order described in this user manual. Do not perform any adjustment, repair, or modification that is not described in this manual.**
There is a risk of damaging the parts and impairing the product safety, resulting in injury to the user or others in the immediate surroundings. Performing any repair or modification that is not described in this manual will invalidate the warranty.
- **Do not perform assembly in a wet environment or if this device is wet.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.
- **When removing this device from the box, firmly hold it and take care not to drop it or let it tip over.**
There is a risk of injury to the user and damage to parts as a result of falling.

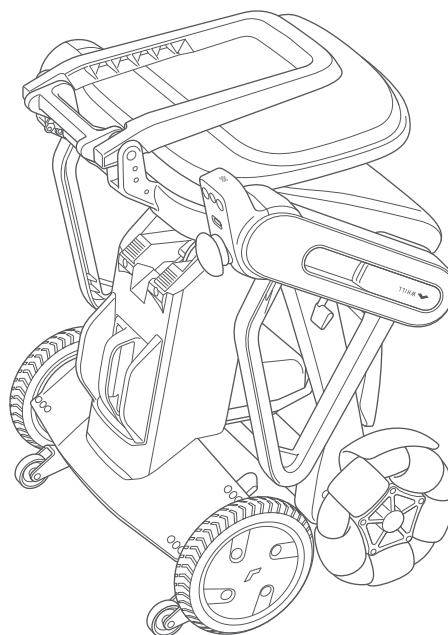


If you cannot perform assembly or adjustment by yourself, contact your distributor or customer support.

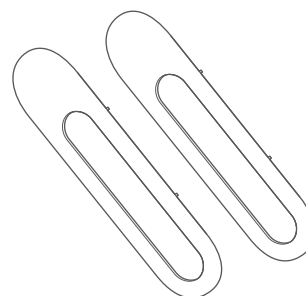
3.1. Names of parts

The following parts are packaged with this device.

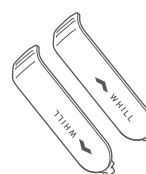
- WHILL Model C Lite



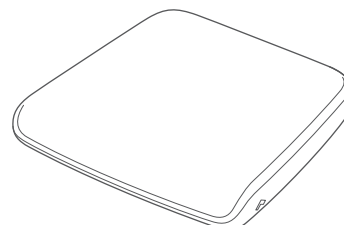
- Armcovers



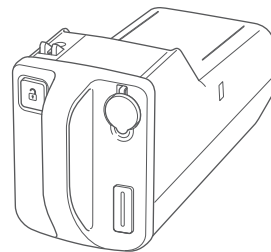
- Bolt covers



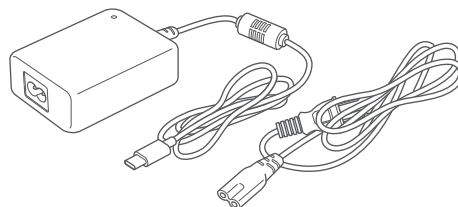
- Seat cushion



- Battery



- Charger



3

3.2. Required tools

Use the following tool for assembling and adjusting this device. The tool is not provided with this device.

1. Hex wrench, 3 mm

3.3. Assembly procedures

When assembling this device, pay close attention to the following points.

WARNING



- **Perform assembly on a flat and level surface.**
Otherwise, there is a risk of unexpected accident.
- **Be sure to perform the work with the battery removed.**
Otherwise, there is a risk of injury, electric shock or unexpected accident due to this device moving unexpectedly.



- **Do not press a sharp object against or apply a load to the cables.**
A damaged cable may cause malfunctions or unexpected movement.
- **Do not adjust any part not described in this manual.**
There is a risk of device malfunction.
- **Do not touch the battery connector socket or battery connector port directly, and make sure that they do not become wet or come into contact with foreign objects.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.
- **Do not touch the controller cable connector or main body cable connector directly, and make sure that they do not become wet or come into contact with foreign objects.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.

 CAUTION

- **When assembling, be careful that your fingers do not become caught.**
There is a risk of injury to the user and damage to parts.
- **Pay attention to the following points and perform adjustment in order to ensure safe use.**
Otherwise, there is a risk of unexpected accident.
 - Before operating this device, adjust the adjustable parts of the device to positions and angles that are easy to use.
 - When performing assembly and adjustments, tighten the bolts at the specified tightening torque. If a tool whose torque can be controlled is not available, firmly tighten the bolts so that they are not loose.
 - Before performing assembly or adjustments, be sure to get off this device.



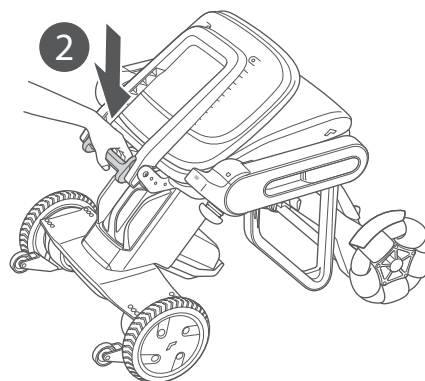
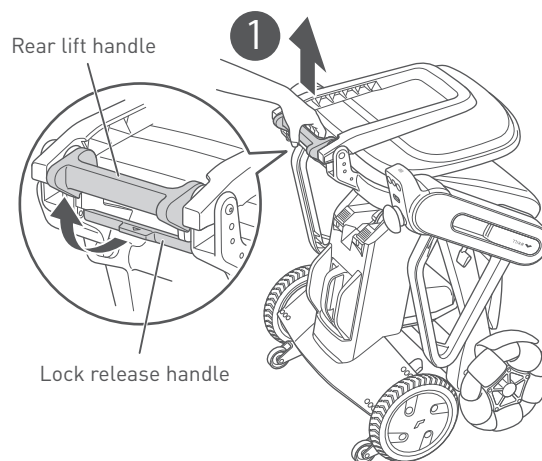
- **Do not scratch or allow dirt to stick to the display of the controller.**
There is a risk that the display may become damaged or illegible.
- **Do not drop, step on, or apply strong impact to the controller, and do not immerse it in water.**
There is a risk of damaging the controller or buttons, rendering the device inoperable.
- **Do not disassemble the controller.**
Doing so may cause malfunction of the controller.
- **When assembling or adjusting the device, grab only the handle and parts as described in this manual, and do not hold the device by any other areas.**
There is a risk of hand injury if it gets caught in this device.

3.3.1. Unfolding the device

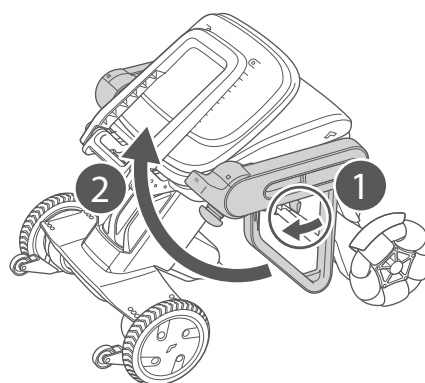
Installation and adjustment work cannot be performed if the device is folded. Be sure to unfold the device before starting the work.

When unfolding the device, follow the procedure below with the battery already removed.

1. ① Grasp the rear lift handle and the lock release handle, pull up gently, and then ② lower the device slowly. Lower the device until it clicks into the open position.



2. ① Move the arm release lever in the direction of the arrow, and ② rotate the arm in the direction of the arrow. Rotate the arm until it clicks into place. Rotate the arm on the opposite side in the same way.



3. Tilt the back support backward.



WARNING

Inserting a finger or other body part into the connecting components and moving parts of this device may result in an injury.

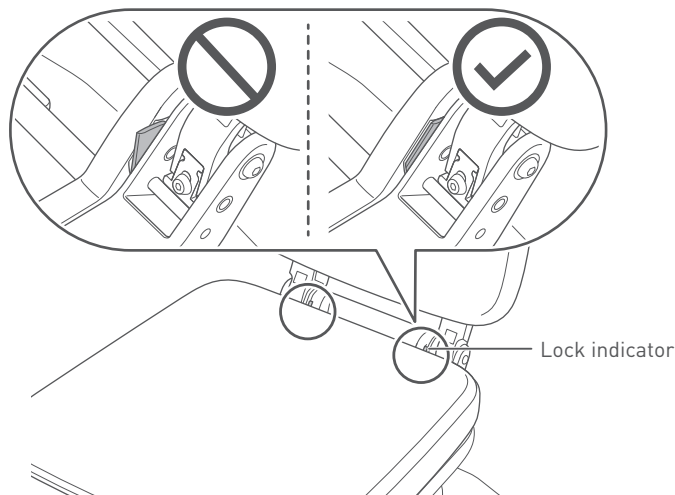
When assembling, adjusting, or transporting this device, do not touch any component other than those indicated in the manual.





After folding or unfolding the device, be sure to check the lock indicator to ensure that the device is properly folded or unfolded.

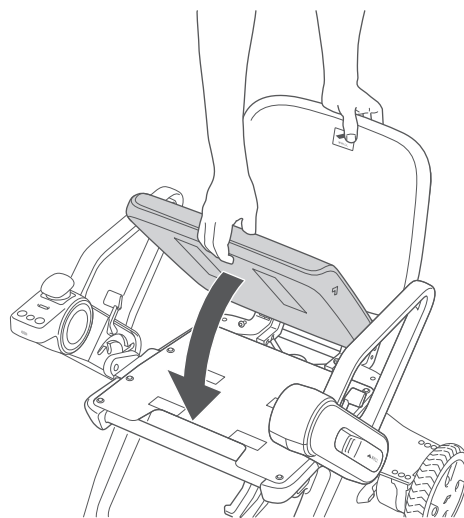
When the device is not correctly unfolded, the red part inside the lock indicator sticks out after the lock release handle is released.



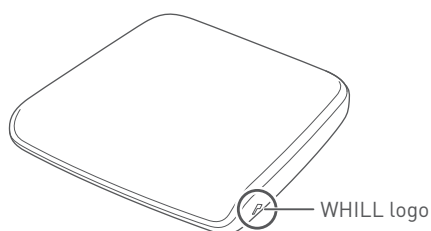
3

3.3.2. Installing the seat cushion onto the seat

1. Install the seat cushion on top of the seat base with the hook and loop fasteners aligned.



Place the seat cushion so that WHILL logo is on the front left side.



3.3.3. Installing the battery

WARNING



- Do not touch the battery connector socket or battery connector port directly, and make sure that they do not become wet or come into contact with foreign objects. When inserting the battery, check that no foreign material is adhering to the battery.

Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.

- Do not use damaged batteries or batteries with a damaged or cracked battery charging port cap.

There is a risk of electric shock, short circuit, or fire caused by liquid or foreign objects getting inside. For details on the battery, refer to "4.1. Battery and charger" (Page 55).

CAUTION



- If this device is not used for a long period, fully charge the battery before storing. Charge the battery at least once a month.

There is a risk that the battery may get excessively depleted and cannot be charged.

- Be sure to close the battery charging port cap when the battery charging port is not in use.

There is a risk of a short circuit caused by liquid or foreign objects getting inside.

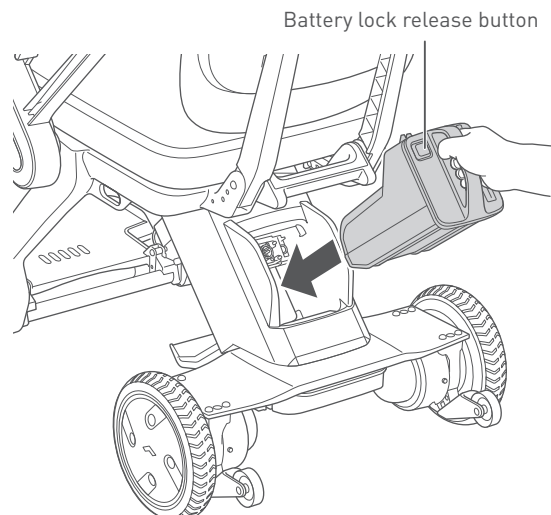
- Be sure to use only an authentic WHILL battery and charger.

It is also possible to use a commercially available USB Type-C charger if the output is 100 W or more. However, we have not tested the operation of commercially available chargers and cannot guarantee stable operation or safety.

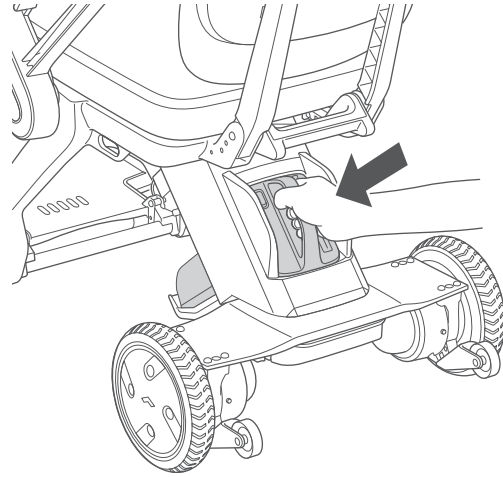


- If this device does not start up properly even though a charged battery is inserted and the power is turned ON after 5 seconds have elapsed, remove the battery, wait 10 seconds, and then insert the battery again.
- If this device does not start up even after removing and inserting the battery several times, there is a risk that the device or battery is malfunctioning. Contact your distributor or customer support.

1. Check that the battery lock release button is not pressed.



2. Grip the battery handle, and insert the battery straight until it clicks in place in the battery compartment. When it is difficult to insert the battery, push it from the front with force.



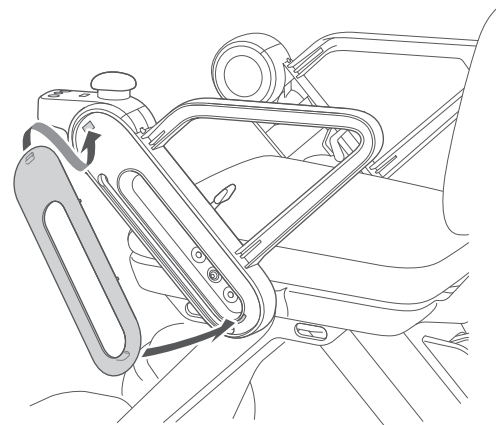
3



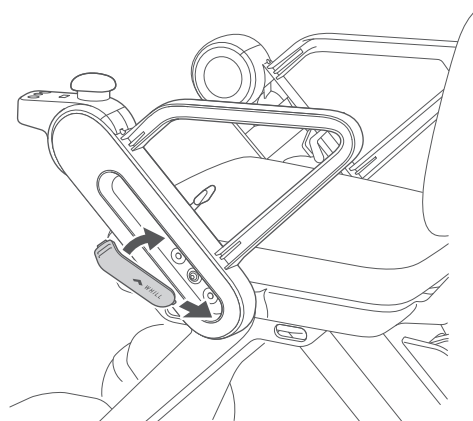
- Charge the battery before using this device for the first time.
- For the battery charging procedure, refer to "4.2. Charging procedure" (Page 56). Take care not to drop the battery. Otherwise, there is a risk of injury or the battery being damaged or igniting.
- If the battery cannot be inserted completely, foreign material may be adhered to the battery connector socket or battery connector port. If there is any foreign material, remove it with a small brush, etc.

3.3.4. Installing the armcover and bolt cover

1. After inserting the tab at the top of the armcover into the rectangular hole on the upper part of the outside of the arm, insert the tab at the bottom of the armcover into the hole on the lower part of the arm, and then press the small tabs on both sides of the armcover (2 locations on each side) into place as well.



2. Insert the lower tab of the bolt cover into the bolt cover hole so that the adjustment bolts on the side of the arm are hidden, and then insert the upper tab into the other hole.
3. Install the armcover and the bolt cover on the opposite side in the same way.



3.4. Adjustment procedures

The following device adjustments can be made to meet the user's seating needs.

- 3.4.1. Adjusting the height of the armrest (Page 33)
- 3.4.2. Switching the position of the controller (Page 35)
- 3.4.3. Adjusting the back support height (Page 45)
- 3.4.4. Adjusting the back support angle (Page 47)
- 3.4.5. Adjusting the footrest height (Page 49)

3

WARNING



- **Before performing adjustments, turn the power supply OFF, and apply the brakes on a flat and level surface.**
Otherwise, there is a risk of unexpected accident.
- **Do not touch the metal terminals of the connectors, allow them to become wet, or bring any metal or other foreign objects close to them. Check that no foreign material is adhering to the parts when assembling.**
Otherwise, there is a risk of injury or electric shock and of damage to the device or its parts.



- **Do not press a sharp object against or apply a load to the cables.**
A damaged cable may cause malfunctions or unexpected movement.

CAUTION



- **When adjusting, be careful that your fingers do not become caught. Also, do not exert unnecessary force.**
There is a risk of injury to the user and damage to parts.
- **Pay attention to the following points and perform adjustment in order to ensure safe use.**
Otherwise, there is a risk of unexpected accident.
 - Before operating this device, adjust the adjustable parts of the device to positions and angles that are easy to use.
 - When performing assembly and adjustments, tighten the bolts at the specified tightening torque. If a tool whose torque can be controlled is not available, firmly tighten the bolts so that they are not loose.
 - Before performing assembly or adjustments, be sure to get off this device.



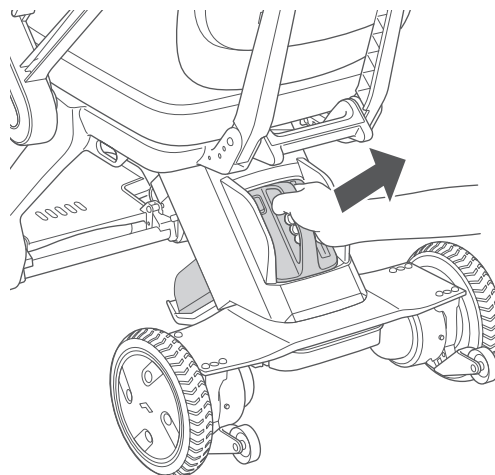
- **Do not scratch or allow dirt to stick to the display of the controller.**
There is a risk that the display may become damaged or illegible.

3.4.1. Adjusting the height of the armrest

The procedure below describes an example where the controller is installed on the right arm.

1. Remove the battery.

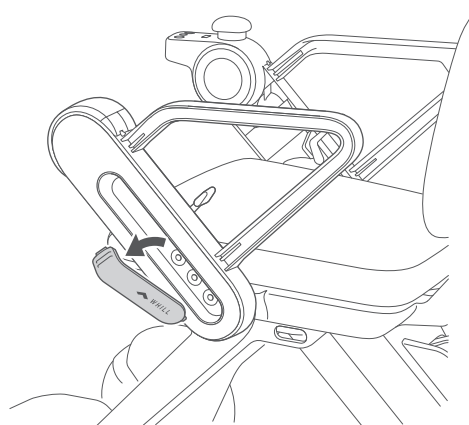
For the removal procedure, refer to "4.1.1. Removing the battery" (Page 55).



2. Remove the bolt cover.

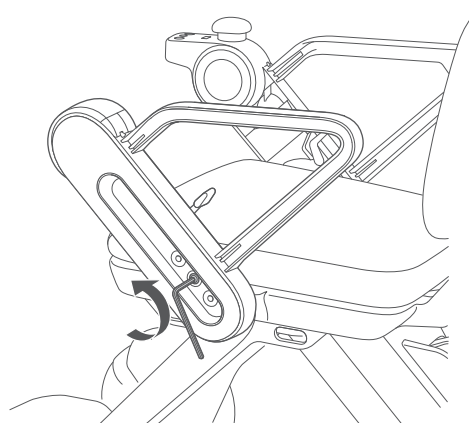
Gently press in on the top of the bolt cover when removing it.

If it is difficult to remove the bolt cover by hands, cover the top of a flathead screwdriver with a thin cloth, then insert the tip into the gap between the upper tab of the cover and the hole in the arm frame, and pry it off.



3. Remove the arm bolt with the specified tool.

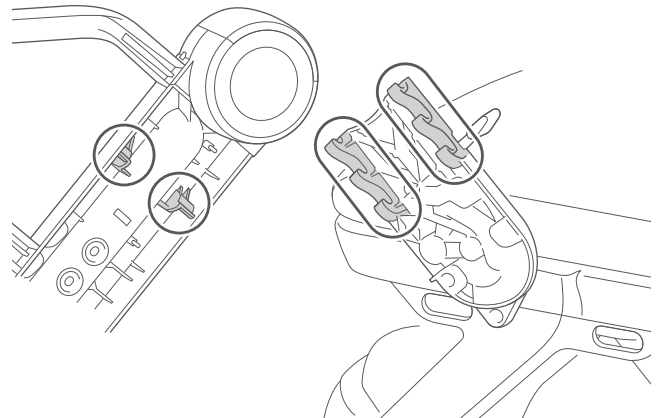
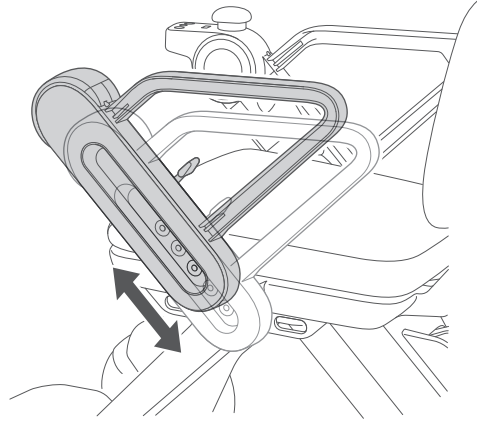
Tool: Hex wrench, 3 mm



4. Remove the arm frame and adjust the arm installation position so that the top of the arm is at the appropriate height.

Adjust the arm frame so that the projections on the arm frame fit into the grooved parts on the device.

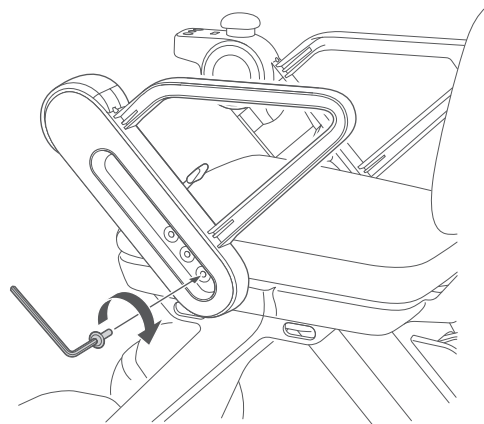
The arm height can be adjusted in 3 stages.



5. Secure the arm frame by fastening the arm adjustment bolt that was removed in Step 3 with the specified tool.

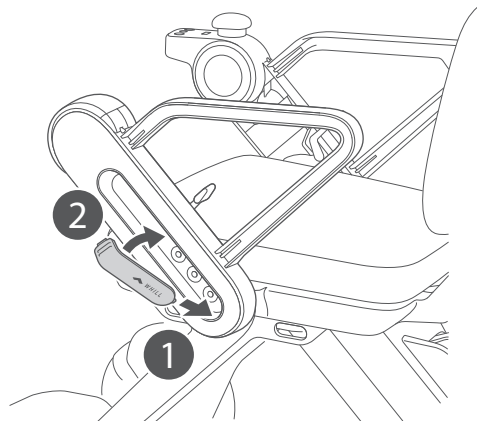
Tighten the bolt firmly with the specified tool. If the bolt is loose, tighten it. Tool: Hex wrench, 3 mm

Tightening torque: 1.5 Nm



6. Install the bolt cover.

- ① Align the tab at the bottom of the bolt cover with the mounting hole on the bottom of the arm frame, and insert the bolt cover.
- ② Then, fit the upper tab into the hole at the upper part of the arm frame, and secure the bolt cover in place.





After adjustment is completed, try to move the arm up and down to check that it is secured in place.

7. Adjust the arm height on the opposite side in the same way.



Make certain the cable is not caught in the cover.

8. Insert the battery.

For the installation procedure, refer to "3.3.3. Installing the battery" (Page 30).

3

3.4.2. Switching the position of the controller

The controller can be installed on the right or left arm.

The procedure below describes an example of switching the controller from the right arm to the left arm.

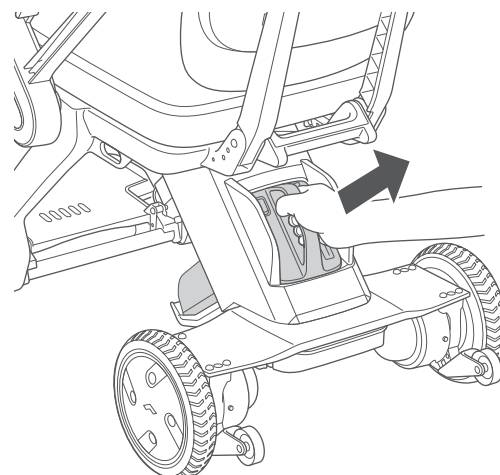
⚠ CAUTION



- Do not lean on the controller, place the removed controller upside down, or apply an excessive load to the controller. Do not press the controller or buttons with excessive force or operate them with a sharp object.
There is a risk of damaging the controller or buttons, rendering the device inoperable.
- Do not drop, step on, or apply strong impact to the removed controller, and do not immerse it in water.
There is a risk of damaging the controller or buttons, rendering the device inoperable.
- Do not press forcefully or scratch the display, and do not touch it with dirty hands.
There is a risk that the display may become damaged or illegible.
- Do not disassemble the controller.
Doing so may cause malfunction of the controller.

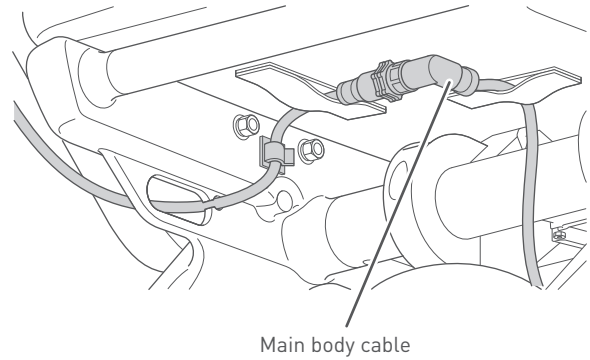
1. Remove the battery.

For the removal procedure, refer to "4.1.1. Removing the battery" (Page 55).



2. Disconnect the controller cable connector under the seat.

Detach the hook and loop fasteners under the seat and remove the cable. Then, loosen the lock at the base of main body cable by turning it counterclockwise, and disconnect the connector.

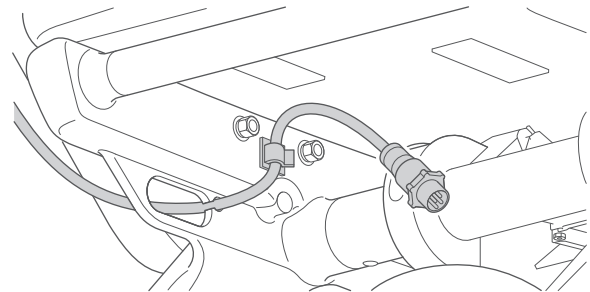


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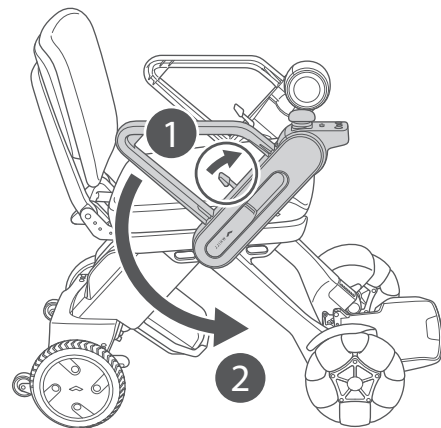
- When disconnecting the controller cable connector, loosen the lock at the base of the main body cable connector by turning it counterclockwise.
- When disconnecting the connector, do not pull forcefully. There is a risk of breaking the cables.

3. Remove the controller cable from the cable holder clip (1 location) on the inner side of the seat frame and from the cable fixing recess on the tie-down hook attachment point (1 location).



4. Pull the right arm down toward the back.

- 1** Move the arm release lever in the direction of the arrow.
The arm is unlocked.
- 2** Rotate the arm backward.
Rotate the arm until it clicks into place.

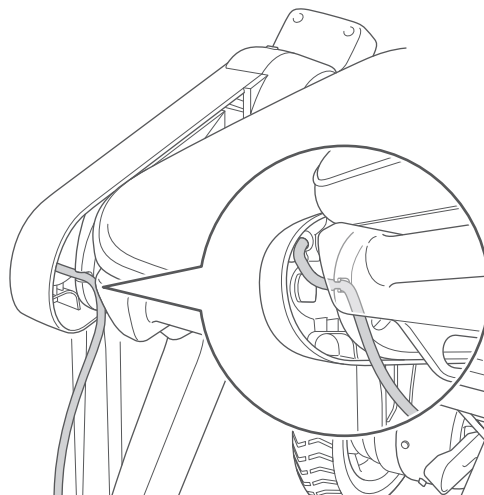


5. Remove the bolt cover from the right arm, and then remove the armcover.

Remove the bolt cover and armcover from the left arm in the same way.

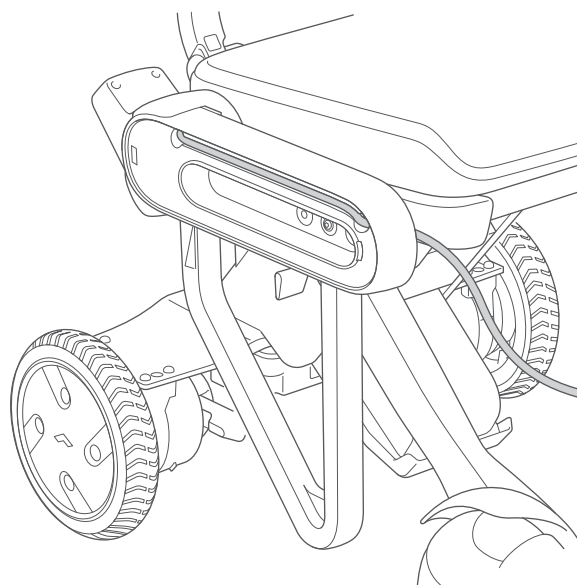
6. Remove the cable from the arm.

- ① Remove the cable from the groove on the inner side of the base section of the arm.
- ② Pull the cable out through the hole in the base section of the arm.



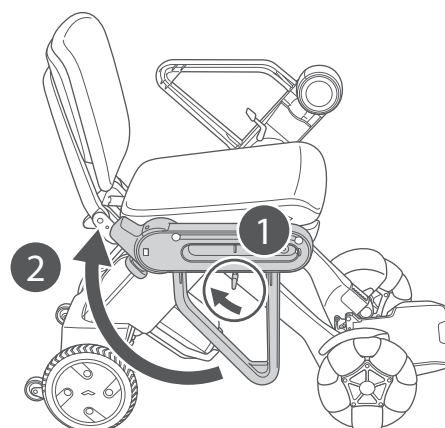
3

- ③ Remove the cable from the groove along the outside of the right arm.



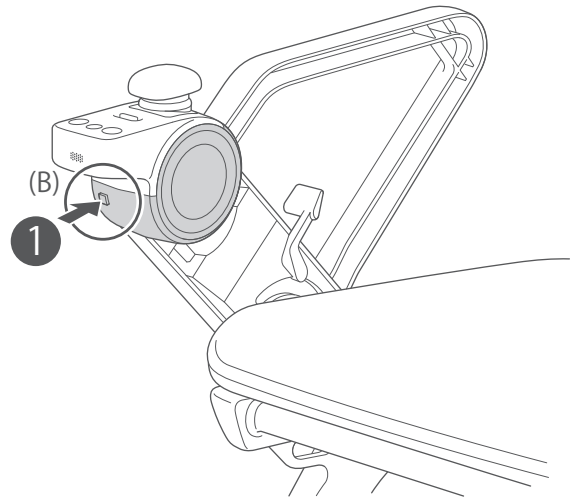
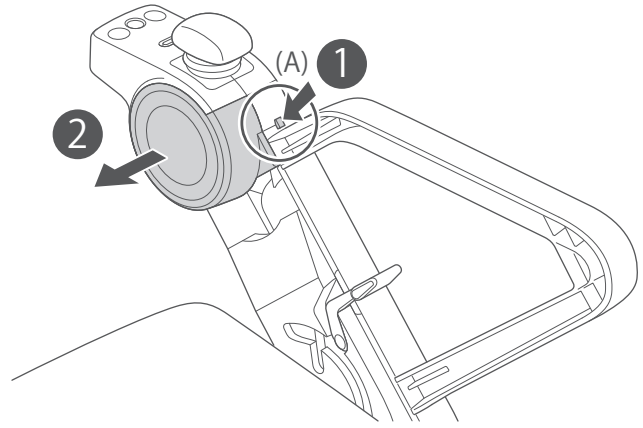
7. Raise the right arm and return it to the original position.

- ① Move the arm release lever in the direction of the arrow. The arm is unlocked.
- ② Rotate the arm forward. Rotate the arm until it clicks into place.



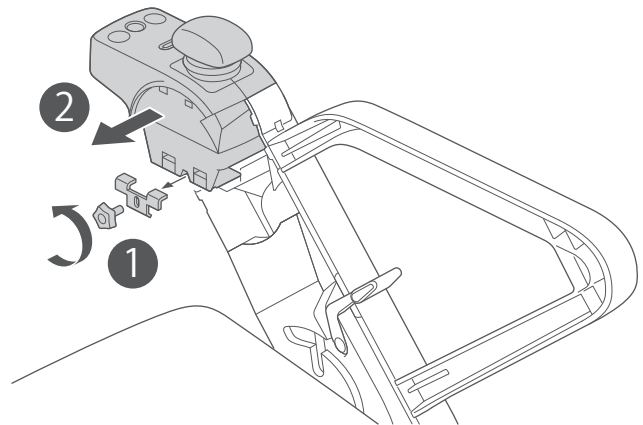
8. Remove the right arm inner cover.

- ① Press the location shown by either arrow (A) or (B) in the figure. This releases the inner tab, allowing the arm inner cover to be detached.
- ② Remove the arm inner cover.



9. Remove the controller from the right arm.

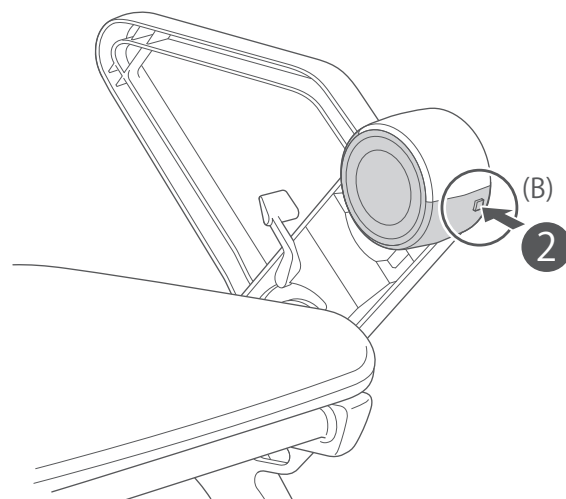
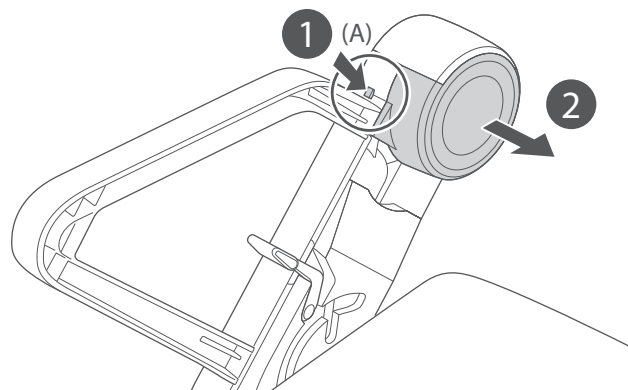
- ① Turn the screw to remove it together with the fixture.
- ② Remove the controller by sliding it in the direction of the arrow.



Before removing the controller from the arm, make sure that the cable is disconnected from the device. Do not pull forcefully on the controller cable. There is a risk of breaking the cable when connected to the controller.

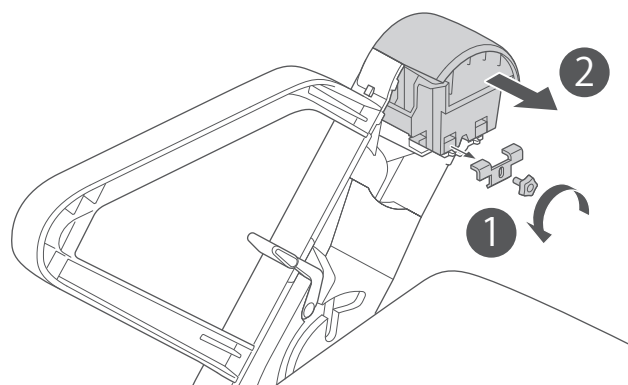
10. Remove the left arm inner cover.

- ① Press either location shown by the arrows in the figure to release the tab (1 of 2 locations), and detach the arm inner cover.
- ② Remove the arm inner cover.



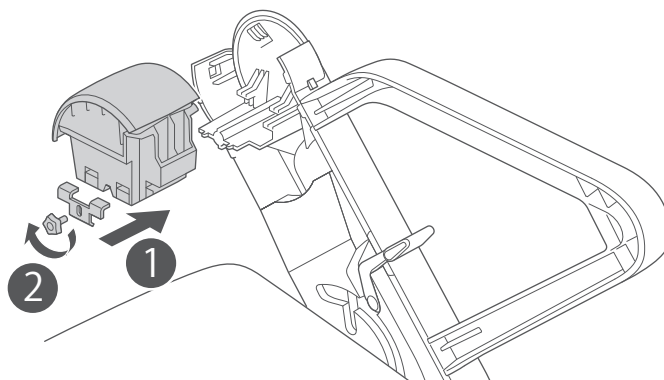
11. Remove the handrest from the left arm.

- ① Turn the screw to remove it together with the fixture.
- ② Remove the handrest by sliding it in the direction of the arrow.



12. Install the handrest removed in Step 11 to the right arm.

- ① Fit the grooved parts of the handrest onto the projections on the arm, then slide the handrest.
- ② Secure the handrest by firmly tightening the screw and fixture removed in Step 11.



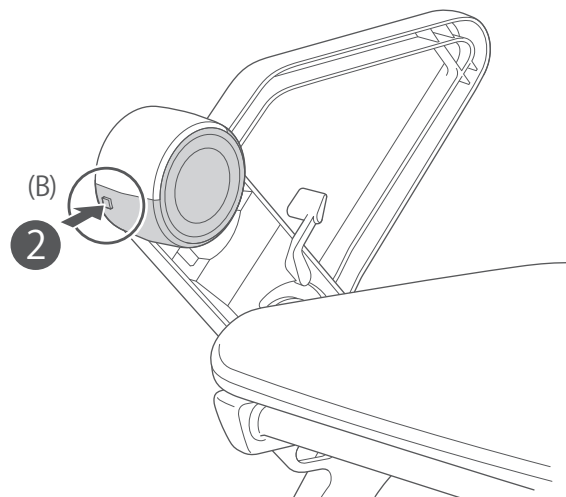
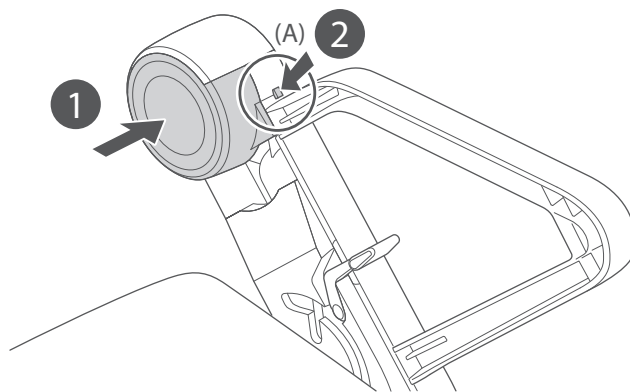
If any parts become loose and the movement becomes unstable after adjustment is performed, use a screwdriver or other tool to firmly tighten the loose parts.

13. Install the arm inner cover removed in Step 8 to the right arm.

- ① Align the tab on the arm inner cover with the groove on the arm, and position it in the correct orientation.
- ② Push in until the tabs at locations (A) and (B) in the figure are properly seated.

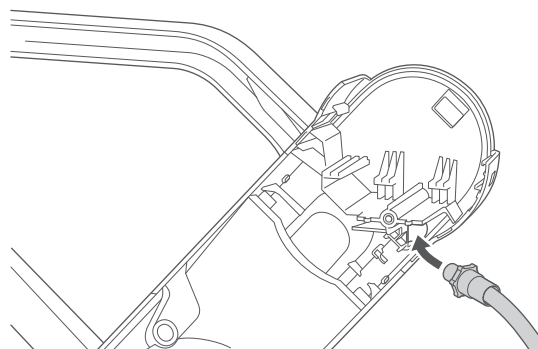


Try to move the round unit at the head of the arm up, down, left, and right, and check that it is secured in place.



14. Install the controller cable to the left armrest.

Pass the cable connected to the controller through the hole at the upper part of the left arm frame, from the inside of the arm to the outside.

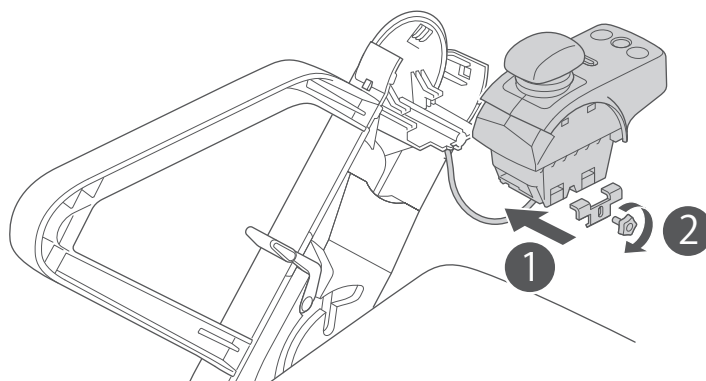


15. Install the controller removed in Step 9 to the left armrest.

- ① Fit the grooved parts of the controller onto the projections on the arm, then slide the controller.
- ② Secure the controller by firmly tightening the screw and fixture removed in Step 10.



- Try to move the controller up, down, left, and right, and check that it is secured in place.
- If any parts become loose and the movement becomes unstable after adjustment is performed, use a screwdriver or other tool to firmly tighten the loose parts.



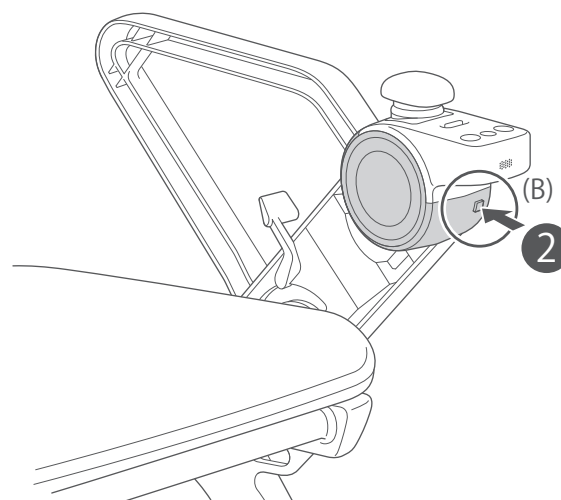
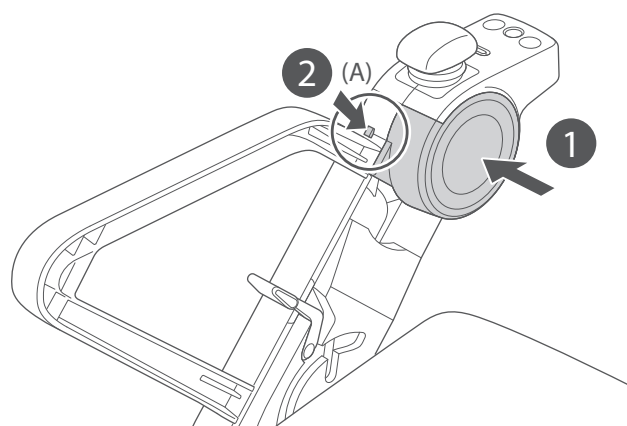
3

16. Install the arm inner cover removed in Step 10 to the left armrest.

- ① Align the tab on the arm inner cover with the groove on the arm, and position it in the correct orientation.
- ② Push in until the tabs at locations (A) and (B) in the figure are properly seated.

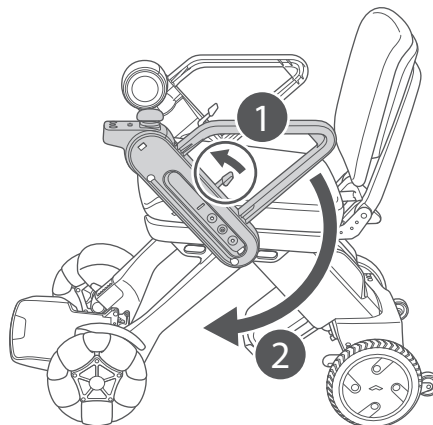


Try to move the round unit at the head of the arm up, down, left, and right, and check that it is secured in place.



17. Pull the left arm down toward the back.

- 1 Move the arm release lever in the direction of the arrow. The arm is unlocked.
- 2 Rotate the arm backward. Rotate the arm until it clicks into place.



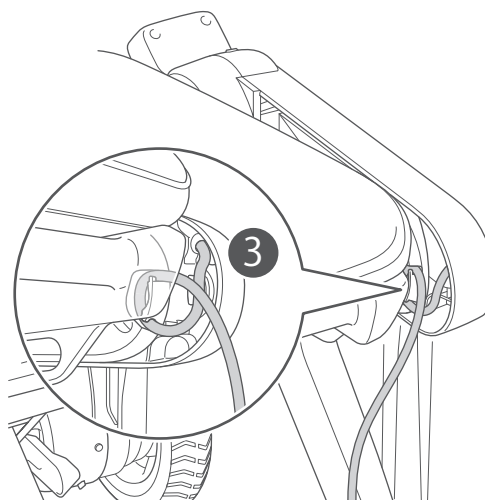
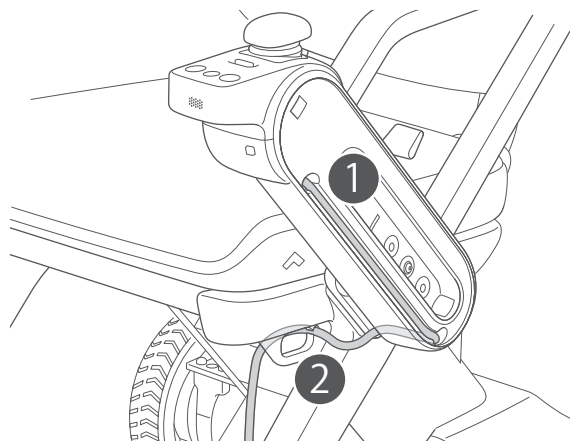
3

18. Fit the cable into place.

- 1 Fit the cable into the groove along the outside of the left arm.
- 2 Pass the cable through the hole in the base section of the arm.

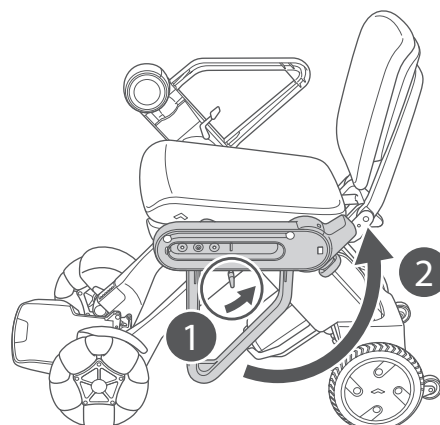
- 3 Fit the cable into the two grooves on the inside of the arm.

When the arm height is set to the highest position, there is less slack in the cable, so you only need to fit the cable into one of the grooves on the inside of the arm.

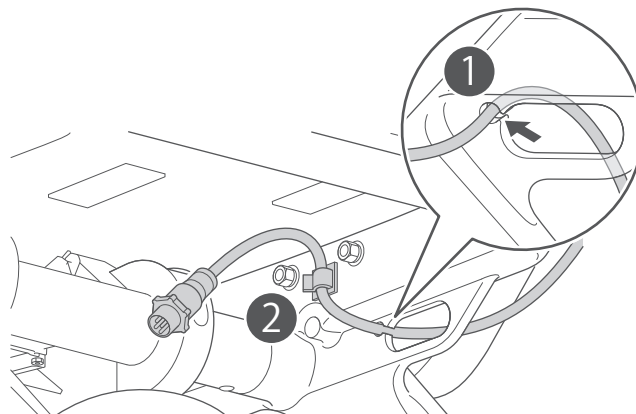


19. Raise the left arm and return it to the original position.

- 1 Move the arm release lever in the direction of the arrow. The arm is unlocked.
- 2 Rotate the arm forward. Rotate the arm until it clicks into place.

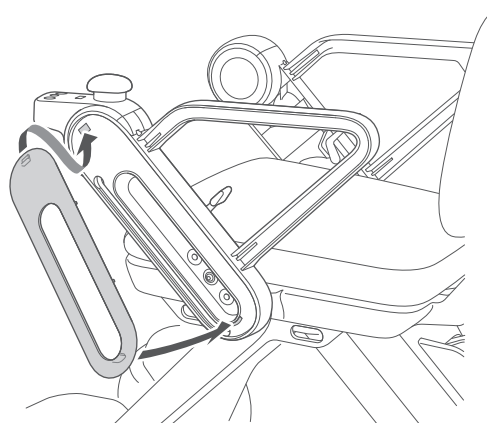


20. Pass the controller cable through the inside of the tie-down hook attachment point on the underside of the seat frame, and secure it in the ① recessed part (1 location) of the tie-down hook attachment point and in the ② cable holder clip (1 location) on the inner side of the seat frame.

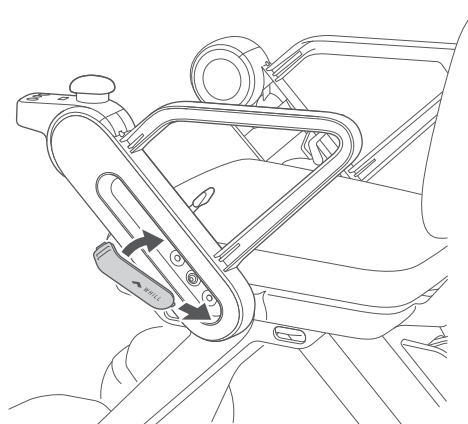


21. Install the left and right armcovers and bolt covers removed in Step 5.

- ① After inserting the tab at the top of the armcover into the rectangular hole on the upper part of the outside of the arm, insert the tab at the bottom of the armcover into the hole on the lower part of the arm, and then press the small tabs on both sides of the armcover (2 locations on each side) into place as well.



- ② Insert the lower tab of the bolt cover into the bolt cover hole so that the adjustment bolts on the side of the arm are hidden, and then insert the upper tab into the other hole.
- ③ Install the armcover and the bolt cover on the opposite side in the same way.

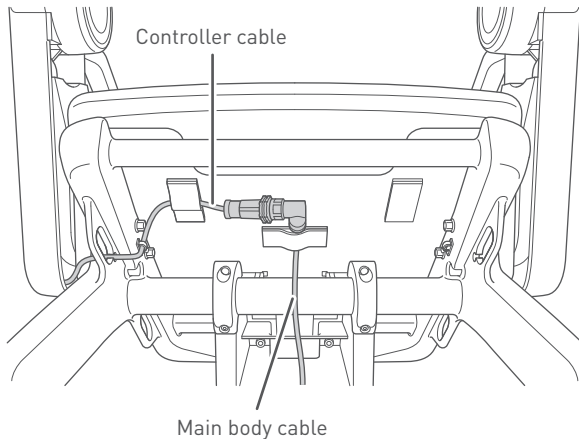


22. Wire the cable.

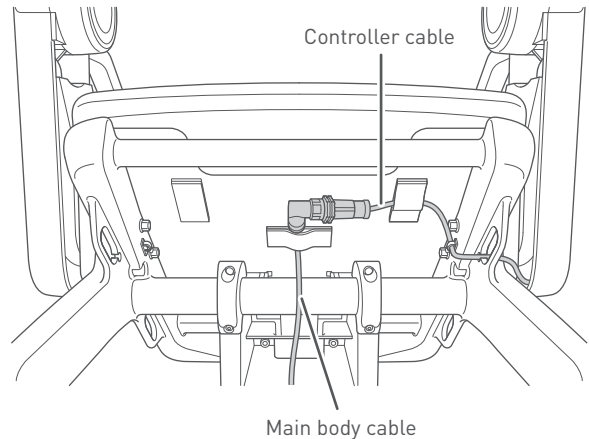
Wire the cable by passing it through the hook and loop fastener on the bottom side of the seat base.



The wiring method varies depending on whether the controller is installed on the left or right side.



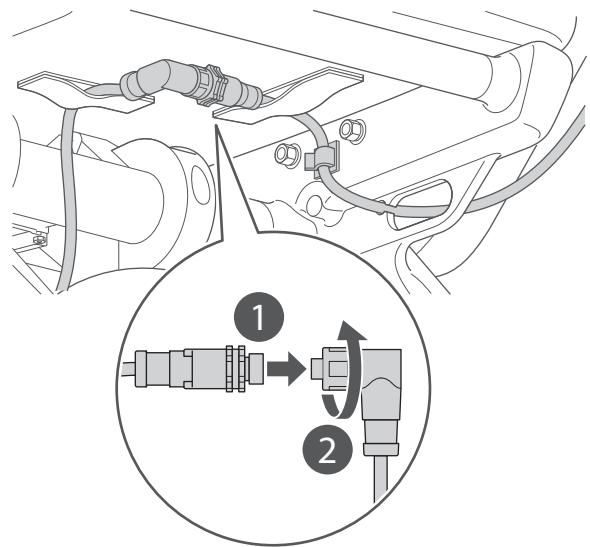
* Wiring when controller is installed on right arm



* Wiring when controller is installed on left arm

23. Connect the connector of the cable.

- 1 Carefully align the connectors of the controller cable and main body cable so that the ends fit together, while inserting the inner metal pin straight into the hole.
- 2 Rotate the lock at the base of the main body cable connector in the direction of the arrow to secure the connection.



24. Insert the battery.

For the installation procedure, refer to "3.3.3. Installing the battery" (Page 30).

25. Turn ON the power and check that the device moves forward, backward, left, and right without problems.

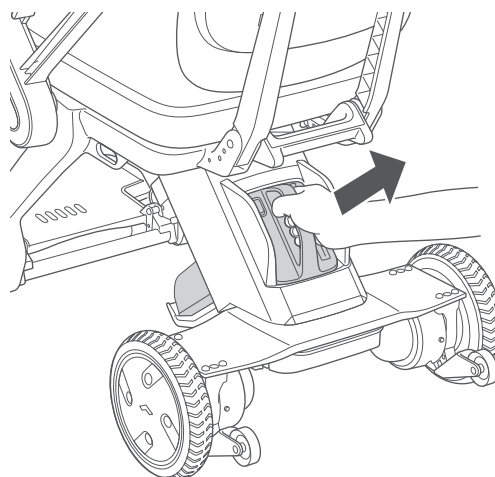


If an error appears on the display, check "11. Troubleshooting" (Page 108). If the issue persists, contact your distributor or customer support.

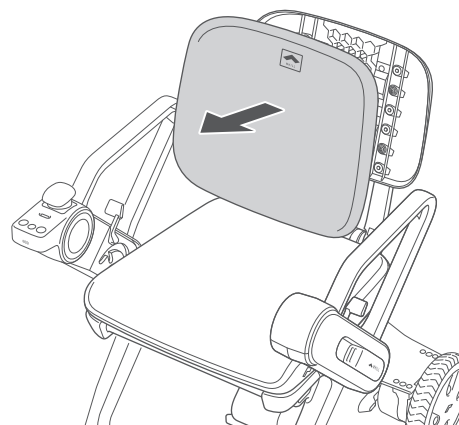
3.4.3. Adjusting the back support height

1. Remove the battery.

For the removal procedure, refer to "4.1.1. Removing the battery" (Page 55).

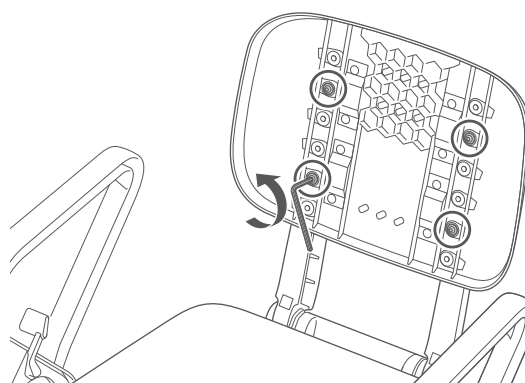


2. Remove the back support cushion from the back support plate.



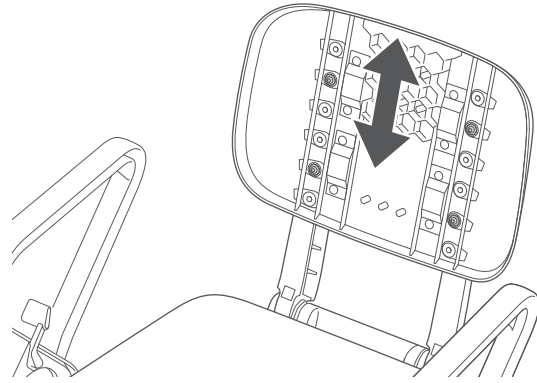
3. Remove the two back support plate screws (M5, 20 mm) on each side of the back support frame (4 locations in total).

Tool: Hex wrench, 3 mm



4. Change the position of the back support to your preferred height by changing which holes are used to secure it.

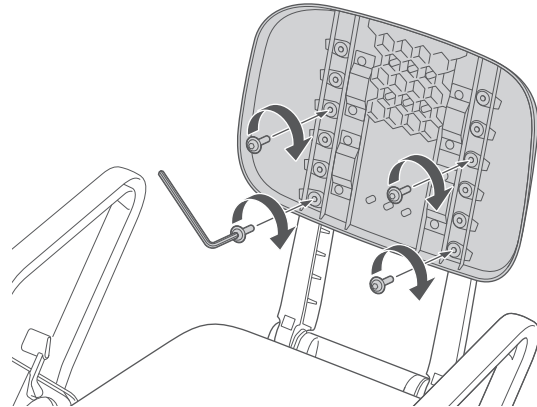
The height of the back support can be adjusted in three stages.



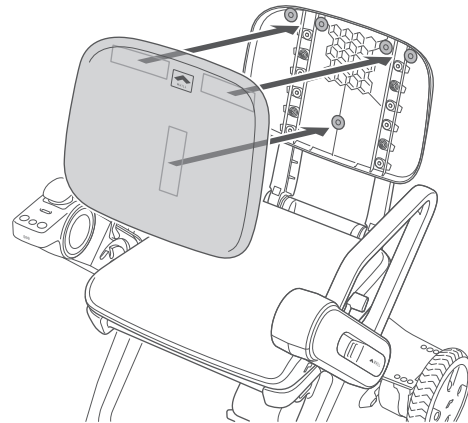
- 3 5. After determining the height of the back support, secure it in position with two screws (M5, 20 mm) on each side (4 locations in total).

Tool: Hex wrench, 3 mm

Tightening torque: 2 Nm



6. Install the back support cushion so that the hook and loop fasteners of the back support cushion are aligned with those on the device.



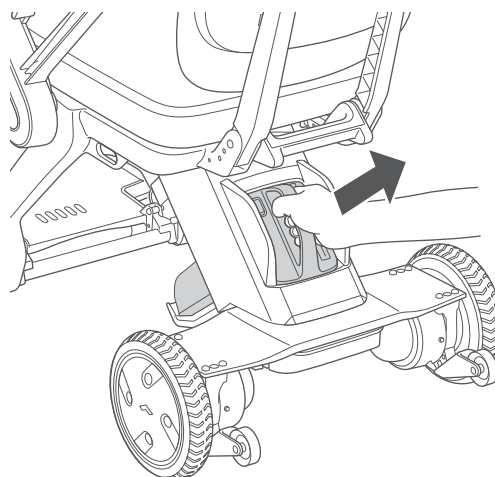
7. Insert the battery.

For the installation procedure, refer to "3.3.3. Installing the battery" (Page 30).

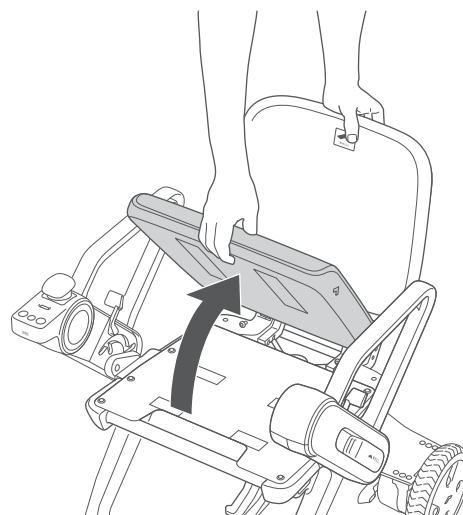
3.4.4. Adjusting the back support angle

1. Remove the battery.

For the removal procedure, refer to "4.1.1. Removing the battery" (Page 55).



2. Remove the seat cushion.



3. Loosen the two back support angle adjustment spacer screws (one each on the left and right sides) using the specified tool.

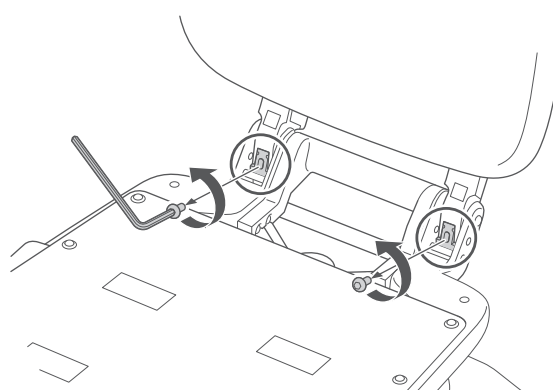
Tool: Hex wrench, 3 mm



WARNING

Inserting a finger or other body part into the connecting components and moving parts of this device may result in an injury.

When assembling, adjusting, or transporting this device, do not touch any component other than those indicated in the manual.

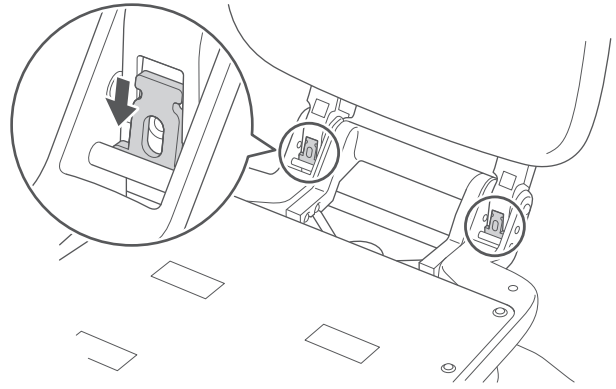


- 4.** Slide each back support angle adjustment spacer (slotted hole) up or down along the bolt to position the back support at an easy-to-use angle.

The back support angle can be adjusted in two stages.



Be sure to align the left and right sides at the same position.



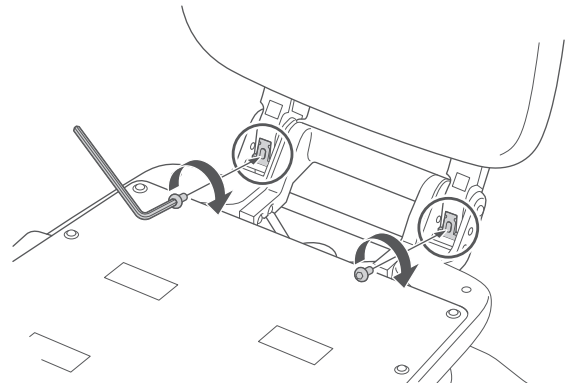
- 5.** Tighten the two angle adjustment bolts (one each on the left and right sides).

Tighten the bolts evenly, alternating left and right.

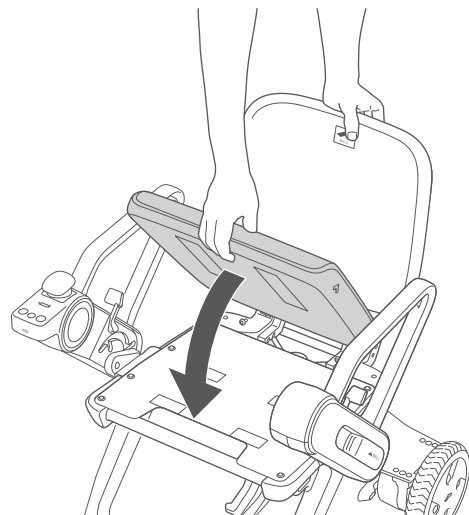
Tool: Hex wrench, 3 mm

Tightening torque: 2 Nm

- 6.** Perform a final check of left/right positioning and the angle.



- 7.** Install the seat cushion on top of the seat base with the hook and loop fasteners aligned, so that the WHILL logo is visible on the front left side.



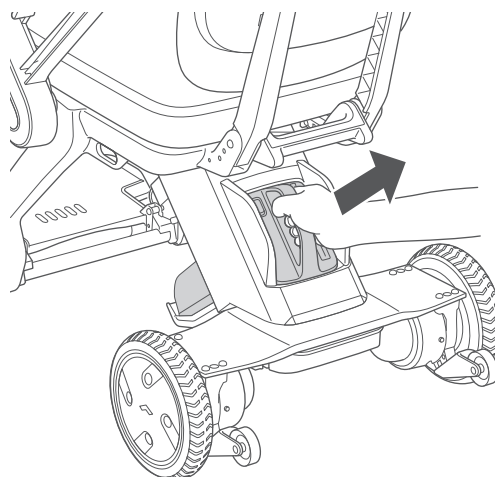
- 8.** Insert the battery.

For the installation procedure, refer to "3.3.3. Installing the battery" (Page 30).

3.4.5. Adjusting the footrest height

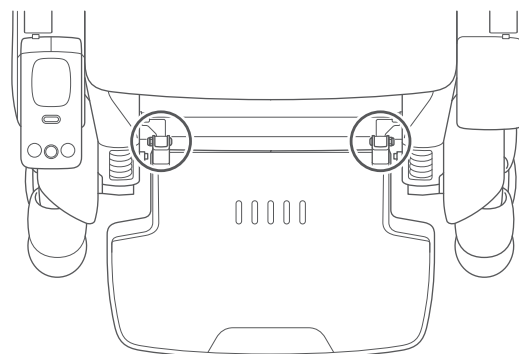
1. Remove the battery.

For the removal procedure, refer to "4.1.1. Removing the battery" (Page 55).



2. Remove the nylon flange nut and screw (M5, 25 mm) from the footrest height adjustment hole on each side (2 locations in total).

Tool: Hex wrench, 3 mm

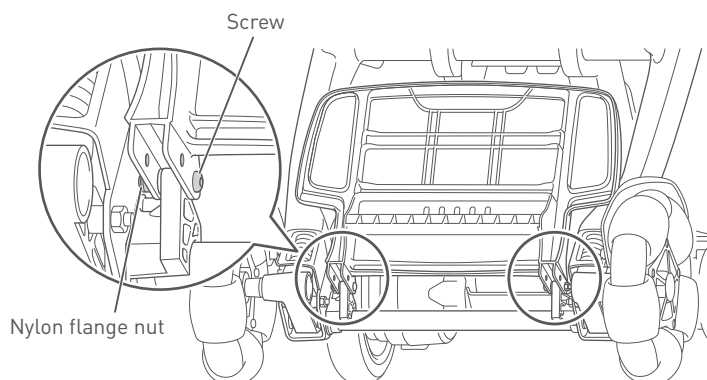


3. Change the position of the footrest to your preferred height by changing which holes are used to secure it.

The height of the footrest can be adjusted in two stages.



Align the left and right sides at the same position.



-
- 4.** After determining the height of the footrest, secure it in position with a nylon flange nut and screw (M5, 25 mm) on each side.

Tool: Hex wrench, 3 mm

Tightening torque: 3 Nm



After adjusting the footrest height, be sure to check the operation. If the parts move when you let go of the footrest, tighten the screws slightly. If it is difficult to move the footrest, loosen the screws slightly and make the appropriate adjustments.

- 5.** Insert the battery.

For the installation procedure, refer to "3.3.3. Installing the battery" (Page 30).

4. Charging the battery

Charge the battery before using this device for the first time.

Under ideal conditions, the device can travel a maximum of 23.4 km (14.5 miles), or 38.5 km (23.9 miles) for long range battery. The driving range of this device varies depending on the types of roads or terrain it is driven on, as well as the load, ambient temperature, operating method, and other factors. To extend the driving range of this device, pay attention to the following when using the device.

- Fully charge the battery before use.
- Travel along routes with few steps and inclines.
- Reduce the weight of storage items.
- Maintain consistent speed and avoid sudden stops.

WARNING



- **Carefully read the explanations in this manual regarding the battery and charger, and follow the instructions.**
Disassembling the battery or charger, bringing them near flames, allowing them to get wet, or subjecting them to impact (dropping, penetrating with nails, or standing on them) may cause an unexpected accident such as the battery igniting or exploding.
- **The device battery should be charged in a well-ventilated space that is free of flammable gases and that is at least twice the size of this device.**
There is a risk of explosion or unexpected accident if the room is filled with flammable gas or if ventilation is insufficient.
- **If damage is found on the exterior of the battery or charger, or if the battery or charger shows any abnormal signs, immediately discontinue use or charging, and contact your distributor or customer support.**
Otherwise, there is a risk of unexpected accident such as electric shock, short circuit, or the battery igniting or exploding.
- **Charge using a 100 to 240 V, 50 to 60 Hz power supply outlet. When using an extension cord, use one that is compliant with applicable standards.**
Otherwise, there is a risk of electric shock, short circuit, and fire.
- **Be sure to use only an authentic WHILL battery and charger.**
It is also possible to use a commercially available USB Type-C charger if the output is 100 W or more. However, we have not tested the operation of commercially available chargers and cannot guarantee stable operation or safety.



- **Do not disassemble the battery or charger.**
There is a risk of ignition or explosion.
- **Do not touch the battery and charger with wet hands.**
There is a risk of electric shock.
- **Do not touch the battery connector socket or battery connector port directly, and make sure that they do not become wet or come into contact with foreign objects.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.
- **Do not directly touch the battery charging port or the DC connector of the charger, and make sure that they do not become wet or come into contact with foreign objects.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.

 WARNING

- **Do not use the battery charging port or the DC connector of the charger if they are deteriorated.**
Use of a deteriorated battery charging port or charger DC connector may result in failure to charge the battery, leading to an unexpected accident due to loss of power while driving. If these parts show any abnormal signs, contact your distributor or customer support.
- **Do not touch the charger while the battery is being charged or immediately after the charge is completed.**
There is a risk of burns caused by the charger heating up.
- **Do not apply excessive force to the AC connector cord of the charger.**
Otherwise, there is a risk of electric shock, short circuit, and fire.

 CAUTION

- **If this device is not used for a long period, fully charge the battery before storing. Charge the battery at least once a month.**
There is a risk that the battery may get excessively depleted and cannot be charged.
- **Close the battery charging port cap except when charging the battery.**
There is a risk of a short circuit caused by liquid or foreign objects getting inside.
- **Unplug the DC connector of the charger from the battery after charging.**
There is a risk of battery deterioration if the DC connector of the charger is left plugged into the battery for a long time.
- **Charge at an ambient temperature of 3 to 40°C (37.4 to 104°F). Charge indoors in a well-ventilated location with little moisture that is not subject to direct sunlight, rain, or condensation.**
The battery may not charge at a temperature outside this range. This may cause battery deterioration or battery malfunction.



- **Do not charge the battery while the brakes are released.**
There is a risk that this device may move, causing an unexpected accident.
- **Do not use damaged batteries or batteries with a damaged or cracked battery charging port cap.**
There is a risk of electric shock, short circuit, or fire caused by liquid or foreign objects getting inside.



- If this device does not start up properly even though a charged battery is inserted and the power is turned ON after 5 seconds have elapsed, remove the battery, wait 10 seconds, and then insert the battery again.
- Do not leave the battery for a long time in an environment with a temperature of 0°C (32°F) or lower before driving.
- If the battery is not used for a long period, store it in an environment with a temperature of 0 to 40°C (32 to 104°F).
- When the battery temperature is low, the maximum driving speed is 3 km/h (1.9 mph).
- This device may come to a stop while driving on a long slope when the battery temperature is low.
- This device decelerates if it is driven on a downhill slope with the battery close to fully charged. This device decelerates considerably more the lower the battery temperature becomes.
- The charger is for indoor use only. Do not charge the battery outdoors.
- Do not charge the battery during lightning storms.
- Under ideal conditions, the device can travel a maximum of 23.4 km (14.5 miles), or 38.5 km (23.9 miles) for long range battery. The driving range of this device varies depending on the types of roads or terrain it is driven on, as well as the load, ambient temperature, operating method, and other factors. Pay attention to the battery charge level during use. This device may get stuck while driving if the battery charge level is low.
- Charge the battery after use. Insufficient battery power can be prevented by using a fully charged battery.
- Unplug the DC connector of the charger from the battery charging port after charging.
- If you have any questions about the battery, contact your distributor or customer support.

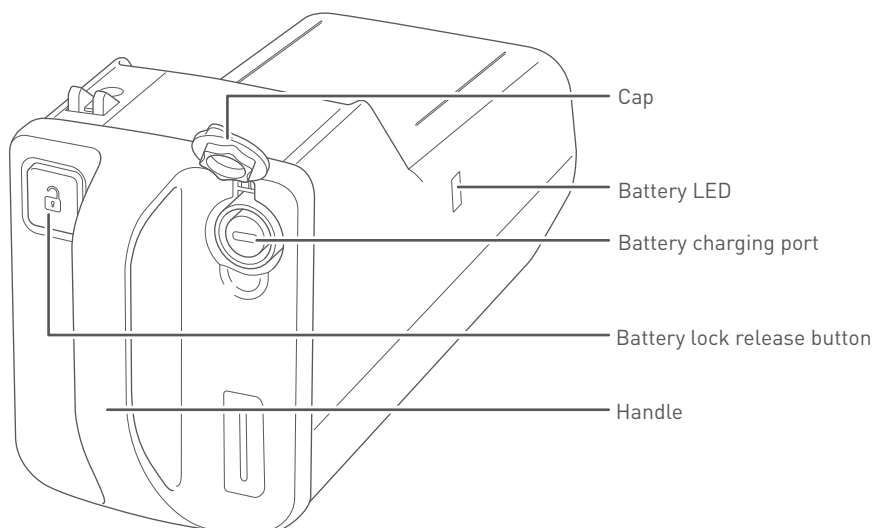
4.1. Battery and charger

■ Battery

This device uses a lithium-ion battery.

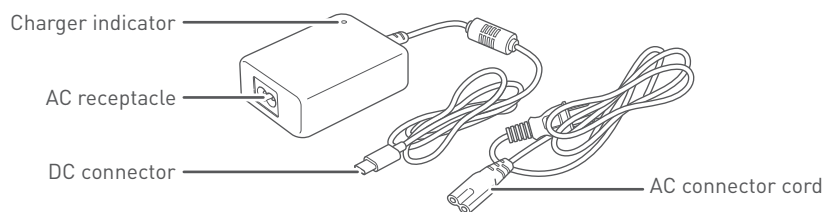


When disposing of the battery, contact your distributor or customer support.



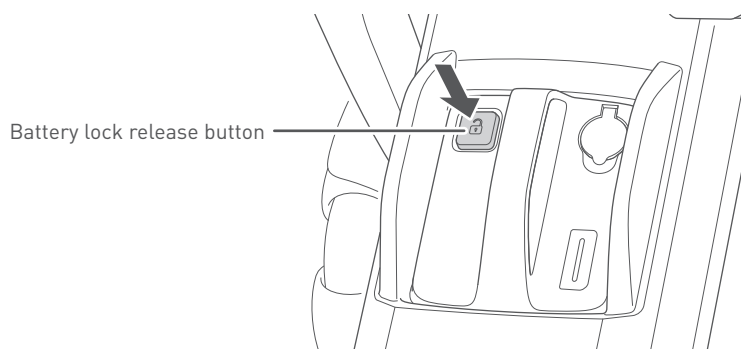
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■ Charger

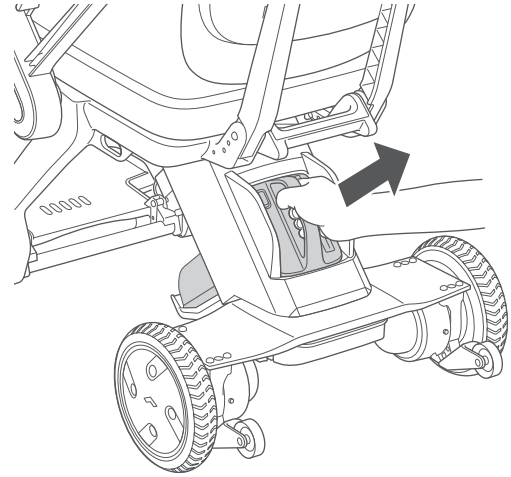


4.1.1. Removing the battery

1. Check that the device power is turned OFF.
2. Press the battery lock release button.



3. Grasp the handle and pull it toward you to remove the battery.



4



The battery weighs 3 kg (6.6 lbs.). Take care not to drop the battery. Otherwise, there is a risk of injury and damage to the battery.

4.2. Charging procedure

Be sure to charge the battery before using this device for the first time or when it has not been used for a long period of time. There are two ways of charging the battery: charging with the battery inserted on this device, or charging with the battery removed from this device. The battery does not require periodic maintenance.

This device cannot be used while the battery is being charged. When charging is completed, the charger automatically stops battery charging.



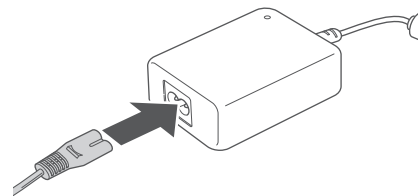
- This device cannot be used while the battery is being charged.
- The approximate battery charging time is 4.5 hours.
- The approximate battery charging time for the long range battery is 9 hours.
- After charging the battery, remove the charger plug from the power supply outlet or extension cord.
- Do not leave the battery for a long time in an environment with a temperature of 0°C (32°F) or lower before driving.
- Do not charge the battery during lightning storms.
- If battery deterioration or malfunction is suspected, such as when the driving range becomes considerably shorter than the specification range even with a fully charged battery, contact your distributor or customer support.

4.2.1. Charging with the battery installed on this device

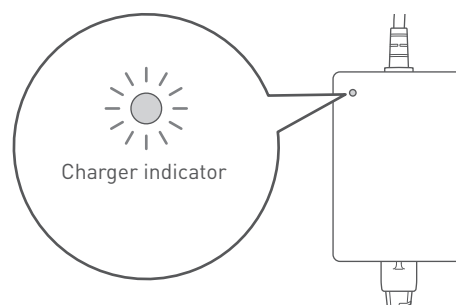
For safety, this device cannot be used while the battery is being charged.

Charge the battery by the following procedure.

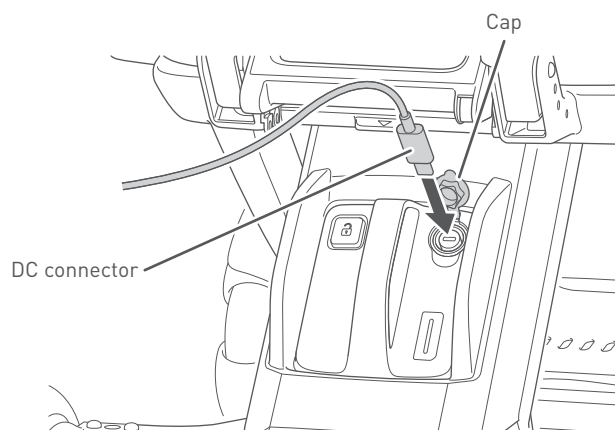
1. Move this device close to the power supply outlet.
2. Turn the device power supply OFF. If the brakes are released, pull the left and right brake release levers up to apply the brakes.



3. Connect the AC connector cord to the AC receptacle of the charger.

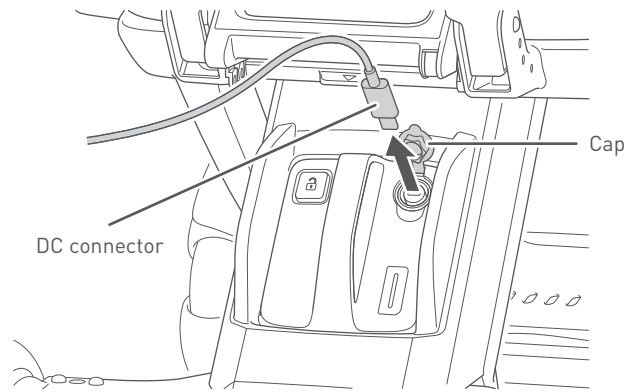


4. Remove the battery charging port cap, and connect the DC connector of the charger to the battery charging port.



5. Plug the charger into the power supply outlet.
6. The charger indicator begins to flash green, and charging starts.
7. Charging is completed when the charger indicator stops flashing and stays solid green.

8. Unplug the charger from the power supply outlet.
9. Disconnect the DC connector of the charger from the battery, and close the battery charging port cap.



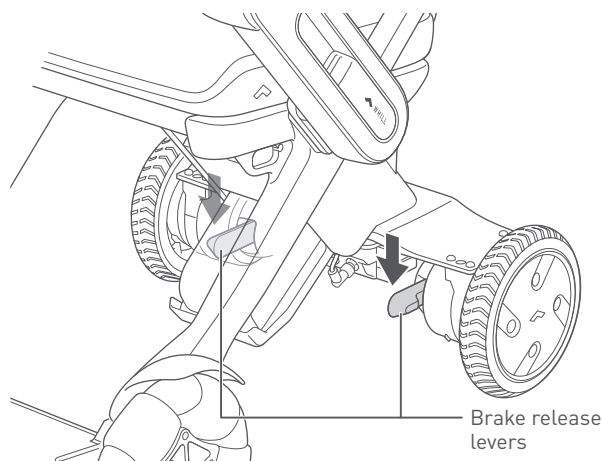
4



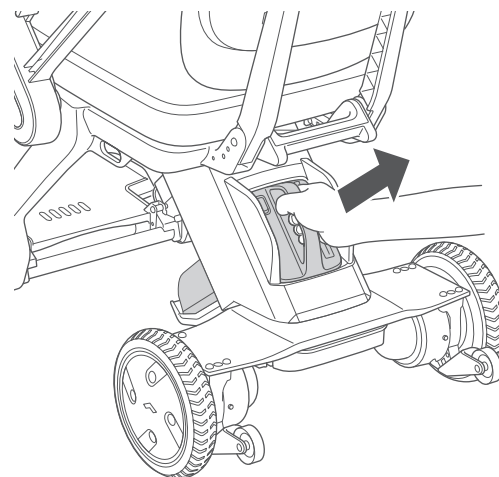
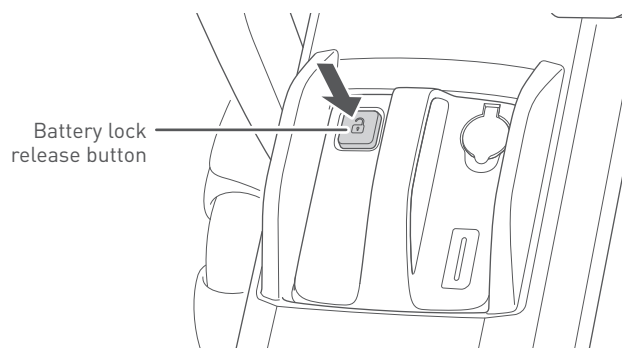
- Charge using a 100 to 240 V, 50 to 60 Hz power supply outlet. When using an extension cord, use one that is compliant with applicable standards.
- When the charger indicator is lit yellow at all times, this indicates that the charger plug is connected to the power supply outlet and power is supplied to the charger.
- When the battery is connected to the charger and charging of the battery is started, the charger indicator begins to flash green.
- If the charger indicator does not light up or is lit red, the battery is not being charged properly. In this case, disconnect and reconnect again by the following method. If the charger indicator is still lit red even after performing the following, a battery or charger malfunction may have occurred. Contact your distributor or customer support.
 1. Disconnect the DC connector of the charger from the battery, and remove the charger plug from the power supply outlet.
 2. Check that the charger indicator light has gone out, and then re-insert the charger plug into the power supply outlet.
 3. Insert the DC connector of the charger into the battery charging port.
- If charging does not start after connecting the charger, disconnect the charger and wait at least 10 seconds before connecting it again. If the issue persists, turn the DC connector upside down and reconnect the charger after waiting at least 10 seconds.
- If the charger indicator immediately turns green even though the battery is not fully charged, you may be using a charger other than the one provided exclusively with this device. Check the label on the charger.

4.2.2. Charging with the battery removed

1. Turn the device power supply OFF. If the brakes are released, pull the left and right brake release levers up to apply the brakes.

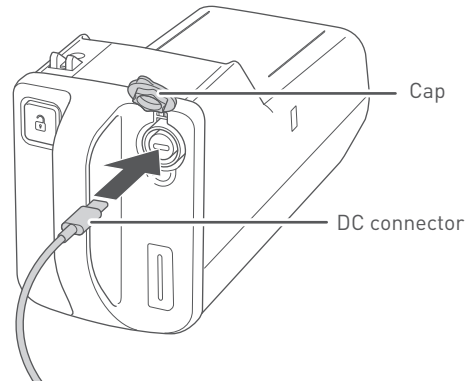


2. Press the battery lock release button, and remove the battery by holding its handle.



3. Connect the AC connector cord to the AC receptacle of the charger.

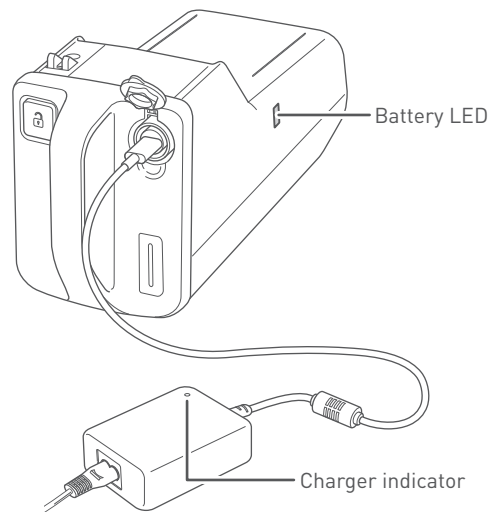
4. Remove the battery charging port cap, and connect the DC connector of the charger to the battery charging port.



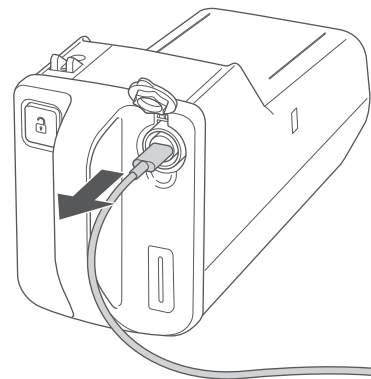
5. Plug the charger into the power supply outlet.
6. The charger indicator begins to flash green, and charging starts.
7. Charging is completed when the charger indicator stops flashing and stays solid green.



- You can check the charge level of the battery on the battery LED.
- Full charge: Solid green
- Approx. 66% to 99%: Flashing yellow
- Approx. 33% to 66%: Flashing orange
- Approx. 0% to 33%: Flashing red
- No charge: Flashing purple

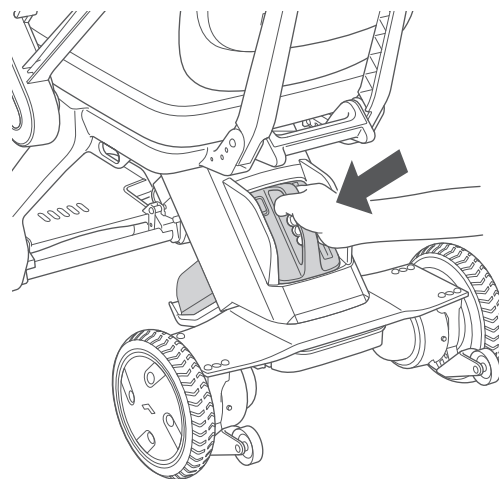


8. Unplug the charger from the power supply outlet.
9. Disconnect the DC connector of the charger from the battery, and close the battery charging port cap.



10. Insert the battery.

For the installation procedure, refer to “3.3.3. Installing the battery” (Page 30).



- Charge using a 100 to 240 V, 50 to 60 Hz power supply outlet. When using an extension cord, use one that is compliant with applicable standards.
- When the charger indicator is lit yellow at all times, this indicates that the charger plug is connected to the power supply outlet and power is supplied to the charger.
- When the battery is connected to the charger and charging of the battery is started, the charger indicator begins to flash green.
- If the charger indicator does not light up or is lit red, the battery is not being charged properly. In this case, disconnect and reconnect again by the following method. If the charger indicator is still lit red even after performing the following, a battery or charger malfunction may have occurred. Contact your distributor or customer support.
 1. Disconnect the DC connector of the charger from the battery, and remove the charger plug from the power supply outlet.
 2. Check that the charger indicator light has gone out, and then re-insert the charger plug into the power supply outlet.
 3. Insert the DC connector of the charger into the battery charging port.
- If the charger indicator immediately turns green even though the battery is not fully charged, you may be using a charger other than the one provided exclusively with this device. Check the label on the charger.

4.2.3. Charger indicator displays

The charger indicator lights up according to the battery state, as shown below.

Charger indicator color	Charger indicator state	Charger status
Red	Lit	Charging error
Yellow	Lit	The charger plug is connected to the power supply outlet and power is supplied to the charger.
Green	Flashing	Battery charging in progress
Green	Lit	Battery charging completed

4



- If the charger indicator does not light up or is lit red, the battery is not being charged properly. In this case, disconnect and reconnect again by the following method. If the charger indicator is still lit red even after performing the following, a battery or charger malfunction may have occurred. Contact your distributor or customer support.
 1. Disconnect the DC connector of the charger from the battery, and remove the charger plug from the power supply outlet.
 2. Check that the charger indicator light has gone out, and then re-insert the charger plug into the power supply outlet.
 3. Insert the DC connector of the charger into the battery charging port.
- If charging does not start after connecting the charger, disconnect the charger and wait at least 10 seconds before connecting it again. If the issue persists, turn the DC connector upside down and reconnect the charger after waiting at least 10 seconds.
- If the charger indicator immediately turns green even though the battery is not fully charged, you may be using a charger other than the one provided exclusively with this device. Check the label on the charger.

5. Operating procedures

This section explains the procedures for getting on and operating this device.

WARNING



- Do not apply an excessive load to the controller, such as leaning or sitting on it. Do not operate the buttons with excessive force or with a sharp object.
These parts might be damaged and become inoperable.

CAUTION



- If this device is not used for a long period, fully charge the battery before storing. Charge the battery at least once a month.
There is a risk that the battery may get excessively depleted and cannot be charged.



- This device is an electrical product. The waterproof performance of this device with the battery installed is IPX5. However, to prevent malfunction, avoid use in heavy rain.
- When using this device for the first time, it is recommended that you use it in an environment with an assistant nearby.

5.1. Inspection before getting on this device

WARNING



- **Inspect the following every time before getting on this device.**

Use of this device when it is malfunctioning can potentially cause an injury or unexpected accident. If you encounter any problems that you are unable to resolve by yourself, contact your distributor or customer support.

■ Inspection items

1. Inspection with the power supply turned OFF

■ Assembly and adjustment

- Check that all parts are correctly assembled without any looseness.
- Check that no parts are broken or have fallen off.
- Adjust the adjustable parts of the device to easy-to-use positions and angles to meet the user's seating needs.

■ Function

- Check that the joystick moves smoothly.
- Check that the brakes can be released and that this device can be pushed manually. Also, check that this device does not move when pushed while the brakes are locked.
- Check that the device has been properly unfolded (the folding lock indicator does not show red).

■ Wheels

- Check the tire treads and ensure that they are not worn down to 0.5 mm (1/64 in.) or less. Check that there are no foreign objects caught in the tire tread.
- Check that the tires are not cracked or deformed.
- Check that the wheels are not wobbly.

2. Inspection with the power supply turned ON

- Check that the battery charge level indicator, speed select indicator, and other indicators are displayed normally on the display of the controller.
- Check that the rear light turns ON.
- Check that the battery charge level is sufficient.
- Check that the buttons function properly.
- Check that the display appears normal.
- Check that the sound is audible when the horn button is pressed.
- Check that the wheels do not make unusual noise when they spin.



- Use a fully charged battery.
- Under ideal conditions, the device can travel a maximum of 23.4 km (14.5 miles), or 38.5 km (23.9 miles) for long range battery. The driving range of this device varies depending on the types of roads or terrain it is driven on, as well as the load, ambient temperature, operating method, and other factors. Pay attention to the battery charge level during use. This device may get stuck while driving if the battery charge level is low.

5.2. Getting on this device

Be sure to read and fully understand the descriptions in this manual before use.

Before going out onto public roads for the first time, be sure to practice driving this device. If you want to practice driving, do so in an open space with good visibility. When getting on this device, pay attention to the following.

WARNING



- **Before getting on or off this device, apply the brakes on a flat and level surface.**
Otherwise, there is a risk of unexpected accident.
- **Before getting on or off this device, turn the device power supply OFF.**
There is a risk of unexpected movement of this device caused by accidental contact with the controller.
- **Before use, check that the lock indicator does not show red and that the device is locked in the unfolded position.**
There is a risk of accident due to the device being folded unexpectedly while driving.
- **Check that the brake release levers are in the raised position (the brakes are locked) before getting on this device. Do not leave this device while the brakes are released.**
If the brakes are released, there is a risk that this device may suddenly start moving.
- **The maximum load-bearing capacity for this device is 136 kg (299.8 lbs.) including both the occupant and any luggage. Use this device without subjecting it to a load higher than this capacity.**
There is a risk of this device being damaged.
- **If your body is not stable when seated in this device, use the lap belt.**
This device may tip over or fall, and there is a risk of unexpected accident. If you have any questions about the lap belt, contact your distributor or customer support.



- **Do not apply an excessive load to the controller, such as leaning or sitting on it. Do not operate the buttons with excessive force or with a sharp object.**
These parts might be damaged and become inoperable.
- **Do not hang walking sticks, umbrellas, bags, baskets, or other objects on the controller or armrests.**
Otherwise, there is a risk of damage to parts or unexpected accident.
- **Do not jump onto this device or place all your weight on the edge of the footrest.**
This device may tip over, and there is a risk of unexpected accident.
- **Prevent raincoats, scarves, and other long clothing from touching the wheels while driving.**
If clothing, scarves, or other objects get entangled in the wheels, there is a risk of injury and unexpected accident.
- **Do not use this device with bare feet. Always wear shoes.**
There is a risk of injury due to your feet coming off the footrest and becoming caught in the wheels or coming into contact with an obstacle.

⚠ CAUTION



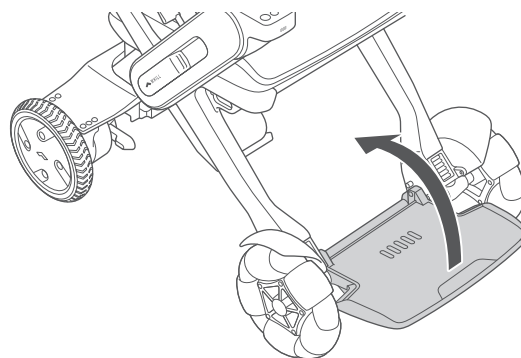
- The maximum speed of this device is 6 km/h (3.7 mph). Check the speed of this device in a safe place. Set the maximum speed using the speed select buttons.
This device may tip over, and there is a risk of unexpected accident.
- The back support is not fixed. Be careful when transferring.
There is a risk of injury.



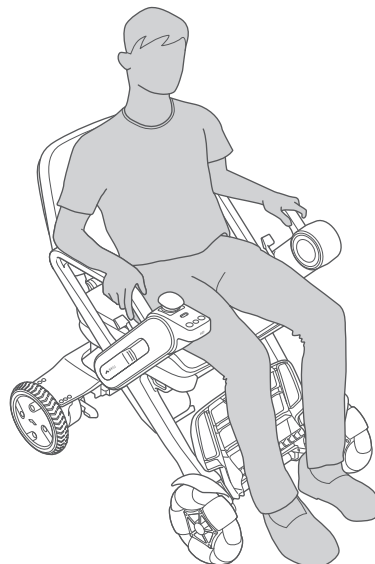
- Under ideal conditions, the device can travel a maximum of 23.4 km (14.5 miles), or 38.5 km (23.9 miles) for long range battery. The driving range of this device varies depending on the types of roads or terrain it is driven on, as well as the load, ambient temperature, operating method, and other factors. Pay attention to the battery charge level during use. This device may get stuck while driving if the battery charge level is low.
- When the battery temperature is low, the maximum driving speed is 3 km/h (1.9 mph).
- This device may come to a stop while driving on a long slope when the battery temperature is low.
- This device decelerates if it is driven on a downhill slope with the battery close to fully charged. This device decelerates considerably more the lower the battery temperature becomes.
- For errors that occur during use, check "11. Troubleshooting" (Page 108).

5.2.1. Getting on the device from the front

1. Check that the power is turned OFF.
2. Raise the footrest by hand.

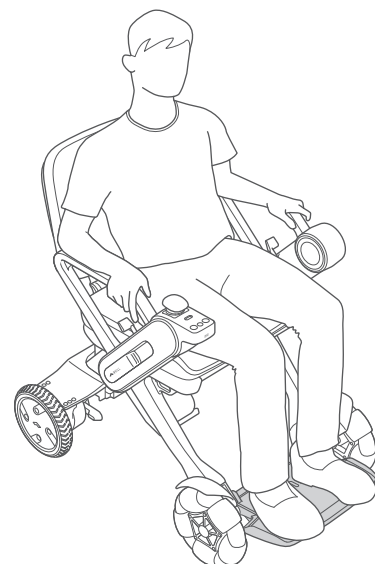


3. Sit in the seat.



- Do not let your hands touch the controller.
- As the back support can be folded forward, do not pull it toward you or apply force to it in the forward direction. There is a risk that the back support may tilt forward, causing an accident.
- When getting on the device, do not stand or place your weight on the footrest.
The device may tip over, resulting in an injury.

4. Lower the footrest.



WARNING

- Inserting a finger or other body part into the connecting components and moving parts of this device may result in an injury.

When assembling, adjusting, or transporting this device, do not touch any component other than those indicated in the manual.



5.2.2. Getting on the device from the side

1. Check that the power is turned OFF.

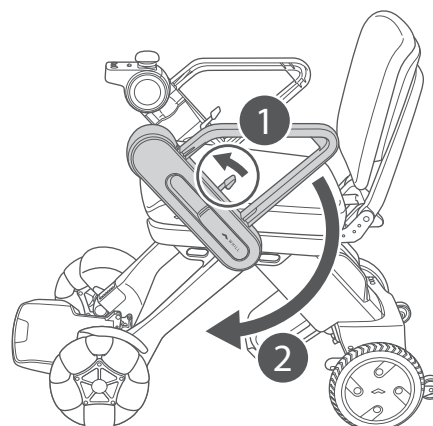
2. Lower the arm.

- ① Move the arm release lever in the direction of the arrow.

The arm is unlocked.

- ② Pull the arm down toward the back.

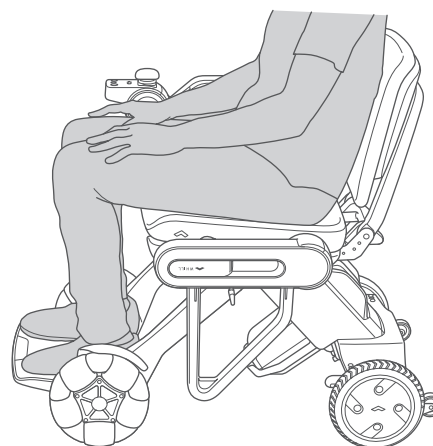
Rotate the arm until it clicks into place.



3. Sit in the seat.



- Do not let your hands touch the controller.
- As the back support can be folded forward, do not pull it toward you or apply force to it in the forward direction. There is a risk that the back support may tilt forward, causing an accident.



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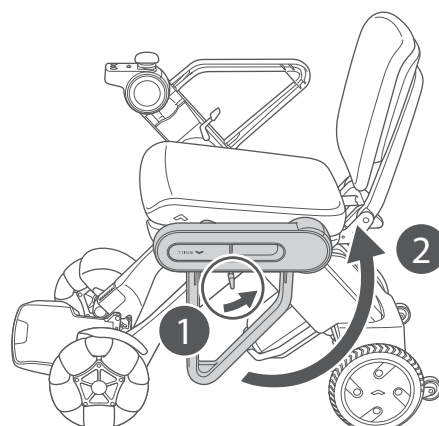
4. Rotate the arm forward and return it to the original position.

- ① Move the arm release lever in the direction of the arrow.

The arm is unlocked.

- ② Rotate the arm forward.

Rotate the arm until it clicks into place.



Check that the arm is locked. When the arm is not correctly locked, the lock indicator at the base of the arm release lever shows red.

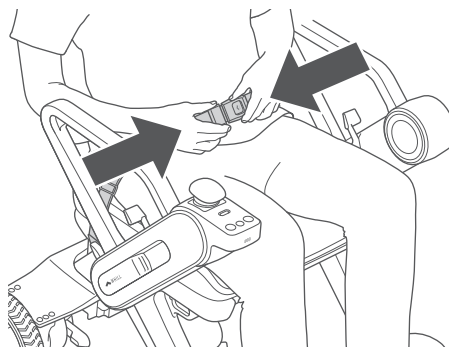
5.3. Fastening the lap belt

If the device you are using is equipped with a lap belt, fasten it during use.

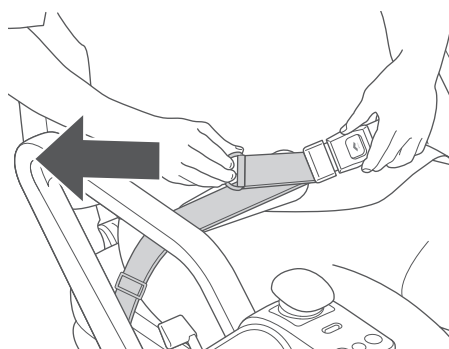
Depending on your country or region, the lap belt may be sold separately as an optional accessory.

1. Fasten the lap belt.

Insert the tongue into the buckle until it clicks into place.

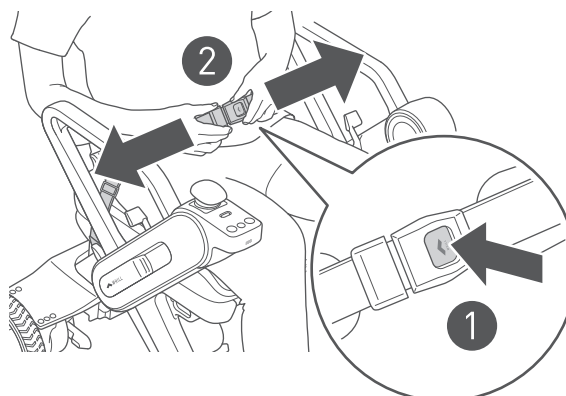


Adjust the length of the belt so that your body is held securely in place.



5.3.1. Removing the lap belt

1. ① Press the button on the buckle to ② remove the lap belt.



5.4. Turning the power supply ON

⚠ WARNING



- Make sure that the brake release levers are in the raised position (the brakes are locked) before turning ON the power.

If the brakes are released, there is a risk that this device may suddenly start moving.



- Do not press the controller buttons with excessive force or operate them with a sharp object.

There is a risk of damaging the controller, rendering the device inoperable.

⚠ CAUTION



- Ensure the device is functional in a safe space each time after setting and adjusting the speed.

There is a risk of unintended movement of the device.

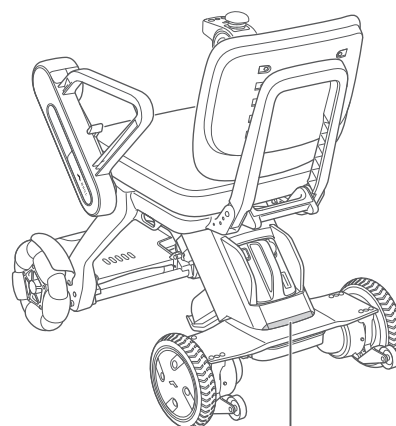
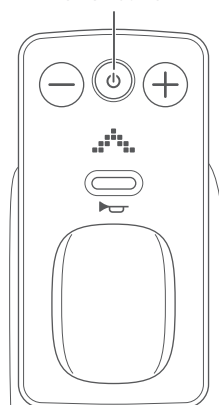
1. Press the power button.

The device turns ON and the rear light turns ON.



If this device does not start up properly even though a charged battery is inserted and the power is turned ON after 5 seconds have elapsed, remove the battery, wait 10 seconds, and then insert the battery again.

Power button

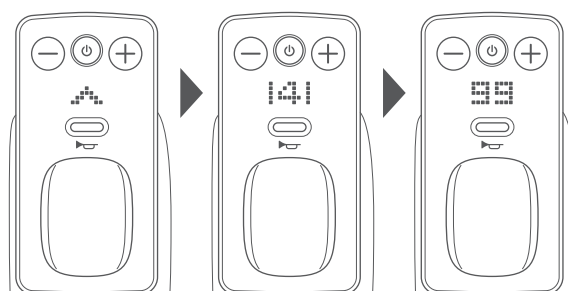


Rear light

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When the device is turned ON, first the WHILL logo appears on the display, and next the current speed setting is displayed. The display will then show the battery charge level indicator.

To check the speed setting again, either turn the power OFF and back ON, or else press the speed select buttons and adjust the speed.

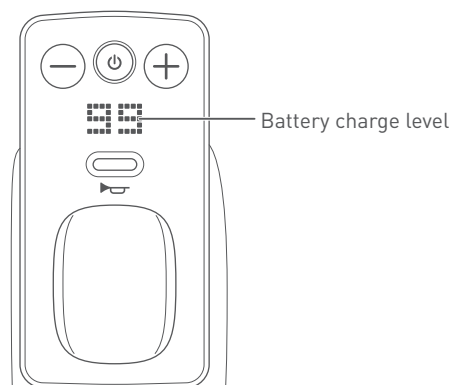


5.4.1. Checking the battery charge level

Check the battery charge level shown on the controller display. The battery charge level is displayed as a numerical value from 0 to 100%, in increments of 1%.



- The battery charge level may decrease rapidly or unexpectedly for various reasons such as the environment or battery conditions, due to the characteristics of the lithium ion battery.
- Regardless of the charge level, charge the battery after use, and use a fully charged battery.



5

■ Travel distance

- Due to the characteristics of the battery, the travel distance during winter may be shorter than it is during summer.
- The travel distance becomes shorter as the battery deteriorates.

5.4.2. Setting the maximum speed

CAUTION



- **Operate the speed select buttons when this device is stationary.**

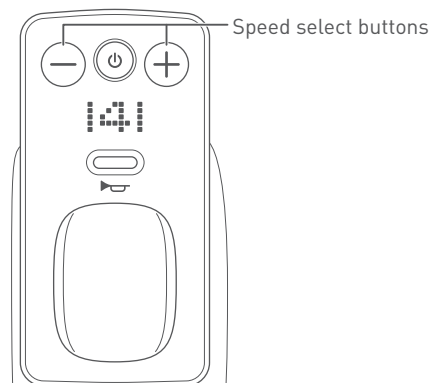
There is a risk that operating the speed select buttons during travel will result in the user not keeping his or her eyes on the road, and cause an unexpected accident.

Set the maximum speed using the speed select buttons on the controller. The speed can be adjusted up to the maximum speed in 4 stages from 1 (slow) to 4 (fast) by operating the speed select buttons.

+ button: Increases the maximum speed.

- button: Decreases the maximum speed.

The device speed can be controlled by the degree of movement of the joystick.

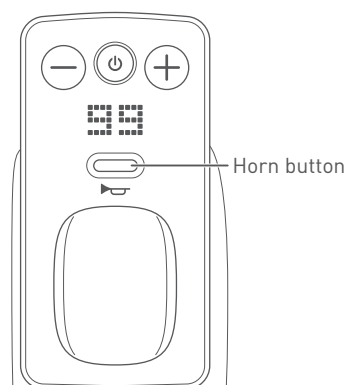


- The device travels at maximum speed when the joystick is pushed forward as far as possible.
- When moving backward or rotating, the maximum speed is limited to 2 km/h (1.2 mph) even when the maximum speed is set to 4 (fast).

5.4.3. Using the horn button

The alarm tone can be sounded by pressing the horn button on the controller.

Use this button, for example, to notify those around you of your presence.



5.5. Driving

This device is intended for use in pedestrian areas. A driver's license is not required. When driving, please use pedestrian paths and observe the traffic rules and manners expected of a pedestrian. Drive on sidewalks or paths for pedestrians, and use pedestrian crossings when crossing roads. On roads without sidewalks, travel along the road on the side normally used by pedestrians while paying particular attention to motor vehicles, bicycles, and the like.

WARNING



- **Make sure that the battery is properly inserted before driving.**
This device may stop while driving due to problems with the connection between the device and the battery.
- **Lower the footrest and keep your feet on the footrest while driving. Prevent your feet from extending outside the footrest.**
Otherwise, there is a risk that your feet may become caught in the front wheels.
- **When operating the device while wearing gloves, be careful to avoid the gloves getting caught in the device.**
There is a risk of the gloves becoming caught on the joystick, resulting in unintended movement of the device.
- **Before driving at night or in places with poor visibility, check that the rear light is visible to the surrounding area.**
Otherwise, there is a risk of unexpected accident.
- **When driving, fully check the surroundings and road conditions. Drive carefully at low speed particularly when driving in locations crowded with people, close to walls or other locations where there are obstacles nearby, and in narrow places or on uneven surfaces or slopes. Do not start or stop driving suddenly.**
When driving on wet inclines in particular, there is a risk that this device may lose stability, leading to an unexpected accident.
- **When approaching curbs, steps, slopes, and similar obstacles, approach at a right angle and drive over them carefully at low speed.**
There is a risk of tipping over or damaging parts.
- **Be careful that people or objects around you do not touch the controller.**
There is a risk of collision and tipping over.
- **Avoid letting your body touch the wheels. Do not let others around you touch the wheels.**
There is a risk of injury.
- **On downhill slopes, slow down sufficiently and drive carefully.**
This device may tip over or fall, and there is a risk of unexpected accident.
- **When stopping on a downhill slope, return the joystick to its original position early and allow plenty of time and distance for the device to stop.**
The stopping distance is longer when on a downhill slope. There is a risk that you may be unable to stop in the intended position, causing an unexpected accident.
- **When driving near a station platform or gutter, maintain a safe distance from the edge.**
There is a risk of falling.

⚠ WARNING



- **Release the brakes only when necessary. Before releasing the brakes, be sure to move to a flat and safe surface, and then turn the device power supply OFF. After moving this device manually, pull the brake release levers up to apply the brakes.**
There is a risk of unexpected accident because this device will move freely when the brakes are released.
- **Do not use this device with bare feet. Always wear shoes.**
There is a risk of injury due to your feet coming off the footrest and becoming caught in the wheels or coming into contact with an obstacle.
- **Do not attempt to maneuver the device onto an incline if the anti-tip rollers touch the ground on the incline. When the anti-tip rollers touch the ground, it means that the incline is too steep for the device.**
There is a risk of the device tipping over and causing an injury, or of losing control of the device.



- **While driving, maintain consistent speed and avoid sudden turns and stops.**
Otherwise, there is a risk of injury or unexpected accident.
- **Prevent your feet from extending outside the footrest while driving.**
Otherwise, there is a risk of injury or unexpected accident.
- **Do not hang walking sticks, umbrellas, bags, baskets, or other objects on the controller or armrests.**
Otherwise, there is a risk of damage to parts or unexpected accident.
- **Do not apply an excessive load to the controller, such as leaning or sitting on it. Do not operate the buttons with excessive force or with a sharp object.**
These parts might be damaged and become inoperable.
- **While riding this device, do not crouch down, lean outside, or shake your body.**
This device may tip over or fall, and there is a risk of unexpected accident.
- **Do not drive while holding something in your hand or with something placed on your lap.**
There is a risk of incorrect operation or tipping over.
- **Do not drive the device in the following areas or under the following conditions.**
This device may tip over, and there is a risk of unexpected accident.
 - Escalators or stairs
 - Steps of 5 cm (2 in.) or more in height
 - Slopes with a gradient of 10° or more
 - Soft surfaces such as sand or mud
 - Puddles
 - Snowy or frozen paths
 - Diagonal driving on slopes that exceed 10° left and right
 - Gaps of 10 cm (3.9 in.) or more in width
 - Sudden turning or driving in a zigzag
 - Driving in reverse or at medium- to high-speed on downhill slopes
 - Bad weather such as rain, fog, or strong wind
- **When you do not feel well, are under the influence of alcohol, or are taking medication, do not drive this device.**
There is a risk of serious accidents, as such circumstances may impair your judgment or slow down your ability to operate the device.

⚠ WARNING



- **Do not extend arms, legs, or baggage outside of this device.**
There is a risk of injury caused by collision while driving.
- **While driving, do not operate a mobile phone or other device. Also, do not drive while wearing earphones or headphones that make it difficult to hear surrounding sounds.**
Otherwise, there is a risk of unexpected accident.
- **Do not tow using this device.**
There is a risk of tipping over.
- **Do not maneuver the device onto or off a curb or step that is higher than approximately 5 cm (2 in.).**
The battery frame may be damaged or the anti-tip rollers may get caught on the curb or step, making it impossible to drive the device.
- **Prevent raincoats, scarves, and other long clothing from touching the wheels while driving.**
If clothing, scarves, or other objects get entangled in the wheels, there is a risk of injury and unexpected accident.
- **Do not drive through puddles.**
There is a risk of corrosion and short circuit.
- **When going across level crossings or streetcar tracks, approach at a 90-degree angle to the tracks to prevent this device from getting caught in the gaps of the tracks, and do not turn midway while you are crossing the tracks.**
Otherwise, there is a risk that the wheels of the device will get caught in the groove of the tracks and cannot be pulled out.

⚠ CAUTION



- **Avoid using level crossings as much as possible, as there is a risk of getting stuck in the middle of the crossing. When it is absolutely necessary to cross a level crossing, pay attention to the following. Also pay attention to the following when crossing streetcar tracks.**
Otherwise, there is a risk of unexpected accident.
 - Before crossing level crossings and railway tracks, check that the battery charge level is sufficient.
 - Have an assistant accompany you whenever possible.
 - In the case of wide level crossings and railway tracks that will take time to cross, make a detour.
 - When the level crossing alarm starts to sound or the level crossing barrier starts to drop, never enter the level crossing.
 - Cross level crossings with the wheels at a 90-degree angle relative to the railway tracks to prevent this device from getting caught in the gaps of the tracks.
 - Do not turn while on level crossings and railway tracks.
- **Check the battery charge level displayed on the display of the controller. If the battery charge level is low, charge the battery immediately.**
This device may get stuck while driving if the battery charge level is low.

⚠ CAUTION



- **Drive on sidewalks or paths for pedestrians, and use pedestrian crossings when crossing roads. On roads without sidewalks, travel along the road on the side normally used by pedestrians while paying particular attention to motor vehicles, bicycles, and the like.**
This device is not designed for use on roads for automobiles. Otherwise, there is a risk of unexpected accident.

- **When driving on uneven surfaces with tactile paving, slow down and fully check the safety of your surroundings.**
The front wheels may be deflected to one side, making driving unstable.



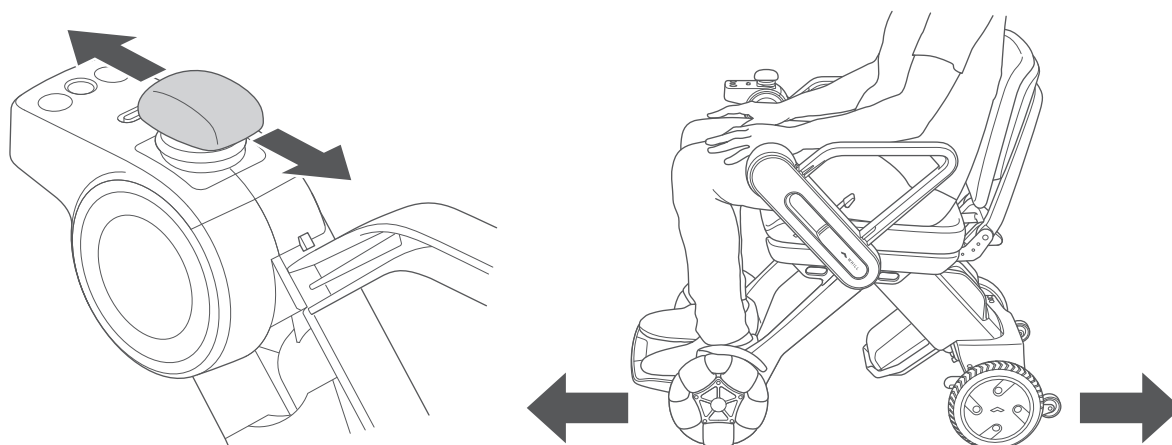
- **Do not twist the joystick assembly except when replacing it.**
There is a risk that the joystick may be loosened or damaged, rendering the device inoperable.
- **Do not operate the brake release levers with your feet.**
The brake release levers may become deformed, broken, and unusable.



- Before going out onto public roads for the first time, be sure to practice driving this device. If you want to practice driving, do so in an open space with good visibility.
- This device sometimes decelerates on slopes, depending on the operating environment and load.
- If you use this device indoors, there is a risk of the floor being damaged or becoming dirty.

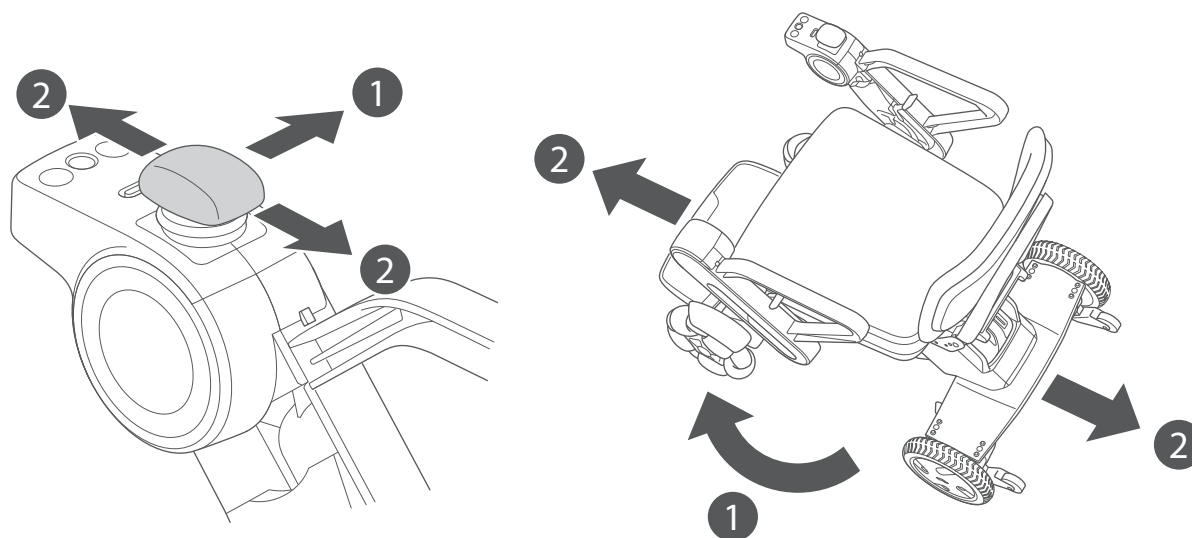
5.5.1. Moving forward and backward

Move the joystick forward to move the device forward, and backward to move the device backward.



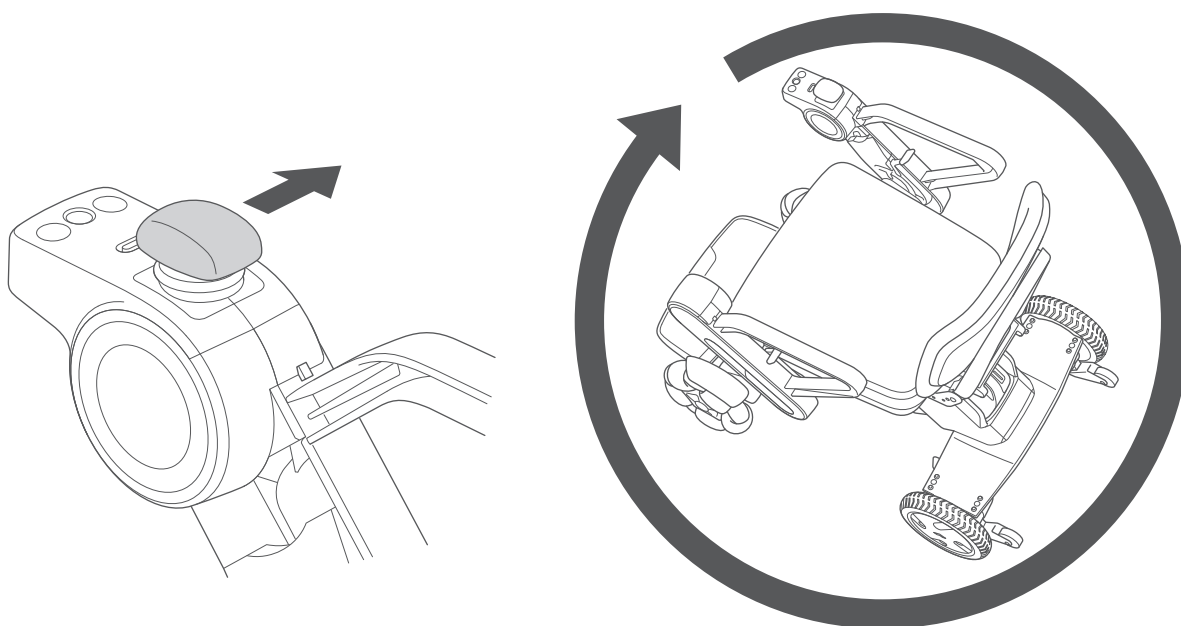
5.5.2. Moving in a diagonal direction

To move in a diagonal direction, first turn the device so that it faces the direction you want to go. Then move the joystick straight forward or backward.



5.5.3. Turning

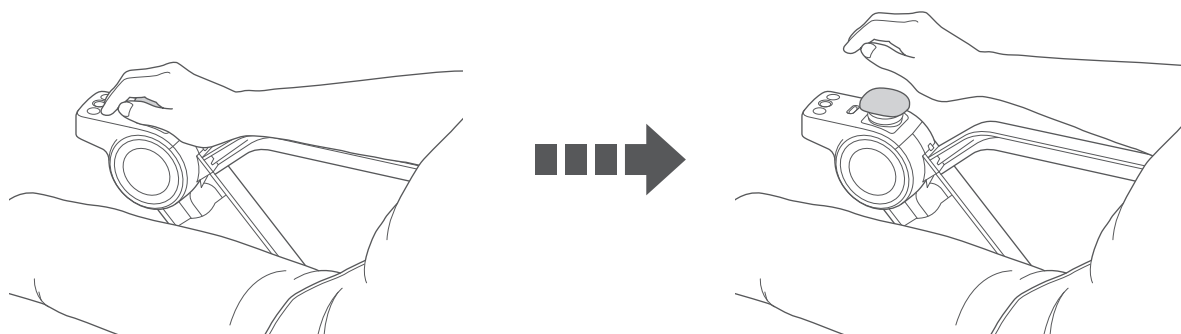
To turn in place, move and hold the joystick to the left or right.



5

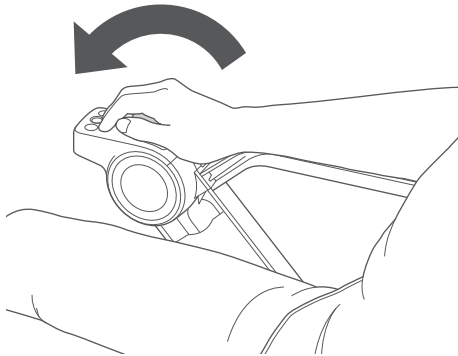
5.5.4. Stopping

Releasing the joystick automatically applies the brakes and stops the device.

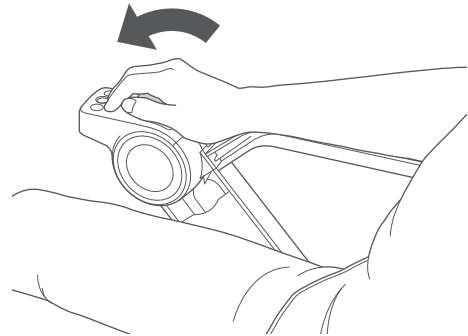


5.5.5. Adjusting the speed

The speed can be adjusted up to the maximum speed in 4 stages from 1 (slow) to 4 (fast) by operating the speed select buttons. The device speed can be controlled by the degree of movement of the joystick. Increasing the tilt angle of the joystick increases the device speed, while reducing the tilt angle decreases the speed. The speed can be adjusted freely on a continuous scale. To prevent accidents, pay attention to the immediate surroundings when changing the speed.



High speed (large tilt angle)



Low speed (small tilt angle)

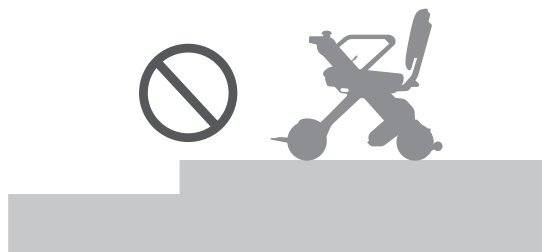
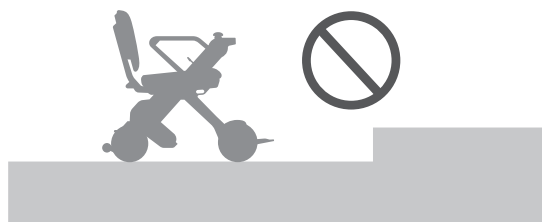


- When beginning to drive, move the joystick only the amount needed to start moving slowly.
- The maximum speed when the joystick is moved all the way varies depending on the speed that was set with the speed select buttons. For the procedure used to set the maximum speed, refer to “5.4.2. Setting the maximum speed” (Page 73).

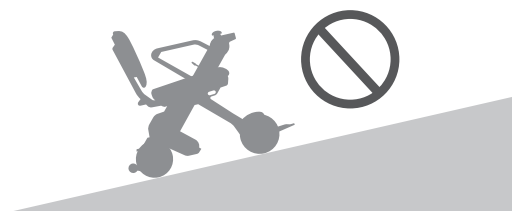
5.5.6. Driving under different road conditions

This device can maintain stability under a wide range of road conditions. However, it cannot be driven under the following conditions.

- Steps of 5 cm (2 in.) or more in height



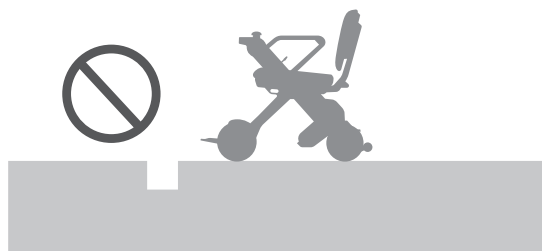
- Slopes with a gradient of 10° or more



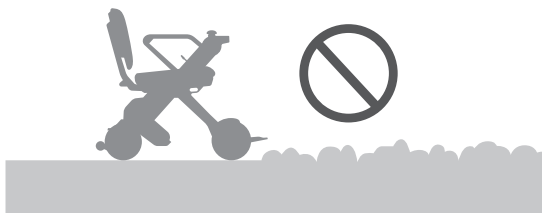
- Diagonal driving on slopes exceeding 10°



- Gaps of 10 cm (3.9 in.) or more in width



- Soft surfaces such as sand, mud, or snowy or frozen paths



5.6. Turning the power supply OFF

1. The power supply of this device can be turned OFF by one of the following methods.

■ **Device power button**

Press the power button on the controller.

■ **Smartphone app**

Connect the smartphone app to this device, and slide the white circle power supply indicator on the screen of the smartphone app to the right. The app may not be available depending on your country, region, or type of purchase.

■ **Smart key (sold separately)**

Press the smart key lock button.

5.7. Releasing the brakes

This device can be moved manually by pushing down the brake release levers located on the inner side of the rear wheels. This device cannot be operated by the motor while the brakes are released.

⚠ WARNING



- Release the brakes only when necessary. Before releasing the brakes, be sure to move to a flat and safe surface, and then turn the device power supply OFF. After moving this device manually, pull the brake release levers up to apply the brakes.

There is a risk of unexpected accident because this device will move freely when the brakes are released.



- Do not manually go up and down slopes with the brakes released.

There is a risk of unexpected accident because the brakes do not work.

⚠ CAUTION



- When moving this device by hand after releasing the brakes, push it slowly while paying attention to the condition of the road.

When the brakes are released, this device will move freely. Pushing it forcefully may cause it to move in an unexpected direction. Also, when this device is pushed at a maximum speed of 6 km/h (3.7 mph) or more, a strong brake will be applied for protection, and there is a risk that unexpected accidents may occur.

- When operating the brake release levers, be careful not to catch or crush your finger or hand.

There is a risk of injury.



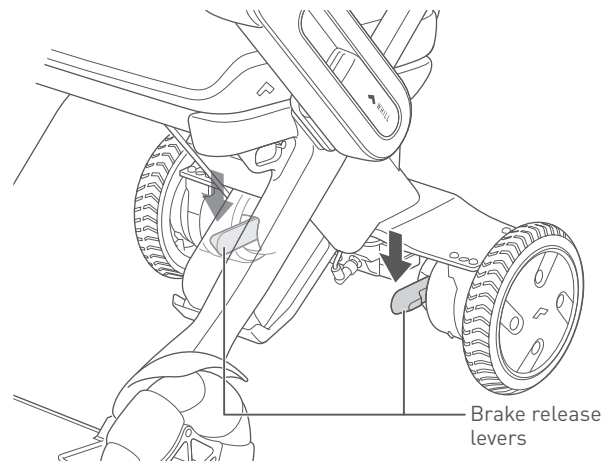
- Do not operate the brake release levers with your feet.

The brake release levers may become deformed, broken, and unusable.

5

5.7.1. Brake release procedure

1. Check that the device power supply is OFF.
2. Push the brake release levers down.



3. Move this device by pushing it manually.

5.8. Carrying items

Do not hang walking sticks, umbrellas, bags, baskets, or other objects on the arms or armrests. When carrying items, be sure to use the basket and only authentic or designated accessories.

■ Storage basket

Place any storage items in the storage basket that is located under the seat assembly.

Depending on your country or region, the storage basket may be sold separately as an optional accessory.

CAUTION



● **Pay attention to the following when using the basket.**

Otherwise, there is a risk of unexpected accident.

- Do not load items in the basket in excess of its maximum storage load.
- Load items in the basket so that they do not exceed the height of the sides of the basket.
- Before placing or removing any items from the basket, turn the device power supply OFF, and verify the safety of your surroundings.

5



The maximum storage load of the basket is 5 kg (11 lbs.). If a load heavier than the maximum storage load is placed in the basket, the basket may be damaged.

5.9. Using the smart key

The smart key (sold separately) can be used to lock and unlock the device.



- For the instructions to change the smart key battery, refer to “10.2. Replacing the smart key battery” (Page 101).

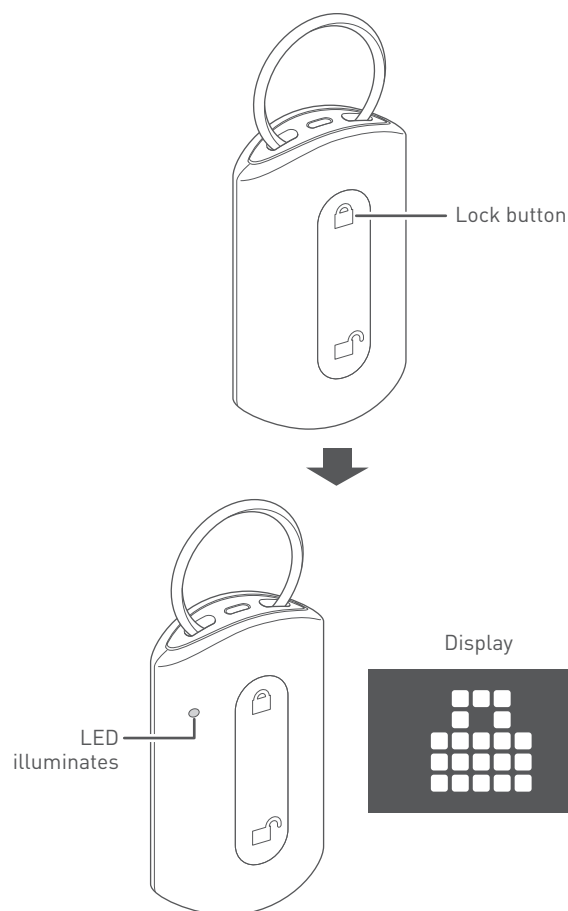
5.9.1. Locking

1. Press the smart key lock button.

The smart key LED illuminates, and the icon indicating the locked status appears on the display, while making the lock sound. The device is now locked.



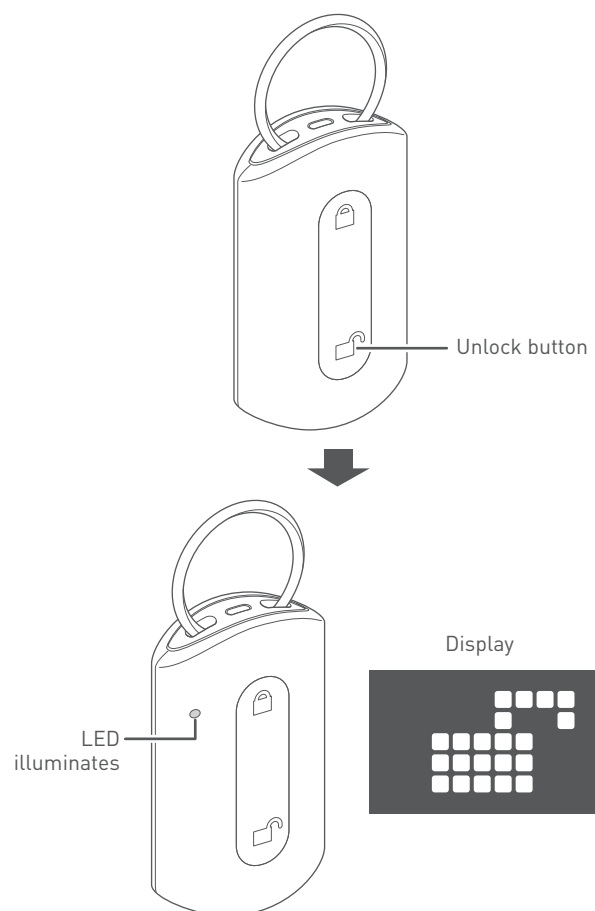
- If you attempt to turn the device on when the device is locked, the icon indicating the locked status appears on the display, and then the power turns off. The device cannot be started.
- Always carry the smart key with you. Although it is possible to lock or unlock the device through a smartphone app, it will not be possible to lock or unlock the device if the smartphone battery runs out.



5.9.2. Unlocking

1. Press the smart key unlock button.

The smart key LED illuminates and the icon indicating unlock appears on the display, while making the unlock sound. And then the device is unlocked.



6. Folding and unfolding the device

6.1. Precautions

WARNING



- **Perform folding and unfolding of the device on a flat and level surface.**
Otherwise, there is a risk of unexpected accident.
- **Perform folding and unfolding of the device with the brake applied.**
Otherwise, there is a risk of unintended movement of the device which may cause accidents.
- **After unfolding the device, lift up on the rear lift handle to make sure that the device does not fold.**
If the device is not unfolded completely, there is a risk of accident due to the device being folded unexpectedly while driving.

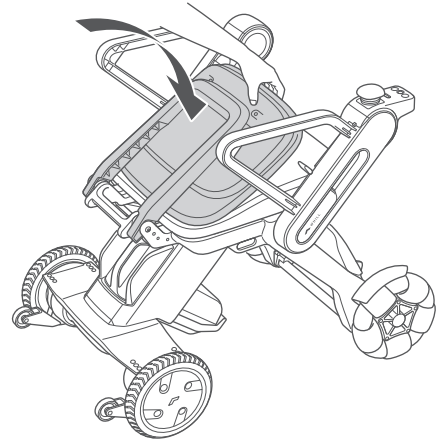
CAUTION



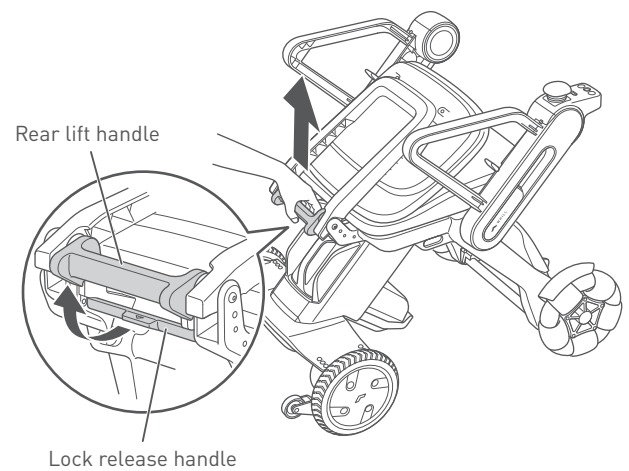
- **When folding or unfolding the device, grab only the handle and parts as described in this manual, and do not hold the device by any other areas.**
Otherwise, there is a risk of hand or foot injury if they get caught in the device.

6.2. Folding

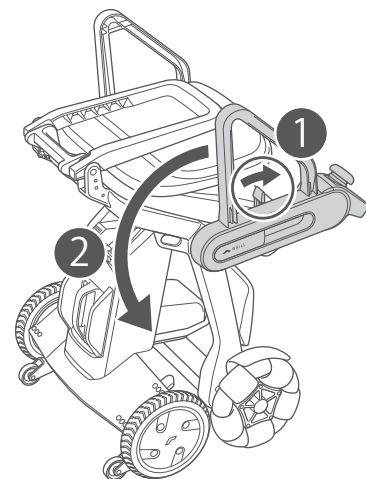
1. Tilt the back support forward.



2. Grasp the rear lift handle and the lock release handle, and pull up. Close the device until it clicks into place.



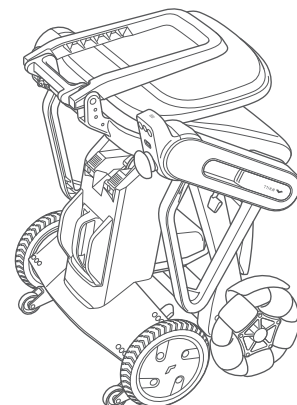
3. Move the arm release lever in the direction of the arrow, and rotate the arm backward. Rotate the arm until it clicks into place.



WARNING

Inserting a finger or other body part into the connecting components and moving parts of this device may result in an injury.

When assembling, adjusting, or transporting this device, do not touch any component other than those indicated in the manual.

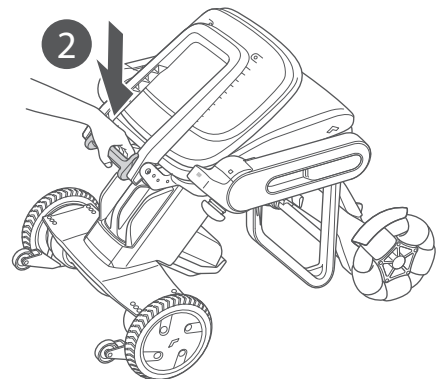
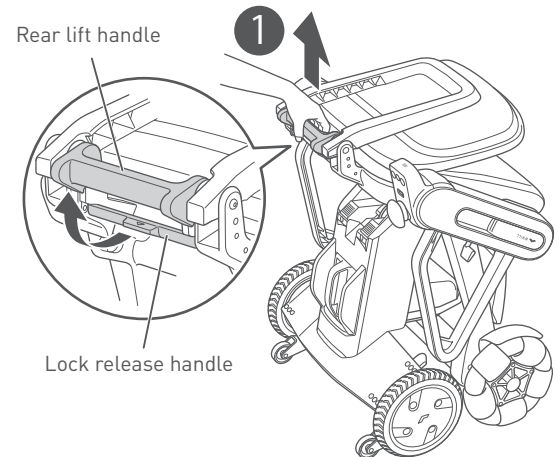




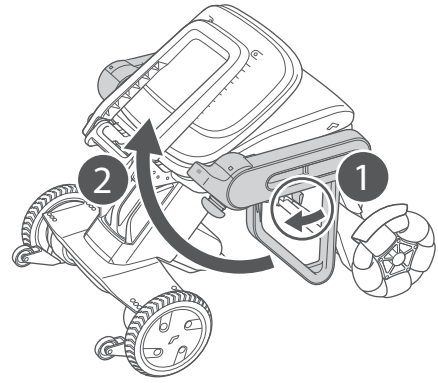
- When moving the device, carefully check the surroundings and road conditions to avoid collisions and dropping the device.
- Do not apply force to the device from the sides or drag the device.

6.3. Unfolding

1. ① Pull up gently while grasping the rear lift handle and the lock release handle, then ② lower the device slowly. Lower the device until it clicks into the open position.



2. ① Move the arm release lever in the direction of the arrow, and ② rotate the arm in the direction of the arrow. Rotate the arm until it clicks into place. Rotate the arm on the opposite side in the same way.
3. Tilt the back support backward.

**WARNING**

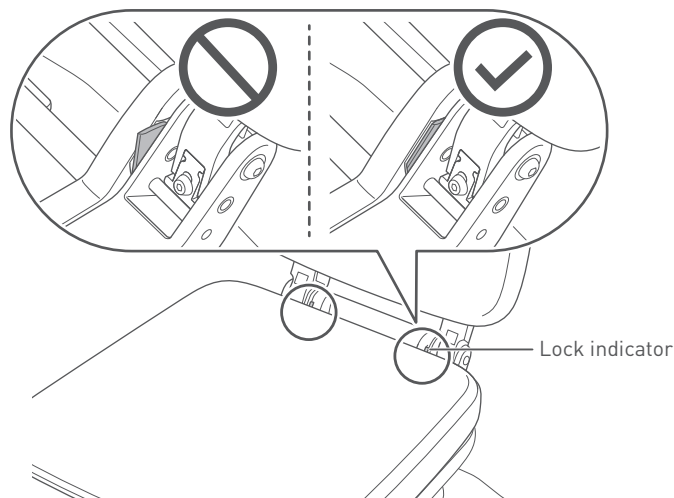
Inserting a finger or other body part into the connecting components and moving parts of this device may result in an injury.

When assembling, adjusting, or transporting this device, do not touch any component other than those indicated in the manual.



After folding or unfolding the device, be sure to check the lock indicator to ensure that the device is properly folded or unfolded.

When the device is not correctly unfolded, the red part inside the lock indicator sticks out after the lock release handle is released.



7. Transporting the device

Pay attention to the following when transporting this device.

- When transporting this device while it is folded, refer to “6.2. Folding” (Page 89).
- When lifting this device while it is folded, be sure to hold the parts specified in this manual.
- When securing this device to a carrier or the like, be sure to secure the parts specified in this manual.
- The unoccupied device is suitable for land and air transport.
- The device has not been tested against the limits specified in the Technical Specification for Interoperability relating to Accessibility for Persons with Reduced Mobility (PRM-TSI).

WARNING



- **Do not lift the device when there is a person or object on the device. When lifting the device, always hold the parts specified in this manual, and be careful of the weight. Do not lift the device by holding the battery handle while the battery is inserted.**

There is a risk of injury to the user and damage to the device.

- **Do not use the device as a seat in an automobile or other vehicle.**

There is a risk the device may become damaged and accidents may occur. The symbol on the right indicates that this device is not intended to be used as a seat in a motor vehicle.



- **If the anti-tip rollers come into contact with the ground while on an incline or during driving, it means that the incline is too steep for the device. Do not use this device on such roads.**

There is a risk of losing control of the device if you operate it while the anti-tip rollers are in contact with the ground.

CAUTION



- **Do not place the controller on the floor or ground while the device is folded, and do not apply an excessive load to the controller.**

There is a risk of damaging the controller or buttons, rendering the device inoperable.

- **When transporting the device in an automobile trunk or on a train, bus, or other public transportation, make sure that each component is safely secured.**

Otherwise, there is a risk of components moving as a result of vibration or impact, resulting in damage to the device.

- **When using a wheelchair lift to move the device, be sure to fasten the device securely.**

There is a risk of the device falling, resulting in damage to the device.

- **Take care to prevent the device from bumping against other objects when transporting the device.**

There is a risk that an impact may cause the device to open unexpectedly, resulting in damage to the device or surrounding objects.



- **Do not transport this device with a heavy object placed on it.**

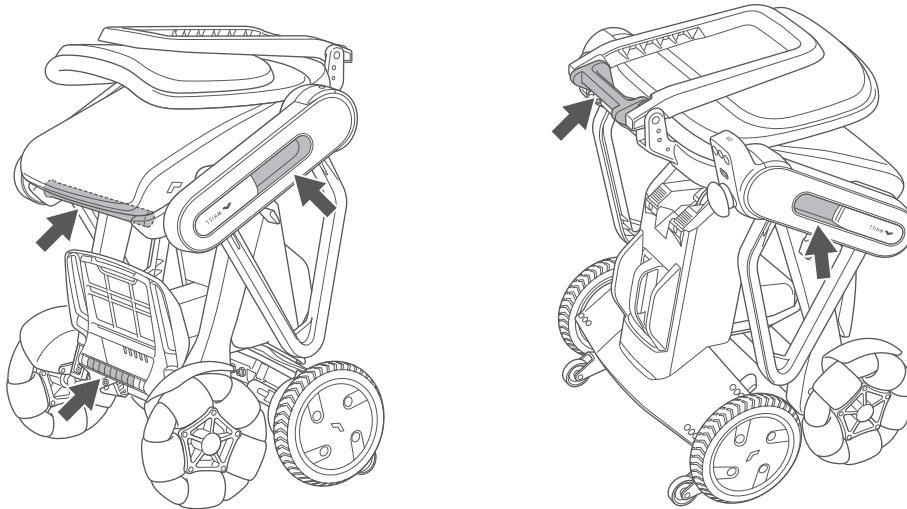
There is a risk of device malfunction.



Should you travel with your device on a commercial aircraft, contact the airline in advance for confirmation of the boarding procedure. You may be asked by the airline to provide the specifications of the device. Information on the device relevant to air travel is available for download from the FAQ section on the WHILL website. Please note that some airlines may refuse to transport your device.

7.1. How to carry the device

When transporting the device, hold the parts indicated in the indicated in the figure below.



7

7.2. Loading/unloading the device into/from a vehicle

⚠ CAUTION



- Before loading the device into the trunk of an automobile or onto a carrier, remove the battery. There is a risk that the power may turn ON and cause device to move, resulting in an accident.
- When loading the device into the trunk of an automobile or onto a carrier, hold only the specified parts as described in this manual. There is a risk of this device being damaged.
- The device weighs approximately 18.6 kg (41 lbs.) with the battery removed. Do not forcibly lift the device if you feel that it is heavy. There is a risk of injury to the user and damage to the device as a result of falling.
- When transporting the device or its components in an automobile trunk or other vehicle, make sure that each component is safely secured. Otherwise, there is a risk of components moving as a result of vibration or impact, resulting in damage to the device.

7.2.1. Transporting the device while folded

CAUTION

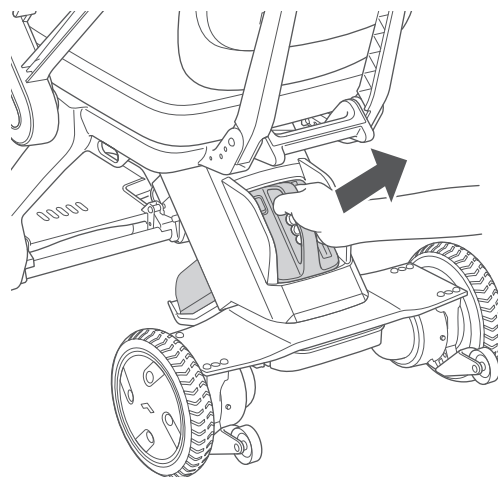


- Fully check the surroundings and road conditions before transporting the device.
There is a risk of collision and tipping over.
- Do not allow the device to tip over.
There is a risk of damage to the device.

This section explains how to transport the device while in the folded state.

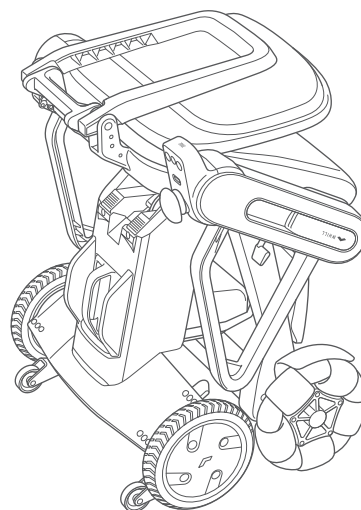
1. Remove the battery.

For the removal procedure, refer to “4.1.1. Removing the battery” (Page 55).



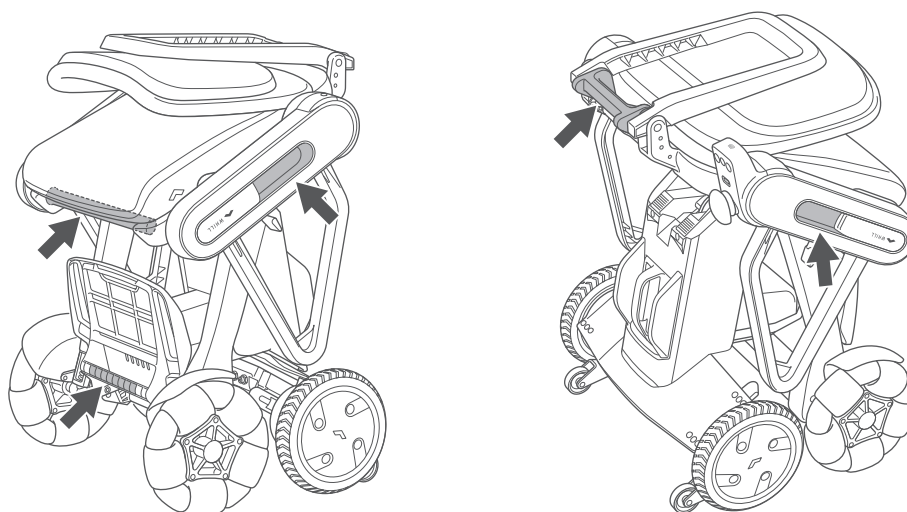
2. Fold the device.

For details on how to fold the device, refer to “6.2. Folding” (Page 89).



3. Load the device.

Grip at least two of the handles indicated by the arrows in the figure below, then lift and load the device so that it lies on its side. Take care not to lay the device with the controller facing down.

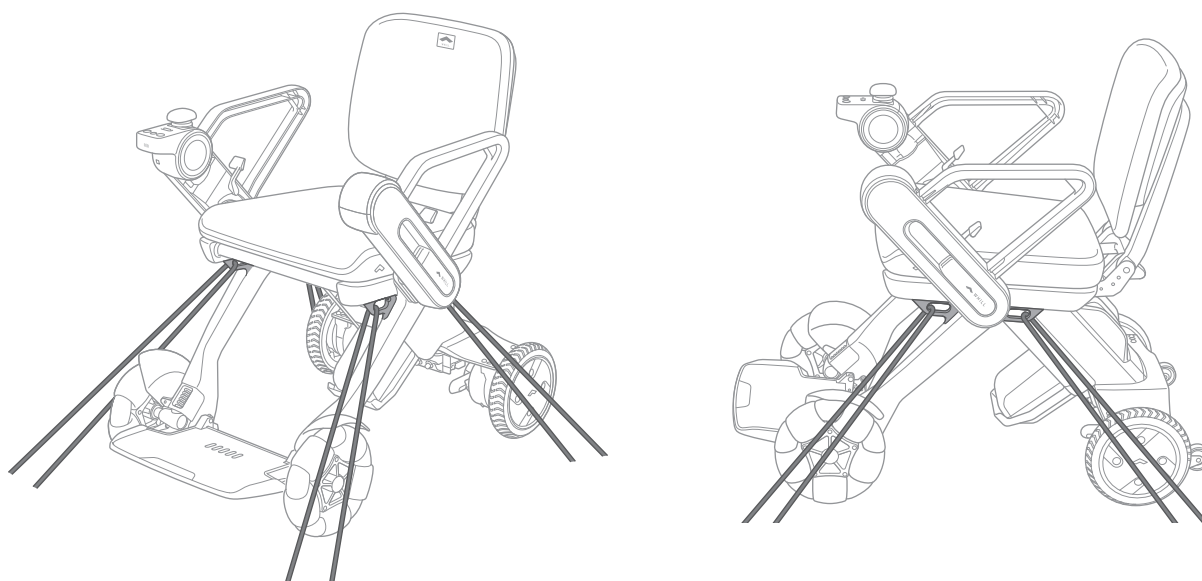


7.2.2. Transporting the device while unfolded

When loading this device onto a vehicle or carrier while unfolded, use a wheelchair ramp. Take sufficient care to prevent the device from falling off the ramp. Do not load or unload this device when there is a person on it.

■ Securing the device

Secure the device by using the four tie-down hook attachment points on the underside of the seat. Make sure that the anchor points on the vehicle are positioned lower than the height of the frame to prevent the device from being damaged by the ropes or other fastening equipment.



8. Storing the device

8.1. Storage method

Pay attention to the following when storing this device.

- Do not store the device near flame or flammable gas.
- Store the device in a location with an ambient temperature of -15 to 40°C (5 to 104°F).
- Store the battery and charger in a location with an ambient temperature of 0 to 40°C (32 to 104°F).
- Store the device indoors. If it is not possible to store the device indoors, store it in an environment such as under a roof where it will not be splashed by rain.
- Store the device in an environment with a humidity of 8% to 90%.
- A white residue may appear on the surface of the tires due to a phenomenon known as "blooming", which commonly occurs with rubber products. This does not affect the performance or safety of the product. If you are concerned about the appearance, wipe the residue off with a damp cloth.

WARNING



- Do not store the battery in a location exposed to direct sunlight or with an ambient temperature of 40°C (104°F) or higher.
Otherwise, there is a risk of unexpected accident such as the battery igniting or exploding.

CAUTION



- If this device is not used for a long period, ensure the battery is fully charged before storing.
Charge the battery at least once a month.
There is a risk that the battery may get excessively depleted and cannot be charged.



- Do not store this device for a long period of time in a location with heavy amounts of dust or sand, near the sea, or in a hot spring area.
Otherwise, there is a risk of foreign material getting inside and corroding the device or its parts.
- Do not store this device with a heavy object placed on it for a long period.
There is a risk of device malfunction.
- Do not place the battery or device in a location that is inclined or subject to excessive vibration.
There is a risk of damage or malfunction of the battery or device.
- Do not place the battery in an elevated location such as on a high shelf.
There is a risk of injury to the user and damage to parts as a result of falling.
- When removing the battery and storing this device, take sufficient care to prevent foreign objects or water from coming into contact with the connecting parts of the battery and device.
There is a risk of device malfunction due to short circuiting of the battery or device.
- Do not store the battery or device in a location exposed to direct sunlight or rain.
There is a risk that rain may cause a short circuit in the battery or device, and that direct sunlight may cause deformation or deterioration of the device. Store the device indoors or in a location with a roof. It is recommended that you cover the device while it is stored.

■ When storing for a long period

- At least once a month, charge the battery and check that this device operates correctly.
- Before using this device again after a prolonged period of disuse, charge the battery and be sure to check that this device operates correctly and safely.
- Store this device in a location with an ambient temperature of -15 to 40°C (5 to 104°F).
- Store the battery and charger in a location with an ambient temperature of 0 to 40°C (32 to 104°F).
- Store the device and battery in an environment with a humidity of 8% to 90%.
- When this device has not been used for a prolonged period, there is the risk that the part of the tires that are contacting the ground will be deformed. Rotate the tires at least once a month to ensure that a different part of each tire is contacting the ground.

9. About the smartphone app

This chapter describes the app used with this device.

If you install the WHILL app on a device running Apple iOS (such as iPhone or iPad) or on a smartphone running Google Android OS, you can configure the settings of this device from the app via Bluetooth Low Energy (BLE). Use the app near the device within the connectable distance (approximately 10 m (32.8 ft.) varying depending on environment) close to the device, otherwise degradation of wireless function (e.g., remote control, firmware update) may occur. For example, the device power supply can be turned ON and OFF, the device status can be checked, and the mode can be changed. For the safety information regarding radio frequency interference, refer to “1.4. EMI (Electromagnetic Interference)”.

Time synchronization of WHILL Model C Lite with the local time can also be accomplished via the app over BLE connection, but this function can only be executed by WHILL. Depending on your region, timing, or smartphone type, the app may not be offered or some functions may not be available. This app cannot be used with the WHILL Model CK Lite.

Stick the label printed with the app pairing ID and password provided with this device onto the last page of this user manual, and store the user manual in a safe place where it will not be lost. Never stick the label onto this device.

CAUTION



- After changing the mode setting, ensure that this device is functional in a safe place. Otherwise, this device might move unexpectedly.



When operating the power supply of this device on the smartphone app, pay attention to the battery charge level of the smartphone. The power supply of this device can no longer be operated if the smartphone battery runs out.

10. Maintenance and inspection

WARNING



- **Do not perform maintenance or inspection on parts that are not specified in this manual.**
There is a risk of injury, or the product safety may be impaired due to damage to the device or its components. Performing maintenance or inspection not described in this manual will invalidate the warranty.
- **Before performing maintenance and inspection, turn the device power supply OFF.**
There is a risk of unexpected movement of this device caused by accidental contact with the controller.



- If you cannot perform adjustment or inspection by yourself, contact your distributor or customer support. Only trained staff are permitted to perform maintenance on this device.
- The maintenance manual is only available to service providers and not to individual users.

10.1. Cleaning, disinfection and user maintenance

Perform maintenance on this device as follows.

- If there is a significant amount of dirt on the exterior or wheels, wipe it away with a wet towel. Pay attention when washing the wheels off with water.
- If the dirt is tough to remove, use a neutral detergent. Avoid the use of petroleum-based solvents.
- When disinfecting this device or parts, wipe gently with a soft cloth moistened with commercially available alcohol disinfectant (ethyl alcohol 70%).
- To clean the cushion cover, wash by hand only, use a neutral detergent, and dry it flat in the shade. Do not iron.
- To clean the inner cushion, remove it from the cover, wash it in water, and hang it up in a well-ventilated place to dry.
- Replace the front and rear wheels when the treads are worn down to approximately 0.5 mm (1/64 in.).
- If there is any foreign material on the battery connector socket or battery connector port, remove it with a small brush, etc. Be sure to close the battery charging port cap when storing the battery.
- If the device, parts, or tires show any abnormal signs such as cracks, stop using the device immediately and contact your distributor or customer support.

WARNING



- **Do not touch the battery connector socket or battery connector port directly, and make sure that they do not become wet or come into contact with foreign objects.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.
- **Do not touch the controller cable connector or main body cable connector directly, and make sure that they do not become wet or come into contact with foreign objects.**
Otherwise, there is a risk of injury or electric shock and of damage to this device or its parts.

⚠ CAUTION



- Wipe off dirt on the surface of the controller with lens cloth or other soft cloth.
Wiping with a hard cloth, etc. may damage the screen.



- Do not use paint thinner, benzene, or other organic solvents for cleaning, and do not use a high-pressure washer.
Doing so may result in discoloration, deformation, deterioration, and damage.
- Do not apply commercially available grease or oily antirust agent/wax, etc. to the moving parts or connections of this device.
There is a risk of sand or other foreign substances entering this device, causing device malfunction.

10.2. Replacing the smart key battery

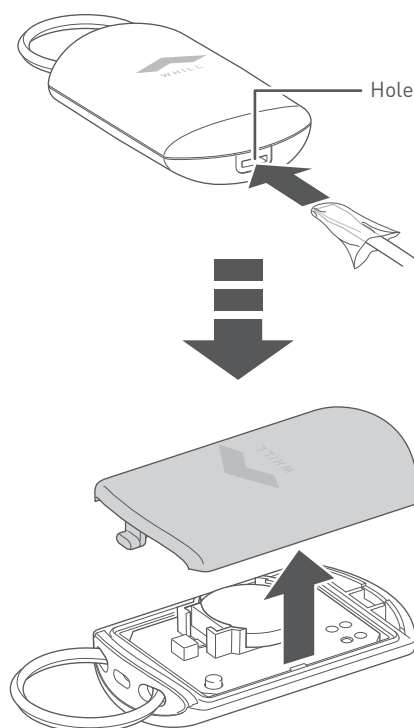
When the display indicates that the smart key battery level is low, follow the procedure below and replace the smart key battery. Perform this procedure carefully because there is a risk of device malfunction if a heavy load is applied. Use a CR2032 3V battery (commercially available).



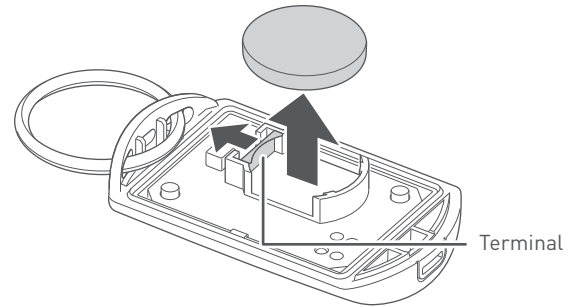
When the smart key battery level is low, the indication on the right is shown on the display of the controller.



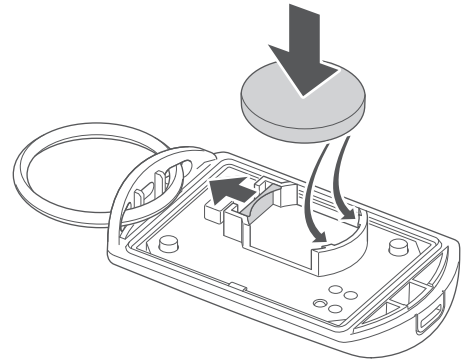
1. Cover the tip of a flathead screwdriver with a cloth, then insert the tip into the hole in the case to remove the case cover.



2. Pull back the terminal and remove the old battery from the battery case.

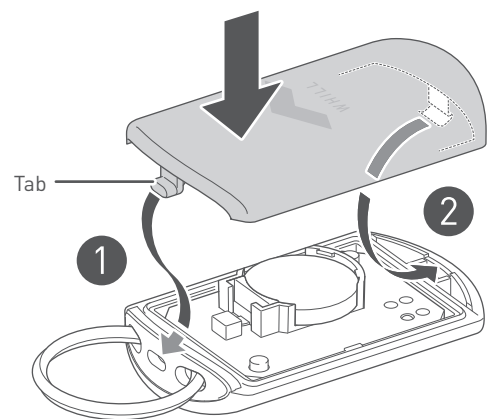


3. Pull back the terminal and install a new battery under the rib in the battery case.



4. Install the case cover.

- 1 Insert the tab into the hole.
- 2 Press the opposite side of the case cover with the WHILL logo on it in order to fit it into place.

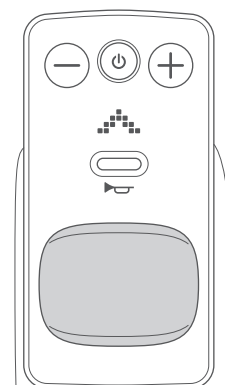


10.3. Reinstalling the joystick

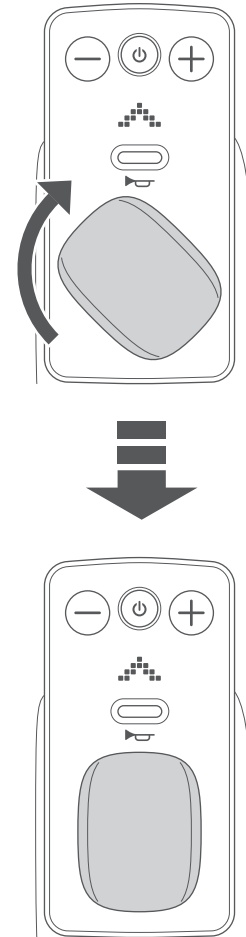
10

If the joystick comes off the controller, follow the procedure below to reinstall it.

1. Fit the joystick in place 90° relative to the direction of forward travel.



2. Rotate the joystick clockwise by 90°. Push in the joystick after rotating it to the specified position.



10.4. Inspection

To ensure safe use of this device, it is recommended that you have the device inspected approximately once every six months by your distributor. For details, contact your distributor or customer support.

10.5. Repair performed by the manufacturer or distributor

If repair is necessary, contact your distributor or customer support.

WARNING



- Replace the anti-tip rollers and footrest if they become deformed.
There is a risk that the device may lose its anti-tipping functionality and tip over.
- If this device shows any abnormal signs, immediately discontinue use, and contact your distributor or customer support.
Continuing to use this device when it is malfunctioning can potentially cause an injury or unexpected accident.

CAUTION



- If a part deteriorates or becomes worn, and requires replacement, contact your distributor or customer support.
The part might be damaged and become inoperable.

10.6. Disposal

When disposing of this device, its parts, and the battery, be sure to follow the local disposal guidelines.

If there is anything that is unclear, contact your distributor or customer support.

10.7. Product warranty

For device warranty information, check its warranty.

10.8. Reuse information

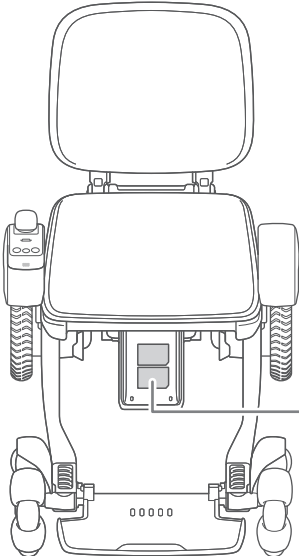
The wheelchair is suitable for reuse. Before the wheelchair is passed on to another user, it must be serviced and hygienically prepared by a specialist dealer. When passing on the wheelchair, please remember to give these operating instructions and the address of your specialist dealer to the new user.

10.9. How to check the manufacture date of the device

■ Device

Check the 5th to 7th digits from the end of the serial number shown on the primary identification label.

Indication	Year	Month
Indicated location	6th and 7th digits from end	5th digit from end
Notation method	25 : 2025 26 : 2026 27 : 2027 28 : 2028 29 : 2029	1 to 9: January to September A : October B : November C : December



Example: CA340312560123

2025 June

SN 製造番号

CA340312560123

UDI

(01) 0 0000000 00000 00 (11) YYMMDD (21) 000000000000

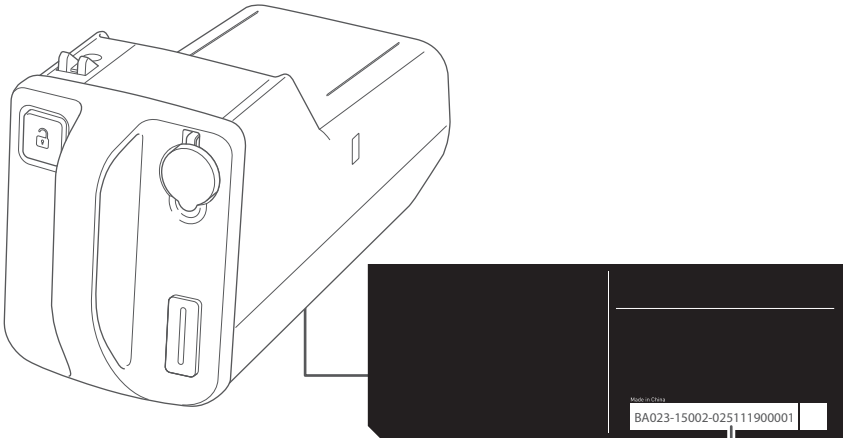
UDI

Model C Lite Series

■ Battery

Check the 6th to 11th digits from the end of the serial number shown in the white frame of the label on the battery.

Indication	Year	Week	Day
Indicated location	10th and 11th digits from end	8th and 9th digits from end	6th and 7th digits from end
Notation method	25 : 2025 26 : 2026 27 : 2027 28 : 2028 29 : 2029	01 to 09: January to September 10 to 12: October to December	01 to 09: 1st to 9th 10 to 31: 10th to 31st



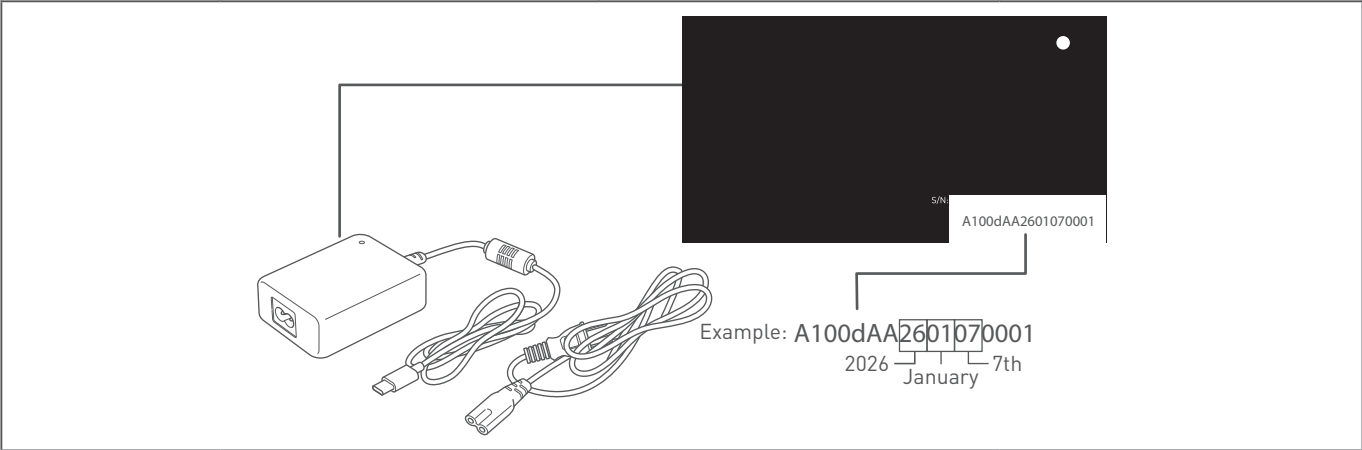
Example: BA023-15002-025111900001

2025November19th

■ Charger

Check the 5th to 10th digits from the end of the serial number shown in the white frame of the label on the charger.

Indication	Year	Month	Day
Indicated location	9th and 10th digits from end	7th and 8th digits from end	5th and 6th digits from end
Notation method	5 : 2025 6 : 2026 7 : 2027 8 : 2028 9 : 2029	01 to 09: January to September 10 to 12: October to December	01 to 09: 1st to 9th 10 to 31: 10th to 31st



11. Troubleshooting

In the event of certain issues with this device, an error code will be shown on the display of the controller.

The following table summarizes the error displays, audio messages, causes of the errors, and how to remedy the errors.

Issue	Error display	Cause	Resolution
The device turns OFF after it is stopped.		The controller was operated while the device was folded.	Unfold the device and turn the power ON again.
		The joystick was not in the neutral position when the power was turned ON.	Turn the power back ON without touching the joystick.
		The brakes were released.	Lock the brakes and turn the power ON again.
		The charger was connected while the power was ON, or the device was turned ON while the charger was connected.	Disconnect the charger from the battery.
The display shown on the right appears.		The battery charge level is low.	Charge the battery.
The maximum speed decreases.		The battery temperature dropped significantly.	Store the battery at room temperature or at least at an ambient temperature higher than 0°C (32°F) until the battery temperature rises above 0°C (32°F).
The maximum speed increases.		The battery temperature rose above 0°C (32°F).	N/A
The error display shown on the right appears, and a warning sound is emitted.		The smart key (sold separately) battery level is low.	Replace the smart key battery.
The device does not turn ON. The error display does not light up.	N/A	The battery charge level is low.	Charge the battery.
		The battery is not fully inserted into the device.	Insert the battery all the way in.
			Remove the battery, then insert the battery again after 10 seconds.



- Numerical error codes are displayed with a red vertical line, as shown on the right.
- If an unlisted error is displayed, or if the issue persists even after performing the appropriate troubleshooting as described, remove the battery. Then contact your distributor or customer support.

12. Specifications

Product specification sheet	
Model	WHILL Model C Lite Series
Wheelchair class	A / B (Long range battery)
Occupant mass group	III
Name and address of manufacturer	WHILL, Inc. 2-1-11 Higashishinagawa, Shinagawa-ku, Tokyo 140-0002, Japan

Measurements		Minimum value	Maximum value
ISO7176-5	Overall length	-	978 mm [38.5 in.]
ISO7176-5	Overall width	-	587 mm [23.2 in.]
ISO7176-5	Overall height	795 mm [31.3 in.]	868 mm [34.2 in.]
ISO7176-5	Folded/Stowage length	-	500 mm [19.7 in.]
ISO7176-5	Folded/Stowage width	-	587 mm [23.2 in.]
ISO7176-5	Folded/Stowage height	-	755 mm [29.7 in.]
ISO7176-5	Rising	-	177 mm [7 in.]
ISO7176-5	Required width of angled corridor	-	800 mm [31.5 in.]
ISO7176-5	Required doorway entry depth	-	1080 mm [42.5 in.]
ISO7176-5	Required corridor width for side opening	-	1000 mm [39.4 in.]
ISO7176-7	Seat plane angle	-	6°
ISO7176-7	Effective seat depth	-	450 mm [17.7 in.]
ISO7176-7	Effective seat width	-	420 mm [16.5 in.]
ISO7176-7	Seat surface height at front edge	-	508 mm [20 in.]
ISO7176-7	Backrest angle	5°	10°
ISO7176-7	Backrest height	350 mm [13.8 in.]	420 mm [16.5 in.]
ISO7176-7	Footrest to seat distance	-	422 mm [16.6 in.]
ISO7176-7	Leg to seat surface angle	-	88°
ISO7176-7	Armrest to seat distance	242 mm [9.5 in.]	290 mm [11.4 in.]
ISO7176-7	Front armrest to backrest distance	441 mm [17.4 in.]	495 mm [19.5 in.]
ISO7176-5	Total mass (including the battery)	-	21.6 kg [47.6 lbs.]
ISO7176-5	Total mass (including the long range battery)	-	21.7 kg [47.8 lbs.]
-	Total mass (without the battery)	-	18.6 kg [41 lbs.]

Measurements		Minimum value	Maximum value
-	Battery weight	-	3 kg [6.6 lbs.]
-	Long range battery weight	-	3.1 kg [6.8 lbs.]
ISO7176-5	Pivot width	-	1080 mm [42.5 in.]
ISO7176-5	Reversing width	-	1180 mm [46.5 lbs.]
ISO7176-5	Ground clearance	-	75 mm [3 in.]

Performance		Minimum value	Maximum value
-	Maximum weight limitation	-	136kg [300 lbs.]
ISO7176-1	Static stability, forward wheelchair tipping angle, front wheels unlocked	-	10°
ISO7176-1	Static stability, rearward wheelchair tipping angle, rear wheels locked	-	10°
ISO7176-1	Static stability, rearward wheelchair tipping angle, rear wheels unlocked	-	10°
ISO7176-1	Static stability, left wheel chair tipping angle	-	10°
ISO7176-1	Static stability, right wheel chair tipping angle	-	10°
ISO7176-1	Static stability, rearward anti-tip device tipping angle	-	10°
ISO7176-2	Forward dynamic stability on ramp	-	10°
ISO7176-2	Rearward dynamic stability on ramp	-	10°
ISO7176-2	Lateral dynamic stability on ramp	-	10°
ISO7176-2	Lateral dynamic stability while turning in a circle	-	1820 mm [71.7 in.]
ISO7176-2	Lateral dynamic stability while turning suddenly	-	10°
ISO7176-2	Rearward dynamic stability traversing step forward	-	50 mm [2 in.]
ISO7176-2	Rearward dynamic stability traversing step backward	-	50 mm [2 in.]
ISO7176-2	Forward dynamic stability traversing forward up a step	-	50 mm [2 in.]
ISO7176-2	Forward dynamic stability traversing forward down a step	-	50 mm [2 in.]
ISO7176-2	Travelling forward at an oblique angle to a downward step	-	50 mm [2 in.]
ISO7176-10	Obstacle climbing height	-	50 mm [2 in.]

Performance		Minimum value	Maximum value
EN12184	Ability to climb rated slope	-	10°
ISO7176-6	Maximum speed forward	-	6 km/h [3.7 mph]
ISO7176-6	Maximum speed backward	-	2 km/h [1.2 mph]
ISO7176-4	Theoretical continuous driving range	-	23.4 km [14.5 miles]
ISO7176-4	Theoretical continuous driving range (Long range battery)	-	38.5 km [23.9 miles]
ISO7176-3	Running brakes, normal operation	Rearwards: 230 mm [9.1 in.]	Forwards: 780 mm [30.7 in.]
ISO7176-3	Running brakes, reverse operation	Rearwards: 280 mm [11 in.]	Forwards: 740 mm [29.1 in.]
ISO7176-3	Running brakes, emergency operation	Rearwards: 230 mm [9.1 in.]	Forwards: 740 mm [29.1 in.]
ISO7176-3	Parking brakes, maximum slope uphill	-	10°
ISO7176-3	Parking brakes, maximum slope downhill	-	10°
ISO7176-5	Minimum turning radius	-	811 mm [31.9 in.]
ISO7176-5	Turning diameter	-	1622 mm [63.9 in.]
ISO 7176-9	Protection against ingress of liquids	-	IPX5

Operating force	Minimum value	Maximum value
Joystick	-	2.5N
Buttons (Power, Speed, Horn)	-	3.3N, 4.3N, 3.4N
Brake release lever	-	18.5N
Wheels		
Front wheels type	Omni-wheel (Solid tire)	
Front wheels diameter	220mm (8.7 in.)	
Front wheels width	65mm (2.6 in.)	
Rear wheels type	Solid tire	
Rear wheels diameter	207mm (8.1 in.)	
Rear wheels width	42mm (1.7 in.)	
Motor		
Type	Brushless motor	
Rated voltage	DC24 V	
Brake		
Type	Electromagnetic brake	
Battery		
Type	Lithium-ion battery	
Nominal voltage	25.6 V	
Rated capacity (5-hour rate)	10.6 Ah / 272 Wh	
Long range battery		
Type	Lithium-ion battery	
Nominal voltage	25.8 V	
Rated capacity (5-hour rate)	19.2 Ah / 496 Wh	

Battery charger	
Type	Off-board battery charger
Rated power	100-240 V, 50/60 Hz
Rated DC output current	5 A
Rated DC output voltage	20 V
Operating temperature and charging temperature	3 to 40°C [37.4 to 104°F]
Supported battery type	Lithium-ion battery
Charging time	4.5 hours
Charging time (Long range battery)	9 hours
Rated current of user-accessible protective fuses	There are no user-accessible fuses
Name and address of battery charger manufacturer	WHILL, Inc. 2-1-11 Higashishinagawa, Shinagawa-ku, Tokyo 140-0002, Japan
Antenna	
Type	Bluetooth Low Energy
Frequency	2402 - 2480 MHz
Maximum output power	6 dBm

Environment	Minimum value	Maximum value
Operation temperature	-15°C (5°F)	40°C (104°F)
Operation humidity	8%	90%
Storage temperature (Battery & Charger)	0°C (32°F)	40°C (104°F)
Storage temperature (Device)	-15°C (5°F)	40°C (104°F)
Storage humidity (Battery & Charger)	25%	50%
Storage humidity (Device)	8%	90%
Miscellaneous	Minimum value	Maximum value
Estimated lifetime	-	5 years
Noise produced by the device and level thereof	-	65 dBA

The wheelchair conforms to the following standards:

- Requirements and test methods for static, impact, and fatigue strengths (ISO 7176-8)
- Power and control systems for electric wheelchairs - requirements and test methods (ISO 7176-14)
- Climatic test in accordance with ISO 7176-9
- Requirements for resistance to ignition in accordance with ISO 16840-10

Note:

1) The maximum speed may be lowered to meet local regulations.

2) The test results are based on the maximum speed set at 6 km/h (3.7 mph).

■ Declaration of Conformity for CE Marking

Hereby, WHILL, Inc. declares that WHILL Model C Lite is in compliance with Directive 2014/53/EU, Regulation 2023/1230/ EU, Directive 2011/65/EU, Regulation 1907/2006 and Regulation (EU) 2017/745. The full text of the EU declaration of conformity is available at the following internet address: <https://whill.inc/>

■ Disposal in the European Union



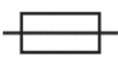
The device, battery and accessories are durable components. Improper disposal of waste products may result in the release of environmentally hazardous substances. This symbol (picture left) means that this device must be disposed of in accordance with the European Directive 2012/19/EC (WEEE Directive). To protect the environment, have the device picked up at the end of its life at a local recycling center.

■ Reusability

Please follow the instructions under 10.8. if you pass the vehicle on to another user. To ensure the safe use of the vehicle, any adjustment and cleaning should be carried out according to the instructions in 3.4., 5.1. and 10.1.

Symbols

The symbols below may be found in this manual or the labels on the device.

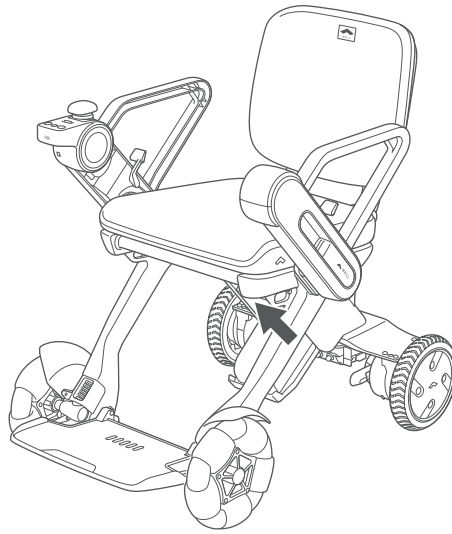
Symbol	Meaning	Symbol	Meaning
	Serial number		Warning; Explosive material (Safety color: Yellow)
	Unique device identification		Refer to user manual (Safety color: Blue)
	Reference number		Refer to user manual
	Medical device		Refer to user manual
	Authorized representative in the European Community		Pinch point
	Authorised representative in Swiss		Maximum load capacity
	Manufacturer		Direct current
	Not intended to be used as a seat in a motor vehicle (Safety color: Red)		Alternating current
	No standing on the footrest (Safety color: Red)		Time-lag miniature fuse-link
	No access for people with active implanted cardiac devices (Safety color: Red)		Class II equipment
	Magnetic resonance Unsafe (Safety color: Red)		Product contains less than the maximum concentration value of all hazardous substances concerned in China RoHS II
	No open flame; Fire, open ignition source and smoking prohibited (Safety color: Red)		Environment Friendly Use Period (EFUP) of 10 years
	General warning sign (Safety color: Yellow)		BSMI mark
	General warning sign		For indoor use only
	Warning; Electricity (Safety color: Yellow)		Keep dry

Symbol	Meaning	Symbol	Meaning
	Temperature limit		PSE marking of the specified electrical appliances and materials (Category A)
	Humidity limitation		PSE marking non-specified electrical appliances and materials (Category B)
	Fragile, handle with care		Regulatory compliance mark
	This way up		International Efficiency Marking for External Power Supplies Energy Efficiency Level VI U.S. Department of Energy
	WEEE symbol		BC mark
 Li-ion	Recycle symbol		TUV mark
	Call2Recycle Battery Seals		KC mark
	CE marking		Safety Mark
	UKCA marking		ETL / Intertek mark
	T/R mark	Meaning of safety color - Red: Prohibition - Yellow: Warning - Blue: Mandatory action	

Country Specific Information

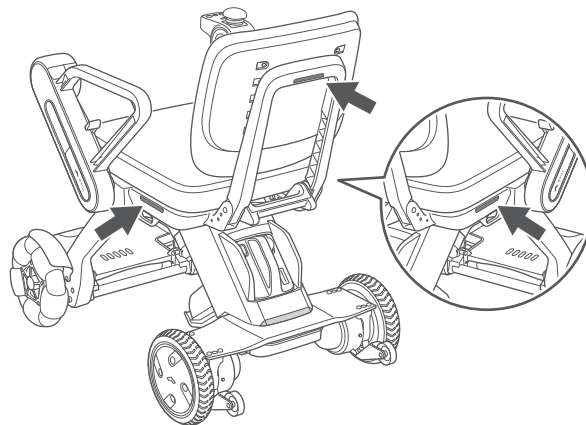
■ Front Light (compliant with German road traffic regulations, StVZO)

A front light is attached to the front.



■ Reflectors (compliant with German road traffic regulations, StVZO)

Reflectors are attached at the following three locations.



■ Package Contents

The device packaging also contains the following items:

- Padded armrests

WHILL Model C Lite is intended for use by individuals with walking disabilities or mobility impairments due to:

- Limb loss (leg amputation)
- Limb defect/deformity
- Joint contractures/damage
- Paralysis
- Neurological disorders (e.g., MS, Parkinson's disease, SCA)
- Muscular dystrophy
- Rheumatic diseases
- Age-related frailty, cachexia, and balance disorders
- Ehlers-Danlos syndrome
- Stroke
- Conditions such as heart and circulatory failure.

WHILL Model C Lite must not be used if one or more of the following conditions are present:

- Impaired vision
- Uncontrolled seizures (e.g., epilepsy)
- Impaired perception and/or judgment
- Functional impairment (joint contractures/joint damage) of both upper extremities.

The armrest is designed with a rotating mechanism to facilitate getting in and out of the device.

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Contact information

The distributor from whom this device was purchased will handle requests for repair, maintenance and parts replacement. To determine whether a loaner device is provided during servicing, contact the distributor. For details on the product warranty, contact the distributor. Also, give your distributor your up-to-date contact information in case of product safety notices or product recalls.

■ Distributor

■ Contact information in regions

- | | |
|--|--|
| <ul style="list-style-type: none">• EU
WHILL Europe BV
Johan Cruijff Boulevard 65 1101 DL Amsterdam,
The Netherlands• North America
WHILL, Inc.
303 Twin Dolphin Dr., 6th Floor, Redwood City, CA
94065
(844) 699-4455 us.info@whill.inc | <ul style="list-style-type: none">• APAC
WHILL China CO., LTD.
South Side, Floor 1, Building 6, No. 851,
Chengyun Road,
Xiangcheng District, Suzhou, Jiangsu, China
(86)512-6856-2019

https://whill.inc |
|--|--|

■ Authorized representatives and sponsors

- | | |
|---|---|
| <ul style="list-style-type: none">• EU
CMC Medical Devices
C/ Horacio Lengo n18 C.P 29006 Málaga-Spain• CHE
CMC Medical Devices GmbH.
Rigistrasse 3, 6300 Zug, Switzerland | <ul style="list-style-type: none">• UK
M/s CMC Medical Devices Ltd.
Office 32 19-21 Crawford Street, London, United
Kingdom |
|---|---|

■ Manufacturer

WHILL, Inc.

Address: 2-1-11 Higashishinagawa, Shinagawa-ku, Tokyo, Japan 140-0002

Contact information (Customer support): 0120-696-527

Website: <https://whill.inc>

■ App pairing password

Stick the label printed with the app pairing ID and password provided with this device in the box above. Never stick the label onto the device.



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