



**PROACTIV**<sup>®</sup>



# Usage instructions Service booklet

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NJ1 el. compact bike  
FREAK el. compact bike

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The following instructions are intended for and may only be carried out by the rehabilitation specialist dealer or PRO ACTIV.



This document is available in PDF format at [www.proactiv-gmbh.com](http://www.proactiv-gmbh.com) for visually impaired people. Using the zoom function, the font can be increased as desired.

## 1 Preface

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Dear Customer,

Congratulations on purchasing your new PRO ACTIV product. You have bought a quality product that has been specially customised to meet your requirements. We have put together some instructions about its proper and safe use in the following document. Please read these instructions before using the product.

The standard components are explained in these usage instructions. If you have individual solutions or non-standard components on your product, your rehabilitation specialist dealer or PRO ACTIV would be happy to deal with any questions you may have about using it.

The only difference between the compact bikes NJ1 el. & FREAK el. is the design of the frame (or in the frame sizes that can be selected). The operating instructions are therefore identical.

You can always download the latest version of the usage instructions as a PDF document in our download area at [www.proactiv-gmbh.com](http://www.proactiv-gmbh.com).

If you have any further questions about this or any of our other products, we would be glad to be at your disposal.

Enjoy your trips and the best possible mobility.

Your PRO ACTIV team

## 2 Legend

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The symbols used in these usage instructions have the following meanings:



Manufacturer



Warnings and safety instructions



Serial number

## 3 Conformity/other information

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### 3.1 Classification

The NJ1 el. & FREAK el. compact bikes (referred to as the "product" below) are classified as class I products.

### 3.2 Conformity

 As the manufacturer, PRO ACTIV Reha-Technik GmbH declares that the respective product is a class I product and meets the requirements of the EU Medical Devices Directive (2017/745).

If the product is adapted in a manner which has not been agreed by PRO ACTIV Reha-Technik GmbH, this declaration becomes void.

### 3.3 Manufacturer



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## 4 Scope of delivery and testing the product on receipt

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The scope of delivery includes the product configured in accordance with the order, rechargeable battery/batteries, display/operating console, mains power charger, usage instructions including record of training/hand-over certificate and inspection lists. You can view the basic equipment in chapter "Technical specifications". As per your order, the product is equipped with additional recommended accessories, such as e.g., lighting and hip strap.

Please check that the delivery is complete after you have received your product.

The product is tested to ensure it is completely functional before shipping and packed in special boxes.

However, please check the product immediately upon receipt, preferably in the presence of the freight company, for any damage which

may have occurred in transit. If you are of the opinion that damage has occurred during transit, please do the following:

1. Record a statement of facts in the presence of the freight company - photo documentation of the packaged product and the unpacked product with detailed images of product damage
2. Preparation of a declaration of assignment - you assign all claims from this damage to the freight company.
3. Statement of facts/photo documentation, delivery note, and declaration of assignment are sent to PRO ACTIV.

Failing to observe these instructions, or reporting damage after acceptance, means that the damage cannot be acknowledged.

PRO ACTIV will subsequently review the damage and discuss the further procedure with you (shipment of replacement parts, returning the product to PRO ACTIV for a complete repair, etc.).

## 5 Introduction

Before starting your first journey, familiarise yourself with these usage instructions, paying particular attention to all of the safety information and hazard warnings contained in them.

Allow your therapists and doctors to advise you, your carers, and assistants on how to use the product and what you are safe to do with the product based on your current ability.

 Under no circumstances should you do anything with or in the product which you have not learnt to do and have not mastered.

You, your carers, and assistants should also seek advice from your therapists and doctors as well as the rehabilitation specialist dealer about the use and settings of your product as well as all the safety accessories available (e.g., hip belt).

 You should always heed the advice provided by doctors, therapists and the rehabilita-

tion specialist dealer on the necessary safety accessories.

 If you are not sure how to handle the product or if technical faults occur, please contact your rehabilitation specialist dealer or PRO ACTIV before using it.

 The control software is programmed at the factory to ensure that the legal requirements for a pedelec drive are met. If changing the software, it must be ensured that these requirements are still met.

 Never leave the product unattended, either when it is switched on or switched off. If this cannot be avoided, removing the rechargeable battery/batteries and the display can help prevent unauthorised use.

 Secure the product against unauthorised use and theft.

 When combining your product with equipment made by other manufacturers, make sure that the individual components and the unit made up of them still work appropriately. You can get information on the suitability of a combination from the manufacturer of the third-party components or from your rehabilitation specialist retailer.

 The product contains small parts that may pose a choking hazard for children.

## 6 Purpose and indication

This product offers persons who have difficulty walking or cannot walk the option of replacing walking by riding a muscle-powered compact bike with electric assistance to a technically feasible extent, with the aim of maintaining or increasing the active user's independent mobility to the greatest possible extent. The electric drive system supports the active cranking motion of the arms by the user, therefore making locomotion easier.

Indications: Walking impediment or limited ability to walk due to paralysis, limb loss, limb

defect/deformation, joint contractions/joint damage, neurological and muscular diseases.

**Contraindications:** progressive muscle diseases, the course of which is accelerated due to fatigue of the arm and core muscles used (e.g. muscle dystrophies and atrophies) and accompanying epilepsy disorders (legal stipulations on freedom from seizures for a permit for use on public roads apply here).

In addition - for safety reasons - the product may only be operated by people who

- can move and coordinate their hands, arms, and head (when using the chin to operate the starting aid and the gears if manual function is unavailable) so that they can operate all control elements and conduct full, unrestricted steering movements during the trip.
- are physically and mentally capable and have the visual ability to safely operate the product in all operating situations and can meet the legal requirements for use on public roads. For children or people with mental, significant motor or visual impairments, the attendants can ensure the required traffic safety as a substitute and as a companion.
- have been trained in its use by the rehabilitation specialist dealer or PRO ACTIV.

## 7 Proper use

This compact bike is designed to be used outdoors on tarmac and adequately paved roads that ensure traction and stability of the product when driving and braking. When used indoors, there must be enough space for manoeuvring. Avoid driving in poor weather conditions (e.g., storms) since this can lead to incalculable risks. This product is characterised by the tool-free removable drive unit and the associated easier loading.

The maximum permitted load of the product in its standard design is 100 kg. The heavy-duty version (only applies to the NJ1 el. compact bike) and individual customisations can be designed for a higher load; this is then indicat-

ed on the rating plate. Please ensure that the load limit indicated on the ratings plate is not exceeded when transporting objects.

Proper use of the product is a basic requirement of safe operation. The product may generally be used only for applications that are listed and described in these usage instructions. This includes storage, transport, maintenance/inspection, and repair, as well as the safety information in each chapter of these usage instructions.

### Recommended equipment:

Always use the safety pennon or warning flag, otherwise there is an easy risk of being overseen due to the very low sitting position.



Figure 1: Safety pennon for improving safety in public traffic (fixing to the product frame)

### Recommended equipment:

The hip strap prevents the user from slipping forwards (slipping in the riding direction) when travelling and thus offers safe retention in the product



Figure 2: Hip strap for better fixing of the user in the product

## 8 Technical specifications

### 8.1 Drive system

#### 8.1.1 General instructions

The technical specifications, information and usage instructions about the drive system can be found in the included usage instructions from the drive manufacturer.

#### 8.1.2 Travel range

The range of the drive system varies depending on the travelled terrain, the prevailing driving conditions, and the user weight. Under optimal driving conditions (user applying maximum force onto the pedal crank, level terrain, fully charged rechargeable battery/batteries, new rechargeable battery/batteries, ambient temperature of 20°C, constant speed, optimal tyre pressure, no headwind, etc.), and a user weight of approx. 85 kg, the following ranges can be achieved:

With a neodrives G2 RR rechargeable battery, 36 V, 14.25 Ah, 513 Wh: approx. 70 km

With a neodrives G3 DT rechargeable battery, 36 V 17 Ah, 612 Wh: approx. 80 km

With double neodrives G2 RR rechargeable battery, 36 V, 14.25 Ah, 513 Wh: approx. 140 km

With double neodrives G3 DT rechargeable battery, 36 V, 17 Ah, 612 Wh: approx. 160 km

#### 8.1.3 Speed

A continuously adjustable speed of up to **6 km/h** can be achieved using the **pushing assist or starting assist** without moving the crank. Motor support above this speed is **only provided with manual rotation** of the pedal crank. Motor support is provided up to a maximum speed of **24.9 km/h**.

#### 8.1.4 Maximum permitted speed

With regards to the drive system, a **maximum permitted speed** is defined for non-motorised use and for driving downhill with the drive system switched on or off. If this maximum speed is exceeded, you endanger the electronic components. In a worst-case scenario, they may be damaged. The maximum speed is logged by the system and depends on the selected drive system and the wheel size:

- With wheel size of 26", 75 km/h (NJ1 el. compact bike)
- With wheel size of 20", 55 km/h (FREAK el. compact bike)

### 8.2 Climbing power

The climbing power refers to the ability of the product to climb a slope. This strongly depends on the weight distribution between the rear and front wheels of the wheelchair, the total weight of the product, and the friction coefficient of the ground. Under sub-optimal conditions (e.g. slippery ground when wet), the drive wheel may start to spin before the indicated climbing power has been reached.

Under optimal conditions (optimal tyre pressure, dry, clean and firm ground, etc.), the product is capable of climbing the following slopes with a speed greater than 2 km/h:

10 % or 6°

The slope that can be driven up is also dependent on the manual driving force applied by the user, in addition to the maximum climbing power.

### 8.3 Product weight

The total weight starts from 22.8 kg for the FREAK el. compact bike (including one battery) and from 23.8 kg with the NJ1 el. compact bike (including one battery) with the basic equipment.

### 8.4 Load weight

**Maximum load weight:**

Up to 100 kg payload

The heavy-duty version (only applies to the NJ1 el. compact bike) and individual customisations can be designed for a higher load; this is then indicated on the rating plate.

### 8.5 Ground clearance & turning circle

**Ground clearance:** from 9 cm for the FREAK Compact bike and from 11 cm for the NJ1 Compact bike

**Turning circle:**

- approx. 6.5 m without manoeuvring (highly dependent on how far the leg permits the stop of the steering angle)
- approx. 4 m with manoeuvring (highly dependent on the number of manoeuvres and on how far the leg permits the stop of the steering angle)

### 8.6 Basic equipment and dimensions

With basic equipment, the product comprises a chassis and the drive unit, leg rests, handles with switching brake fittings, chain shift, infinitely adjustable backrest, mechanical service brake including handbrake locking mechanism, hydraulic disc brake and drive system. In addition, the product also features a leg guard (only the NJ1 el. compact bike) and a safety flag as well as a bell.

**Dimensions, FREAK el. compact bike:**

Product width: 56 cm (depending on the tyre width)

Product height: approx. 75 cm (depending on the length of the pedal bearing support)

Product length: approx. 185 cm

Seat width: 35 cm

Grip width: 40 - 53 cm

Crank length: 155 - 195 cm

**Dimensions, NJ1 el. compact bike:**

Product width: approx. 56-60 cm (depending on the seat width and the tyre width)

Product height: approx. 85 cm (depending on the length of the pedal bearing support)

Product length: approx. 210 - 220 cm (depending on the chassis length)

Seat width: 39 - 43 cm

Grip width: 40 - 58 cm

Crank length: 155 - 195 cm

### 8.7 Service life

The service life of the product is 6 years.

## 9 Rating plate & markings on the product

The **rating plate** is located on the bottom bracket and on the product frame (on the left side, just before the axle). The rating plate includes the precise model, the serial number and other technical specifications.

When contacting your rehabilitation specialist dealer or PROACTIV with regard to your product, please always have the serial number and year of construction on the rating plate at hand.

<b>PROACTIV</b>		Modell ..... model	
 <b>PROACTIV</b> Reha-Technik GmbH Im Hofstätt 11 D-72359 Dotternhausen www.proactiv-gmbh.de	<b>SN</b> .....	serial number	
		.....	date of manufacture
	max. Zuladung .....kg max. load		
max. Anhängelast .....kg max. towed capacity			
   			

 CE marking  
"European conformity"

 Medical device

 Manufacturer

 Follow the usage instructions

 Serial number

 Date of manufacture

 Electric components must be properly disposed of at government-designated recycling facilities

The product is labelled with **further symbols** (stickers):

 Product not approved as a seat in motor vehicles

 Product approved as a seat in motor vehicles; marking of the transport restraint system connections on the wheelchair or fastening points for wheelchair restraint systems

More detailed information about this can be found in Chapter 25.2.

## 10 Commissioning and handover

The product will be handed over to you ready for use by a rehabilitation specialist dealer or a field representative or by a product consultant from PROACTIV.

Finally, you will be fully instructed in the use of the product based on the usage instructions included in delivery. You will be handed over a record of training and handover certificate as written proof. In addition, you will be handed the usage instructions and, if necessary, further accessories for your own use. It is recommended that you take along an assistant to the training so that, if required, they can assist you later when handling the product.

During the hand-over, the record of training (chapter 34) and the hand-over certificate including the associated check list (chapter 35) must be filled in. The rehabilitation specialist dealer should send the completed documents to PROACTIV for filing as a file by e-mail or in the form of a copy by fax or in the post.

## 11 Introduction to the product and the surroundings

During the initial commissioning of the product, drive at minimum speed and become accustomed to the driving characteristics of the product. Always adapt the speed and driving manoeuvres to match your own abilities, the external circumstances and the legal regulations. You will get a feel for how to use the product safely after a short time. Before driving up or down slopes or hills with the product, you should be proficient in the safe handling of the product on level ground. Get familiar with the braking distance at different speeds.

Get to know the environment in which you wish to use the product. Look out for obstacles and learn how to overcome or avoid them.

Get familiar with the road traffic regulations, since these must be observed when driving on public roads.

## 12 Safety instructions – prior to driving/use

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 Before every trip, check the condition of the wheels (e.g. visual inspection of the spokes and rims, check the tyres for damage, foreign bodies and crack formation). If you have any doubts about the serviceability of the product, stop using it. In this case, contact your rehabilitation specialist dealer or PRO ACTIV.

 Check the tyre pressures at regular intervals. Ensure that you comply with the manufacturer's specifications which can be found on the tyres. When the tyre pressure is too low, it has a detrimental effect on the driving behaviour, the range, and the braking reaction of the product. Moreover, there is an increased risk of a flat tyre.

 Before each trip, check the safe locking of the wheels and adaptation of the drive unit.

 Secure the safety cord to the lever of the eccentric pin. The use without the safety cord attached is not permitted (see chapter 23).

 Before starting your trip, check all electrical plug connections for firm contact and the rechargeable batteries for firm seating in the rechargeable battery holders.

 Before starting your trip, check the functioning of the product's brake. If all existing brakes are not fully functional, no trips may be taken.

 Check the stable condition of the seat and backrest upholstery at regular intervals and in case of doubt, have your rehabilitation specialist dealer assess its condition.

 Always ensure that your feet cannot slip out off the leg rest and make contact with the drive wheel when using the product, if necessary by using a special fixation device (e.g., using the hook-and-loop straps included in the scope of supply).

 Depending on the equipment, the product may have folding/closing mechanisms that

pose a risk of crushing injuries (e.g. pinching your fingers). For this reason, please allow your rehabilitation specialist dealer to explain how to work these mechanisms and then have a go yourself under instruction.

 If present, check the function of the front and rear lights as well as the effectiveness of the side and rear reflectors before every trip. Lights and reflectors must be clearly visible during the trip and must not be covered by objects.

 It is recommended that you only take a trip with completely charged rechargeable batteries. If this recommendation is not followed, you must take into account that the range will be restricted when planning your route. When driving long distances, it is recommended to take along a fully charged replacement rechargeable battery.

 To minimise the risk of suffering serious head injuries in the event of a fall, a helmet should always be worn when driving with the product.

 When travelling, always carry a repair kit and tyre pump for repairs in event of punctured/flat tyre. An alternative to this is an emergency puncture repair spray that fills your tyre with a foam that hardens in the tyre.

## 13 Safety instructions – while driving/using

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 Please note that some parts of your product can become extremely hot in high ambient temperatures. This means that above 50°C, the product may be damaged and above 40°C there is already the risk of burns for the user, which should not be underestimated, particularly for people with impaired sensitivity. For this reason, the product should not be exposed to such extreme temperatures. PRO ACTIV cannot accept any liability or provide any warranty for personal injury and material damage caused by such stresses. Similarly, there are also certain risks at extremely low temperatures.

 Always hold onto the crank handles with both hands while driving, braking, and manoeuvring. If a driving situation requires you to take one hand off the crank handle, make sure the speed has been reduced to the minimum possible beforehand.

 When driving in curves, reduce your speed to a minimum and if possible, lean your upper body towards the curve.

 Do not ride parallel to slopes and inclinations due to the risk of tipping.

 You may only drive on slopes where the product can be safely controlled by steering and braking of the product.

 Do not stop on a steep slope, otherwise there is a risk of losing control of the product. If possible, do not turn on a slope or change your direction.

 Never turn the product off on upwards or downwards slopes. This could result in dangerous situations to which you can only react with a delay in terms of electrical assistance or virtually not at all by manual means.

 When the drive system is switched on, the smallest movement on the crank handle is converted into a drive command. When waiting at potential hazard areas (e.g. while waiting at a pedestrian crossing or at ramps), always keep the service brakes applied and keep the crank handles in a vertical position downwards.

 In rooms, tight or dangerous areas or when manoeuvring, the product may only be used with the drive inactive and turned off to prevent unintentional drive signals.

 Do not attach objects (carrier bags, etc.) to the product. These could cause an unwanted drive impulse when stationary and prevent safe operation of the product while driving.

 Always switch on the lights on the product at twilight and in the dark as well as in bad lighting and weather conditions.

 When driving in areas that are approved for pedestrians, keep to the maximum permitted speed (walking speed 6 km/h) and maintain sufficient lateral distance (at least the product width) from obstacles and other road users.

 When driving on public areas, roads, paths, and spaces, the provisions of the German road traffic regulations (StVO) and road traffic licensing regulations (StVZO) must be observed.

 Avoid driving on unpaved or loose surfaces (e.g. on loose gravel, in sand, mud, snow, ice or through deep puddles of water).

 When travelling on poorly maintained paths (e.g. coarse gravel, potholes), there is an increased risk of puncturing your tyres as well as tipping.

 You must not make telephone calls while driving. You should also avoid driving near to strong electrical interference fields. The driving characteristics of the product can be influenced by electromagnetic fields.

 The product can affect other devices, for example theft protection barriers in department stores.

 Always check the tight fit of the eccentric pin and the securing cord.

 When driving, never jerk the handlebar, as this could possibly cause the product to tip over sideways.

 While driving, never grab onto the area of the wheel, in the area of the chain / sprockets / chain wheels or into other rotating parts; if you do you may cause injuries.

 Brake the product using the service brakes, and when driving down longer slopes, activate the recuperation to relieve the brakes.

 During long trips the brakes and the drive of the product may heat up. Therefore, do not

touch the brakes or the drive during or immediately after the trip.

 If the situation allows it, the speed should be reduced by carefully applying the service brake. Abrupt braking can cause the upper body to fall forwards which can thereby result in injuries or loss of vehicle control.

 If the weight load on the drive wheel decreases (e.g. when driving on slopes) or when driving on loose/slippery surfaces, the braking action of the wheel may be considerably reduced. The driving style and speed should be adjusted so that the product can be safely stopped at all times using the brakes.

 Towing or using a trailer is not permitted.

 Make sure that cables and lines are not kinked or tangled somewhere. This could cause them to be damaged which could lead to the brakes, gears and drive system not working correctly. In this case, the product must no longer be operated.

 Smoking when using the wheelchair should be forgone, as the seat and back system may be damaged due to dropping ash.

## 14 Safety instructions regarding obstacles

 Driving on steps and escalators with the product is forbidden.

 The ground clearance is decisive with regard to negotiable obstacle heights. You will find ground clearance in chapter 8.5.

 When driving over or passing obstacles, it is important that you avoid any product or body parts catching on the obstacle as this may lead to falls causing serious injuries to the user and third parties as well as damage to the product.

 Always drive over curbs or other obstacles so that you cross them to the front or at right angles and at the minimum required speed. If you approach them at an angle or

pass over an obstacle with just one rear wheel, there is an increased risk of tipping over to the side.

## 15 Safety instructions regarding dangerous locations and dangerous situations

The operator of the product determines the route to be driven themselves, taking the usage instructions, their driving knowledge, and physical abilities into consideration.

Personal driving skills are particularly important in the following dangerous locations that are provided as examples; the product user must use their judgement before driving in such locations:

- quay walls, landing and berthing locations, paths and locations close to water, unsecured bridges and dykes.
- narrow paths, slopes (e.g. ramps and driveways), narrow paths on a slope, mountainous routes.
- narrow and/or steeply sloping paths along main roads or near cliffs.
- routes that are covered in leaves, snow or ice.
- ramps and lifting equipment on vehicles.

 When driving in a curve or turning on hills or downward slopes, there may be an increased tendency to tip over to the side due to the changes in the centre of gravity. Avoid such driving manoeuvres. If these cannot be avoided, perform these driving manoeuvres with increased caution and only at a very slow speed. If necessary, the driving manoeuvre must not be performed or only with the help of an assistant.

 Use particular caution when approaching stairs, edges, drops or other hazard areas.

 Extreme caution is needed when crossing main roads, intersections and level crossings. Rails in the road or level crossings must never

be crossed when travelling parallel to them, as otherwise the wheels could become caught which would result in the product being unable to manoeuvre.

 Before driving on ramps and lifting equipment for vehicles, ensure that they are wide enough so that you do not risk one of the product wheels slipping off the ramp. During the lifting or lowering operation of the ramp or the lifting equipment, the drive system must be switched off and the service brake of the product must be actuated. Always keep the product in the middle of the ramp.

 The grip of the tyres on the ground is reduced under wet conditions. There is an increased risk of slipping. Adjust your driving, braking and steering behaviour accordingly.

## 16 Safety instructions – after driving/use

 Always turn off the drive system immediately when it is not in use to prevent accidental triggering of a drive signal by touching the crank handle and to prevent the rechargeable batteries being discharged.

 Always observe the usage instructions and recommendations in the drive manufacturer's usage instructions concerning charging the rechargeable batteries.

## 17 Functional elements

### 17.1 Bottom bracket support and crank

 The following instructions are intended for and may only be carried out by a rehabilitation specialist dealer or PROACTIV

#### 17.1.1 Seating position

The seating position and therefore the pedal position and the crank length depend on the upper-body stability or the core musculature as well as the body size. A suitable adjustment

will have been made during the consultation / measurement procedure.

The **bottom bracket position should be selected as low as possible** without the cranks being able to touch the user's thighs when they are turning. Moreover, the elbows should not be completely extended when the crank handles point completely forward away from the body and the shoulders should rest against the backrest.

With **weak core musculature**, the seating position and the crank length should normally be chosen so that the upper body remains still and always has a fixed contact with the backrest when operating the crank while driving. Rocking motion of the upper body or the head should be avoided where possible. For this, the correct setting of the backrest (see chapter 18) and the correct choice of the crank length as well as the pedal position is decisive. If necessary, you should also use a hip strap or chest strap for stabilising.



Figure 3: Elbows are not stretched completely



Figure 4: Distance between the crank and the thigh

 If you require a restraint system, a suitable system must be selected together with your doctor or therapist and/or defined and implemented by your rehabilitation specialist dealer. Various systems are available, such as chest straps or hip straps. Rehabilitation specialist dealers can also often create a customised system or adapt commercially available systems.

#### Recommended equipment:

PRO ACTIV also offers restraint systems such as hip straps with belt and Velcro fastener and chest straps of various lengths.

#### 17.1.2 Bottom bracket position

When equipping the product with a **pedal bearing support that cannot be adjusted**, a subsequent adjustment of the pedal bearing position can only be achieved by exchanging the pedal bearing support.

The bottom bracket support can be exchanged by loosening the four M6 fixing screws (AF 5 mm) on the top fork bridge and the four M6 fixing screws (AF 4 mm) on the bottom bracket housing. Then the new bottom bracket support with another length can be inserted and the 8 fixing screws tightened up to 7 Nm and secured with thread lock fluid. Finally, check the chain length and the cable lengths and adjust them if necessary.



Figure 5: M6 fixing screws on the top fork bridge



Figure 6: M6 fixing screws on the bottom bracket housing

If your product is fitted with an **adjustable bottom bracket support (optional)**, the bottom bracket position can be adjusted in angle and height:

- The **angle** is adjusted at the top fork bridge. To do this, loosen the four M6 clamp screws (AF 5 mm), on the clamp slightly so that the bottom bracket support's angle can be adjusted using minimal force. The angle adjustment is continuous (as a guide, there is a 12° scale fitted). When you have finished adjusting the angle, tighten up the four M6 clamp screws (AF 5 mm) to 7 Nm torque and secure them with thread lock fluid.

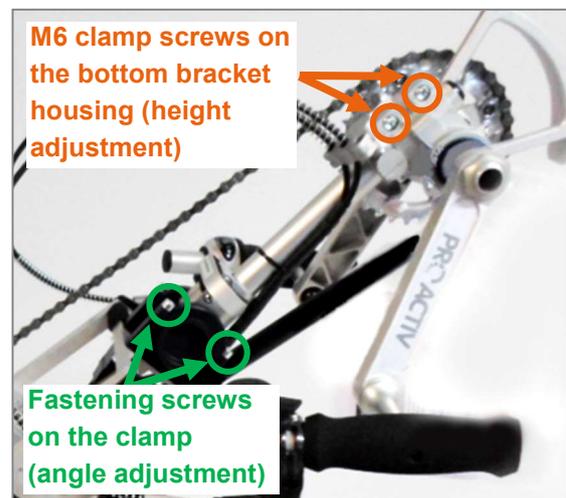


Figure 7: M6 clamp screws for angle and height adjustment of the bottom bracket position

- To **adjust the height**, two M6 clamp screws (AF 5 mm) must be loosened on the bottom bracket housing. Then the bottom bracket housing can be moved along the bottom bracket support to the desired

position. Then tighten up the four M6 clamp screws (AF 5 mm) to 7 Nm torque and secure them with thread lock fluid.

For smaller adjustments to the height, infinitely variable adjustments of +/- 25 mm can be made on the bottom bracket support. To adjust the height, the two M6 clamp screws (AF 5 mm) must be loosened on the bottom bracket support. Then the bottom bracket support can be moved in its mount to the desired position. Then tighten the four M6 clamp screws (AF 5 mm) to 7 Nm torque and secure them with thread lock fluid.



Figure 8: M6 clamp screws for adjusting the height of the bottom bracket position

If you want to make a change to the bottom bracket position, please contact your rehabilitation specialist dealer or PROACTIV.

 Please note that, after a large adjustment to the chain bottom bracket position, the lines and the cable lengths must be adjusted.

### 17.1.3 Crank length and grip width

The **crank length** can be chosen from different lengths individually to suit the length of the arms and mobility of the user. Different widths of bottom bracket shafts and spacers between the pedal cranks and the rotary axes of the handles are available to adjust the **grip width**.

If you want to make a change to the crank length or grip width, please contact your rehabilitation specialist dealer or PROACTIV.

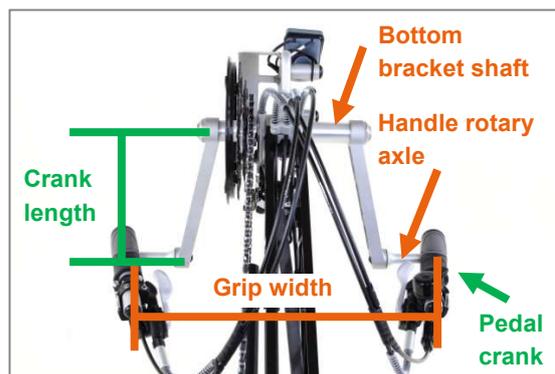


Figure 9: Crank length and grip width

## 17.2 Grips

The grips must be held firmly with both hands whilst driving and always held so that the cables and lines are oriented upwards.



Figure 10: Correct grip hold

 Always hold onto the crank handles with both hands while driving, braking, and manoeuvring. If a driving situation requires you to take one hand off the crank handle, make sure the speed has been reduced to the minimum possible beforehand.

## 17.3 Gear shift

### 17.3.1 Derailleur

With the derailleur, the gears can only be changed while the crank is moving. Changing the gear with the cranks stationary is not possible. In general, the torque applied to the cranks should be reduced briefly while chang-

ing the gear so that the gear change can happen more quickly.

The gearshift control elements are normally designed so that they can be operated using thumb / index finger shift control (for mechanical gear systems) or buttons (for electronic Di2 gear systems). With the cassette at the bottom, switching to the next largest sprocket means a lower or easier gear and to the next smallest sprocket a larger or more difficult gear.

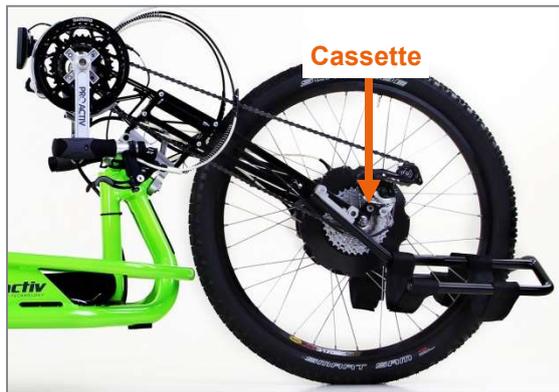


Figure 11: Cassette

With the **thumb / index finger shift control**, gear changes are achieved by:

- "Thumb shifter" – operation by pressing in the direction of travel with the thumb
- "Index finger shifter" – operation by pulling in the opposite direction of travel with the index finger or using the thumb to press against the direction of travel.

The mechanical gearshifts do not provide a display for the gear selected. There is only an orientation as to which sprocket is currently being used via a display above the handle.

In electronic Di2 gearshift, you can shift up or down by pressing the **button**.

On an electronic Di2 gearshift, gear changes are achieved by:

- Pressing the small button with your thumb to shift up.
- Pressing the large button with your thumb to shift down.



Figure 12: Buttons for shifting up and down

On an electronic gearshift with buttons, the current gear is shown on the gearshift display.



Figure 13: Displaying the current gear on the display

It is also possible to operate the gearshift by **shifting gears with your chin**. One of the two **buttons** of the Di2 button on the left in the direction of travel can be pressed to shift up; one of the two buttons of the Di2 button on the right in the direction of travel can be pressed to shift down. The current gear is always shown in the gearshift display.



Figure 14: Chin operation via buttons

For more information on derailleur gear systems, please see the instructions provided by the gear manufacturer.

### 17.3.2 Charging the battery for Shimano electronic gearshifts

The rechargeable battery charge level of the electronic gearshift is also visible on the display. When the charge state is low (thus when only one rechargeable battery bar is shown), the rechargeable battery must be recharged.



Figure 15: Alfine Di2 electronic gearshift battery

For this purpose, the rechargeable battery is removed as follows: the flap on the side is opened and the push button is pressed-in (figure 16). Now the rechargeable battery can be pulled out along the retaining rail and charged using the charger included in the scope of supply. During the charging procedure, an orange lamp is visible (figure 17).

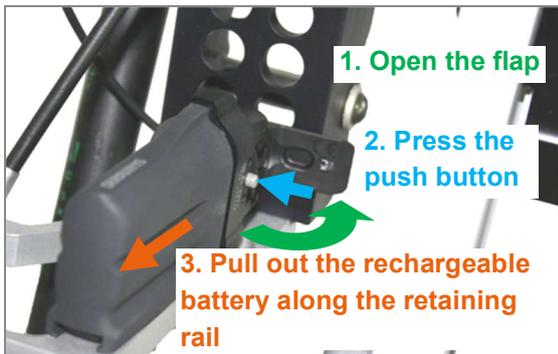


Figure 16: Remove the rechargeable battery for charging



Figure 17: Rechargeable battery and charger

The fully charged rechargeable battery (visible on the charger when the orange lamp goes out) is pushed back along the retaining rail until you can feel a slight resistance. When closing the flap on the side, the rechargeable battery is completely secured and is connected fixed. Now the gears are ready for use again.

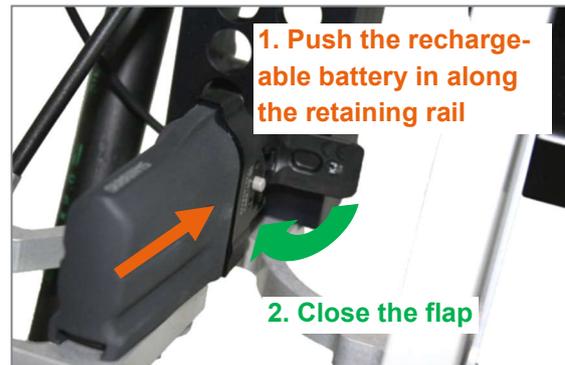


Figure 18: Reconnect the rechargeable battery after charging

### 17.3.3 Bottom bracket gearshift

The bottom bracket gearshift ("Mountaindrive" gear reduction for hills) is switched on by pressing the control buttons on the left and right of the bottom bracket. Here, you can choose between a 1:1 gear ratio (the left control button in the direction of travel) or a 2.5:1 gear ratio (the right control button in the direction of travel).

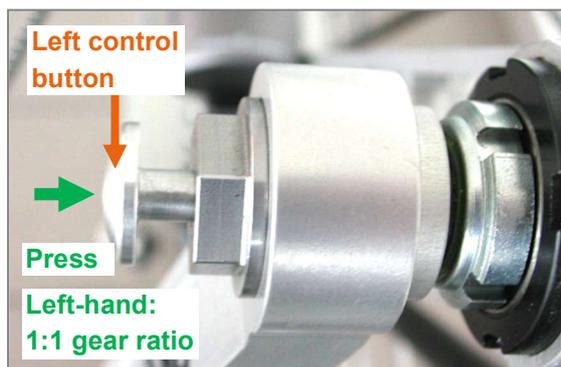


Figure 19: Left control button of the bottom bracket gearshift

The bottom bracket gearshift should be lubricated once or twice a year with the supplied original semi-fluid grease using the syringe. The semi-fluid grease is filled through the slotted screw.



Figure 20: Slotted screw to lubricate



Figure 21: Original semi-fluid grease in the syringe

For more information, please see the instructions provided by the manufacturer.

## 17.4 Brakes

Normally there is one disc and one rim brake fitted to the product.

Please note that the braking effect can be strongly reduced by one or all of the following conditions:

- Worn tyre profile
- Soiled and wet tyres
- Wet, soiled, loose and uneven ground
- Dirt and wetness on the brakes and brake surfaces
- Changed weight load

### 17.4.1 Rim and disc brakes

The brakes are operated manually using the brake lever.



Figure 22: Brake lever

**!** In the event of abrupt hard braking, there is a risk that you might fall forward with your upper body and thereby cause injuries to yourself.

**!** With rim brakes: Please make sure that the braking surfaces on the rim and the brake pads on the rim breaks do not come into contact with oils or greases which could otherwise impair the braking effect.

**!** With disc brakes: At regular intervals, check that the brake pads and discs are free from grease, oil or other contamination. In addition, check the thickness of the brake disc. The minimum thickness is printed on the brake disc. In addition, the brake pad thickness must be checked with a measuring calliper. The minimum pad thickness plus support material is 2.5 mm.

**!** If equipped with V-brake rim brake as service brake: The setting screw on the brake lever of the V-brake rim brake must be well locked. In addition, this setting screw on the

brake lever must always be checked for tightness.



Figure 23: Setting screw on the brake lever

You can find further information in the brake manufacturer's instructions.

#### 17.4.2 Parking brake

An **aluminium bracket** is attached to the bottom bracket support as a parking brake. With it, one of the two brakes can be used as a parking brake. For this purpose, the aluminium bracket is clamped over the grip and the brake lever while the brake lever is depressed.



Figure 24: Aluminium bracket as a parking brake

#### 17.4.3 PRO ACTIV back-pedalling brake & crank release function

The PRO ACTIV back-pedalling brake is a closed hydraulic system consisting of a generator unit and a disc brake calliper. The system has automatic wear compensation for the brake pads.

The back-pedalling brake is delivered with a crank release function that allows reverse driving and manoeuvring via the hand rims. As: For functional reasons, the back-pedalling brake always acts as soon as the product

moves backwards. Therefore, the user must “unlock” the reverse movement first by operating the crank release function.

The braking function via the backward movement (crank movement against the direction of acceleration) is always guaranteed – with the crank release function activated or deactivated.

The **braking force applied** is adjusted by the strength of rotating the cranks backwards. The braking force applied is adjusted by the strength of rotating backwards.

The **crank release function** is operated by pressing the side pressure plate. To activate the crank release function, the left-hand pressure plate must be operated (seen from the direction of travel). To return to normal driving operation with the back-pedalling brake, the right-hand pressure plate must be operated.

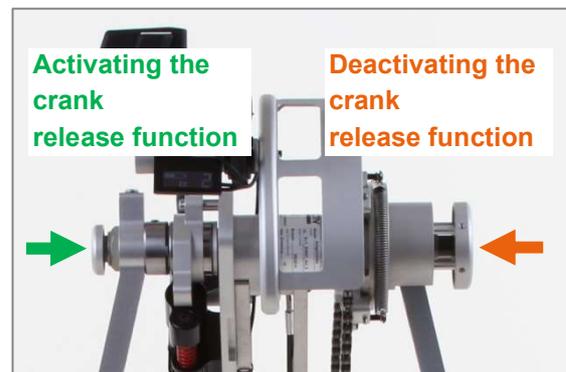


Figure 25: Left- and right-hand pressure plates

**!** Before every trip, test the brakes by moving the cranks with the normal operating force in the direction opposite to acceleration. The drive wheel must not be able to move when the system is operated.

**!** At regular intervals, check that all of the connections, lines, bleed screws and the surface of the transmitter unit do not leak and that all the screw connections on the brake system are tightened securely.

**!** At regular intervals, check that the brake pads and discs are free from grease, oil or other contamination. In addition, check the thickness of the brake disc. The minimum thickness is printed on the brake disc. In addi-

tion, the brake pad thickness must be checked with a measuring calliper. The minimum pad thickness plus support material is 2.5 mm.

**⚠** Do not drive if your brake system is faulty in one of the previously listed points. Contact your rehabilitation specialist dealer immediately, who will arrange for maintenance by PRO ACTIV.

## 17.5 Rechargeable battery pack

### 17.5.1 General instructions

Please refer to the accompanying documentation from the drive manufacturer concerning the handling as well as the insertion and removal of the rechargeable battery. Please always comply with the safety instructions in the usage instructions from the drive manufacturer.

**⚠** Improper handling of the rechargeable battery can cause electrolyte fluid to leak. This can cause skin injuries or damage to clothing. If skin or eyes come into contact with the electrolyte fluid, they must be rinsed with pure water and a doctor consulted immediately.

**⚠** The rechargeable batteries may not be exposed to heat or fire or be burned. External heat effects can cause the rechargeable batteries to explode. The rechargeable battery must not be submerged in water or be splashed with water. Always ensure that the rechargeable battery remains dry and clean.

**⚠** The rechargeable battery may not be opened or taken apart. Improper opening or deliberate destruction of the rechargeable battery bears the risk of severe injury. All warranty claims expire when the rechargeable battery is opened.

**⚠** Rechargeable batteries that have suffered mechanical damage may no longer be used.

**⚠** The contacts of the rechargeable batteries must not be short-circuited. A short-circuit

causes very high currents which could damage the rechargeable batteries and/or the product.

**⚠** The product's rechargeable batteries may only be charged using the original charger from the manufacturer which was supplied.

**⚠** The charger may only be used under dry conditions. Protect it from rain and humidity, fire and high temperatures. Avoid temperature fluctuations that can cause condensation.

**⚠** During the charging process, the charger may not be covered with any objects.

**⚠** Never unplug a connection when the system is switched on.

### 17.5.2 Change-over device for double rechargeable batteries

The change-over device lets you switch between the two rechargeable batteries. The following figure shows the position of the rechargeable battery's magnetic connector if the rechargeable battery on the right in the direction of travel is connected.

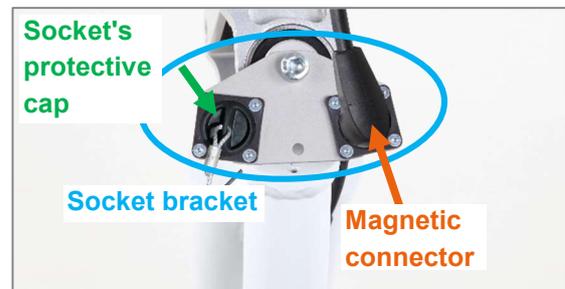


Figure 26: Socket bracket on steering head connection with magnetic connector and protective cap (view from seat system in direction of travel)

To switch from the right rechargeable battery to the left rechargeable battery, you need to switch off the drive system via the display (chapter 17.6.1).

Now remove the protective cap on the left socket and insert the magnetic connector there. The socket protective cap is inserted in the right socket. Then switch the drive system back on.

 To prevent short-circuits due to moisture, the protective cap must be placed on the socket that does not have a magnetic connector.

 When reconnecting the rechargeable batteries, always switch the drive system off.

## 17.6 Drive system

The drive manufacturer's usage instructions are included with the product as a supplement to the supplied usage instructions. Operation of the drive system is described there in detail. Please observe the contents of these instructions. A summary of how to switch on and off and how to attach and remove the display can be found in the following subchapters.

### 17.6.1 Switching on and off

To **switch on** the drive system, briefly press on the middle button (rhombus ) on the controller.

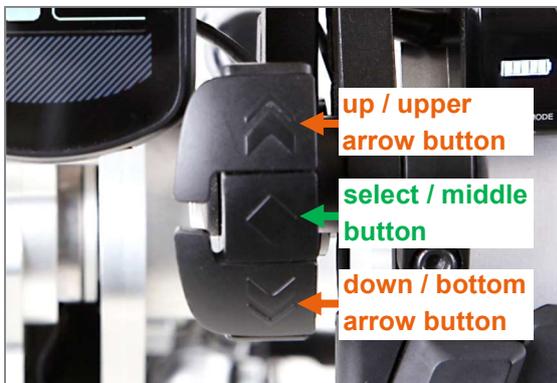


Figure 27: controller button

To **switch off** the drive system, press the middle button (rhombus ) down for approx. 2 seconds while the start menu is displayed. By pressing the arrow buttons (arrow down  and up ) , navigate to "Switch off" and confirm with the middle button (rhombus ) .

**Automatic switch-off:** After 10 minutes without use, the drive system switches off automatically.

 Do not switch off the drive system by removing the display when it is switched on. This could damage the electronics.

If the **rechargeable battery** has not been used within 48 hours, it goes into "deep sleep mode" and must be switched on by pressing the "ON/OFF button" before switching on the display.



Figure 28: On and off button on the rechargeable battery

### 17.6.2 Attaching and removing the display

To **attach the display**, place it on the dock, rotated to the left at an angle of about 30°. Rotate the display on the dock clockwise by 30°, applying light pressure, so that both components are aligned. Now slide the display holder over the display and dock, from above.



Figure 29: Attaching and removing the display



Figure 30: Display with display holder

To **remove the display**, turn off the drive system and remove the display holder. To remove the display, turn the docked display by approx. 30° anticlockwise.



Figure 31: removing the display holder

### 17.7 Lights

A **light set with a separate rechargeable battery including a charger** can also be selected as an option. The front lights are installed on the front of the product and the rear lights are generally installed on the back cross bar on the back of the coupled wheelchair. The lights are switched on and off using the respective actuation button on the lights.



Figure 32: Actuation button for the front lights



Figure 33: Actuation button for the rear lights

### 17.8 Bell

The bell can be actuated with the thumb or index finger without letting go of the handlebar.

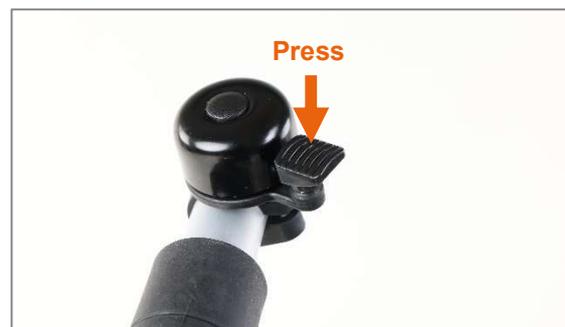


Figure 34: Bell

**17.9 Manufacturer instructions**

You will be instructed about the functions and operation of the drive system, gears, brakes and other brand components during the hand-over / training. You can also get information later from the component manufacturers' enclosed usage instructions, or if needed, by asking your rehabilitation specialist dealer or PRO ACTIV.

In the download area of [www.proactiv-gmbh.com](http://www.proactiv-gmbh.com) under the links "more documents >>", we have put together the most important documents. More extensive information can be found on the manufacturers' websites:

Shimano components::  
<https://si.shimano.com>

Magura components:  
[www.magura.com](http://www.magura.com)

Mountain Drive bottom bracket gearshift:  
[www.haberstock-mobility.com](http://www.haberstock-mobility.com)

neodrives drive system:  
[www.neodrives.com/en/](http://www.neodrives.com/en/)

Sigma:  
[www.sigmasport.com/en/](http://www.sigmasport.com/en/)

Subject to changes to the links provided by the component manufacturers.

**18 Backrest**

 Avoid falling into the seating and back system as the risk of changing the adjustment, falling or a defect is increased significantly.

The back system usually consists of either a sprung Body Contour cover or a filling plate. With both back systems, the slack cannot be adjusted. The Body Contour backrest upholstery has a springing effect and automatically forms a slack.

**18.1 Angle adjustment of the backrest**

For adjusting the angle of the backrest, open the clamp lever by turning counter-clockwise (a half to a complete rotation). Then the backrest can be moved forwards or backwards. The

length of the backrest support changes during the movement of the backrest.

Once the desired angle of the backrest is set, hold the backrest in this position and then close the clamp lever again clockwise with a half to complete rotation.

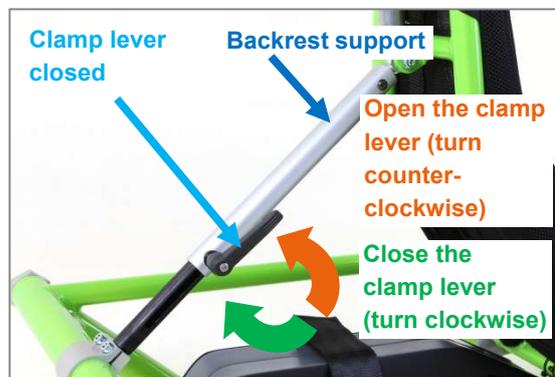


Figure 35: Angle adjustment of the backrest via the clamp lever

**Note:**

If the clamp lever rests on the frame of the product when turning, you have the option of pulling the clamp lever out vertically to the rotary axle and to let go into another angled position via the integrated serration, and keep on turning.



Figure 36: Put the clamp lever in another angled position by pulling out

 After every adjustment, check that the backrest is firmly attached in its position.

 When adjusting the angle of the backrest, make sure that the backrest does not rest against the rechargeable battery.

## 18.2 Longitudinal positioning of the backrest

 The following instructions are intended for and may only be carried out by a rehabilitation specialist dealer or PROACTIV



Figure 37: Clamp for the longitudinal positioning of the backrest

The longitudinal positioning of the backrest (or distance for the backrest to the pedal bearing) can be carried out by undoing two M6 fixing screws (AF 5 mm) each on the right and left side of the product frame. After undoing a total of four M6 fixing screws (AF 5 mm), both clamps on the product frame can be moved to the desired position.

In doing so, take note:

- when the product is equipped with seat upholstery "Open belt system", the backrest can be pushed forwards and backwards. when equipped with seat upholstery "Body Contour", the backrest can only be pushed backwards so that the distance between the backrest and the pedal bearing is increased.
- The clamps on the right and left side must be positioned at the same height of the product frame.
- The wires must be routed in such a manner that these cannot be bent, crushed or damaged. Moreover, the wires must not protrude beyond the bottom edge of the frame otherwise damage being caused to

the cable when overcoming obstacles cannot be ruled out.



Figure 38: Longitudinal adjustment of the backrest via M6 fixing screws and clamps on the frame of the product

Once the desired longitudinal position of the backrest has been found, the four M6 fixing screws (AF 5 mm) are tightened to 7 Nm again and secured using screw locking fluid.

 After an adjustment of the longitudinal position of the backrest, a check should be made if the seat system should be changed with regard to the new dimension.

## 19 Seat system

 Avoid falling into the seating and back system as the risk of changing the adjustment, falling or a defect is increased significantly.

The seat system usually consists of either sprung Body Contour seat cover or a belt system.

With a seating system from **Body Contour seat cover**, there is no adjustment option. The Body Contour seat cover has a springing effect and when seating., automatically forms a slack.



Figure 39: Body Contour seat cover

The **belt system** can be subsequently adjusted. The slack of the seating surface can be changed using fleece hook-and-loop straps.



Figure 40: Open belt system with fleece hook-and-loop straps for adjusting the slack

**!** For the “belt system” seating system: when adjusting the slack of the belt system, make sure that the slack does not protrude beyond the lower edge of the frame. Otherwise when overcoming obstacles, you may get caught the belt system and your bottom that may result in injury and damage to the belt system. The product may not be operated with damaged seating system.

**Note:**

Using a seat cushion on the seat system is mandatory. At cold temperatures, the seat cushion prevents lower abdomens from undercooling and protects against dirt and wetness. Moreover, the cushion ensures uniform pressure distribution for your bottom and absorbs impacts as well as vibrations.

**20 Neck rest**

**20.1 Neck rest height adjustment**

 The following instructions are intended for and may only be carried out by a rehabilitation specialist dealer or PROACTIV

To adjust the height of the neck rest, two M6 fixing screws (AF 5 mm) have to be loosened on the neck rest holding tube. Then the height of the neck rest holding tube can be adjusted. Once the desired height has been found, the two M6 fixing screws (AF 5 mm) are tightened to 7 Nm again and secured using screw locking fluid.



Figure 41: Height adjustment of the neck rest via two M6 fixing screws on the neck rest holding tube

**20.2 Neck rest angle adjustment**

The angle adjustment of the neck rest is carried out via the clamp lever on the neck rest holding tube. Open the quick release lever and set the neck rest padding to the desired angle. Then close the quick release lever again.



Figure 42: Quick release lever closed (view from behind)



Figure 43: Quick release lever opened for adjusting the neck rest angle (view from behind)

**!** After every adjustment, check that the neck rest is firmly attached in its position. If necessary the tension can be adjusted by turning the nut of the quick release lever clockwise until it reaches the end stop.



Figure 44: Nut of the quick release lever

## 21 Collision guard



Figure 45: Collision guard

### 21.1 Collision guard mount

To remove the collision guard, both M6 fixing screws (AF 4 mm) are undone on the right and left inlet. Now the collision guard can be removed from the inlet.



Figure 46: M6 fixing screws on the clamp on the axle tube

### 21.2 Mounting the collision guard

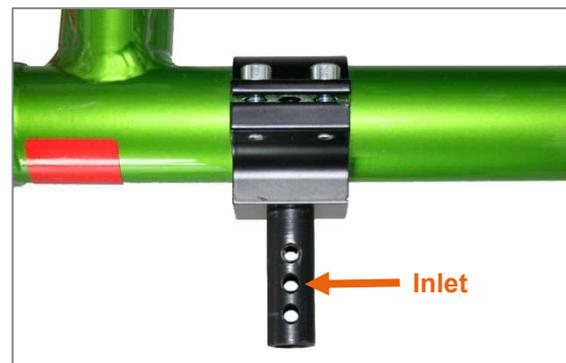


Figure 47: Inlet of the collision guard with several boreholes

For mounting the collision guard, the collision guard is pushed onto both inlets. In doing so, ensure for the correct position of the collision guard on the inlet as there are several boreholes on the inlet. Then both M6 fixing screws (AF 4 mm) are tightened to 7 Nm and secured with thread lock fluid (Fig. 46).

**21.3 Adjusting the length of the collision guard**

 *The following instructions are intended for and may only be carried out by a rehabilitation specialist dealer or PROACTIV*

When mounting running wheels with another tyre size, the length of the collision guard may have to be adapted. For this purpose, loosen both M6 fixing screws (AF 4 mm) on the right and left inlet (Fig. 46). Now the collision guard can be pushed along the inlet and another hole can be used for the fixing screws (Fig. 47).

Once the correct position of the inlet has been found, both M6 fixing screws (AF 4 mm) are tightened to 7 Nm again and secured using screw locking fluid.

**22 Wheels**

**22.1 Removing and attaching the running wheels**



Figure 48: Locking knob of the quick-release axle in the middle of the wheel axle

To **remove the running wheels**, reach through the spokes around the wheel hub with your fingers. The wheels can be unlocked and removed by pressing and holding the locking knob at the centre of the wheel axle with your thumb.

To **attach the running wheels**, press the locking knobs and insert the wheels with quick release axle into the wheel bushings. When doing this, special attention should be paid to ensure that the locking knob springs out again after attaching the wheel, as otherwise the

wheels are not properly secured. You will know this if you can see the index groove.

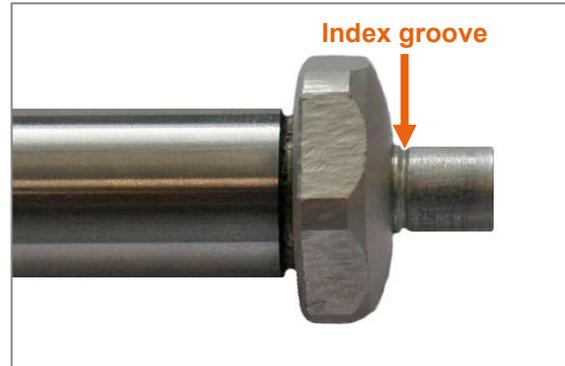


Figure 49: Quick release axle with index groove

 Before using the product, check if the running wheels are secured and that the quick release axles are locked.

**22.2 Checking and adjusting the wheel tracking of the running wheels**

 *The following instructions are intended for and may only be carried out by a rehabilitation specialist dealer or PROACTIV*

Well adjusted wheel tracking significantly improves the easy running characteristics of the product. To **check** the tracking, proceed as follows:

Position the product on a flat surface and apply the parking brake.

Measure the axle heights (from the ground to the running wheel axle) and write this dimension on both tyres at front and back.



Figure 50: Drawing the axle height on the front and back of both tyres of the running wheels

Afterwards measure the distance between the running wheels front and back at the height of the axles along the markers. Ideally, the distance between both running wheels should be the same size at the front and back. In general, it can be said that the distance between the running wheels at the front and back may not be larger 5 mm. If this is not the case, the wheel tracking needs to be corrected.

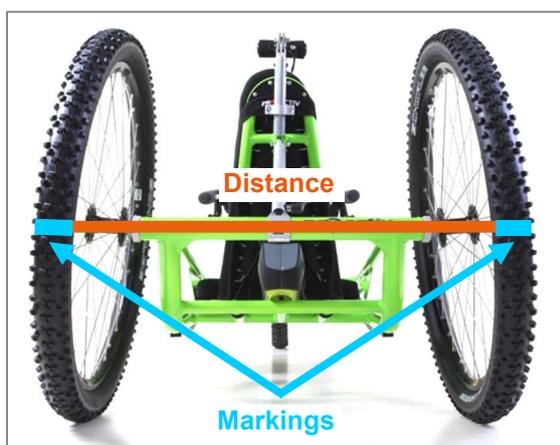


Figure 51: Distance between the markers on the tyres (at axle height), back

To **adjust the track** proceed as follows:

1. Loosen the aluminium locking nuts on both sides (AF 41 mm).

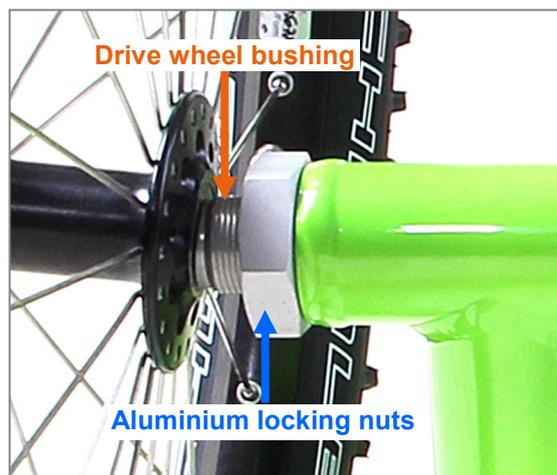


Figure 52: Drive wheel bushing and aluminium locking nut (rear view)

2. Correctly adjust the track by turning the drive wheel bushing (AF 24 mm). Here it can be said that: If you turn the drive wheel bushings in the direction of travel, the track at the front will become narrower. The exact opposite occurs if you turn it opposite to the direction of travel; the track becomes wider.
3. Make sure that the distance at the front to the frame on the right and left is the same.

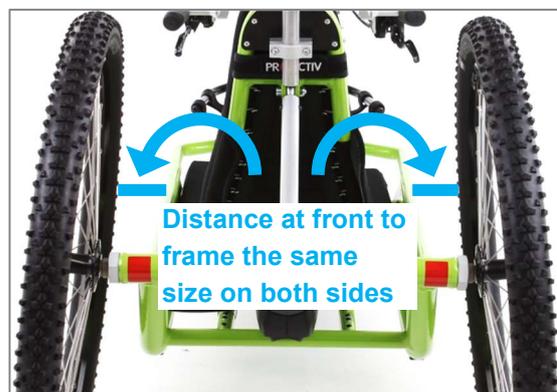


Figure 53: Distance at the front to the frame

4. Check by measuring the distance between the running wheels at the front and back again at the axle height (along the markers) so that the distance between the running wheels at the front than at the back is no more than 5 mm.

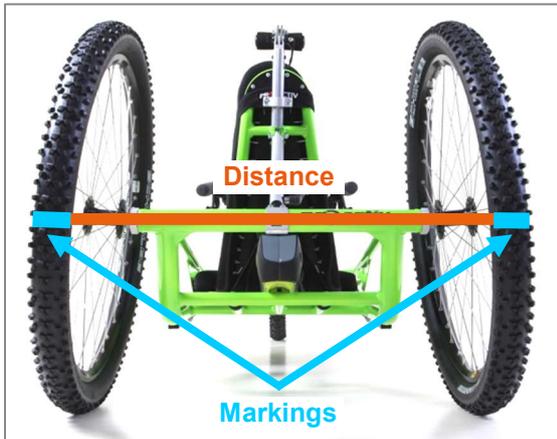


Figure 54: Distance between the markers on the tyres (at axle height), back

5. Once all of the distances are correct, use an open-ended spanner (AF 24 mm) to hold the drive wheel bushing in position and tighten the aluminium locking nuts (AF 41 mm) to a tightening torque of 70 Nm.

### 22.3 Tyre pressure

Check the tyre inflation pressure at regular intervals as well as after extreme temperature effects. The **recommended tyre pressure is printed on the side of the tyre**. This should be observed.

 Insufficient tyre pressure has a negative effect on the handling. Apart from that, there is an increased risk of a flat tyre.

 If the pressure is too high, the tyre may burst. For this reason, product tyres may not be exposed to unusually high temperatures such as under glass in the summer.

 When inflating the tyres, make sure that the prescribed air pressure is not exceeded.

**To check or correct the tyre pressure**, proceed as follows:

1. Secure the product to prevent it rolling away.
2. The drive wheel is normally fitted with a car tyre valve. Unscrew the valve cap.



Figure 55: Valve with cap

3. Place the valve attachment of the compressed air device or the compressor onto the valve and, if a clamp lever is available, secure the connection by applying the clamp lever.
4. Now check the tyre pressure. If the tyre pressure does not match the specifications, correct it.
5. Finally release the clamp lever (if present), pull the valve attachment off the valve and replace the valve cap.



Figure 56: Compressor

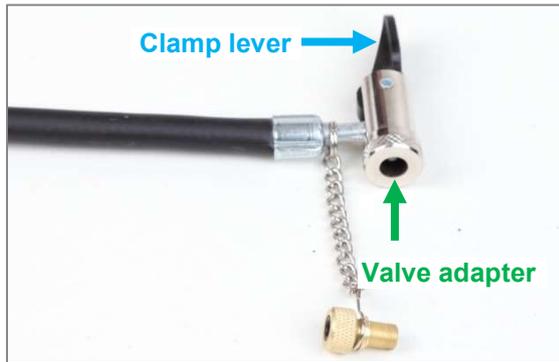


Figure 57: Valve adapter and clamp lever of the compressor

## 23 Adaptation and decoupling the drive unit

### 23.1 Safety instructions

-  The adaptation and uncoupling of the drive unit may only be performed when the drive system is switched off in order to prevent unintended drive signals.
-  The drive system may only be switched on after completing the adaptation process.
-  The drive unit may only be adapted and detached on dry, stable and flat surfaces.

### 23.2 Terminology

The product comprises drive unit and product frame. The product frame is also designated as chassis. The insertion shaft is located on the adapter plate of the chassis.



Figure 58: Insertion shaft on the chassis adapter plate

The insertion shaft – the counter item for the insertion shaft – is located on the adapter plate of the drive unit.

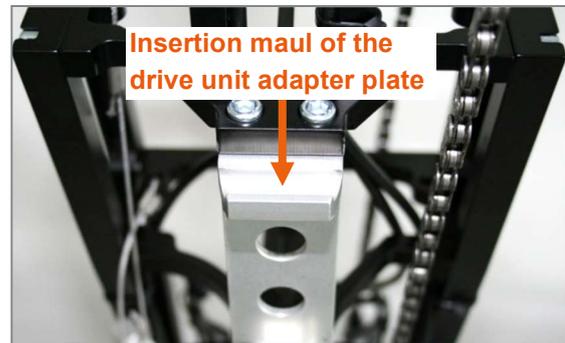


Figure 59: Insertion maul of the drive unit adapter plate

### 23.3 Adapting the drive unit

For adapting the drive unit to the chassis, first operate the parking brake. Hang the insertion maul of the drive unit adapter plate to the insertion shaft of the chassis adapter plate. In doing so, the drive shaft must be raised a little to allow the insertion maul of the drive unit to slip under the insertion shaft on the chassis.



Figure 60: Lifting the drive wheel



Figure 61: Insertion maul of the drive unit slips under the insertion shaft on the chassis

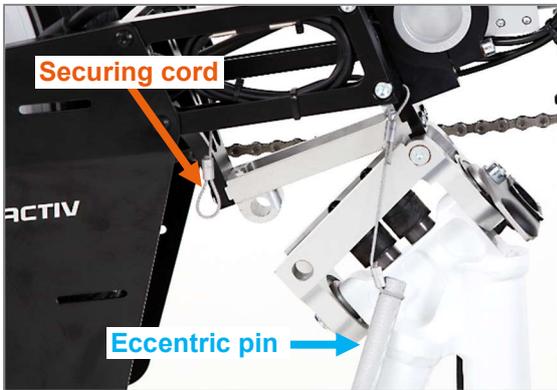


Figure 62: Insertion maul of the drive unit hung into the insertion shaft on the chassis, eccentric pin not inserted yet

Finally, the chassis is raised at the front or the drive unit is raised on the bottom bracket housing that the adapter plates of the drive unit and chassis can completely rest on top of each another. In doing so, make sure that the insertion maul and the insertion shaft stay in position.

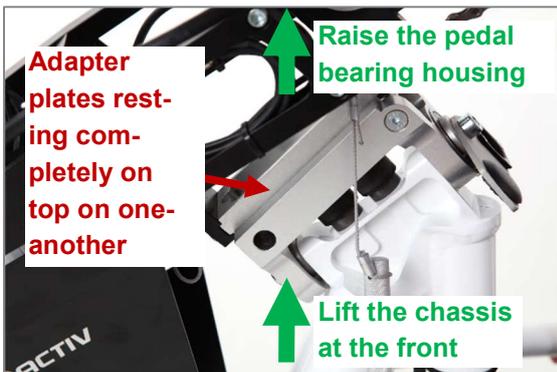


Figure 63: Adapter plates of the drive unit and chassis resting on top on one-another

Now the eccentric pin must be inserted on the left side in the direction of travel, and the lever of the eccentric pin must be turned upwards approx. 90° counter-clockwise. Finally, the securing cord is hung onto the lever of the eccentric pin.

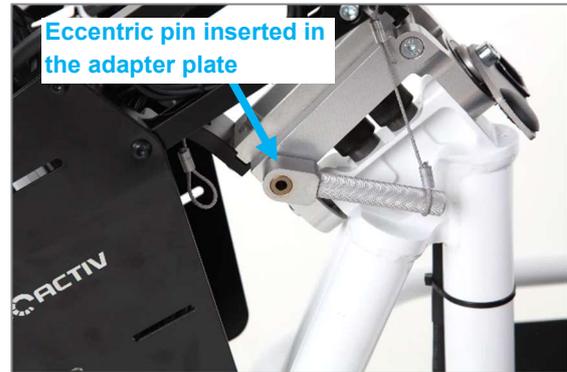


Figure 64: Eccentric pin inserted

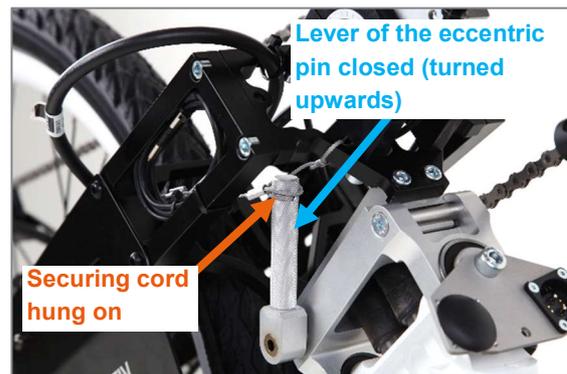


Figure 65: Drive unit adapted completely

Finally, insert the magnetic connector into the socket of the socket holder.

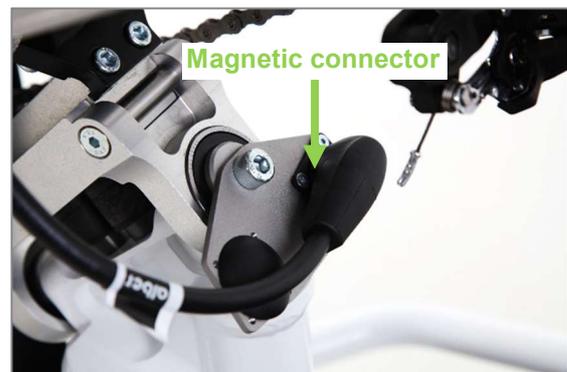


Figure 66: Magnetic connector inserted



**Video** Adaptation via the drive unit on the chassis:

<https://www.youtube.com/watch?v=MdZ1hXSg1w>

### 23.4 Decoupling the drive unit

For decoupling the drive unit from the chassis, first operate the parking brake. Remove the magnetic connector from the socket of the socket holder.

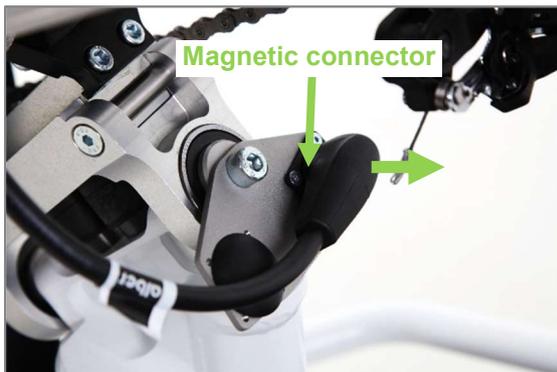


Figure 67: Removing the magnetic connector

Then remove the securing cord from the lever of the eccentric pin and turn the lever of the eccentric pin clockwise by approx. 90°.

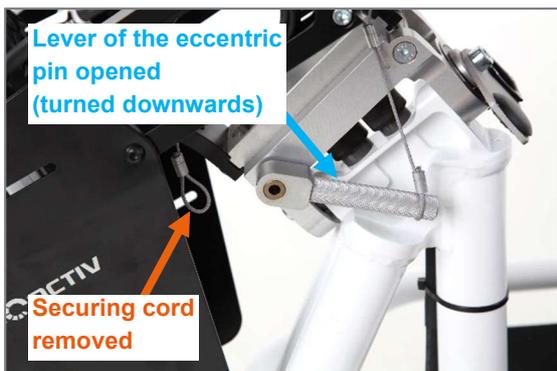


Figure 68: Lever of the eccentric pin opened and securing cord removed

Now the eccentric pin is removed from the adapter plates. For easier handling, raise the drive unit on the pedal bearing housing slightly in the process. After removing the eccentric pin, the chassis is lowered to the ground automatically.

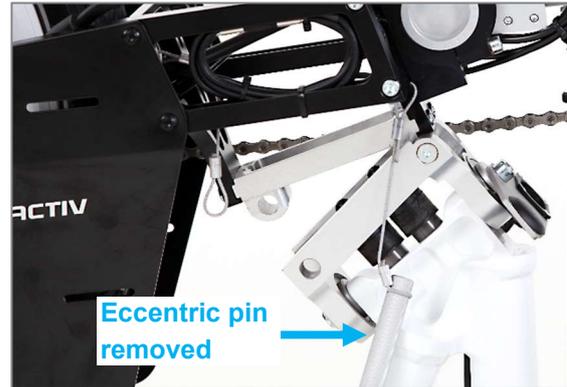


Figure 69: Eccentric pin removed from the adapter plate, chassis lowered to the ground

Now lift the drive wheel a little and hang the insertion shaft of the drive unit adapter plate out of the chassis.



Figure 70: Lifting the drive wheel

Now the drive unit is separated from the chassis. This allows a favourable packing size for transporting the product.



Figure 71: Pack size: Chassis and drive unit separated and running wheels removed



**Video** Disconnecting the drive unit from the chassis:

<https://www.youtube.com/watch?v=Wb1-Z1Yx9so>

## 24 Storage

Store the product on an easy-to-clean surface in a dry environment, preferably at room temperature from +15°C to +25°C.

For storage, please also observe the instructions in the other sections of these usage instructions and in the component and drive manufacturers' usage instructions included with the delivery, in particular the points about the rechargeable batteries and the electrical drive.

To avoid corrosion and therefore malfunctions or breakages of components, the product may not be exposed to any aggressive environmental influences (especially salt) or to any strong solar radiation. Because of the effect of salt water in the winter and the humidity on rainy days, it is not recommended to store the product in the garage.

 If the product is not used or is stored over a longer period, if necessary, before using it again, we recommend having a rehabilitation specialist dealer give it a general function and safety check.

 When the rechargeable batteries are stored or taken out of use, they should only be stored with a charge status of between 50% and 70%; they must be charged to 70% at the latest every two months. Before re-use, the rechargeable batteries must be completely charged.

 Store the rechargeable battery in a dry location where it is protected against damage and unauthorized access. The rechargeable battery should never be exposed to extreme temperature fluctuations and it should always be protected from moisture during storage to prevent corrosion of the plug contacts. If the product is stored in a cool location or in a location with temperature fluctuations, it is recom-

mended that the rechargeable battery be removed and stored separately at an appropriately tempered location.

 For optimum battery life, the rechargeable battery should be stored at a temperature of 18°C to 23°C and a humidity of 0 to 80 per cent. The state of charge should be 70 per cent.

 For the electronic Shimano gearshift: Unused rechargeable batteries should preferably be stored somewhere between 10°C and 20°C.

## 25 Transport

### 25.1 Securing handling of the product

When loading or transporting, the product can be held on the pedal bearing support and product frame.

### 25.2 Passenger transport in vehicles



When transporting in vehicles, it must be noted that the product is not approved for use as a seat in vehicles or disabled persons transport vehicles. All vehicle occupants must only sit on the seats installed in the vehicle during the journey with the associated restraint systems.

 The hip strap that may be fitted is not designed as a safety belt in motor vehicles and may not be used for this purpose.

### 25.3 Securing the product in a vehicle (without a person)

To reduce the weight, individual components, such as the batteries for example, can be removed from the product and stored separately. In addition, the drive unit and the chassis can be separated from each other. The product and all associated components must be secured during transport so that they are not damaged and do not become a hazard to persons or other products. Before transport, check

with your vehicle dealer about safely securing it using the existing fitted lashing rings or other securing devices. Suitable brackets are mostly available in the vehicle and are described in the operating manual of the vehicle.

When the product is in the transport vehicle, you or the person accompanying you should proceed as follows:

1. Operate the parking brake.
2. Secure and safely stow any components from the product which have been previously removed.
3. Objects that are installed to the product, but do not belong to the product, must be removed and securely stowed.
4. Secure the product with lashing straps. To do this, use the existing securing devices in the vehicle.  
After securing, the product may not roll, slip or tip over to the side any more.

 The lashing straps used to secure the product in the transport vehicle may only be fitted to the components of the vehicle provided for that purpose, as well as to the frame and bottom bracket support of the product.

 Do not transport the product on the front passenger seat. The product could slip and impede the driver.

 When loading and securing, make sure that the cables and lines do not get tangled, become kinked or otherwise damaged. The product may not be used with damaged cables and/or lines.

#### 25.4 Transport in aircrafts

The lithium rechargeable batteries used are classified as hazardous goods for transport by air. It is not permitted to claim that there is a right to transport them by air. The decision about the transport is the sole responsibility of the airline and this should be discussed in advance of the flight or the booking.

## 26 Malfunctions

In the event of malfunctions that cannot be repaired by yourself based on the usage instructions included in the scope of delivery, please contact your rehabilitation specialist dealer or PRO ACTIV directly.

 Malfunctions must be repaired before any further use or, if they occur during the trip, it must be interrupted immediately.

All serious incidents that have occurred in connection with the product must be reported to the manufacturer and the responsible authority in the state in which the user resides.

## 27 Cleaning and care

Regular cleaning of the product is prescribed to prevent the components becoming clogged up due to dirt. In particular, the product should be carefully cleaned after every major use, e.g. summer or winter holidays.

To avoid corrosion and therefore malfunctions or breakages of components, the product may not be exposed to any aggressive environmental influences. If this cannot be avoided, the product should be cleaned immediately after such use and moving parts need to be greased. Regular cleaning prevents corrosion and increased wear.

In case the product becomes wet when using, please dry it after use.

 Clean the quick release axles of the running wheels as well as the ball bearings and grease these with a little lubricating oil with high corrosion protection properties (e.g. Neoval MTO 300) approx. every 8 weeks in order to guarantee the reliable functioning.

 Clean your product with water, solvent or neutral cleaning agents. Do not use any abrasive cleaning agents or aggressive, acidic cleaners when cleaning. Only use water and soap to clean the seat and backrest upholstery.

 Drive and grip units, as well as the re-chargeable batteries, may only be cleaned by rubbing off with a damp (not wet) cloth. Always work with just a little water and keep water away from the electrical contacts.

 The charger may only be cleaned with a dry cloth.

The drive wheel should be regularly cleared of contamination. It is recommended that you use a soft sponge or a soft brush.

After cleaning, check to make sure that the plug connectors are not damp and, if required, allow them to dry before re-starting the product.

In addition, the plug connectors should be lubricated with petroleum jelly after cleaning to protect them against corrosion and moisture.

 The product must not be cleaned using steam or high pressure.

**Recommended care:**

If you need care products for your product, please contact PRO ACTIV.

**28 Maintenance**

**28.1 General instructions**

The product is not a maintenance-free device. Therefore, please observe the following instructions about maintenance.

 If repairs are required or there are any defects in your product, in the interests of your own safety, you should contact your rehabilitation specialist dealer or PRO ACTIV before using it again and have the defect remedied. Screws and other elements need to be secured properly again after repairs.

 For tyres with tread: As soon as there is one or more points with less than 1 mm of tread on the tyres of the product, the tyres must be changed as otherwise there is an increased risk of an accident.

 For tyres without tread: As soon as there is one or more points where the tyre carcass or the puncture-proofing is visible on the product, the tyres must be changed as otherwise there is an increased risk of an accident.

 When maintaining the brakes, the gear-shift components, and the drive system, it is imperative to follow the usage instructions of the manufacturer that were included in delivery.

 Only the manufacturer's original parts may be used when spare parts are required.

 Repairs and conversions to the product may only be carried out by your rehabilitation specialist dealer or PRO ACTIV.

Tightening torques and securing details for fastening elements as shown in the table in chapter 33 must be observed.

**28.2 Service schedules**

There is some **maintenance work or checks which should be carried out by the user themselves** at regular intervals (approximately every 4 weeks depending on the frequency of use):

- The chain should be cleaned and lubricated with chain oil (observe the manufacturer's instructions).
- Check the tyres for damage, foreign bodies and any cracks that form.
- Check the function and ease of running of the quick release axles on the running wheels.
- Check that the cable housings are seated tightly in the gear cable brackets.
- Cables and lines should be checked for kinks and crushing.
- Check the brake pads.
- Check the plug contacts of the drive system; if required clean with a soft, dry brush and re-grease (using petroleum jelly).

- Check the tyre pressure and correct if needed (the tyre pressure should always be as printed on the tyre covers).

 If you should discover any problems during these checks, please immediately contact your rehabilitation specialist dealer or PRO ACTIV. Service and repair work on the product may only be carried out by your rehabilitation specialist dealer or PRO ACTIV.

In addition to these maintenance tasks/checks by the user, PRO ACTIV has prescribed **maintenance tasks to be carried out by the rehabilitation specialist dealer or PRO ACTIV** for safe operation of the product and to minimise the risk to the user or third-parties.

The initial inspection is performed after running 200 kilometres or 5 months after delivery (whichever comes first). The maintenance schedule can be found in the inspection lists in chapter 36.

Subsequent inspections are then always performed after 1,000 kilometres running or a period of 1 year after the last inspection (whichever comes first). The maintenance schedule can be found in the inspection lists in chapter 36.

After extreme stresses, such as during holidays where the product was exposed to sand, sea water or snow, an additional deep clean and inspection by your rehabilitation specialist dealer is recommended.

To maintain the warranty validity, the performance of the maintenance tasks must be documented. Any faults identified during maintenance work must be rectified and documented as such before further use of the product.

Even if your product does not show any signs of wear, damage or malfunctions, the regular safety-related checks on your product must be carried out in accordance with the maintenance schedule.

### 28.3 Proof of maintenance

To provide proof of the maintenance, you can use the inspection lists in Chapter 36. Always keep all receipts/service reports as proof, and have any service work that has not been carried out by the manufacturer documented.

**Please bring these usage instructions/this service booklet along with you each time maintenance is performed.**

## 29 Disposal and recycling

At the end of the service life, the product can be disposed of by PRO ACTIV or your rehabilitation specialist dealer in a proper, environmentally-friendly manner.

The disposal or recycling must be carried out by a waste disposal company or a municipal waste disposal centre.

Special guidelines may apply on-location with regard to the disposal or recycling. These must be clarified and considered when disposing (this may also include the cleaning or disinfection of the product before the disposal). In addition, the special provisions of the local regulations regarding the disposal of the drive system and the rechargeable batteries must be observed.

In the following text, you will find a description of the materials for the disposal and recycling of the product and its packaging:

**Aluminium:** frame, rims, leg rest

**Steel:** fixing points, quick-release / screwed axle, screws, nuts

**Plastic:** handles, clamp lever, tube plugs, tyres, bags for packing, battery housing

**Copper:** Cable and electrical components in the drive system

**Lithium:** Rechargeable battery

**Synthetic fibres and foam:** padding, covers

**Cardboard/paper:** Packaging



According to the WEEE Directive, electric and electronic devices must be disposed of in government-designated recycling facilities

separate from general residual waste. Proper disposal serves to prevent possible environmental and health damage. These guidelines are applicable only to devices that are installed or operated in the EU. Regulations may differ outside of the European Union.

### 30 Re-use

If your product has been provided to you by your funding provider and you no longer require it, you should report this fact to your health insurance company or your rehabilitation specialist dealer. Your product can then be simply and economically re-used.

Prior to each re-use, a technical safety check must be carried out on the product at PRO ACTIV or the rehabilitation specialist dealer. In addition to the instructions contained in chapter 27 (Cleaning and care), a thorough cleaning of the grips, all control elements as well as the rechargeable battery housing must be carried out prior to re-use.

Before the product can be reused, it must be prepared with care. A disinfection agent that is suitable for medical products must be sprayed onto all surfaces that the user may come into contact with. A liquid, alcohol-based disinfectant for residue-free, quick disinfection (e.g. Exporit 4712) must be used for this, and the respective usage instructions for use of the disinfectant must be observed. In general, a complete disinfection cannot be guaranteed on the seams. We therefore recommend that you dispose of the seat and backrest upholstery.

These preparations will be performed by PRO ACTIV or the rehabilitation specialist dealer as part of the technical safety check. This safety-related check **must** be initiated by the funding provider.

Moreover, in event of wear or due to adaptation to the new user, components such as the seat and back system can be adjusted or replaced using the modular system. The

backrest angle is infinitely adjustable as standard. The bottom bracket support is also often angle-adjustable and can then be optimally adapted to the new user.

### 31 Warranty

PRO ACTIV guarantees that the product was free of any defects at the time it was handed over. This warranty expires 24 months after the product was delivered.

Further information can be found in PRO ACTIV's general terms and conditions at [www.proactiv-gmbh.com](http://www.proactiv-gmbh.com).

With regard to the warranty and guarantee for the drive system, please refer to the usage instructions of the drive manufacturer.

The warranty shall be null and void if the product or a part needs to be repaired or replaced due to the following reasons:

- Normal wear on components such as rechargeable batteries, grips, tyres, brakes, etc.
- The product has not been maintained and serviced in accordance with the maintenance schedule laid down by PRO ACTIV.
- The product or a part of the product has been damaged due to neglect, accident, or improper use.
- The product has been commissioned and used in non-compliance with these usage instructions.
- Repairs or other work have been carried out by non-authorised persons.
- Third-party parts have been installed or connected to the product or the product was otherwise modified.



Any modifications to the product which have not been expressly approved by PRO ACTIV will invalidate the warranty. Such modifications can lead to unforeseeable safety risks and are therefore not permitted.

## **32 Liability**

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As the manufacturer of the product, PRO ACTIV is not responsible for its safety if:

- The product is handled improperly.
- The product is not maintained in accordance with the maintenance schedule laid down by PRO ACTIV.
- The product is commissioned and used in non-compliance with these usage instructions.
- Repairs or other work are carried out by non-authorised persons.
- Third-party parts have been installed or connected to the product or the product has otherwise been modified.
- Changes are made to the software.

Further information can be found in PRO ACTIV's general terms and conditions at [www.proactiv-gmbh.com](http://www.proactiv-gmbh.com).

### 33 Appendix: Tightening torques, securing details and tools

The following table shows the torques for shaft screws with a metric control thread (valid providing the drawing, assembly, or usage instructions do not state different values!):

Dimension	Tightening torque Ma in Nm depending on the screw strength	
	Strength 8.8 (e.g., cylinder head screw)	Strength 10.9 (e.g., oval head screw)
M4	2.1	3.1
M5	4.2	6.1
M6	7.3	11
M8	17	26
M10	34	51
M12	59	87
M10 x 1	36	53

Securing details: All screws on PRO ACTIV products should be secured with thread lock fluid "medium strength" (e.g. Weicon AN302-43), where there are no securing clamps on the screw connections present or there is a lubrication requirement with grease or copper paste.

In the following table you will find tools and care products for your PRO ACTIV product:

Tool	Order number
<b>Special tool for setting the wheel position</b> Open-ended spanner AF 22/24 mm + 41 mm	8000 900 025
<b>Care kit for PRO ACTIV wheelchairs and handbikes</b> Assembly paste (dosing syringe 10 g), Neoval oil (spray 100 ml), thread lock, medium strength (pen system 10 ml), surface cleaner (spray 150 ml), terminal grease (tube 50 ml)	8000 900 026
<b>Assembly stands</b> 	8000 902 000

### 34 Appendix: Medical product passport/record of training

**Product specifications:**

Serial number: SN \_\_\_\_\_ Key number/s: \_\_\_\_\_

**Customer data:**

Surname, forename: \_\_\_\_\_  
 Street: \_\_\_\_\_  
 Postcode, city: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Paying organisation: \_\_\_\_\_

**Training carried out by:**

- Rehabilitation specialist dealer
- PRO ACTIV Field Representative/  
Product Adviser

\_\_\_\_\_  
 Stamp / Date / Rehabilitation specialist dealer's signature

**Record of training**

I/we have been instructed in accordance with the associated hand-over certificate about the operation of the product listed and informed about possible operator errors. I/we have also been advised about situations where the assistance of another person is required. The usage instructions were handed to me/us.

**Instructor**  
 Name, date, signature \_\_\_\_\_

**1. Person being trained**  
 Name, date, signature \_\_\_\_\_

**2. Person being trained**  
 Name, date, signature \_\_\_\_\_

**3. Person being trained**  
 Name, date, signature \_\_\_\_\_

For minors, or persons who are not responsible for their actions, legal guardians/supervisors/responsible persons are to be trained in the use. This is confirmed by their signature. The data are recorded in the feedback system of PRO ACTIV Reha-Technik GmbH as the manufacturer of the above named product. It is managed in accordance with § 16 BDSG (German Data Protection Law).

### 35 Appendix: Hand-over certificate

#### 35.1 Required compliance criteria to authorise use

Topics	Completed/ fulfilled	Remarks
The product is suitable for the customer based on their own judgement and the customer information received regarding the disability-related restrictions.		
The use intended by the customer is fully consistent with the intended use as described in the usage instructions (see Chapter "Proper use").		
The product's equipment is suitable to allow the customer safe use with maximum reduction of risks.		
The customer was informed about the current / applicable regulations in accordance with the road traffic regulations.		
The customer's driving ability was checked during a test drive in difficult driving situations and found to be appropriate (see the check list on the following page).		
The user, according to their own statements, or those of the legal representative or guardian and the assessment of the person providing the training, is able to meet the requirements of public traffic in full and to act accordingly. This ability to act, which is the basis for reducing the risk for the user and other road users to an acceptable level, is also completely achievable taking current illnesses/disabilities into full account.		
The customer was informed that in the event of a change in the driving capability, further use of the product must be assessed by a medical professional.		
The usage instructions - and explicitly all of the warning and safety instructions contained therein - were discussed during the training in detail and understood by the user. The user was then handed these operating instructions.		

The use of the product is only permitted when all topics listed in "Required compliance criteria for those permitted to use" have been met by the user and all the points have been ticked off in the "Check list for training the user".

### 35.2 Check list for training the user

Topics	Completed/ fulfilled
Advised of the applicable legal regulations when driving on public roads.	
All mechanical function control elements were explained and their function demonstrated.	
Adaptation and uncoupling the drive unit to/from the chassis were demonstrated and then performed by the user themselves and/or an assistant.	
Use of the parking brake and service brakes was demonstrated and then performed by the user themselves and/or an assistant.	
Operation and basic settings on the display were demonstrated and then tested by the user themselves and/or an assistant.	
The starting/pushing aid – if fitted – was demonstrated and then performed by the user themselves and/or an assistant.	
Operation of the drive system and the reaction of the drive system to the various settings has been demonstrated and then performed by the user themselves and/or an assistant.	
Removal and insertion of the display and the rechargeable batteries as well as operation of the change-over device – if fitted – was demonstrated and then performed by the user themselves and/or an assistant.	
Handling and charging the rechargeable batteries as well as the charger functions were demonstrated and then performed by the user themselves and/or an assistant. The instructions about charging the rechargeable batteries during a prolonged period of non-use/storage of the product are important here.	
The operation and function of the gearshift has been demonstrated and then performed by the user themselves and/or an assistant.	
Adjustment of the backrest, the seating system and the neck rest was demonstrated and then performed by the user themselves and/or an assistant.	
Removal and installation of the collision guard – if fitted – was demonstrated and then performed by the user themselves and/or an assistant.	
Removal and installation of the running wheels was demonstrated and then performed by the user themselves and/or their assistant.	
The operation and function of the bell was demonstrated and then performed by the user themselves and/or an assistant.	
The operation of the lights – if fitted – has been demonstrated and then performed by the user themselves and/or an assistant.	
Test drive: Forward and - if necessary - backwards travel	
Test drive: Driving on level ground and uphill and downhill in the direction of travel	
Test drive: Emergency stop from maximum speed	
Information for care, cleaning and maintenance of the product has been provided and understood by the user and/or an assistant.	
Information on the wheels with regard to inflation pressure and tread depth and checking the quick release axles have been provided and understood by the user and/or assistant.	
Information on regular checks of the brakes has been provided and understood by the user and/or an assistant.	
Information on checking the gears including cables and lines and the maintenance of the chain has been provided and understood by the user and/or an assistant.	
The content of the usage instructions from PRO ACTIV and the other component manufacturers (if available) were completely worked through based on the product training and were understood by the user and/or the assistant.	

**36 Appendix: Inspection lists**

**Initial inspection:** After 200 km or 5 months

Serial number: <input type="text" value="SN"/> _____ Kilometre reading: _____	OK/ carried out	not OK	resolved
Check that all screws/fastening elements are firmly seated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of all lights (if fitted), steering and adaptation of the drive unit to the chassis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the brakes and, where necessary, replacement of the brake fluid, brake pads, brake cables and tyres on the product.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the electrical connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check, adjust / set, clean and oil the gear components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the wheel track of the running wheels and that the drive wheel bearings are firmly seated (tightening torque 70 Nm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the spoke tension of the drive wheel and, if required, correct the tension/re-centring and inspect the axle nuts of the drive wheel for firm seating (tightening torque for neodrive: 30 Nm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK / carried out = OK | not OK = not OK | resolved = the fault was corrected

**Comments:**

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**Rehabilitation specialist dealer:**

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**First name and last name of contact:**

---

**Stamp:**

---

Date/signature

To maintain the warranty rights, the completed inspection list must be sent by e-mail or post to PROACTIV within four weeks of the inspection.

**Subsequent inspection:** After another 1000 km or 1 year after the last inspection or after heavy use

Serial number: <b>SN</b> _____	OK / carried out	not OK	resolved
Kilometre reading: _____			
Check that all screws/fastening elements are firmly seated and replace, if necessary (particularly the following: M8x35 oval head screws (for the handle rotation axes on the cranks))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean and oil/grease all pivot points and bearings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carry out a visual inspection of the frame and attachments for crack formations, deformations, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carry out a functional and safety check of the brakes and, where necessary, replace the brake fluid, brake pads, brake cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check, adjust, clean, and oil the gear components including bottom bracket gearshift (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the capacity of the rechargeable battery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the electrical connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check of the control parameters and functionality of the drive system; perform a software update if necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the spoke tension of the drive wheel and, if required, correct the tension/re-centring and inspect the axle nuts of the drive wheel for firm seating (tightening torque for neodrives: 30 Nm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the running wheels and drive wheel, where necessary, replacement of the tyres on the product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the wheel track of the running wheels and that the drive wheel bearings are firmly seated (tightening torque 70 Nm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the back and seating system including neck rest (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the leg rest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of all lights (if fitted), steering and adaptation of the drive unit to the chassis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test drive/functional test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK / carried out = OK | not OK = not OK | resolved = the fault was corrected

**Comments:**

---

**Rehabilitation specialist dealer:**

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**First name and last name of contact:**

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Date/signature

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**Subsequent inspection:** After another 1000 km or 1 year after the last inspection or after heavy use

Serial number: <b>SN</b> _____	OK / carried out	not OK	resolved
Kilometre reading: _____			
Check that all screws/fastening elements are firmly seated and replace, if necessary (particularly the following: M8x35 oval head screws (for the handle rotation axes on the cranks))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean and oil/grease all pivot points and bearings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carry out a visual inspection of the frame and attachments for crack formations, deformations, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carry out a functional and safety check of the brakes and, where necessary, replace the brake fluid, brake pads, brake cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check, adjust, clean, and oil the gear components including bottom bracket gearshift (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the capacity of the rechargeable battery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the electrical connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check of the control parameters and functionality of the drive system; perform a software update if necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the spoke tension of the drive wheel and, if required, correct the tension/re-centring and inspect the axle nuts of the drive wheel for firm seating (tightening torque for neodrives: 30 Nm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the running wheels and drive wheel, where necessary, replacement of the tyres on the product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the wheel track of the running wheels and that the drive wheel bearings are firmly seated (tightening torque 70 Nm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the back and seating system including neck rest (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of the leg rest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Functional and safety check of all lights (if fitted), steering and adaptation of the drive unit to the chassis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test drive/functional test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Your rehabilitation specialist dealer:

**PRO**  **ACTIV**<sup>®</sup>



**PRO ACTIV Reha-Technik GmbH**

Im Hofstätt 11

D-72359 Dotternhausen – Germany

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