

**Model series**  
**Neodrives**



**Additional operating instructions**  
**R&E Stricker Reha-Entwicklungen GmbH**

This supplementary operating manual for the Neodrives model series supplements the general operating manual for the City, Ultra, Sport, Neodrives and Lipo Smart model series..

## **Manufacturer**

R&E Stricker Reha-Entwicklungen GmbH

Klotzberg 64

D-77815 Bühl

Phone: +49 7223 / 72510

Fax: +49 7223 / 74947

E-Mail: [info@stricker-handbikes.de](mailto:info@stricker-handbikes.de)

Web: [www.stricker-handbikes.de](http://www.stricker-handbikes.de)

## **Notice to reader**

For reasons of readability, the masculine form has been chosen in these operating instructions; nevertheless, the information refers to members of all genders.

Misprints, errors and price or product changes reserved. Product changes include, but are not limited to, changes resulting from further development of mechanics, software or legal requirements.

Date: 2.11.2021

© R&E Stricker Reha-Entwicklungen GmbH, Bühl

Reprint, even in part, only with the written permission of R&E Stricker Reha-Entwicklungen GmbH , Bühl.

## Table of contents

<b>1</b>	<b>Declaration of Conformity</b> .....	<b>2</b>
<b>2</b>	<b>Introductory notes</b> .....	<b>2</b>
<b>3</b>	<b>Note on the general instructions for use</b> .....	<b>2</b>
<b>4</b>	<b>Product Description &amp; Intended Use</b> .....	<b>2</b>
<b>5</b>	<b>Safety and driving instructions for accident prevention</b> .....	<b>2</b>
5.1	Safety instructions for battery and charger .....	3
<b>6</b>	<b>Operation</b> .....	<b>4</b>
6.1	Key .....	4
6.2	Start driving .....	5
6.3	Display of the charge level .....	6
6.4	End of ride .....	6
<b>7</b>	<b>Battery and charger</b> .....	<b>6</b>
7.1	Charging the battery .....	6
7.2	Attaching the battery .....	7
7.3	Charging the battery .....	8
7.4	Storage .....	9
<b>8</b>	<b>Repair, cleaning and maintenance</b> .....	<b>9</b>
8.1	Motor .....	9
8.2	sMMI Connect .....	9
8.3	Akku .....	10
8.4	Motor .....	10
8.5	Removing the drive wheel .....	10
8.6	Attaching the drive wheel .....	11
<b>9</b>	<b>Transport</b> .....	<b>12</b>
9.1	Transportation in vehicle .....	12
<b>10</b>	<b>Disposal and recycling</b> .....	<b>12</b>
<b>11</b>	<b>Warranty and guarantee</b> .....	<b>13</b>
<b>12</b>	<b>Liability</b> .....	<b>13</b>
<b>Attachment</b>	.....	<b>14</b>
A	Technical data .....	14

## 1 Declaration of Conformity



The device complies with the current EU standards and directives. We certify this in the EC Declaration of Conformity. If required, we will be pleased to send you the corresponding declaration of conformity. Our power assist devices have been tested by means of an electromagnetic compatibility test (EMC).

In the event of a change not agreed with R&E Stricker GmbH, this declaration loses its validity.

## 2 Introductory notes

### WARNING

Before operating the handcycle, please read these instructions for use and all other instructions for use supplied with the handcycle carefully and observe them.

### WARNING

Visually impaired persons or persons with cognitive impairments must have the information material and the operating instructions read aloud by assistants. Corresponding documents are available on our website [www.stricker-handbikes.de](http://www.stricker-handbikes.de) on the Internet. Videos and photos are also available there.

### DEALER NOTICE

Be sure to hand out these instructions for use to each customer when handing over the handcycle and expressly draw the customer's attention to the safety and hazard information.

Never deliver a handbike without operating instructions!

## 3 Note on the general instructions for use

### WARNING

This is the supplementary instruction manual for handbikes of the Neodrives model series. It supplements the general instructions for use for the City, Ultra, Sport, Neodrives and Lipo Smart model series. Be sure to read both instruction manuals before operating the handcycle.

## 4 Product Description & Intended Use

The handbike is coupled to a manual wheelchair as an electrically assisted manual traction aid. This allows the rider to be supported in his mobility. The aim is to extend the range of action by enabling longer distances to be covered more easily and independently. Coupling the handbike creates a three-wheeled vehicle with three relatively large wheels. The handbike therefore improves driving characteristics on uneven surfaces. Obstacles can also be overcome more easily. Driving downhill and on slopes becomes safer due to the additional braking systems. The handbike can be independently coupled to and released from the wheelchair by the rider. The wheelchair as such is not changed and its characteristics remain completely unchanged.

## 5 Safety and driving instructions for accident prevention

### WARNING

These instructions are for your own safety. Please read them carefully before using the handbike and follow the instructions! Failure to observe the instructions for use could result in damage to the product as well as serious personal injury. We accept no liability for damage resulting from failure to observe the operating instructions.

**NOTE**

Observe all safety and hazard information and instructions, both in this and in all other operating instructions supplied.

## 5.1 Safety instructions for battery and charger

**WARNING**

Before performing any repair, cleaning or maintenance tasks on the handbike, switch off the electrical components and remove the batteries from the handbike.

The batteries supplied are used exclusively to operate the drive systems of the handbike. Do not connect any other systems to the battery. Any use beyond this requires the written approval of the manufacturer. All information is state of the art at the time of printing. Cases of misuse include:

- Use of the battery contrary to the description and instructions in the user manual.
- Use of the battery in excess of the technical performance limits
- Technical modification of the battery
- Modification of the battery software
- Use of the battery to supply other systems

We accept no liability for damage in the event of misuse.

**HEALTH INFORMATION**

In case of contact with leaking gases, supply fresh air. In case of body contact with battery fluids, rinse the affected body part with plenty of water. In case of contact with mucous membranes or discomfort, consult a physician.

**5.1.1 Operation**

Make sure that the batteries are firmly seated in the holders provided and lock the batteries. This applies especially if you have previously removed the batteries from the power assist device for charging.

Observe the battery temperature on the display during extreme uphill travel. The temperature must not exceed 45 °C. To prevent overheating, take an operating break to relieve the batteries.

Only operate the battery in ambient temperatures between -20 °C and 50 °C. Operation outside the temperature range shortens the service life of the battery and poses a risk of ignition.

Do not subject the battery to shocks. If the battery has been dropped or has taken a knock, the battery must be checked by the manufacturer. Contact your dealer or the manufacturer for return and repair/disposal procedures. This also applies to otherwise damaged or defective batteries. Never continue to use a damaged or defective battery. Do not open the battery yourself.

Keep the battery dry and clean. Protect the battery against the ingress of moisture or foreign particles. Do not connect the battery's contacts to metallic or other conductive objects. Keep the battery away from small metallic objects such as screws, coins, paper clips, keys or similar to avoid a short circuit. Clean dirty contacts with a dry, clean cloth only. Do not immerse the battery in water.

If you notice that the battery is overheating, leaking, smoking, emitting an unusual odour or deforming, stop using the battery immediately and switch it off.

Protect the battery from heat and open fire (radiators, microwaves, ovens, strong sunlight). Exposure to heat can cause ignition and explosion.

Do not open the battery casing. Do not disassemble the battery. Damage to the battery cells or contact with oxygen can cause fire and explosion. Opening the battery will void the warranty.

**FIRE FIGHTING**

Do not attempt to extinguish lithium-ion batteries with water or other liquids in the event of a fire. Sand is recommended by battery cell manufacturers as the only extinguishing agent. There is a risk of explosion in the event of a fire.

Extinguish lead-gel batteries with water, foam or CO<sub>2</sub>. Dangerous gases may be formed in a fire involving lead-gel batteries. Do not breathe in the gases under any circumstances.

**5.1.2 Charging process****WARNING**

Do not leave the battery unattended during the charging process.

Only charge the battery at temperatures between 0 and 40 °C. A charging process outside the temperature range is automatically aborted by the battery. To optimize the service life, charge the battery at temperatures of 10-30 °C.

Charge the battery in a sufficiently ventilated, dry and dust-free environment. Ensure sufficient air circulation during the charging process.

Do not charge the battery near flammable substances (solids, liquids, gases).

Protect the battery from moisture during the charging process. Do not charge the battery in rooms where water could condense on the battery or the charger. Only use the charger when it is completely dry. If condensation has formed, allow the charger to dry completely before charging.

Only use the charger supplied to charge the battery. Using any other charger may cause malfunction, damage, defect, ignition or explosion. Do not charge the battery with a defective charger. Replace a defective charger immediately.

Do not use a charger that has been knocked or dropped. Do not open or repair the charger yourself.

Do not charge damaged batteries.

Avoid unnecessary charging and do not charge the battery for a long time when not in use.

The battery charging process is automatically terminated as soon as the battery is fully charged. When charging is complete, first disconnect the charger from the mains socket and then from the battery.

Do not carry the charger by the mains cable or the charging cable. Do not pull on the mains cable to disconnect the charger from the mains socket. Do not subject the cables and plugs to pressure or pinch the parts. There is a risk of electric shock or ignition.

Position the charger so that no one can step on or trip over the cable or charger. Also protect the charger and all related components from other harmful influences or stresses.

### 5.1.3 Storage

Do not store the batteries in places that are exposed to heat for long periods of time (sunlit car boot, garden shed, etc.). The service life of the battery depends, among other things, on the storage conditions.

Only use your car for transport, not for storing or keeping the battery.

For optimum service life, store the battery at 18-23 °C and a maximum humidity of 80 %. Do not expose the battery to moisture (rain, snow, etc.) during storage.

Charge the battery before storage according to the specifications of the respective battery. Check the charge level at least every three months and recharge the battery if necessary. („7.4 Storage“).

Ensure that the battery is stored away from damage and unauthorised access.

Store the battery out of the reach of children.

## 6 Operation

### NOTE

Unpacking and installation video can be found on [www.stricker-handbikes.de/installationsupport](http://www.stricker-handbikes.de/installationsupport)

### NOTE

The contents listed in this user manual for Neodrive's components were provided to us with the kind support of Alber GmbH (93.0001.4.01.03 as of: 02.10.2014). The original instructions can also be found on the website [www.neodrive.com](http://www.neodrive.com) in the Service > Downloads tab. More comprehensive information on assembly and repair is also available there.

### 6.1 Key

Two keys for locking the battery in the battery rail are included in the scope of delivery. The identification engraved on the key is noted by the specialist dealer in the delivery bill of the handbike so that they can be reordered if necessary. Please therefore check whether the key marking is entered in the papers. If this is not the case, please add it. Keys can only be reordered from AXA via the specialist trade (as of November 2013). (**Fig. 1**).

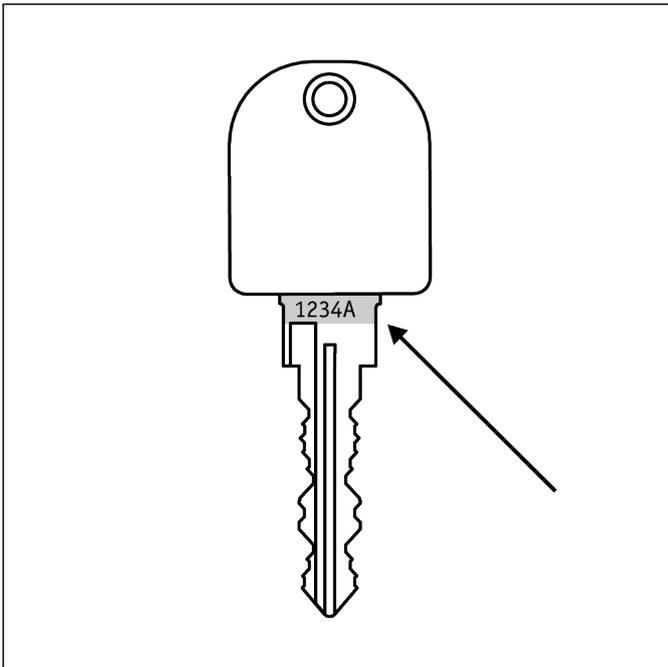


Fig. 1: Key with marking

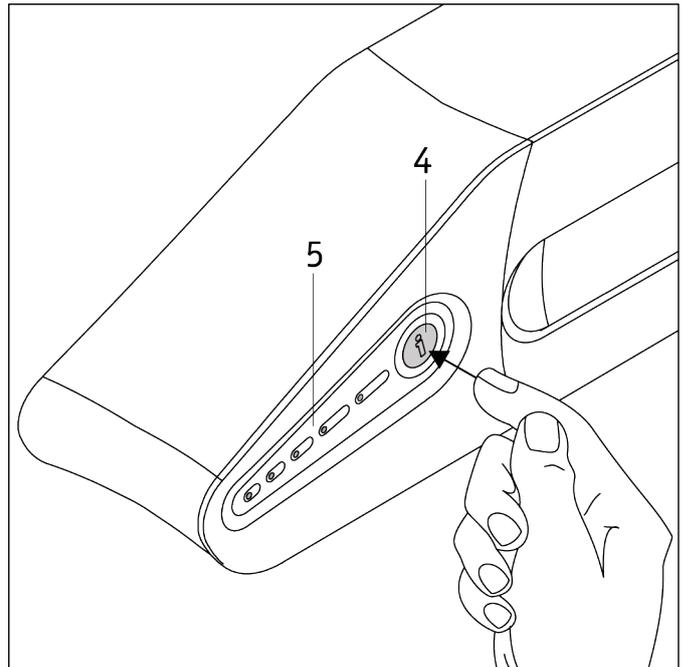


Fig. 2: Switching on the battery

## 6.2 Start driving

### INFORMATION

Basically, there are two different operating modes for the rechargeable battery. The battery is either in „Active Mode“ or in „Deep Sleep Mode“. In „Active Mode“, the battery consumes at least 5 mA per hour (self-consumption of the electronics). To keep the self-consumption as low as possible, the battery automatically switches to the so-called „Deep Sleep Mode“ after 48 hours.

If you have used the battery in the last 48 hours, you can start up the handbike via the neodrives sMMI Connect.

If you have not used the battery in the last 48 hours, switch it on using the On/Off button [4]. To do this, briefly press the button. Successful switching on is signaled by the LEDs [5] flashing three times. The battery is now ready for operation and you can now start up the handbike via the neodrives sMMI Connect. (**Fig. 2**).

### NOTE

To operate the neodrives sMMI Connect terminal, please read the supplied neodrives sMMI Connect Quick Start Guide. This is only available in German and English.



Fig. 3: neodrives sMMI Connect Kurzanleitung

If you have not yet connected the motor cable to the battery, the battery will still be set to „Active Mode“ when switched on. If the battery cannot be switched on, the cell voltage may be too low. In this case, connect the charger and then press the On/Off button [4]. The battery is then charged for one minute.

**NOTE**

If the system comes to a standstill due to increased temperatures (caused, for example, by uninterrupted driving or at a standstill due to continuous direct sunlight), allow the motor to cool down for about 10 minutes before continuing your journey.

**6.3 Display of the charge level**

You can check the charge status of the battery at any time using the LED display. If the battery has not been used for more than 48 hours, briefly press the button [4]. The battery is switched on, all LEDs (a to e) flash three times. Press the button [4] again briefly. Now the capacity of the accumulator is indicated by the LEDs as shown in the following table.

If the battery has been used within the last 48 hours, press the button [4] briefly. Now the capacity of the battery, as shown in the table below, is indicated by the LEDs.

LED is on	LED flashes	Capacity
-	a	< 19 %
a	-	20 – 39 %
a, b	-	40 – 59 %
a, b, c	-	60 – 79 %
a, b, c, d	-	80 – 99 %
a, b, c, d, e	-	100 %

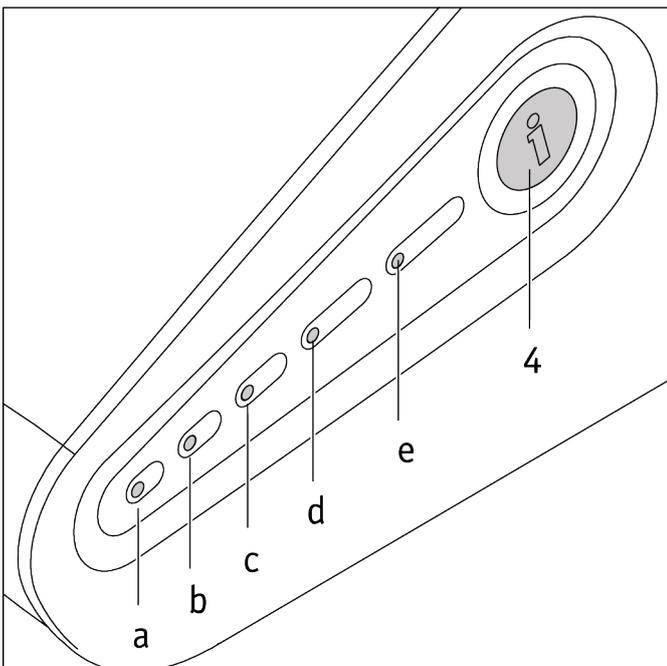


Fig. 4: Neodrives battery LED display

**6.4 End of ride**

The battery is switched off using the sMMI controller (see neodrives sMMI Connect Quick Start Guide). The battery is initially set to „**Active Mode**“ for 48 hours. This means that the sMMI can be reactivated at any time during this period without having to switch on the battery first. The power required for this is minimal.

**7 Battery and charger****SAFETY NOTICE**

Be sure to read and observe all safety and hazard information „**5.1 Safety instructions for battery and charger**“.

**WARRANTY NOTICE**

Batteries are wearing parts. The warranty period is 24 months.

**DISPOSAL INSTRUCTIONS**

Dispose of batteries only at designated disposal points. If you have any questions, please contact a specialist dealer or the manufacturer.

**7.1 Charging the battery****WARNING**

Before using the charger, check that the mains voltage matches the connection voltage of the charger. The connection voltage of the charger is indicated on its type plate.

We recommend charging the battery after each use of the pulling device, if possible. If you have completely discharged the battery, charge it again immediately.

Charge the battery before each use. Check the charge level of the battery before each trip. If the battery is completely discharged during travel, further travel is only possible manually via the cranks.

Only switch on the battery for use. Switch off the battery immediately when you stop the traction unit.

## 7.2 Attaching the battery

Place the battery [1] on the battery rail [6] mounted on the handbike. Push the battery [1] to the front edge of the battery rail [6] as shown in the diagram. Lock the battery [1] by gently turning the key [2] clockwise until it stops. The battery can now no longer be removed from the battery rail. Remove the key [2] from the battery [1]. (**Fig. 5**).

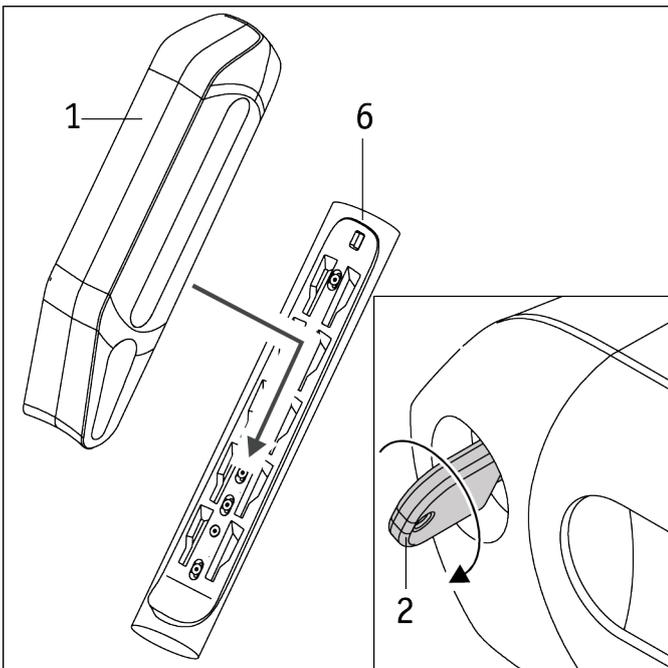


Fig. 5: Insert battery into battery rail

Insert the plug [7] of the cable coming from the motor into the socket [3] on the battery [1]. The correct alignment and locking of the two parts is done automatically by a magnetic lock. Before inserting the plug [7] into the socket [3], make sure that both parts are clean and that there are no metallic particles in them. If these are present, they must be removed with a clean, dry cloth (**Fig. 6**).

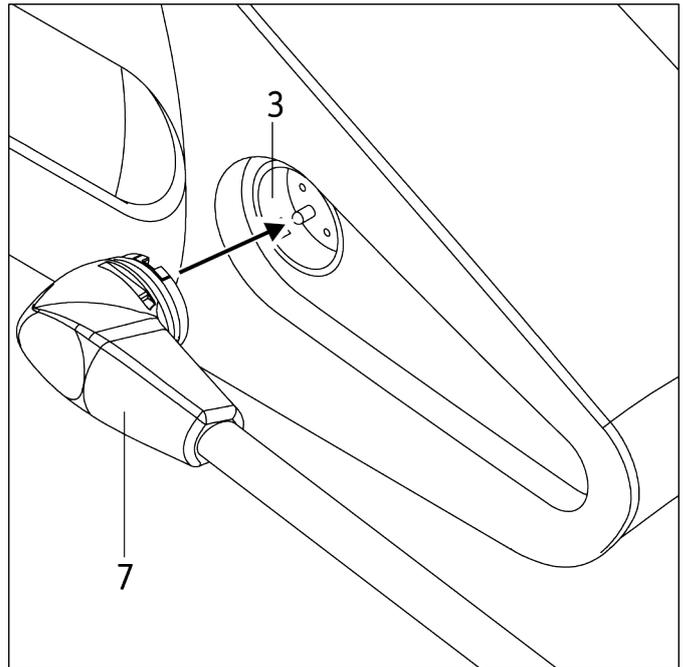


Fig. 6: Establish cable connection

Switch off the handbike at the sMMI. Then pull the plug of the motor cable [7] out of the socket [3]. Make sure that the plug of the motor cable [7] does not come into contact with any metallic particles when it is removed (risk of contamination). (**Fig. 7**).

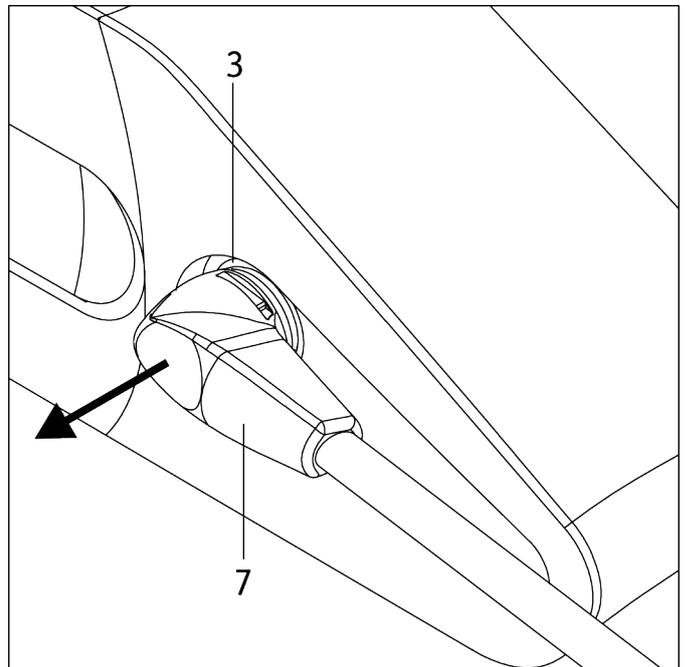


Fig. 7: Disconnect cable connection

Insert the key [2] into the lock on the battery [1]. Turn the key [2] counterclockwise until it stops. The lock is now released and the key can no longer be removed from the battery. Pull the battery [1] approx. 2 cm upwards along the rail [6] and then

remove it completely. Place the battery in a clean place. Make sure that the socket [3] does not come into contact with any metallic particles when placing the battery (risk of contamination). **(Fig. 8)**.

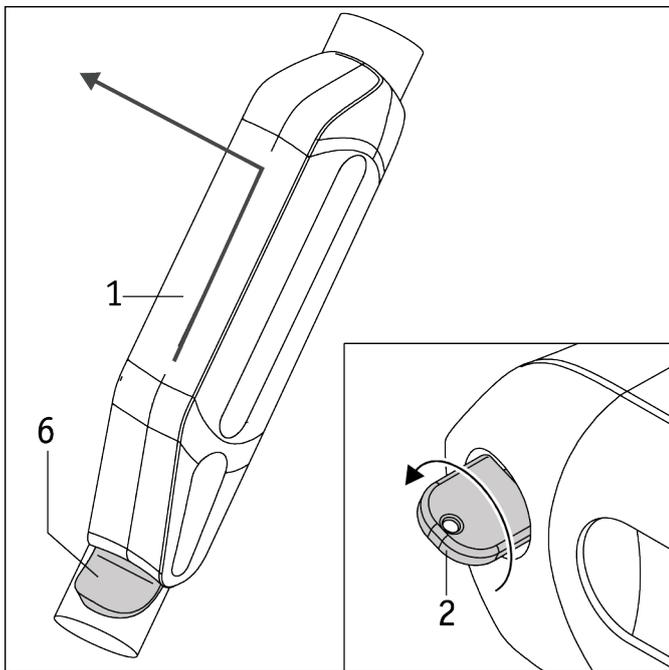


Fig. 8: Remove battery from battery rail

### 7.3 Charging the battery

Fully charge the battery before using it for the first time. The charge level of the rechargeable battery is generally 30 % at delivery. The rechargeable battery can be charged in any state of charge without this affecting its service life. The battery reaches its maximum service life when it is charged at an ambient temperature between 10 °C and 30 °C.

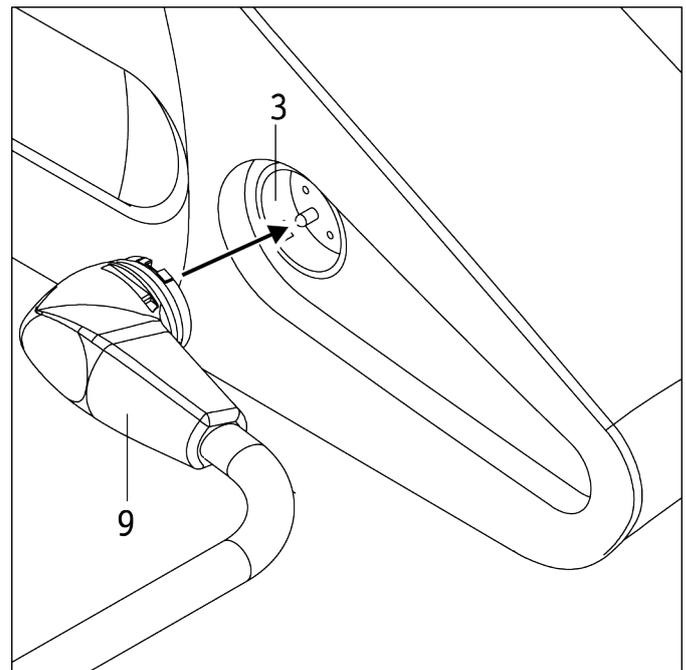


Fig. 9: Connecting the charger

The battery [1] does not have to be removed from the handpiece for charging, but can remain attached. Pull the plug of the motor cable [7] out of the socket. Insert the plug [9] of the charger into the socket [3] on the battery. The correct alignment and locking of the two parts is done automatically by a magnetic lock. **(Fig. 7) (Fig. 9)**.

Carry out the charging process according to the instructions in the charger operating manual. Also observe the notes on the charging process. Before inserting the plug [9] into the socket [3], make sure that both parts are clean and that there are no metallic particles in them. If these are present, they must be removed with a clean dry cloth. („5.1.2 Charging process“)

When charging the battery, follow the instructions in the charger operating manual. Also observe the safety and warning notes in „5.1 Safety instructions for battery and charger“ & „7 Battery and charger“.

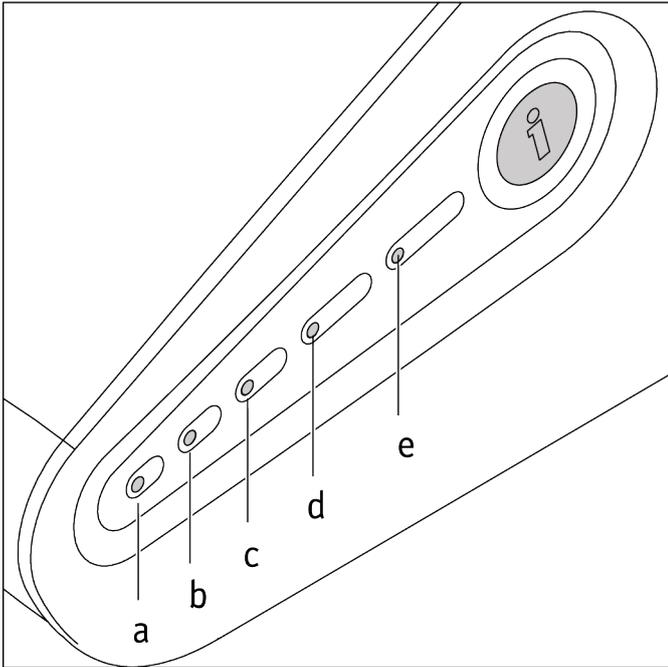


Fig. 10: LEDs during charging

The following table shows the LED display [5] of the battery during the charging process. If an error occurs during the charging process, all LEDs light up. Check whether all criteria (e.g. ambient temperature, correctly attached charging plug, etc.) for the charging process are fulfilled in accordance with this and the instructions for use enclosed with the charger are fulfilled. Do not leave the charger connected to the power supply for longer than is necessary for the charging process. After the charging process, first disconnect the charger from the mains socket and then from the battery. Always check the charge status of the battery before starting to drive. The battery should be fully charged before the start of the journey in order to have the motor support available at all times. The battery may only be charged in a dry room at temperatures between 0° and a maximum of 40 °Celsius. Observe the instructions in the operating manual enclosed with the charger. Observe the safety and warning instructions for the battery in chapters 2.1 to 2.5 of these operating instructions (**Fig. 10**).

LED is on	LED flashes	Charge status
-	a	ca. 0-19 %
a	-	ca. 20 – 39 %
a, b	-	ca. 40 – 59 %
a, b, c	-	ca. 60 – 79 %
a, b, c, d	-	ca. 80 – 99 %
a, b, c, d, e	-	Battery 100 % charged.

## 7.4 Storage

Charge the battery to 70 % before storing it for a longer period. Check the charge level every three months and recharge the battery to 70 % if necessary. Also observe the notes in „5.1.3 Storage“.

## 8 Repair, cleaning and maintenance

Never use benzene, thinner, acetone or similar agents for any cleaning processes. Likewise, do not use abrasive or aggressive cleaning agents. Instead, use only commercially available household cleaning agents and disinfectants (isopropanol).

### 8.1 Motor

The motor of your handbike should be regularly cleaned of dirt, preferably with a dry brush or a damp (not wet) cloth. Cleaning should not be done with running water such as a water hose or even a high-pressure cleaner. However, driving in the rain and on wet roads is possible without any problems.

Penetrating water can destroy the engine. When cleaning, therefore, always ensure that neither liquids nor moisture penetrate the engine.

Do not clean the engine when it is warm, e.g. directly after a journey. Wait until it has cooled down. Otherwise, damage may occur.

If the motor is removed, e.g. for cleaning purposes, it must not be held or transported by the cables under any circumstances, otherwise there is a risk of cable breakage.

If the motor has been removed from the frame of the handbike, the plug of the motor and the socket of the cable to the battery pack must be checked or cleaned with regard to possible contamination before assembly.

### 8.2 sMMI Connect

The contacts of the sMMI dock are spring-loaded and should be cleaned from time to time with a contact spray to ensure their proper and long-lasting function.

The sMMI housing may only be cleaned with a damp (not wet) cloth.

### 8.3 Akku

Never use benzene, thinner, acetone or similar agents for any cleaning processes. Instead, use only commercially available household cleaning agents and disinfectants (isopropanol).

The plug of the charging cable on the charger [9], the plug of the motor cable [7] and the charging socket [3] on the battery may only be cleaned with a dry cloth.

The battery must never be sprayed with a steam jet or similar.

### 8.4 Motor

The drive wheel of your hand bike can be removed from the bike frame at any time, for example for cleaning purposes or in case of a flat tire. Proceed with extreme care during this process and during subsequent assembly and, in particular, also observe the instructions and information provided by the manufacturers of the various components attached to the wheel, especially the brake disc.

#### NOTE

For reasons of clarity, only the drive motor integrated in the wheel is shown in the following graphics, but not the complete drive wheel.

### 8.5 Removing the drive wheel

Before removing the drive wheel, note or memorize the cable routing as well as the fastening points of the cable ties. First loosen and remove all cable ties with which the cable [16] coming from the motor as well as cables and supply lines of other components are fastened to the bicycle frame. Then disconnect the plug [15] on the motor cable [16] from the socket [17] on the battery cable. Loosen the two nuts [18] or the quick release with which the wheel is attached to the frame so that the complete wheel can be removed from the frame of your handbike. **(Fig. 14)(Fig. 11).**

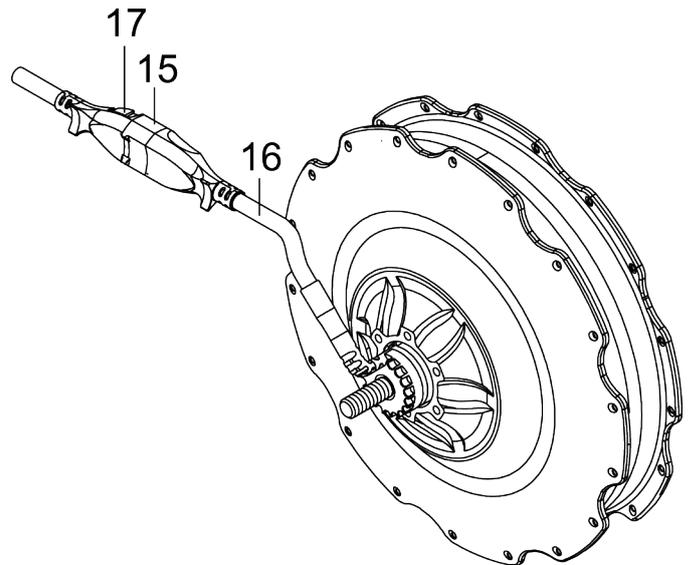


Fig. 11: Cable connection to wheel hub motor

#### NOTE

Note or mark the position of the torque arm [20]. When attaching the wheel later, it must be attached in exactly the same position as before removal. **(Fig. 14).**

#### WARNING

Never hold or transport the removed wheel by the cable coming from the motor [16]! There is a risk of cable breakage.

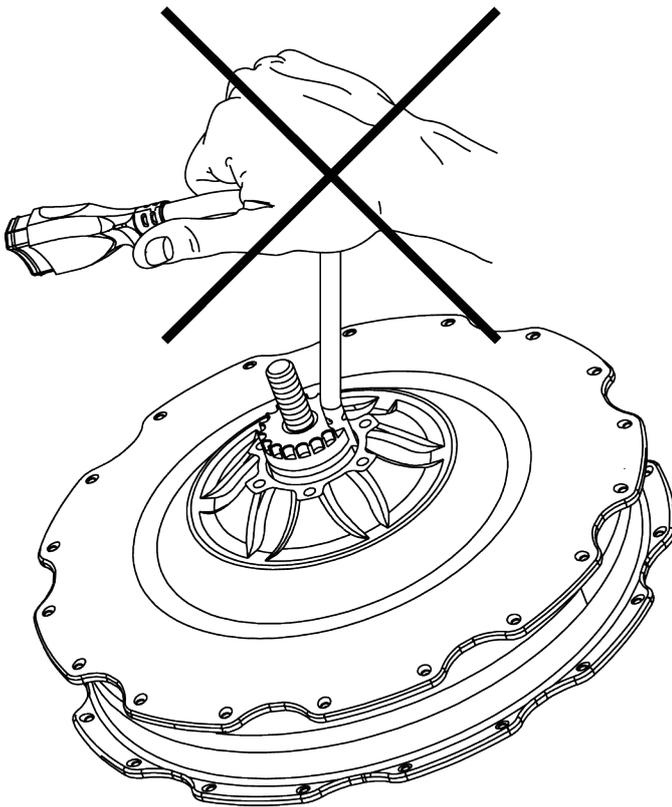


Fig. 12: Do not carry motor by cable

## 8.6 Attaching the drive wheel

Make sure that all components attached to the wheel have been mounted according to the instructions and specifications of the respective manufacturer. This applies in particular to the brake and the gear shift. Do not forget to remount the torque arm [20] in the same position in which it was previously removed. Then push the wheel into the receptacle of the frame and tighten it with the axle nut [18] in the following order:

- first tighten on the side of the gear shift (**Fig. 13**)
- then tighten on the brake side (**Fig. 14**)

The tightening torque of both nuts is between 30 and 40 Nm. Also make sure that the ratchet washer [19] is under the axle nut, otherwise there is a risk that the axle nut [18] will come loose.

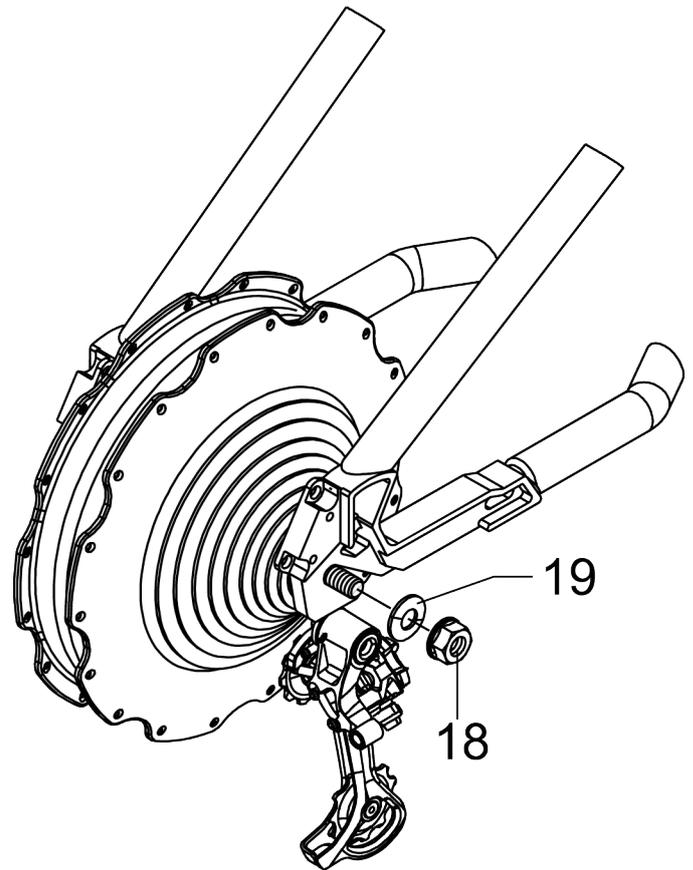


Fig. 13: Fastening to the fork [1]

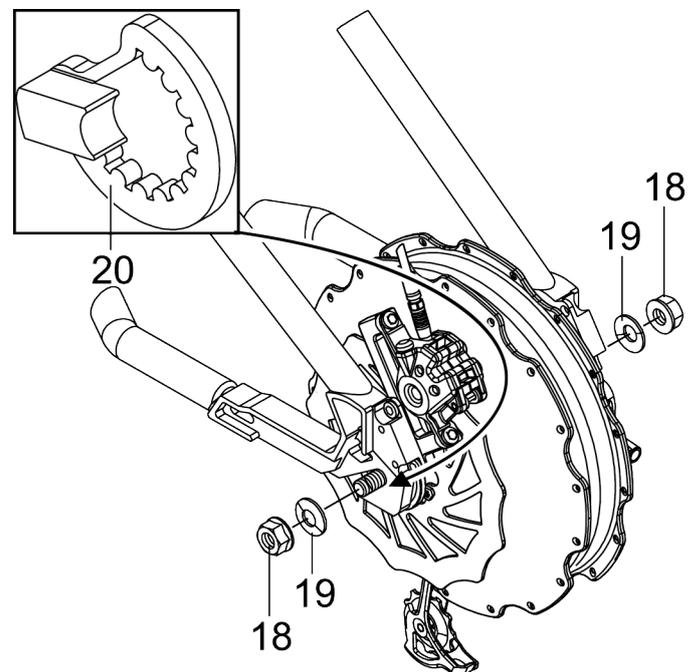


Fig. 14: Attachment to the fork [2] and torque arm

If your wheels are equipped with quick-releases, please observe the manufacturer's specifications for mounting and tightening torque.

Once the wheel is correctly attached to the frame, the motor can be connected to the cable end that leads to the battery. Make sure that the plug [15] is correctly aligned with the socket [17]. The rounded surfaces ([A] and [B]) must be aligned with each other! Now fasten all cables and supply lines to the bicycle frame again with cable ties and carry out a final function test (**Fig. 15**).

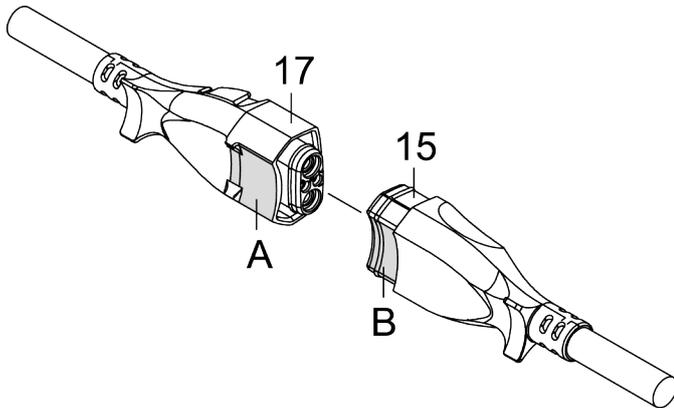


Fig. 15: Correct connection of cables

### WARNING

Make sure that the cable is laid correctly, as incorrect laying could result in the cable getting caught in the brake disc, the drive or in the spokes, which could cause the bike to lock up and fall.

### NOTE

In all your assembly work, be sure to follow the instructions and specifications of the manufacturers of the various components attached to the wheel. This applies in particular to the brakes, gears and quick-releases.

### WARNING

Never mount the motor without the torque arm [20]. This would result in a total loss (twisting off of the cable). In this case, all guarantee and warranty claims are void. (**Fig. 14**).

### NOTE

In addition to your repair tools, also carry 5 cable ties with you in order to be able to securely fasten any cables that may come loose during a trip.

## 9 Transport

### NOTE

Special legal regulations apply to the transport and shipping of lithium-ion batteries and must be strictly observed.

The shipping of lithium-ion batteries is strictly regulated. Therefore, take a defective battery personally to your specialist dealer. Contact your specialist dealer beforehand.

The legal transport regulations for taking lithium-ion batteries with you may change annually. Before starting a journey, enquire in good time about the applicable regulations with the airline or shipping company or your tour operator.

### 9.1 Transportation in vehicle

Always transport the handbike only when it is disconnected. If necessary, detach the attachment stand from the handbike. Secure all individual parts against slipping. The batteries can be transported in any position, as they are leak-proof batteries.

Only use your car for transport, not for storing or keeping the battery.

### NOTE

Remove the battery and the sMMI Connect from the handbike to avoid damage during loading and during the journey. Make sure that cable ends cannot cause any damage to the handbike or your car while driving.

## 10 Disposal and recycling

Electrical appliances, batteries, accessories and packaging should be recycled in an environmentally friendly manner.

Avoid taping parcel tape to the handcycle, as adhesive residue is difficult to remove.

Dispose of all other components of your handbike in accordance with the regulations of your region at appropriate collection points or in household waste (paper, cardboard, plastic packaging).

## 11 Warranty and guarantee

### NOTE

Do not throw the batteries, chargers and electrical components of your handbike in the household waste. According to the current EU directives, electrical devices and batteries must be collected separately and recycled *in an environmentally friendly manner*.

Complaints due to incomplete or incorrect delivery or recognizable defects must be made in writing immediately, at the latest 8 days after receipt of the goods. Our obligation in the case of justified complaints is limited to replacement delivery or repair by us. In the case of warranty repairs, which have been agreed with us in advance, the rejected parts are to be sent back to us. Modification or repair work carried out by the customer or a third party without our prior consent shall invalidate the warranty obligation.

The warranty period for the handbike is 2 years. The batteries for our Lipo and Neodrives models also have a 2 year warranty. Not covered by the warranty are defects due to wear and tear or improper handling. Wear parts are for example: tires, brake pads, Bowden cables, light bulbs. Also wear parts are lead-acid batteries, on which we grant a half-year warranty.

## 12 Liability

### NOTE

The information on liability is taken from our general terms and conditions (as at the time of printing). These can be viewed in full at the web address <https://stricker-handbikes.de/en/general-business-terms>.

We shall only be liable for consequential damages or other claims for damages if we, our legal representatives or vicarious agents are guilty of intent or gross negligence insofar as this is in accordance with the statutory provisions.

## Attachment

### A Technical data

#### Power Assist Device

kg	from 22
Total weight 18,5 kg	from

#### Range\*\*

Drive	120 km
-------	--------

Wheel hub motor electric km/h	25
----------------------------------	----

Rated power (Peak) (650 W)	250 W
-------------------------------	-------

Operating voltage	36 V
-------------------	------

Nominal torque	12 Nm
----------------	-------

Peak torque	40 Nm
-------------	-------

Efficiency (incl. electronics)	80 %
-----------------------------------	------

Control power electronics integrated in the wheel hub

Cassette mount standard plug-in cassette, up to 10-speed

Brake disc from 160 mm diameter

Torque absorption variable torque support adaptable to dropout

Weight 4.36 kg (drive only incl. plug and cable, without brake disc, freewheel, cassette)

#### Smart MMI

Display control monochrome

Display Diagonal, resolution 2,4 Zoll, 240 X 320 Pixel

Dimensions sMMI without dock (B X L X H) 53 mm x 85 mm x 14 mm

Connectivity  
Micro-B 1.1 USB, 5 volt power supply, 500 mA,

Connection to PC with diagnostic and parameterization software

Mechanical/electrical contacting  
bayonet lock (twist-to-lock), corrosion-protected contacts, spring-mounted

Lighting  
backlight, 70 - 350 cd/m<sup>2</sup>

Display lens  
scratch-resistant, coated acrylic glass pane

Weight sMMI (removed) 55 g

#### Smart MMI Dock

Controller 23 mm  
inner diameter, 3 buttons (up, down, menu), fixed

wired

Mounting plate  
and handlebar mount, angle adjustable in 10° increments,  
Height adjustable with spacers

Weight (incl. cable and remote control) 60 g

#### Total system

Operating temperature - 20 °C  
to + 50 °C (below 0 °C automatic deactivation of recuperation or

deactivation of the recuperation or the brake assistant)

Protection class IP65

#### Battery

Designation  
10INR19/66-5

Battery type  
Lithium Ion

Nominal capacity in Ah 17.25

Rated voltage in V 36.2

End of charge voltage in V 42

Total energy in Wh 515

Maximum discharge current in A 30

Charging ambient temperature 0 °C to 40 °C

Operating ambient temperature -20 °C to 60 °C

Number of cells 50

Protection class IP54

---

Weight	approx. 3.5 kg
--------	----------------

---

(\*) The transport weight is the total weight minus the battery and the mounting frame. It is recommended to remove these parts for easier transport.

(\*\*) The range varies depending on the battery used, as well as the terrain traveled and the prevailing driving conditions. Under optimal riding conditions (for example, a level terrain, freshly charged batteries, ambient temperature of 20 °C, steady ride, etc.), a drive power of 100 watts and a pedaling power of 100 watts, the indicated range can be achieved.

Subject to changes in technology and design due to continuous further developments.

These operating instructions are available for download from our website [www.neodrives.de](http://www.neodrives.de). If you need a version with a larger font, please contact the Alber Service Center.





Misprints, errors and price or product changes reserved. Product changes include, but are not limited to, changes resulting from further development of mechanics, software or legal requirements.

Date: 2.11.2021

© R&E Stricker Reha-Entwicklungen GmbH, Bühl

Reprint, even in part, only with the written permission of R&E Stricker Reha-Entwicklungen GmbH , Bühl.